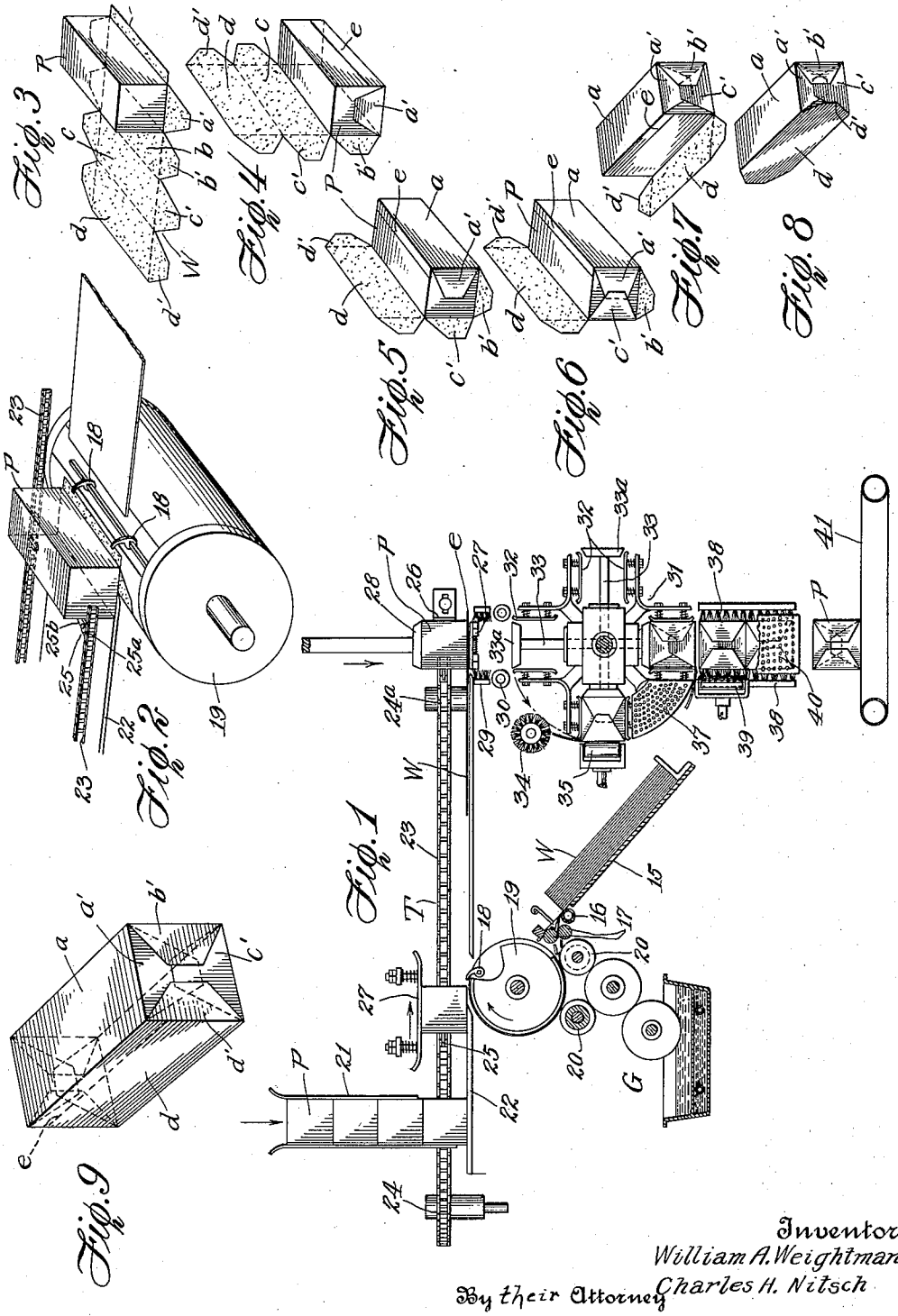
W. A. WEIGHTMAN AND C. H. NITSCH.

METHOD OF PRODUCING SEALED WRAPPED PACKAGES.

APPLICATION FILED JUNE 29, 1917.

**1,352,232.** **Patented Sept. 7, 1920.**



Inventors
William A. Weightman
Charles H. Nitsch
By their Attorney
Meyers, Cushman & Rea

# UNITED STATES PATENT OFFICE.

WILLIAM A. WEIGHTMAN AND CHARLES H. NITSCH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNORS TO STOKES & SMITH COMPANY, OF SUMMERDALE, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

## METHOD OF PRODUCING SEALED WRAPPED PACKAGES.

1,352,232. Specification of Letters Patent. Patented Sept. 7, 1920.

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*To all whom it may concern:*

Be it known that we, WILLIAM A. WEIGHTMAN and CHARLES H. NITSCH, both citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Methods of Producing Sealed Wrapped Packages, of which the following is a specification.

This invention relates to the art of producing sealed wrapped packages, and pertains more particularly to the method by which packets may be wrapped with an adhesively-coated wrapper to inclose the packet and produce a sealed wrapped effect.

Sealed wrapped packages are of two general types, one in which the wrapper is loose on the packet—the adhesive connection being between component parts of the wrapper—the other type having adhesive connection between the wrapper and packet as well as between the component parts of the wrapper. The present invention pertains more particularly to the latter type, this type having the advantage of tightly fitting the packet and remaining on the packet even after the package has been opened to gain access to the packet contents.

The wrapper employed in this type is generally in the form of a blank having its body portion made up of connected sections substantially corresponding to the contour and area of the packet walls which each is to cover together with a marginal top lap, the sections having end wings or laps which are applied at the ends of the packet, the wings or laps substantially covering the packet ends. One surface of the blank is adhesively coated after which the adhesive surface is applied to the walls and ends of the packet, this operation being generally provided by covering apparatus formed of a plurality of covering instrumentalities which operate in predetermined cycles to produce the wrapped effect.

As will be understood, the formation of a commercial package of this type involves an accurate registration of the packet and blank in order that the covering operations may bring the sections, etc., in proper position on the walls and ends of the packet. To provide this accurate registration is more or less of a problem due to the length of the blank and to the fact that, after receiving its adhesive coating, the coated blank must be properly positioned in order that the packet may be brought into registration contact therewith. This problem is made more difficult where it is desired to provide a more or less automatic operation, since the conditions are such that the point of adhesive application is generally spaced from the point where the blank must be positioned at the commencement of the covering operations, thus complicating the problem by the necessity for transferring the adhesively-coated blank from the adhesive-applying mechanism to the covering instrumentalities. To transfer the lengthy thin and flexible blank with its adhesive coating and accurately deliver it in position to receive the packet becomes a serious problem, since the blank must be drawn in the direction of its length and while coated, tending to limit the speed of travel of the blank and thus increase the time required to transfer it, this latter in turn tending to increase the inherent curling effect produced by the setting of the adhesive. Manual transporting and positioning is more or less difficult due to the necessity for handling a thin flexible wrapper of considerable length and other dimensions when one face of the blank is entirely covered with the adhesive.

The present invention is designed more particularly to overcome these difficulties by supporting the blank during the adhesive-applying operation, and while so supported bringing the packet and blank into registration contact, thus assembling the packet and coated blank by applying a face of the packet to the complemental portion of the adhesive surface of the blank, thus providing an extended connection between the two parts and producing an assembly such as will enable the packet to serve as the means for drawing the coated blank during the transfer of the latter from the point of adhesive application to the covering instrumentalities. As a result, the movement of the assembly can be provided by bodily moving the packet, permitting the latter to be gripped or otherwise manipulated by the operator or the transfer mechanism and advanced with greater speed without damage to the packet and without affecting the more

or less trailing portion of the blank. Hence the transfer can be had in reduced time and thus tend to decrease the curling effect.

In addition, simpler mechanism may be employed in the transfer mechanism, and at the same time the position of the assembly in the covering instrumentalities can be controlled by the position of the packet, a feature which greatly simplifies the positioning mechanism and decreases the difficulties at this point.

An additional material feature in these results is the fact that the point where registration contact is had is at a point removed from the point of positioning in the covering apparatus, thus eliminating the necessity of producing registration of the elements directly within the covering apparatus, the assembly, on the contrary, taking place at a point readily inspected and not complicated by the presence of other mechanisms.

In addition, one face of the packet is practically covered at or prior to the time when the blank begins its real transfer movement and before the assembly reaches the covering instrumentalities.

The present invention is also designed to permit of substantially automatic operation by mechanical means, thus tending to reduce the cost of manufacture and tending to increase the capacity of the apparatus.

To these and other ends, the nature of which will be readily understood as the invention is hereinafter disclosed, said invention consists in the improved methods hereinafter more fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claims.

In the accompanying drawings, in which similar reference characters indicate similar parts in each of the views:

Figure 1 is a view, diagrammatic in character, illustrating one way in which the present invention may be carried out.

Fig. 2 is a detail view showing the manner of assembling the packet and blank.

Fig. 3 is a detail view showing the form in which the assembly is transferred to and positioned in the covering apparatus.

Figs. 4 to 9 inclusive illustrate the results produced on the assembly by the operation of the successive covering instrumentalities of the covering apparatus, Fig. 9 showing the completed package.

As shown in Fig. 9, the wrapper incloses each of the longitudinal walls of the packet and has four wings or laps for each end of the packet, these wings or laps, as shown in Fig. 3, being preferably, although not necessarily of two lengths, the wings or laps of shorter length overlying the wings or laps of longer length, the several laps completely covering an end of the packet with a sufficient amount of overlap to provide proper adhesive connection between the opposing faces of the laps and at the same time employ a minimum amount of material.

The product thus produced is made up of the packet P and the wrapper blank W, the latter being generally of thin and flexible stock and having a length to form a plurality of integrally-connected sections indicated at *a*, *b*, *c* and *d*, together with a marginal lap portion *e*, the sections substantially corresponding to the contour and area of the longitudinal faces of the packet. If desired, the blank may be scored between the sections to facilitate folding, although this is not essential. As will be seen, each of the sections is provided with end wings or laps, the wings or laps of the sections *a* and *c*, indicated at *a'* and *c'* respectively, being of greater length than the wings or laps of the sections *b* and *d*, the end laps of the latter being indicated at *b'* and *d'* respectively.

In producing the package the wrapper is preferably adhesively-coated throughout one surface so as to provide for an adherent connection of each part of the wrapper either to a face of the packet or to a component portion of the blank, the result being that the wrapper tightly fits on the packet and at the same time is not affected by any manipulations for opening the latter.

As is well-known, packets are of various forms and vary as to the manner in which the packets are opened to gain access to the contents, and no attempt is made to indicate any particular type of packet container, it being readily understood that the invention is applicable for use with any of such forms. For similar reasons, no particular means are disclosed herein for indicating the point where the positioned wrapper W should be mutilated to gain access to the point where the packet is to be opened, it being understood that the blank, which generally has its non-coated surface arranged in label form, will have proper indications to meet the conditions of the individual packet being wrapped.

As heretofore pointed out, the present invention is designed more particularly to facilitate the application of the wrapper to the packet and eliminate, as far as possible, the difficulties which result by reason of the necessity for use of a wrapper blank of considerable length and particular configuration and especially where the blank is formed from thin and flexible stock, this fact together with the necessity for handling a packet of considerable size and, in many cases of several pounds weight, produces a more or less serious problem or problems, some of the difficulties of which have heretofore been pointed out and among which is the transfer of the blank from its adhesive-receiving position to position within the covering instrumentalities, and the positioning of the packet in such manner

that a face of the packet is brought into registration contact with the complemental portion of the wrapper blank.

These difficulties are more or less present whether the operation is to be manual or mechanical. Where produced manually, the length of time required to complete the cycle is necessarily increased by reason of the care required to produce the result, thus more or less limiting the capacity of the covering apparatus, tending to increase the cost of manufacture. Where the operations are produced mechanically, the characteristics of the several elements form material factors in determining the ability to provide complete mechanical operation.

As heretofore pointed out, the invention is designed more particularly to meet these difficulties, and is particularly applicable for use in connection with automatic apparatus by means of which the packets and blanks may be introduced in quantities by the use of magazines or other form of device, the packets and blanks being individually introduced into what may be termed a travel path or paths, after which the operation is automatically continued until the complete package is delivered.

For the purpose of disclosing the present invention we have shown it as employed as a part of an automatic apparatus embodying feeding, adhesive-applying, transfer, and covering instrumentalities, the operations of which are correlated to produce a cycle of operations on the packet and blank. In such cycle, the blanks are successively removed from the blank magazine, positioned on a rotating blank supporting platen, and, while so supported, each blank is brought into the field of operation of an adhesive-applying mechanism which applies adhesive throughout the exposed face of the blank. The platen carries the blank to a point where it meets an advancing packet, a face of the latter passing into contact with the adhesive surface of the blank before the latter has left the platen, the means for advancing the packet and the platen rotating means being timed to operate in such manner that the contact between the opposing faces of the packet and wrapper will be provided with the packet face properly registered with the complemental portion of the wrapper. The specific mechanisms for providing this timing relation, and the operating connections for producing this result and the remaining covering operations are not specifically disclosed or claimed herein, since they form the subjects-matter of a companion application covering the general apparatus. It may be noted, however, that the speed of travel of the blank while on the platen is preferably synchronous with the speed of travel of the packet, so that relative movement between blank and packet will be prevented after contact therebetween has taken place.

The travel of the packet is not stopped during the period when assembly of these elements takes place, and since an entire face of the packet is adherently connected to the blank at this time, the extended connection thus provided will form an exceedingly efficient means for withdrawing the blank from the platen and for advancing it during the advance movement of the packet.

In Fig. 1, the blank supply or magazine is indicated at 15. The blank feed mechanism is shown as in the form of a suction device 16 adapted to deliver a blank between rolls 17, the latter advancing the blank to a point where grippers 18 of the platen 19 may grip the advance end of the blank. The rotation of the platen carries the blank past the adhesive-applying mechanism, indicated generally at G, and which may be of any desired type, that shown in the drawings including a pair of adhesive-applying rollers 20 which combinedly provide the coating to the blank.

The packet supply or magazine is indicated at 21, the lower packet preferably resting on a table 22, the magazine being so arranged that the lower packet is located in the path of travel of packet advancing mechanism and is free to be moved out of its position in the magazine by such mechanism, the remainder of the packets in the magazine being restrained from such advance movement and being free to locate the succeeding packet in proper position for the advance.

The packet-advancing and assembly-transfer mechanism, indicated generally at T, is shown as in the form of a pair of endless chains 23 located on opposite sides of the travel path of the packet, each chain being mounted on a pair of sprocket wheels 24 and 24$^a$ which form the opposite ends of the chain flights. Each chain carries a plurality of fingers 25 projecting outwardly of the flights, and hence projecting into the space between the opposite chains during travel in the length of the inner flight. Each finger is of suitable configuration so as to contact with and positively advance the packet to a predetermined point and release the packet when the latter is positioned at such point. A simple form of structure for this purpose is shown in Fig. 2 as a rigid member 25$^a$ projecting inwardly from the inner flight of each chain and carrying a yieldable member 25$^b$, member 25$^a$ having a projecting length such that during the advancing travel of the chain in a straight line, the members 25$^a$ of the opposite flights oppose each other and will contact with the rear face of the packet. When, however, the chains have advanced the fingers to a point where the chains begin to move out of such straight

line in rounding the sprocket wheels 24ª, the rigid members 25ª will be withdrawn, leaving the yieldable members 25ᵇ as the sole elements for continuing the advance. When the advance face of the packet is brought into contact with the stop or stops 26, the advancing movement of the packet will be stopped, members 25ᵇ yielding and passing by the ends of the packet, leaving the latter in its stopped position.

As will be seen, the packet, during this travel, passes a gap in table 22, platen 19 extending into this gap. When, therefore, the advancing packet passes this point, platen 19 becomes the support for both blank and packet, the registration assembly taking place while the support is provided by the platen.

If desired, a suitable pressure device 27 may be employed for pressing the packet on to the blank during the assembling operation.

It will be seen, therefore, that the advance of the assembly is had without applying any strains to the blank, the contact of the advancing mechanism with the assembly being substantially confined to the packet itself, the container of which is, of course, of heavier stock and therefore better adapted to withstand any effect which the advancing mechanism may have thereon.

Fig. 3 discloses the assembly, a face of the packet being adherently secured to the adhesive surface of section *a*, the marginal lap portion *e* of small projection, being in advance of the packet, sections *b*, *c*, and *d* being unattached to and extending in rear of the packet. The major portion of the blank thus trails behind the packet, the latter drawing this portion as the packet advances. Since the adherent connection is comparatively large, and the trailing portion of the blank is trailing free, it will be understood that the advance movement of the assembly can be made with more or less rapidity, thus tending to reduce the length of time required to transfer the blank from its assembly position to the point where further advance movement of the packet is prevented by stop mechanism 26. This decrease in length of time required tends to decrease the curling action.

Stop mechanism 26 is so arranged that when the packet advance movement is stopped, the assembly will be properly positioned at the entrance to the covering instrumentalities, the latter including a yieldable device 27 which forms a support for the packet when the assembly is thus positioned.

The proper positioning of the assembly places the packet in proper alinement with a plunger 28 which is operative to advance the assembly into the first covering instrumentality which acts to apply the marginal lap *e* and section *b* to opposite faces of the packet, and end wings or laps *a'* to the ends of the packet, producing the result shown in Fig. 4.

As will be seen, the blank of the assembly is positioned on the opposite face of the packet from that with which plunger 28 contacts, so that the blank is interposed between the packet and the covering or blank-manipulating mechanism.

It may be noted that any desired type of covering mechanism may be employed in providing the covering operations, the drawings showing diagrammatically one form which may be employed. While we describe the successive operations as being performed by the mechanisms shown in the drawings, it is to be understood, of course, that this is simply illustrative and may vary according to the particular type of mechanism which may be employed.

The covering instrumentalities shown for producing this application of lap *e* and face *b* just described are shown as wiping brushes 29 and rolls 30, the end wings *a'* being folded up by the action of the supporting device 27 when yielding during the movement of the assembly.

After this initial action is had and by the continued movement of the assembly under the action of plunger 28, the assembly, in the form shown in Fig. 4, is positioned in a rotating element 31, indicated as in the form of a turret preferably having two pairs of assembly-receiving structures, each pair being alined on a diameter of the turret with the pairs extending in directions at right angles to each other. Each structure is shown as in the form of opposing yieldable plates 32 between which the assembly is positioned and held during movements of the turret.

Each pair of structures is provided with a reciprocating member 33 having its opposite ends formed with heads 33ª, each head operating in one of the structures, the length of each member being such that when the face of one head 33ª is in contact with a positioned packet, the face of the opposite head will be approximately at the entrance to its structure. The turret arrangement is such that the head 33ª which is in the path of travel of the entering assembly, is normally positioned at the outer end of the structure which is to receive the assembly. Consequently when the assembly advances under the action of plunger 28, it contacts with head 33ª and moves member 33 toward its opposite extreme of movement, this head thus forming a face on which the assembly rests while positioned, the opposite head serving to deliver a previous assembly, as presently described.

As heretofore pointed out, the assembly, when first positioned in the turret, is in the form shown in Fig. 4. The turret is

then rotated in the direction of the arrow in Fig. 1 through an angular distance of 90° this movement bringing the assembly into operative relation with a rotatable wiping brush 34 which acts to apply section *c* to the face of the packet opposite that to which section *a* was initially applied, producing the result shown in Fig. 5, the assembly being in the form shown in this figure, when the turret comes to rest after this initial movement which places the succeeding structure in position to receive the succeeding assembly.

While the turret is in this position, a pair of wiping rollers 35 are made active to apply end wings or laps *c'* to the ends of the packet, producing the results shown in Fig. 6, thus placing the longer wings or laps in position at the ends of the packet with the wings *a'* and *c'* overlapping each other as shown in this view.

The succeeding quarter revolution of the turret places the assembly opposite its point of entrance into the turret, and the mechanism is so arranged that during the travel to this point, the ends of the assembly are subjected to the operation of wiping brushes 37 which act to apply end wings or laps *b'* to the ends of the assembly, thus producing the result shown in Fig. 7, the turret coming to rest with the assembly in the form shown in this view.

This is the position of the assembly shown at the bottom of the turret in Fig. 1, and it will be understood that when the plunger 28 acts to introduce an assembly into the top structure of the turret of Fig. 1, the lower head 33ª of member 33 will push this lower assembly out of the turret and into operative relation with wiping brushes 38, this movement acting to apply the last section—section *d*—to the remaining face of the package and in overlying relation to the initially applied marginal lap *e*, producing the result shown in Fig. 8 and completing the packaging with the exception of end wings or laps *d'*, these being positioned by the action of wiping rollers 39 which are preferably made active when the assembly has come to rest between the brushes 38. Rotation of the turret then brings the succeeding assembly into position to be discharged from the turret, the discharge action moving the previously discharged packet into a lower position between these brushes or between succeeding brushes and into operative relation to the wiping brushes 40 operative to wipe the folded end wings or laps, and completing the packaging operation, the delivery of the succeeding assembly moving the completed package out of the covering instrumentalities. If desired, this delivery may be made on a suitable carrier 41 located therebelow which will act to carry the delivered package out of the path of the package which will be delivered at the succeeding operation of the turret-carried mechanism, the package thus delivered being shown in Fig. 9.

As will be seen from Fig. 2, the direction of movement of the packet and the cover blank are such that the contact between the faces of these elements when the assembly is being produced is progressively rearward.

As will be understood from Fig. 3, the assembly is made with the advance face of the article spaced from and in rear of the advance edge of the blank, this spacing being equal to the width of lap portion *e*. Consequently, a predetermined portion of the blank must be advanced beyond the point where the article and blank are brought into actual contact. Since the article and blank support are advancing at synchronous speeds and the position of the blank on the support is such as to insure the continued movement of the blank at the support speed and in a predetermined path after the gripping action has been released, it will be clear that assurance will be had of proper registration of article and blank without liability of disturbing the adhesive connection of the assembly. In addition, the adhesive connection will not be disturbed by movements of the assembly, since the advancing movements of the assembly formation are simply continuations of the movements of the two elements prior to and during assembly.

The disclosure herein is more or less diagrammatic, one form of apparatus for utilizing the methods disclosed herein being shown in our companion application filed July 28, 1917, Ser. No. 183,212.

While we have shown one way in which the invention may be carried out, it will be readily understood that the principles of the invention may be utilized in other ways and through other forms of mechanism than those suggested herein, the selection of a specific embodiment being determined more particularly by the exigencies of use or the particular wishes of the user, and we desire to be understood as reserving the right to make any and all such changes or modifications as may be found desirable or essential, in so far as the same may fall within the spirit and scope of the invention as expressed in the accompanying claims when broadly construed.

And it is to be understood, of course, that the invention is not limited to the particular use referred to herein, since it may be employed in various relations, and it is desired to reserve the right to protect against such use.

Having thus described our invention, what we claim as new, is:—

1. The method of covering a packet with an adhesively coated wrapper blank having a body portion formed of integrally con-

nected sections substantially corresponding to the several longitudinal faces of the packet and also having marginal extensions adapted to cover the lateral faces of the packet, which consists in assembling the blank and packet with a longitudinal face of the packet in contact with an adhesively coated corresponding section of the blank adjacent one end of the blank and during continuous travel of both blank and packet, and thereafter applying the remaining sections of the blank successively to the longitudinal faces of the packet and the marginal laps successively to the lateral faces of the packet.

2. In the art of adherently applying a wrapper blank to an article, the method of assembling a thin and flexible blank adapted to cover a plurality of faces of the articles, which consists in continuously moving the article along a predetermined path, continuously supporting said article during its movement in said path, and inserting said blank between the article and its support during travel with a face of the article in contact with an adhesively coated portion of the blank and with said blank extending in the direction of article travel beyond said face of the article along said support.

3. In the art of applying a cover blank to an article, the method of applying a wrapper blank to a plurality of longitudinal faces of the article which includes supporting the article during its continuous travel along a fixed path on a plurality of supports, positioning the cover blank on one of said supports, applying adhesive to said blank while on said support, and bringing said blank into engagement with said article while both blank and article are supported by said support.

4. In the art of producing sealed wrapped packages, the method of assembling the packet and cover blank, during travel thereof, which consists in positioning the cover blank on a support and adhesively coating a surface thereof, and while so supported, bringing a face of the packet into registration contact with the complemental portion of the adhesive surface of the blank to produce the assembly, whereby the major portion of the blank is free from adhesive connection with the packet in the direction of packet travel, and thereafter applying the unattached portions of the blank adhesively to the remaining faces of the packet.

5. In the art of producing sealed wrapped packages, the method of assembling the packet and cover blank, which consists in supporting the cover blank during adhesive-application and moving the support to advance the cover blank with its adhesive surface uppermost, and advancing the packet into contact with the advancing blank and with a face of the packet in registration with the complemental portion of the adhesive surface of the blank to produce the assembly during the advancing movements, and with the blank support serving to support both blank and packet during assembly.

6. In the art of adherently applying a cover or wrapper blank to an article to be covered or wrapped, the method of assembling the article and blank which consists in coating a surface of the blank while the latter is supported, and assembling the article and coated blank with both supported by the blank support by progressively applying a face of the article to the complemental portion of the adhesive surface of the blank and thereby producing registration of blank and article.

7. In the art of adherently applying a cover or wrapper blank to an article to be covered or wrapped, the method of assembling the article and blank which consists in advancing the article and a supported adhesively-coated blank concurrently relative to a registration position, and progressively applying a face of the article to the complemental portion of the adhesive surface of the blank during such advance movement, the blank support serving to support both blank and article during the applying operation.

8. In the art of producing sealed wrapped packages, the method of positioning the covering blank in the covering apparatus which consists in advancing the packet and a supported adhesively-coated blank concurrently and bringing them into registration contact with both blank and packet supported by the blank support to produce an assembly wherein the packet will serve as a carrier for the blank, and positioning the blank in the covering apparatus by controlling the position of the packet therein.

9. In the art of producing sealed wrapped packages, the method of positioning the covering blank in the covering apparatus which consists in advancing the packet and a supported adhesively coated blank concurrently and bringing them into registration contact with both blank and packet supported by the blank support during such advance movement to produce an assembly wherein the packet will serve as a carrier for the blank, and positioning the blank in the covering apparatus by controlling the position of the packet therein.

10. In the art of producing sealed wrapped packages, the method of positioning the covering blank in the covering apparatus which consists in advancing the packet and a supported adhesively coated blank concurrently and bringing them into registration contact with both blank and packet supported by the blank support prior to the completion of such advance move-

ments to produce an assembly wherein the packet will serve as a carrier for the blank, and positioning the blank in the covering apparatus by completing the advancing movements of the assembled elements and by controlling the position of the packet in the covering apparatus.

11. In the art of adherently applying a cover blank to a packet to produce a sealed wrapped package and wherein the blank has a length to form a marginal lap and a succession of integrally-connected sections corresponding in area and contour to the several longitudinal faces of the packet, the method of assembling the adhesive-coated cover blank and packet which consists in advancing the blank and packet individually and concurrently with the marginal lap portion of the blank in advance, and bringing a face of the packet into registration contact with the section of the blank in rear of said lap during such advance movements to assemble the blank and packet for combined advance movement with a substantial portion of the blank extending beyond the rear edge of said face of the packet.

12. In the art of producing sealed wrapped packages wherein the cover blank is adhesively coated on one surface and has a length to include a succession of integrally-connected sections corresponding in area and contour to the longitudinal faces of the packet with each section carrying end wings or laps, the method of adherently-applying the blank to the packet which consists in applying the adhesive-coated surface of the sections and end wings to the packet by applying the succession of sections to the packet faces in regular progression in the direction of length of the blank and applying the section end wings successively to the packet ends in an irregular progression with the wings of a section applied substantially concurrently.

13. In the art of adherently applying a cover or wrapper blank to a plurality of longitudinal exterior walls of an article to be covered or wrapped, the method of producing an assembly of wrapper and article which consists in concurrently and individually advancing the article and an adhesively-coated blank in non-parallel paths to a predetermined point to produce initial assembly at the advance end of the article, and progressively completing the assembly by the concurrent advance of both blank and article relative to such point with said blank extending beyond the article in the direction of advance after said initial assembly is completed.

14. In the art of adherently applying a cover or wrapper blank to each of a plurality of longitudinal exterior walls of an article to be covered or wrapped, and wherein the article and blank are advanced from individual supplies in predetermined travel paths to covering or wrapping station mechanism and are adherently assembled during travel within such paths to provide concurrent travel of the article and blank as an assembly with said mechanism operative to shift the assembly transversely of such path, the method of producing and delivering an assembly which consists in concurrently and individually advancing the article and an adhesively-coated blank in non-parallel paths to a predetermined point with said blank extending beyond the article in the direction of advance after said initial assembly is completed in advance of such station to produce initial assembly at the advance end of the article, progressively completing assembly by the concurrent advance of both blank and article relative to such point, and containing the advancing movement of the assembly to present the latter to said mechanism with the blank interposed between the article and the blank-manipulating mechanism.

15. In the art of adherently applying a cover or wrapper blank to the exterior walls of an article to be covered or wrapped, and wherein the article and blank are advanced from individual supplies in predetermined travel paths to covering or wrapping station mechanism and are adherently assembled during travel within such paths to provide concurrent travel of the article and blank as an assembly to such station with said mechanism operative to shift the assembly transversely of such path, the method of producing an assembly which consists in concurrently and individually advancing the article and an adhesively-coated blank on individual supports to a predetermined point in advance of such station, adhesively coating a surface of the blank during travel to such point, and progressively completing the assembly by concurrent advance of both the article and the blank relative to such point with the blank support active to support both blank and article during such assembling.

16. In the art of adherently applying a cover or wrapper blank to an article to be covered or wrapped, wherein the blank has an area to extend on to the sides and ends of the article adjacent the assembly face of the article and wherein the blank has one of its surfaces adhesively coated, the method of assembling the blank and article preliminary to completing the blank application, which consists in temporarily locating the blank on an advancing support to provide an advancing movement of the blank in a predetermined path, and bringing the article into registration contact with the advancing blank while the latter is maintained in such path.

17. In the art of adherently applying a cover or wrapper blank to an article to be covered or wrapped, wherein the blank has an area to extend on to the sides and ends of the article adjacent the assembly face of the article and wherein the blank has one of its surfaces adhesively coated, the method of assembling the blank and article preliminary to completing the blank application, which consists in temporarily locating the blank on a support and bringing the article and blank into predetermined registration contact to produce the assembly by synchronous advancing movements of both article and blank, and maintaining such support while producing the assembly.

18. In the art of adherently applying a cover or wrapper blank to an article to be covered or wrapped, wherein the blank has an area to extend on to the sides and ends of the article adjacent the assembly face of the article and wherein the blank has one of its surfaces adhesively coated, the method of assembling the blank and article preliminary to completing the blank application, which consists in temporarily locating the blank on a support and bringing the article and blank into predetermined registration contact to produce the assembly by synchronously advancing the article and blank support to maintain the advancing movement of the blank in a path to produce the predetermined registration.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

WILLIAM A. WEIGHTMAN.
CHARLES H. NITSCH.

Witnesses:
CARL E. SCHAEFFER,
SILAS E. CHILD.