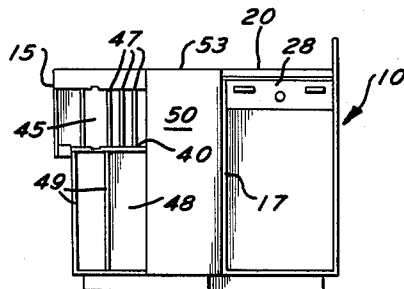


A. H. COHEN
CHECKOUT COUNTER

3 Sheets-Sheet 1

FIG. 1



BY

Sentinel of Honda

ATTORNEYS.

Filed June 2, 1965

CHECKOUT COUNTER

3 Sheets-Sheet 3

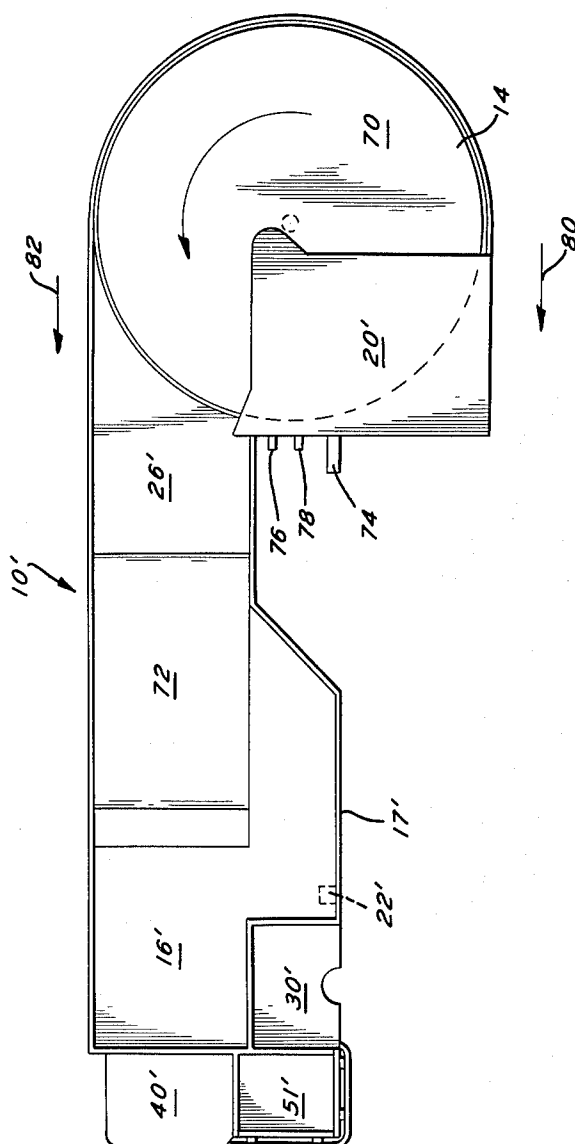


FIG. 8

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3,262,519

CHECKOUT COUNTER

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6 Claims. (Cl. 186—1)

This invention relates generally to a checkout counter and specifically to the arrangement of cash register stands and loading stations thereon.

In a crowded supermarket it is naturally essential to provide for a quick and efficient checkout of purchased articles. It is equally important to efficiently and effectively handle a large number of customers as quickly and as courteously as possible. A new and improved checkout counter is proposed which will physically and psychologically direct a line of customers along the counter while encouraging the customers to aid in the checking out and bagging of the articles purchased.

Therefore, to provide the foregoing and to overcome other difficulties of the prior art, the general object of this invention is to provide a new and improved checkout counter.

It is an object of this invention to provide a checkout counter which will encourage a customer to aid in bagging his own purchase.

An object of this invention is to provide a checkout counter which maintains a continuous separation between a customer and a cashier enabling the latter to work freely without interference.

Another object of this invention is to provide bagging wells at a rear station on a checkout counter which facilitates the bagging of purchases thereat.

A further object of this invention is to provide a convenient location of the most commonly used bags at the bagging areas on a checkout counter.

A further object is to provide an improved checkout counter which is economical to produce and which utilizes conventional, currently available components that lend themselves to standard mass production manufacturing techniques.

Other objects will appear hereinafter.

For the purpose of illustrating the invention there is shown in the drawings a form which is presently preferred; it being understood, however, that this invention is not limited to the precise arrangements and instrumentalities shown.

Other objects and a fuller understanding of the invention may be had by referring to the following description and claims, taken in conjunction with the accompanying drawings in which:

FIGURE 1 is a plan view of the improved checkout counter.

FIGURE 2 is an elevational side view of FIGURE 1 showing the cashier's side of the counter.

FIGURE 3 is a side elevational view of FIGURE 1 showing the customer's side of the counter.

FIGURE 4 is an end elevational view showing the rear of the counter in FIGURE 1.

FIGURE 5 is an enlarged sectional view taken along line 5—5 of FIGURE 1.

FIGURE 6 is a sectional view of FIGURE 5 taken along line 6—6.

FIGURE 7 is a partial sectional view of FIGURE 6 taken along line 7—7.

FIGURE 8 is a top plan view of another embodiment of the present invention.

Referring to the drawings in detail, wherein like numerals indicate like elements, there is shown in FIGURE 1 a drawing of the checkout counter of one embodiment of the present invention designated generally as 10. The

counter 10 has an elongated, generally rectangular shape, as shown, with a front at 12 and a rear at 14. The customer's side 15 of the counter is illustrated in FIGURE 3. The cashier's side 17 of the counter is illustrated in FIGURE 2. A conveyor system 18, 18' is provided to carry articles from the front 12 of the counter 10 to a rear station at 19. The rear station 19 has a downwardly sloping deck 16 to aid in collecting purchased articles from conveyor 18' for packaging.

A cash register stand 20 projects out from a front portion of counter 10 on the cashier's side 17 as illustrated in FIGURE 1. The cash register stand 20 forms an oblique projection pointing toward the rear of the counter 10. This projection of stand 20 serves to guide customers in an adjacent aisle away from the cashier's side 17 thereby providing a free space behind the stand 20 enabling a cashier to move along the cashier's side 17 to the rear station 19 without interference. The oblique orientation increases the ability of the checker to simultaneously view the register and merchandise on plate 26 with minimum effort.

A check station 25 is provided in the counter 10 by a switch under pressure plate 26, which upon loading stops the front conveyor system 18. Convenient controls for the conveyor system 18, 18' are provided by switches 29, 29', 22 and foot pedal 21 on the cashier's side 17 of the counter. Switch 29 is a manual switch adjacent stand 20 and when in the on position starts conveyor system 18. As soon as articles are removed from plate 26, system 18 resumes movement delivering more articles on plate 26. Foot pedal 21 is only used when there is a malfunction with the ability of plate 26 controlling system 18. The purpose of switch 22 will be made clear hereinafter. System 18' is selectively operable by switches 29' or 22 which are in parallel in the same circuit. A miscellaneous drawer 28 is provided beneath the cash register. Drawer 28 has two slots in the front wall, is internally divided, and preferably provided with a lock.

A flat cashier bagging platform 30 is provided at the rear of counter 10 on the cashier's side 17. As illustrated, the platform 30 is at a convenient level beneath the sloping deck 16. A first set of shelving is provided at 35 and separated into various sizes by the vertical adjustably positionable separator plates 37. Additional shelving is provided at 38 beneath the platform 30 and divided into various compartments by the vertical dividers 39.

A flat customer bagging platform 40 is provided at the rear 14 of counter 10 on the customer's side 15 as illustrated in FIGURE 1. Shelving 45 for use in conjunction with the platform 40 is provided beneath the rear station 19 and above the platform 40. The shelving 45 is divided into various compartments by the vertical separators 47. Additional shelving 48 is provided beneath the platform 40 and divided into various compartments by the vertical separators 49.

An upright box is provided at the rear 14 of counter 10 on the cashier's side 17. The upright box 50 includes a bottom 51 and is open at the top 53. The most commonly used standard size of bags are kept in the box 50. A wrap-around bumper bar 55 provides a protection around the box 50. The box 50 separates the platforms 30 and 40 to provide separate bagging wells at 60 and 65.

Customers checking out place purchased articles on the conveyor 18 and watch while they are being checked at the check station 25. The customers will be guided away from a cashier at an adjacent counter by the oblique projection of cashier stand 20. The customers will move to the rear station 19 along with the purchased articles. The cashier may freely walk from the cashier stand 20 to the rear station 19 to begin bagging while at all times facing the customer aisle at the cashier's normal bagging position. A standard size bag is removed from

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the box 50, opened and placed into the bagging well 60 on the platform 30. Purchased articles are removed from the rear station 19 and placed in the bag. Additional bags of varying sizes may be taken from the shelving at 35 and 38. The side of the box 50 will aid in keeping the bag in the well 60 at an upright position. Thus, it will be noted that an open bag on platform 30 in well 60 will be enclosed on three sides which enhances positioning the bag in an upright disposition.

A customer, during this time, will normally be standing in the vicinity of the other bagging well 65. The standard size bags will be visible to him in the box 50. Various other size bags will be visible and available to the customer in the shelving at 45 and 48. The platform 40 will be separated by the box 50 from the platform 30 to provide a completely separate work area on the customer's side. Thus, hopefully, the customer will be encouraged to aid in bagging his own purchases, particularly during rush periods.

If the number of articles is large, some of them will be located on conveyor system 18' at the beginning of the bagging operation. If the switch 29' was turned off prior to the bagging operation, the cashier need only turn switch 22 on. This will restart conveyor system 19'. The switch 22 is conveniently located near well 60 so that the cashier does not have to walk back to switch 29'.

In FIGURE 8, there is illustrated another embodiment of the present invention designated generally as 10'. The checkout counter 10' is identical with the checkout counter 10 except as will be made clear hereinafter. Accordingly, corresponding structure is provided with corresponding numerals.

The checkout counter 10', in place of the belt type conveyor system 18, utilizes a conveyor system in the form of a rotating disk 70 which is adapted to convey articles onto the pressure plate 26'. The conveyor system 18' of checkout counter 10' is designated as 72 in the checkout counter 10'. A foot pedal 74 is provided and corresponds identically with the foot pedal 21. Likewise, switches 76 and 78 are provided corresponding identically with switches 29 and 29', respectively.

A switch not shown but corresponding identically to switch 22 will be provided to effect operation of conveyor system 72. The checkout counter 10' is designed for use in checkout systems wherein the customer will unload the articles from the cart and place them on the disk 70 in the area designated A. The disk 70 will convey the articles to the pressure plate 26'. When the customer has fully unloaded the cart, the cart will be moved into the aisle designated by the arrow 80. Thereafter, the customer will move into the customer aisle designated by the arrow 82. Otherwise, the system of checkout counter 10' is identical with the checkout counter 10. The position and location of the cashier stand 20' facilitates the provision of a walking space for the cashier without interfering with the carts which will be disposed in the aisle indicated by the arrow 80.

The present invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof and, accordingly, reference should be made to the appended claims, rather than to the foregoing specification as indicating the scope of the invention.

I claim:

1. A checkout counter comprising an elongated counter having a customer side and a cashier side and including a conveyor means for carrying articles thereon to a rear station on said counter; a cash register stand projecting from said cashier side to provide free space therebehind enabling a cashier to move along said cashier side to said rear station without interference with customers or carts in an adjacent aisle; a first flat bagging platform below said rear station on said cashier side at a convenient level; a second flat bagging platform below said rear station on rear end of said counter at a convenient level for customer assistance in bagging; and an upright box affixed at a rear

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corner of said counter at said cashier side, said box separating said first and second platforms and being open at top for storage of a standard size bag therein, said box cooperating to stand bags on said first and second platforms and maintaining a separation between said customer and cashier sides which encourages said customer assistance.

2. A checkout counter in accordance with claim 1 wherein said first and second bagging platforms are at the same convenient level.

3. A checkout counter in accordance with claim 1 wherein said cash register stand projects obliquely toward rear of said counter for guidance of said customers in said adjacent aisle away from said cashier side and enhancing vision of a cash register on the stand and said conveyor by a cashier.

4. A checkout counter comprising an elongated, generally rectangular counter having a customer side and a cashier side and including a conveyor for carrying articles thereon to a rear station on said counter; a cash register stand obliquely projecting from a front portion of said counter at said cashier side toward rear of said counter for guidance of customers in adjacent aisle away from said cashier side, thereby providing a free space therebehind enabling a cashier to move along said cashier side to said rear station without interference; a first flat bagging platform below said rear station on said cashier side at a convenient level; a first set of storage shelves for various bag sizes in said counter below said rear station and adjacent said first platform; a second flat bagging platform below said rear station on rear end of said counter at said level for customer assistance in bagging; a second set of storage shelves for various bag sizes in said counter between said rear station and said second platform; and an upright box affixed at a rear corner of said counter at said cashier side, said box separating said first and second platforms and being open at top for storage of a standard size bag therein, said box cooperating to stand bags on said first and second platforms and maintaining a separation between said customer and cashier side which encourages said customer assistance.

5. A checkout counter in accordance with claim 4 wherein said rear station has a downward slope for collection of said articles from said conveyor.

6. A checkout counter comprising an elongated counter having a customer side and a cashier side and including a conveyor means for carrying articles thereon to a rear station on said counter; a cash register stand projecting from said cashier side to provide free space therebehind enabling a cashier to move along said cashier side to said rear station without interference with customers or carts in an adjacent aisle; a first flat bagging platform below said rear station on said cashier side at a convenient level; a second flat bagging platform below said rear station on rear end of said counter at a convenient level for customer assistance in bagging; and an upright box affixed at a rear corner of said counter at said cashier side, said box separating said first and second platforms and being open at top for storage of a standard size bag therein, said box cooperating to stand bags on said first and second platforms and maintaining a separation between said customer and cashier sides which encourages said customer assistance, said conveyor means including two spaced conveyor systems separated by a plate adjacent said stand, one of said conveyors being between said plate and said rear station, and a switch means at said rear station for operating said one conveyor system.

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