Dec. 20, 1966 P. J. FELLNER 3,292,344

WRAPPING TABLE

Filed Feb. 28, 1964

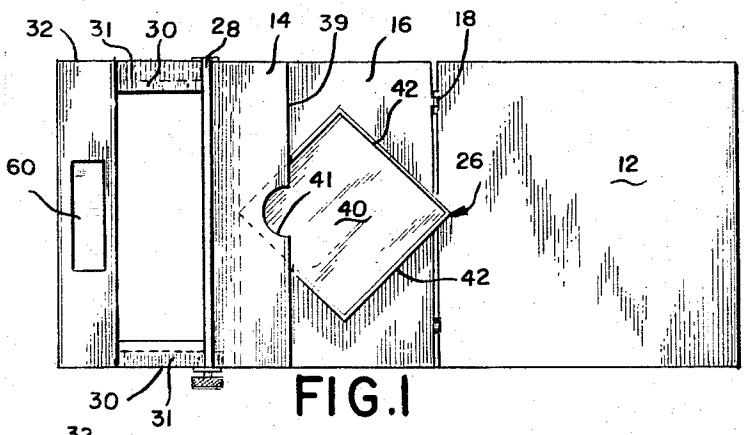


FIG. 1

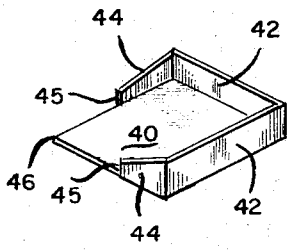


FIG. 4

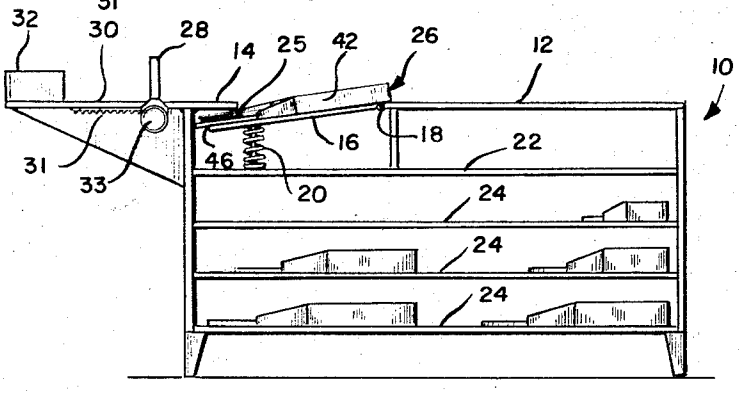


FIG. 2

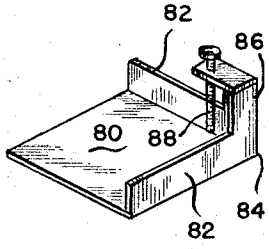


FIG. 5

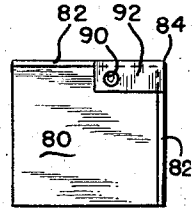


FIG. 6

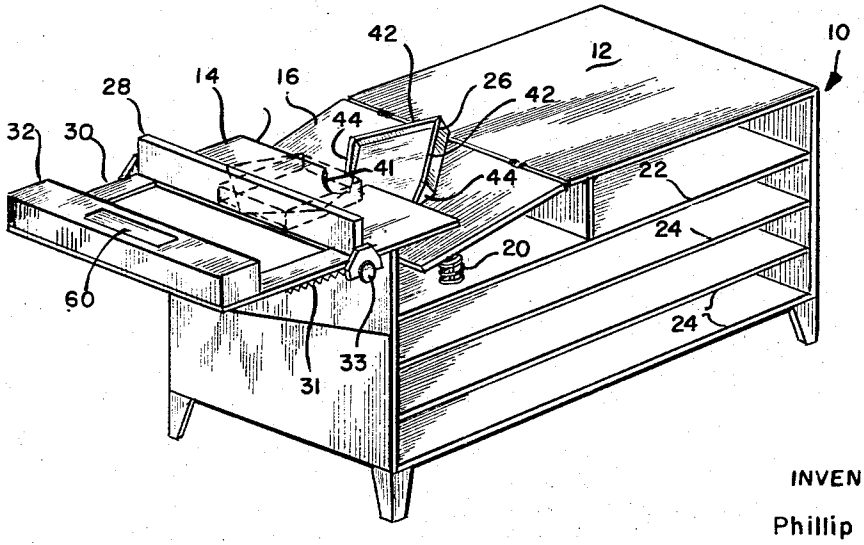


FIG. 3

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WRAPPING TABLE

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This invention relates to an apparatus for wrapping articles with transparent wrapping paper and more particularly to the combination of a tray for retaining such transparent wrapping paper and a work table which is especially designed for supporting said tray in a convenient position for wrapping such articles.

The wrapping of articles in transparent wrapping paper has been universally accepted for marketing of meat and produce because of the ability of the purchaser to see the article as well as the obvious sanitary advantages. At the present time, there are machines on the market that can wrap an article automatically, but they have not been readily accepted for wrapping packages of non-uniform dimensions. These articles must first be partially wrapped by hand in order to satisfactorily seal such articles. They are then placed in an automatic sealing, weighing and stamping machine. Since the speed of these machines is much faster than the speed of the hand wrapping process, efforts to improve the wrapping of the articles must be centered on the hand wrapping process. Trays and tables have been specially designed to accomplish this end, but have for the most part been limited somewhat by high cost, awkward equipment and unnecessarily dangerous sealing mechanisms.

One of the primary objects of the present invention is to provide an improved tray and table arrangement which overcomes these problems.

Another object of the present invention is to provide an improved tray and table combination for partially wrapping articles in transparent paper which results in faster operation of the automatic sealing machine.

Another object is to provide a wrapping table and tray which can be operated by an unskilled operator at greater speeds.

Another object of the present invention is to provide an improved tray for retaining transparent wrapping paper in an aligned relation.

A further object is to provide an improved table which holds the wrapping paper in place while it is being pulled around the article to be wrapped.

A still further object of the present invention is to provide an improved tray for retaining the wrapping paper in position.

These objects are accomplished by utilizing an especially designed table for supporting and aligning the article. This table is divided into two sections with a gap between the two sections for a spring biased leaf which is used to support a specially designed tray for the transparent wrapping paper. One section of the table is used as an article support section and overlies the leaf so that trays placed thereon will have one corner extending beneath this section of the table. The article to be wrapped is placed on the top of this section with one edge abutting an adjustable stop and the other edge aligned with the lip of this section of the table.

A tray is placed on the leaf with one corner of the tray extending beneath the leaf so that the transparent wrapping paper pis pressed or squeezed between the leaf and the underside of the support section. The operator can stand on either side of the work table to wrap the article. With one corner of the wrapping paper held between the leaf and support section, the opposite corner of the wrapping paper is pulled over the article and held against the front of the adjustable stop. In the same motion that the wrapping paper is pulled over the article, the operator

slides the other hand under a notch in the section and lifts the article off the support section carrying it forward toward a sealing bar. As the article is carried forward, the opposite corner of the paper is held under the article so that it overlaps the opposite corner of the wrapping paper. The bottom of the article is then pushed across a hot plate in the sealing bar to heat seal the overlapped sections of the wrapping paper. The semi-wrapped article is then placed on the automatic machine which finishes the wrapping and sealing operation. This entire process can be done in a few seconds by an experienced wrapper with a minimum of lost motion in wrapping the article.

Other objects and advantages will become more readily apparent from the following detailed description when read in connection with the accompanying drawings, in which:

FIG. 1 is a top view of the work table with a tray positioned under the work section.

FIG. 2 is a side view of the work table.

FIG. 3 is a perspective view of the apparatus with an article shown partly wrapped with the transparent wrapping paper.

FIG. 4 is a top view of a tray which can be used with the present apparatus.

FIG. 5 is a top view of a modified tray which can be used with this table.

FIG. 6 is a side view of the modified tray.

Referring more particularly to the drawings, a table **10** is shown having a work section **12** and a support section **14**. A leaf **16** is pivotally connected to the work section by hinges **18** and extends forward to a point beneath the support section. The leaf is biased against the underside of the support section by any convenient means; a pair of springs **20** mounted on shelf **22** is shown in the drawings to provide the bias, but is only an example of one way of providing this bias. A number of shelves **24** are provided beneath the work and support sections of the table for storage of a number of different sized trays **26** that are used to hold the transparent wrapping paper **25**.

An adjustable stop **28** is positioned on a pair of arms **30** which extend forward from the table to support heating bar **32**. The adjustable stop can be moved to a number of different positions by means of a rack **31** and gear **33** arrangement secured to the bottom of each of the arms. A knurled knob **35** secured to the end of shaft **37** can be used to adjust the position of the stop. Other means can be used to make this adjustment, such as locating holes in arms **30** and securing depending pins to the bottom of adjustable stop **28** for selectively setting the stop at predetermined positions. Any other means may be used to lock the stop in position.

The adjustment of the stop is made so that the packages to be wrapped have one edge aligned with edge **39** of the support section. A package can then be placed on the support section and pushed forward into engagement with the stop. A notch **41** is cut in edge **39** to aid in lifting the partially wrapped package from the support section. When a package is placed on the support section, the operator can lift the package off the section by sliding his hand under the notch and lifting straight up. This will be more fully described hereinafter.

The trays which are used to hold the transparent wrapping paper are all of the same design but of different dimensions, depending on the size of the article to be wrapped. Each tray includes a bottom section **40** and a pair of side walls **42** which extend along the full length of two of the intersecting edges of the tray. A short oblique side wall **44** extends forward from the end of each of the side walls **42** along the edge of the bottom section. One corner **46** of the tray is left free of any side walls. Since the dimensions of the tray are slightly

larger than the dimensions of the particular wrapping paper, when a stack of the paper is placed in the tray it will be retained in the tray by the side walls **42** and **44**. When the tray is placed on the leaf of the table, the leaf is depressed slightly so that corner **46** of the tray can be pushed under the support section. The ends of the side walls **44** are designed to engage edge **39** of the support section thereby limiting the amount of the wrapping paper which extends beneath the leaf. The force of the springs is sufficient to pinch the transparent wrapping paper against the underside of the support section and acts to hold the corner of the paper in position while the article is being wrapped. When the operator pulls the paper across the article, the corner of the paper beneath the support section will be held securely in position. The corner is released when the operator places his hand in the notch **41** of the support section and presses down slightly on the leaf.

In operation, an article is placed on the support section with one edge against the adjustable stop. The stop is moved until the other edge of the article is aligned with the lip of the support section and is then set in place. The operator can stand on either side of the table to wrap the article. Considering the heating bar to be located at the front of the table, the operator will pick up the rear corner of the wrapping paper in the tray with her front hand and will pull the wrapping paper across the top of the article and down the front of the adjustable stop in the gap between arms **30**. The slight bias provided by the springs will pinch the front corner of the paper in position underneath the support section. The operator, as she pulls the paper across the top of the article with her front hand, places her other hand in notch **41** in the support section of the table, pushing the leaf down slightly. This releases the corner of the paper from the bias of the springs. As she lifts the article off of the support section and moves it forward over the top of the adjustable bar, the rear corner is held in the same position so that as the article is moved forward, the rear corner of the wrapping paper will overlap the front corner of the wrapping paper beneath the article. The article is then slid across hot plate **60** in the heating bar and dropped onto the conveyor of an automatic sealing machine. The table is so designed that an operator can stand and wrap on both sides of the table at the same time. As one operator removes an article from the support section, the other operator will place an article on the work section and wrap it. The cycle is then repeated.

The tray shown in FIG. 4 is also the same tray shown in the wrapping table. This tray is low in profile so that it fits in the space between the shelves. The oblique walls **44** extend along the edge of the bottom of the tray only a short distance, which is sufficient to prevent the transparent wrapping paper from sliding out of the tray when it is lifted off of the shelf and placed on the work section. The oblique walls may be provided with an aligning edge **45** that can be used as a guide when the corner **45** of the tray is placed under the support section.

In FIGS. 5 and 6 a modified tray is shown having a substantially square bottom section **80** and side walls **82** extending along two of the sides and intersecting at corner **84**. A bracket **86** is secured to the intersection of the side walls and extends upward to support a pointed drill **88**. The drill is threaded at its upper end and screwed through hole **90** in the top **92** of the bracket. The drill is positioned to engage the edge of the transparent wrapping paper a short distance away from the corner of the tray. The wrapper can then grab the exposed corner of the wrapping paper without any interference from the hold down drill. When using this type of tray, a greater distance will be required between the shelves for storage purposes.

Although only one embodiment of the present invention has been shown and described, it should be apparent that various changes and modifications can be incorporated herein without departing from the scope of the appended claims.

What is claimed is:

1. The combination of means for wrapping an article having a front edge, a rear edge, and a substantially flat bottom comprising

a work surface for supporting said article,

said surface having a front lip,

an adjustable stop on said work surface for engaging the front edge of said article and aligning the rear edge with said lip,

tray means for retaining a plurality of wrapping sheets in a stack,

means for supporting said tray means with one corner of said sheets extending beneath said lip,

spring means for biasing said means for supporting against the underside of said work surface, whereby said corner of said wrapping sheet is clamped between the work surface and said means for supporting.

2. The combination according to claim **1** wherein said means for supporting comprises

a flat tray supporting surface having one edge underlying the work surface and the other edge mounted for pivotal motion.

3. The combination according to claim **1** wherein said tray means includes a substantially flat bottom section having side walls extending along two sides of said section and intersecting at one of the corners of the bottom section, and

secondary side wall sections extending partially along the other two sides of the bottom section to prevent the transparent wrapping paper stacked on said tray from sliding off of the bottom section.

4. The combination according to claim **3** wherein said secondary side wall sections include aligning surfaces on their vertical edges for aligning the trays with the lip of said work surface.

5. The combination according to claim **1** wherein said tray means includes a substantially flat bottom section having

side walls extending along two sides of said section and intersecting at one of the corners of the bottom section, and

bracket means mounted at said intersection, and

wrapping paper holding means supported by said bracket means a spaced distance from said intersection in close proximity to one of said sides.

6. The combination according to claim **5** wherein said wrapping paper holding means comprises

a sharp pointed member to penetrate the stack of paper.

7. A wrapping table for initially wrapping articles of varying height in transparent wrapping paper, said articles being supported in containers having a front edge, a rear edge, and a substantially flat bottom comprising

a base having a work section and a support section spaced a predetermined distance apart,

a leaf bridging said space and being pivotally connected to said work section and underlying one edge of said support section,

spring means biasing said leaf section into engagement with said support section, said leaf holding the transparent wrapping paper with one corner underlying the support section,

stop means positioned on said support section for aligning said articles with said one edge of said support section,

adjustment means for positioning said stop means a distance from said edge equal to the distance between the front and rear edges of said article, and

sealing means mounted on said base in spaced relation to said support section so that the articles can be initially wrapped with transparent paper before being passed over the sealing means.

8. A wrapping table according to claim 7 wherein said support section has a notch in said one edge located over the corner of the wrapping paper underlying its support section for aiding in removing articles from said support section.

9. A table for wrapping articles of varying heights with substantially square heat sealable wrapping paper comprising

a table having a work surface and a support surface located on a common plane,

a flat leaf having one edge pivotally connected to said work surface and the other edge underlying the support surface to support said wrapping paper,

spring means biasing the leaf against the support surface,

a pair of arms projecting parallely outward from said work surface,

an adjustable stop bar movably secured to the arms at right angles to the arms,

adjustment means for moving said stop bar back and forth on said arms, and

heating means secured to the end of said bar whereby an article placed on said work surface in abutting relation to said stop means can be quickly wrapped with said wrapping paper and sealed on said heating means.

10. A table according to claim 9 wherein said work surface includes a notch above said underlying edge of said leaf to aid in lifting the article from said work surface.

References Cited by the Examiner

UNITED STATES PATENTS

2,840,962	7/1958	Stremke et al.	53—390 X
2,914,189	11/1959	Bishop et al.	206—73 X
2,974,458	3/1961	Muskat et al.	53—390 X

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