

Jan. 24, 1967

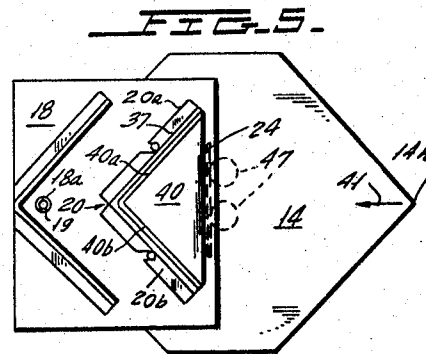
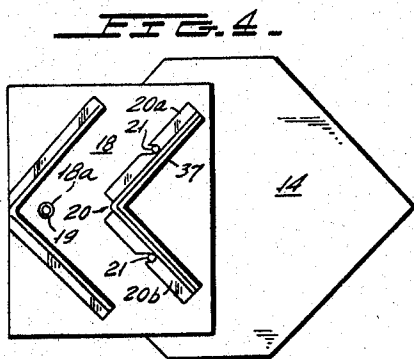
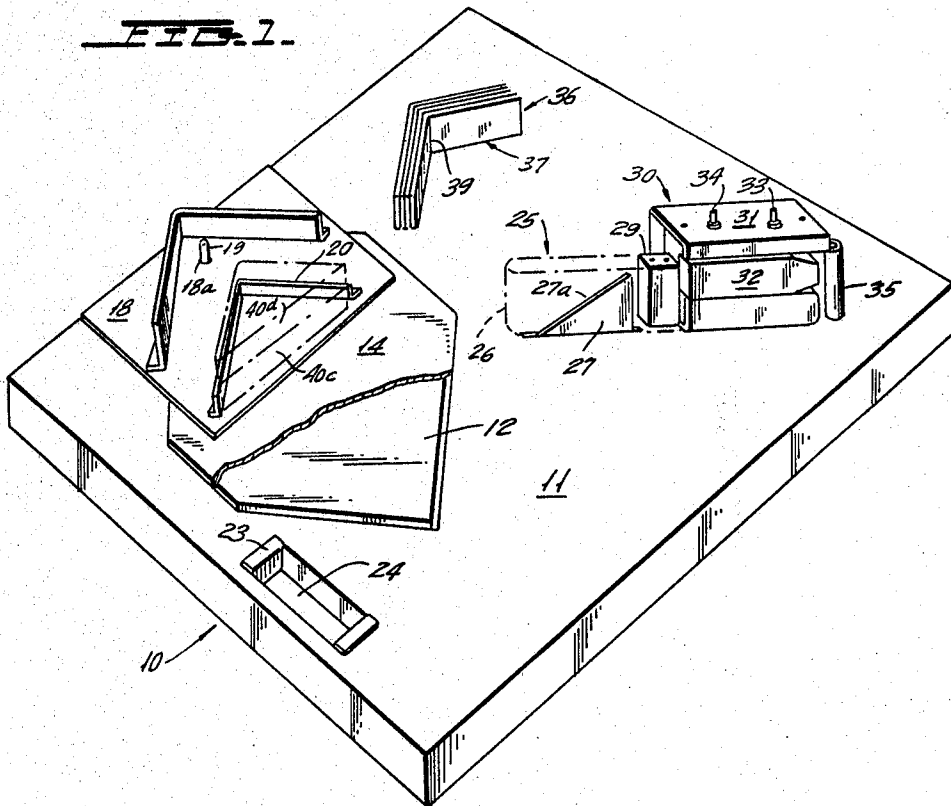
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3,299,612

SANDWICH WRAPPER-SEALER

Original Filed Sept. 6, 1963

3 Sheets-Sheet 1



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SANDWICH WRAPPER-SEALER

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3 Sheets-Sheet 2

FIG. 2.

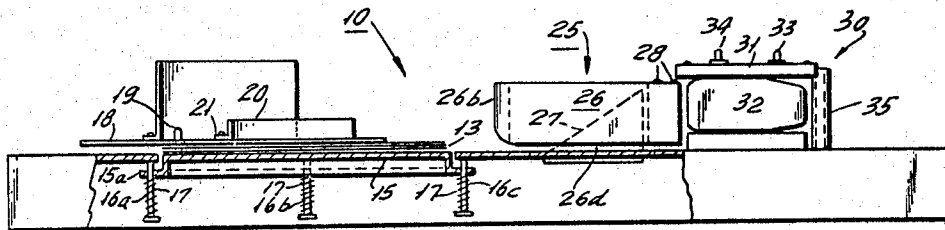
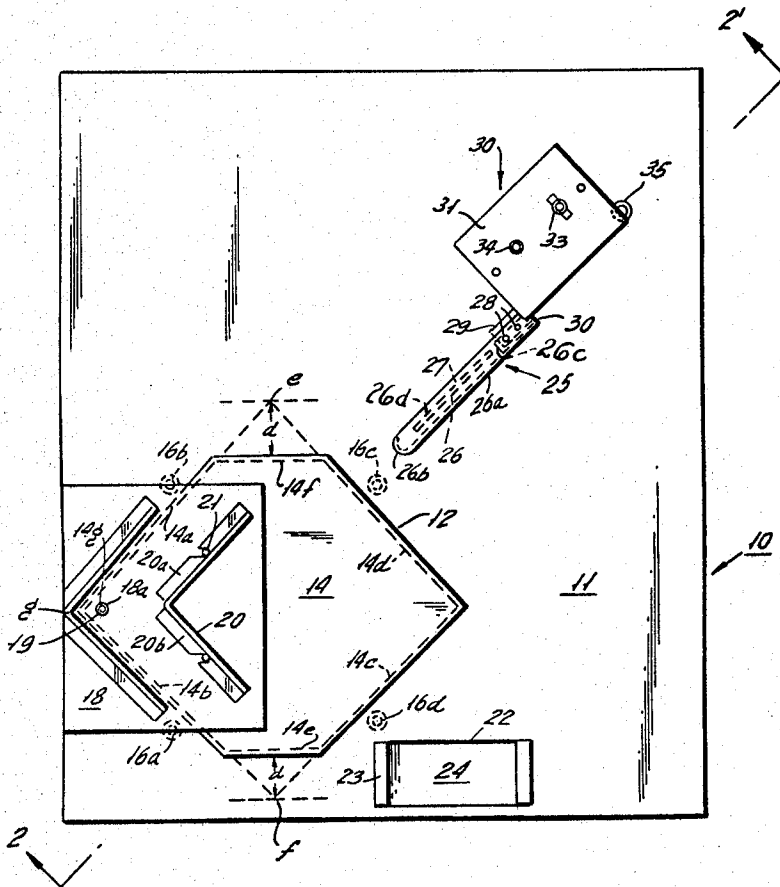


FIG. 3.

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SANDWICH WRAPPER-SEALER

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Original application Sept. 6, 1963, Ser. No. 307,184, now Patent No. 3,216,831 Divided and this application Oct. 1, 1965, Ser. No. 510,130

3 Claims. (Cl. 53—210)

This is a division of application Serial No. 307,184, filed September 6, 1963, now Patent No. 3,216,831.

This invention relates to sandwich wrappers and more particularly to a novel apparatus for providing a semi-automatic sandwich wrapping and sealing operation which is performed quickly and easily and requires an extremely minute degree of exertion on the part of the operator.

Food, restaurant and like establishments, find extremely widespread use for food wrapping apparatus. One of the largest uses is that of wrapping sandwiches and the like, preferably in transparent wrappers, for use in sandwich dispensing machines, box lunches, food counters, restaurants, and the like.

One preferred arrangement for the wrapped sandwich is that of cutting the sandwich, which is substantially square-shaped, diagonally, to provide two triangular half-sections which are set one upon the other and then wrapped in this position. This manner of wrapping, with the use of a transparent wrapper, provides the potential customer with the opportunity of clearly observing the contents of the sandwich, thus enhancing the salability of the item. In addition thereto, this package arrangement is the most compact and enables a larger number of sandwiches per automatic dispensing unit than is permitted by any other sandwich packaging arrangement.

Restaurants and others, engaged in the food preparation industry, who are required to prepare extremely large numbers of such wrapped sandwiches, presently prepare such packages by hand, thus necessitating extremely large labor costs as well as requiring relatively large amounts of time for preparing such packages.

The instant invention provides a novel apparatus for wrapping and sealing such sandwich packages in a semi-automatic manner, thus enabling a high speed operation, permitting operators to prepare more packages per unit time than is possible through the employment of present day practices.

The instant invention is comprised of a wrapping table which either houses or supports all of the elements employed in the wrapping and sealing operation, which elements are positioned and inter-related relative to one another so as to provide a reliable relatively high-speed wrapping and sealing operation.

One portion of the wrapping table is provided with a suitable opening for storing a substantially large stack of the transparent sheets in which the sandwiches are wrapped. The sheets are stacked one on top of another and are positioned within the opening upon a platform which is positioned within the opening of the wrapping table and which is supported upon a plurality of spring pedestals. The spring pedestals operate to move the stack of wrapping paper upwardly as each sheet is removed so that the top sheet always remains substantially flush with the surface of the wrapping table.

A substantially flat support means is positioned over a portion of the wrapping table opening and hence the sheets of wrapping paper so as to cover approximately one-half of the sheet. A V-shaped supporting bracket is secured to the support means and is provided to receive and position the two halves of the sandwich, with the

short side of each half of the sandwich resting against the arms of the V-shaped bracket. The support means is removably mounted to the wrapping table and is substantially secured thereto by means of an upwardly projecting pin which extends vertically upward from the wrapping table and is received by a suitable opening in the support means. The upwardly projecting pin also serves as the means for securing all of the sheets of wrapping paper which are provided with an opening through which the projecting pin is inserted.

The initial steps of the wrapping operation consists of placing the first and second halves of the sandwich with the short sides of each half of the sandwich resting against the arms of the V-shaped bracket. The top sheet of the transparent wrapping paper is then lifted upward and folded over the top of the sandwich. One side of the wrapper adjacent to a short side of the sandwich half is manually held down against that side of the sandwich. The sandwich with the folded over wrapping paper is then moved a small distance away from the V-shaped positioning bracket, causing the sheet of wrapping paper to be torn away from the upwardly projecting pin. The top sheet of wrapping paper in being pulled up and over the sandwich engages one edge of the flat support means causing the sheet to be lifted slightly from the sheet immediately beneath the topmost sheet so as to prevent the next sheet to be frictionally engaged by the topmost sheet and hence pulled out along with the top sheet.

The folding and sealing operation is performed by the folding and heating devices which are positioned a spaced distance away from the opening in the wrapping table so as to permit the folding and sealing operations to be performed while requiring only a relatively small degree of motion of the sandwich in order to make contact with the folding and sealing devices.

The folding device is comprised of a vertically aligned guidewall mounted upon the wrapping table, the forward end of which lies only a small distance away from the opening in the wrapping table. The sandwich to be wrapped is dotted along the surface of the vertical guidewall with one of the short sides of the sandwich package making engagement with the guidewall. The guidewall lower edge is positioned slightly above the surface of the wrapping table to enable the wrapping paper to slide through this small space. The forward end of the guidewall is a curved surface which causes a small fold to be formed in the wrapping paper as the sandwich is moved along the guidewall.

With the upper half of the wrapping paper held down against the side of the sandwich being moved along the guidewall, this upper portion, together with the lower portion of the wrapping paper upon which the sandwich rests and which in turn rests upon the surface of the wrapping table, come in contact with a second vertically aligned plate which is substantially parallel to and a spaced distance apart from the guidewall. The second plate is of a triangular shape and is so arranged that the low end of the sloping side confronts the sandwich wrapper as it is moved past the vertical guidewall. As the sandwich continues moving along the vertical guidewall the triangular member causes a gradual continuous folding of the wrapping paper along the side of the sandwich resting against the vertical guidewall.

A heat-seal device is positioned in alignment with and immediately behind the vertical guidewall with the heating element being substantially coplaner with the surface of the vertical guidewall. As the partially wrapped sandwich is moved beyond the rearward end of the vertical guidewall the fold which has just been formed comes into sliding engagement with the heating element which provides a heat-seal along the entire fold.

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The folding means comprised of the first and second vertically aligned plates, in addition to effecting the fold along the short side of the sandwich package, also causes the wrapping paper to be folded about the second short side of the sandwich package and after the first short side is moved across the heating element the sandwich package is rotated through substantially a 90° angle causing the second short side to make sliding engagement with the heating element so as to effect a heat-seal along the second short side.

A cylindrical post is positioned immediately behind the rearward end of the heating element for the purpose of folding the last unfolded flap of the wrapping paper. After the second short side is moved across the heating element, the sandwich package is moved a small distance beyond the heating element until the unfolded flap is moved to a position to the right of the cylindrical post. The sandwich package is then manually moved in the reverse direction, first causing the flap to be folded by the cylindrical post and then causing the folded flap to move across the heating element, thus completing the wrapping and sealing operation.

It can be seen from the foregoing description that the folding and sealing operation is performed simply by first sliding one short side of the sandwich package past the folding and heating elements, rotating the sandwich through a quarter-turn so as to heat-seal the second short side and then reversing the direction motion of the sandwich package to finally fold and heat-seal the last unfolded flap of the sandwich package. The total travel of the sandwich package from the position of the V-shaped bracket to the heating element is less than 12 inches with the folding operation being completed within a travel of only 6 inches, thus requiring only a small degree of hand motion on the part of the operator to effect the folding and sealing operations.

In order to provide an effective heat-seal, the sandwich package may further be provided with stiff paper backing which is positioned along the short sides of the sandwich package. The paper backing, or V-board, is formed from a fairly stiff elongated sheet which is substantially rectangular in shape. The stiff paper sheet is folded in half to form a V-shaped profile. Hence, the stiff paper backing is referred to as a V-board. The V-board is placed against the V-shaped bracket prior to placement of the sandwich after which the sandwich is positioned against the bracket such that the V-board makes engagement with the short sides of the sandwich package. The remainder of the folding and sealing operation is substantially the same with the use of the V-board as the folding and sealing operation described above. The V-board, however, performs the function of providing a substantially rigid backing for the wrapping paper so as to provide a more effective heat-seal of the wrapping paper as it is moved along the heating element. In addition thereto, the V-board acts to improve the aesthetic appearance of the sandwich package by means of a fanciful design which may be printed on the exposed surface of the V-board. In addition thereto, the V-board may be imprinted with advertising matter to identify the source of the sandwiches, as well as to provide an identification of the sandwich contents and price. In addition the V-board protects the sandwich from being crushed while wrapping, and also while being carried to the point of consumption.

In many instances, it is desirable to wrap thin pickle slices, or "chips" within the sandwich package. In order to do this without having the moist pickle chips dampen the sandwich, the wrapping table is provided with a small container positioned immediately adjacent the wrapping table opening, which container is provided with a stack of rectangular sheets of preferably the same material as the wrapping paper. After placement of the V-board and the sandwich against the V-shaped bracket, one of the rectangular sheets is placed against the long side of

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the sandwich and the pickle chips are then placed against the rectangular sheet. The wrapping paper is then folded over the top of the sandwich contained in the V-shaped bracket and the wrapping and sealing operations are performed in the same manner as previously described. However, in this manner, the pickle chips are positioned between the outer wrapper and the inner rectangular sheet, which serve to separate the chips from the sandwich so as to prevent any moistening of the sandwich due to the presence of the pickle chips.

The wrapping paper employed in the wrapping and sealing operation is a six-sided sheet which may be considered to be formed from a substantially square sheet with two of the opposing corners cut away, thus forming a six-sided sheet having four sides of substantially equal length, all of which are greater in length than the two remaining sides which are substantially parallel to one another. The six-sided sheets are aligned relative to the platform for receiving the sandwich such that the two short sides which are parallel to one another are aligned so as to be substantially perpendicular to the front edge of the platform carrying the V-shaped bracket. Thus when the top sheet of the wrapping paper is pulled up and over the sandwich the forward edge of the platform acts to bend the sheet with the bend being substantially perpendicular to the short parallel sides the bisecting line is across the center of the sandwich. The six-sided wrapping paper greatly facilitates the folding operation of the folding means by simplifying the folding operation as well as providing neater folds. In addition thereto, experimentation with a substantially square-shaped wrapping paper used in the apparatus of the instant invention failed to fold properly and would not feed through the folding means. Thus the six-sided wrapping paper in addition to being easily fed through the folding means provides a neater completed package, allows for more rapid sealing since there are less plies of paper to be heated, and thus enhances the overall folding and sealing operation. Each sheet of wrapping paper is provided with an aperture thru which an upright projecting pin is inserted. The pin and apertures cooperate to permit only the top sheet to be removed during the wrapping operation.

It is therefore one object of the instant invention to provide a novel apparatus for folding and sealing sandwiches in a sanitary wrapper.

Another object of the instant invention is to provide a novel apparatus for wrapping and sealing sandwiches in a semi-automatic manner wherein the steps of the operation may be performed simply and quickly.

Another object of the instant invention is to provide a novel apparatus for wrapping and sealing sandwiches in a sanitary wrapper wherein a folding and sealing means are so arranged as to permit the folding and heat-sealing operation to be performed with only a small movement of the sandwich package.

Still another object of the instant invention is to provide a novel apparatus for wrapping and heat-sealing sandwiches in a sanitary wrapper which is so arranged as to perform the folding and heat-sealing operations by only a short movement of the sandwich package across the folding and heat-sealing means.

Still another object of the instant invention is to provide a novel apparatus for wrapping and heat-sealing sandwiches in a sanitary wrapper wherein a novel paper storage means is provided for facilitating the placement of the sanitary wrapper about the sandwich in readiness for the folding and heat-sealing operation.

Still another object of the instant invention is to provide a novel apparatus for wrapping and heat-sealing sandwiches in a sanitary wrapper wherein the wrapping paper dispensing means, folding means and heat-sealing means are arranged in such close proximity as to permit the sandwich to be fully wrapped and heat-sealed with only a minimum movement of the sandwich package.

Still another object of the instant invention is to provide a sandwich package having a novel V-board positioned

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against the sandwich and within the sandwich package in such a manner as to greatly facilitate the heat-sealing operation.

Still another object of the instant invention is to provide sanitary wrapping paper of a novel configuration so as to enhance the folding and sealing operation.

Another object of the instant invention is to provide a novel sanitary package for sandwiches which employs a six-sided sheet of wrapping paper to facilitate the folding and sealing operation of the package.

Another object of the invention is to provide novel wrapping and sealing apparatus having a projecting pin which cooperates with an aperture in each sheet of wrapping paper to permit removal of only the top sheet of wrapping paper during the wrapping operation.

These, and other objects of the instant invention will become apparent when reading the accompanying description and drawings in which:

FIGURE 1 is a perspective view of a folding and sealing apparatus designed in accordance with the principles of the instant invention.

FIGURE 2 is a top view of the apparatus of FIGURE 1.

FIGURE 3 is a side view of the folding and sealing apparatus of FIGURE 2 looking in the direction of arrows 2-2' with parts of the housing being removed to display the internal construction thereof.

FIGURES 4 through 13 are developmental views of the apparatus of FIGURES 1 through 3 presented for the purpose of explaining the semi-automatic folding and sealing operation.

Referring now to the drawings and more specifically to FIGURES 1 through 3, there is shown therein the wrapping and sealing apparatus 10 which is comprised of a substantially flat table or surface 11 having a six-sided opening 12 for receiving and supporting a stack of wrapping paper 13. Each sheet 14 of the stack 13 is preferably a transparent sheet of material having six sides 14a-14f with the sides 14a-14d all being substantially equal in length and with the sides 14e-14f being equal in length and having a length substantially less than the length of the sides 14a-14d. The sides 14a, 14b, 14c and 14d, in addition to being of equal length, are in the range of 8 $\frac{3}{4}$ " to 10 $\frac{1}{4}$ " long. The sides 14e and 14f are substantially of equal length and are in the range of $\frac{3}{4}$ " to 2 $\frac{1}{4}$ " long. The stack 13 of the sanitary wrapping paper is placed upon a platform 15 which is guided for upward and downward vertical movement by means of the vertical posts 16a-16d which are inserted through suitable openings in a marginal flange 15a surrounding the platform 15. The platform 15 is biased in the vertically upward direction by means of spring member 17, the lower ends of which rest against the base of posts 16a-16d and the upper ends of which rest against the underside of flange 15a. Thus, with this arrangement, the stack 13 of transparent wrappers 14 are urged upwardly with the left-half of the topmost sheet 14 bearing against the platform 18.

Each sheet 14 is provided with an aperture 14g for the purpose of receiving vertically mounted pin 19 which is secured to the upper surface of platform 15. Post 19 cooperates with the openings 14g to maintain the stack 13 in a neat compact pile upon the platform 15. Platform 18 is also provided with an aperture 18a for receiving pin 19 which likewise serves to position platform 18 relative to the stack 13 of transparent wrappers.

The sheets initially are square shaped with each side being 8 $\frac{3}{4}$ " to 10 $\frac{1}{4}$ " long and more preferably being 9 $\frac{1}{2}$ " long. The two short sides 14c and 14f are cut a distance *d* from the corners *e* and *f* shown in FIGURE 1 with the distance *d* being between $\frac{3}{4}$ " to $\frac{1}{4}$ " and preferably being 1 $\frac{1}{2}$ ". The aperture 14g has a diameter of $\frac{5}{16}$ " and the center of aperture 14g is located $2\frac{9}{32}$ " in from corner *g* of wrapper 14. The location of the aperture was chosen so as to prevent the paper from fracturing

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in the region of said sides 14a and 14b under only slight pressure and the size of the aperture was found to be the most suitable to prevent the bunching of the wrapper during the cutting operation.

The wrapping sheet employed with the structure of the figures is preferably a wrapping film of polymer coated cellophane which has excellent heat sealable characteristics. It should be understood, however, that any standard heat sealable cellophane will provide a satisfactory heat sealable function. In addition to the above films, polybase plastic films, heat sealable wax paper and heat sealable films in general, will provide adequate results. In cases where a transparent film is not required, heat sealable wax paper may be employed with the requirement that the heating element be suitably adjusted to provide an adequate heat seal.

A substantially V-shaped bracket 20 is provided with flanges 20a and 20b for the purpose of securing bracket 20 to platform 18 by virtue of the fastening means 21. V-shaped bracket 20 is employed for the purpose of positioning the sandwich in readiness for the wrapping and sealing operations in a manner to be more fully described.

Surface 11 is further provided with a second opening 22 for receiving and supporting a tray means 23. Tray 23 contains a stack of elongated rectangular transparent sheets 24 which are employed for the purpose of wrapping pickle chips within the sandwich package in a manner to be more fully described.

A folding means 25 is located adjacent the wrapping paper stack 13 and is comprised of a guiding member 26 which is a substantially flat metal sheet having a guiding surface 26a aligned perpendicular to the surface 11. The forward end 26b of guiding member 26 is curved for the purpose of initiating the folding of the wrapping paper in a manner to be more fully described. Immediately adjacent and parallel to the guiding member 26 is a vertically aligned triangular shaped member 27 which is arranged with its sloping side 27a facing upward and being inclined downwardly in the direction of the wrapping paper stack 13. The guiding member 26 is provided with a flange 26c which is substantially parallel to surface 11 and which is provided with suitable apertures for receiving fastening means 28. Fastening means 28 act to secure guiding means 26 to the block 29 which in turn is secured to surface 11 in any suitable manner. As can clearly be seen in FIGURE 3, the lower edge 26d of guiding means 26 lies a spaced distance above surface 11 so as to permit the wrapping paper to pass through this space during the folding operation, in a manner to be more fully described. Also, the inner surface of guiding means 26 which faces the triangular member 27 is a spaced distance away from the abutting face of block 29 to provide a passageway 26e (see FIGURE 10) for the wrapping paper during the folding operation, in a manner to be more fully described. The heat seal unit 30 is positioned immediately behind the folding means 25 and is comprised of a housing 31 for housing the heating element 32. The upper surface of housing 31 is provided with an ON, OFF control switch 33 for selectively energizing or de-energizing heating element 32. An indicator light 34 is also provided on the upper surface of housing 31, which indicator light is energized when the heating element is ON to provide a visual indication to the operator of the state of the heating element. The heating element may be energized by any suitable energy source. A vertical cylindrically-shaped post 35 is positioned immediately adjacent the rearward end of the heating means housing 31 and is employed during part of the folding operation, in a manner to be more fully described.

A plurality of V-boards 36 are stacked upon the surface 11, which V-boards are used as backings for the wrapped sandwich package, in a manner to be more fully described. Each V-board, such as, for example, the V-board 37, is formed of a substantially flat elon-

gated rectangular shaped sheet of relatively stiff material, such as, for example, light cardboard, which sheet is folded at the center thereof to form a crease, or fold, 39 to give each V-board a substantially V-shaped configuration.

The folding and heat sealing operations are performed as follows:

With a suitable supply of sanitary wrapping sheets 13 and of V-boards 36, the wrapping and heat sealing operations may commence. The first step is that of energizing the heat-sealing means 30 by moving the control switch 33 to the ON position. The amount of time necessary to raise the temperature of the heating element sufficiently is dependent only upon the particular type of heating element employed. In any case, the heating of the element is no drawback since the heat-seal means may be energized before the wrapping paper sheets and/or V-boards are being stacked, or during the time that the sandwiches are being prepared so as to avoid the loss of any time in the actual sealing and wrapping operations.

The first step is that of taking a V-board, such as, for example, the V-board 37 and placing it against the V-shaped bracket 20, in the manner shown in FIGURE 4.

The next step is that of placing the sandwich 40 against the V-board 37, in the manner shown in FIGURE 5. Sandwich 40 is positioned such that its short sides 40a and 40b make engagement with the V-board 37. It should be noted that the sandwich, in order to be positioned in the manner shown in FIGURE 5, is first cut in half with the cut being along the line between two opposite corners of the sandwich so that the sandwich is now comprised of two triangular halves. The triangular halves 40c and 40d [which are shown in dotted fashion in FIGURE 1] are then stacked one upon the other so that the short sides 40a and 40b of both triangular halves 40c and 40d engage the V-board 37.

The topmost sheet of sanitary wrapping paper 14 is then lifted at the corner 14h (see FIGURE 5) and moved in the direction of arrow 41 until the upper half of the topmost sheet 14 covers the sandwich 40, in the manner shown in FIGURE 6. One marginal edge 14d of the top half of sheet 14 is then held downwardly against the side 40a of sandwich 40 by means of a finger, such as the finger 42. The sandwich, with the wrapper 14, is then moved in the direction shown by arrow 43 of FIGURE 7, causing the sandwich 40 and the V-board 37 to be moved away from the V-bracket 20 and further causing the top sheet 14 to be torn away from the vertical post 19. Thus, the sandwich is moved in the direction of arrow 43 from the position shown in FIGURE 7 to that shown in FIGURE 8. It can be seen that the lifting away of the wrapper 14 causes a tear 14j to occur in the left-hand corner of the wrapper 14. The sliding of the sandwich 40, V-board 37 and wrapper 14, in the direction shown by arrow 43, does not cause the wrapper immediately beneath the topmost wrapper 14 to slide out with the top wrapper due to the fact that the lifting of the wrapper over and around the top of sandwich 40, lifts the topmost sheet sufficiently above the next sheet so as to prevent any frictional engagement between the two sheets.

The marginal portions 44 of the wrapper which extend beyond the edge 40a of sandwich 40 are then guided into the space between the lower edge 26d of vertical guiding plate 26 and the surface 11 with the side 40a of sandwich 40, making sliding contact with the vertical guide member 26, in the manner shown in FIGURE 8. The forward projecting flap 49 (see FIGURE 7) is first folded back as shown in FIGURE 8 by the curved end 26b of guide plate 26. The sandwich is then moved along the surface 11 in the direction shown by arrow 45 of FIGURE 8. The lower marginal edge of the wrapping paper is caused to fold upwardly in the manner shown in FIGURE 9 due to the presence of the triangular member 27 with the fold being formed rapidly due to the sharp sloping side 27a which makes contact with the lower marginal edge 44

of the wrapping paper so as to lift the marginal edge 44 in the manner shown in FIGURE 9. Within the first two inches of travel the forward moving end of the wrapper is completely lifted and folded against the guide plate 26 which is parallel to V-board 37. The sandwich is moved still further in the direction shown by arrow 45 so as to make sliding contact with the heating element 32 in the manner shown in FIGURE 10. It can be seen from FIGURE 10 that while the forward end of the sandwich 40 makes sliding engagement with the heating element 32 the training edge of the sandwich 40 has not yet been removed from the folding means 25.

As soon as the corner 40e of sandwich comes into contact with heating element 32 the sandwich 40 is rotated clockwise in the direction shown by arrow 50 with the corner 40e of the sandwich substantially acting as the pivot point. This causes the side 40a of sandwich 40 to move away from the heating element 32 and causes the side 40b of sandwich 40 to come into sliding engagement with heating element 32 with the sandwich 40 moving from the position of FIGURE 10 to the position of FIGURE 11. The side 40b of sandwich 40 is then guided along the surface of heating element 32 while being moved in the direction shown by arrow 45 so as to effect a heat-seal of the wrapping material along the side 40b. It should be noted that it is not necessary to insert the marginal edges of the wrapper extending beyond the side 40b of sandwich 40 into the folding means 25 since they are adequately folded as a result of the initial folding operation and the pressing of the sandwich side 40b against heating element 32 completes the fold as well as providing the heat-seal.

The folding and sealing operation, having reached the stage depicted in FIGURE 11, still requires the folding and sealing of the flap 46. This is performed by moving the sandwich 40 in the direction shown by arrow 45 of FIGURE 11 until the flap 46 moves beyond the cylindrical post 35. The flap 46 is then folded against side 40b of the sandwich 40 by moving the sandwich in the direction shown by arrow 47 of FIGURE 12 causing the flap 46 to be folded against side 40b. The sandwich 40 is then moved in the direction shown by arrow 48 of FIGURE 13 through a distance sufficient to effect the heat-sealing of the flap 46 against the side 40b of sandwich 40. At this point the folding and sealing operations have been completed.

The V-boards 36 serve the function of providing a substantially rigid backing for the wrapping paper so that when the wrapping paper comes into sliding engagement with the heating element 32 the smooth rigid features of the V-board guarantee a substantially uniform heat-seal of the wrapper along the sides 40a and 40b of the sandwich 40. In addition thereto, the exposed surfaces of the V-boards may have a fanciful pattern imprinted thereon, as well as advertising matter, identifying the origin of the sandwiches, as well as the contents and price of the sandwich. The completed wrapped sandwich 40, shown in FIGURE 12, provides a substantially compact package which many present day automatic dispensing or vending machines require for the purpose of dispensing the sandwich. In addition thereto, the packaging of the sandwich in this manner provides the potential purchaser with the opportunity of readily observing the contents of the sandwich, thus enhancing the marketing of the sandwiches.

In cases where it is desired to package pickle chips within the sandwich wrapper, it is important to prevent the moist pickle chips from moistening the sandwich bread thus reducing the palatability of the sandwich. In order to prevent the pickle chips from moistening the sandwich bread a strip of material 24, which is preferably the same material as the wrapper 14, is placed against the long side of the sandwich, as shown in FIGURE 5, after the V-board 37 and sandwich 40 has been placed against the V-bracket 20. The pickle chips 47 are then placed upon the top layer 14 of sanitary wrapping paper.

The topmost sheet is then lifted in the same manner as previously described so as to be placed over and around the sandwich 40 in the manner shown in FIGURE 6. In this position, the pickle chips 47, while being contained within the wrapping paper 14, are separated from the sandwich 40 by means of the elongated wrapping strip 24. Thus the pickle chips may be contained within the sandwich wrapper while at the same time preventing such moist pickle chips from making the sandwich bread moist or soggy.

It can be seen from the foregoing that the instant invention provides a novel apparatus for semi-automatically wrapping and heat-sealing sandwiches in sanitary wrappers with the folding and sealing operations being performed in a simple and rapid manner to enable an extremely large number of sandwiches to be wrapped per unit time thus cutting down on labor costs considerably. While any suitable sheet material may be employed for the sanitary wrapper, a transparent sheet material is preferable to permit visual observation of the sandwich by the potential customer thus enhancing its salability. The positioning of the various components is such as to permit the wrapping and sealing operations to be performed with only small hand movements required by the operator. The distance between the V-bracket for positioning the sandwich and the heat-seal means being of the order of 12 inches and with the total travel (upon completion of the heat seal operation) being less than 16 inches which is well within the comfort range of arm motion for the average operator.

Although there has been described a preferred embodiment of this novel invention, many variations and modifications will now be apparent to those skilled in the art. Therefore, this invention is to be limited, not by the specific disclosure herein, but only by the appending claims.

What is claimed is:

1. Means for folding and heat sealing sandwiches and the like in sanitary wrappers comprising first means for storing and feeding individual sandwich wrappers; second means positioned immediately above said first means for positioning the sandwich item to be wrapped; said second means comprising a platform covering approximately one-half of said first means; folding means for folding the marginal edges of said wrapper against one side of said food item positioned in close proximity to said first and second means; heating means for heat sealing the folds of said wrapper to completely seal said food item within the wrapper; said heating means being positioned in tandem with said folding means to perform the heat sealing operation before completion of the folding operation; said first means comprising a spring mounted platform means for supporting a stack of sanitary wrappers; said platform means being biased in the direction of said second means; said spring mounted platform having a pin projecting upwardly toward said second means and protruding through said stack of wrappers to retain said wrappers in a neat stack.

2. Means for folding and heat sealing sandwiches and the like in sanitary wrappers comprising first means for storing and feeding individual sandwich wrappers; second

means positioned immediately above said first means for positioning the sandwich item to be wrapped; said second means comprising a platform covering approximately one-half of said first means; folding means for folding the marginal edges of said wrapper against one side of said food item positioned in close proximity to said first and second means; heating means for heat sealing the folds of said wrapper to completely seal said food item within the wrapper; said heating means being positioned in tandem with said folding means to perform the heat sealing operation before completion of the folding operation; said first means comprising a spring mounted platform means for supporting a stack of sanitary wrappers; said platform means being biased in the direction of said second means; said spring mounted platform having a pin projecting upwardly toward said second means and protruding through said stack of wrappers to retain said wrappers in a neat stack; one edge of said flat platform acting to fold the wrapper in half and around the food item positioned within said bracket.

3. Means for folding and heat sealing sandwiches and the like in sanitary wrappers comprising first means for storing and feeding individual sandwich wrappers; second means positioned immediately above said first means for positioning the sandwich item to be wrapped; said second means comprising a platform covering approximately one-half of said first means; folding means for folding the marginal edges of said wrapper against one side of said food item positioned in close proximity to said first and second means; heating means for heat sealing the folds of said wrapper to completely seal said food item within the wrapper; said heating means being positioned in tandem with said folding means to perform the heat sealing operation before completion of the folding operation; said first means comprising a spring mounted platform means for supporting a stack of sanitary wrappers; said platform means being biased in the direction of said second means; said spring mounted platform having a pin projecting upwardly toward said second means and protruding through said stack of wrappers to retain said wrappers in a neat stack; one edge of said flat platform acting to fold the wrapper in half and around the food item positioned within said bracket; said flat platform having an aperture for receiving said pin to position said second means above said first means.

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