C. R. BALL.

STORE SERVICE.

APPLICATION FILED JAN. 30, 1920.

1,408,679.

Patented Mar. 7, 1922.

2 SHEETS—SHEET 1.

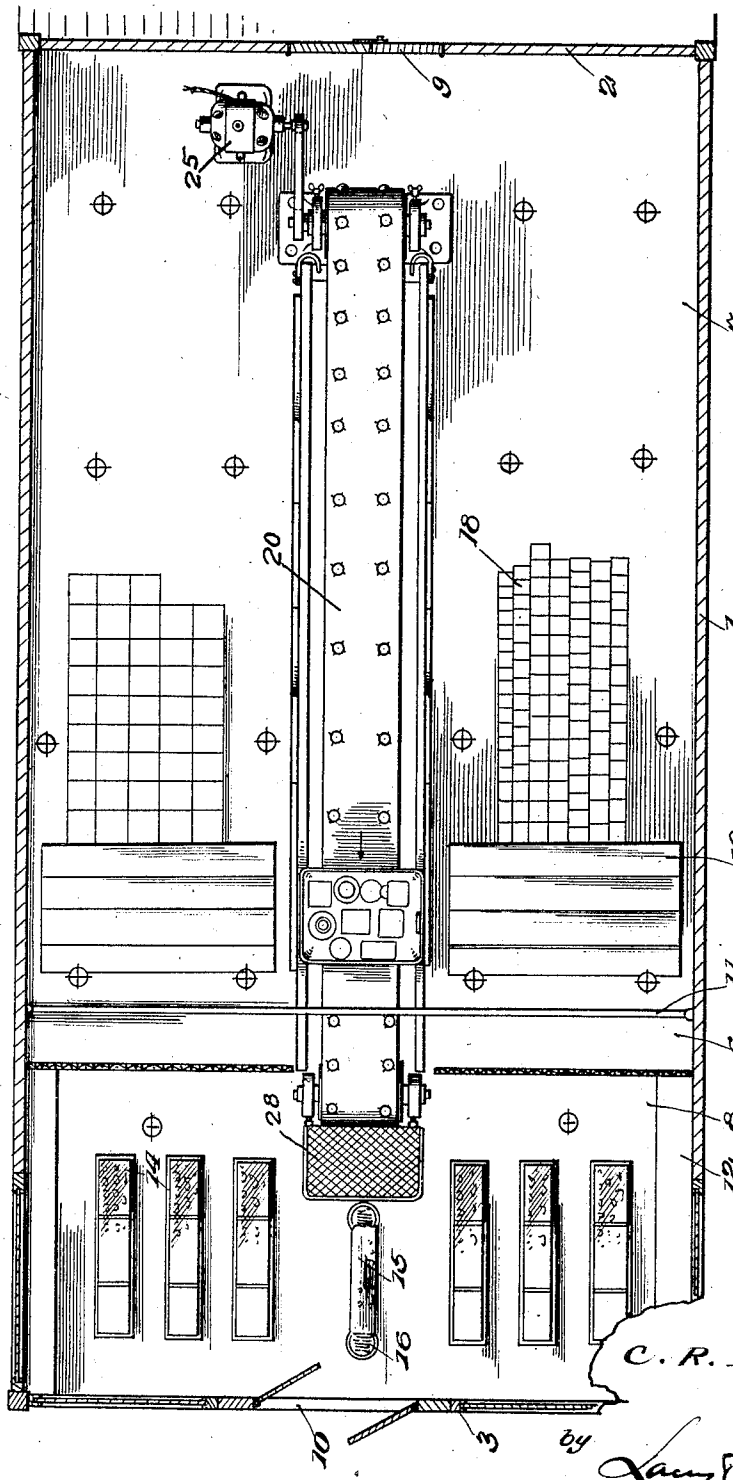


Fig. 1.

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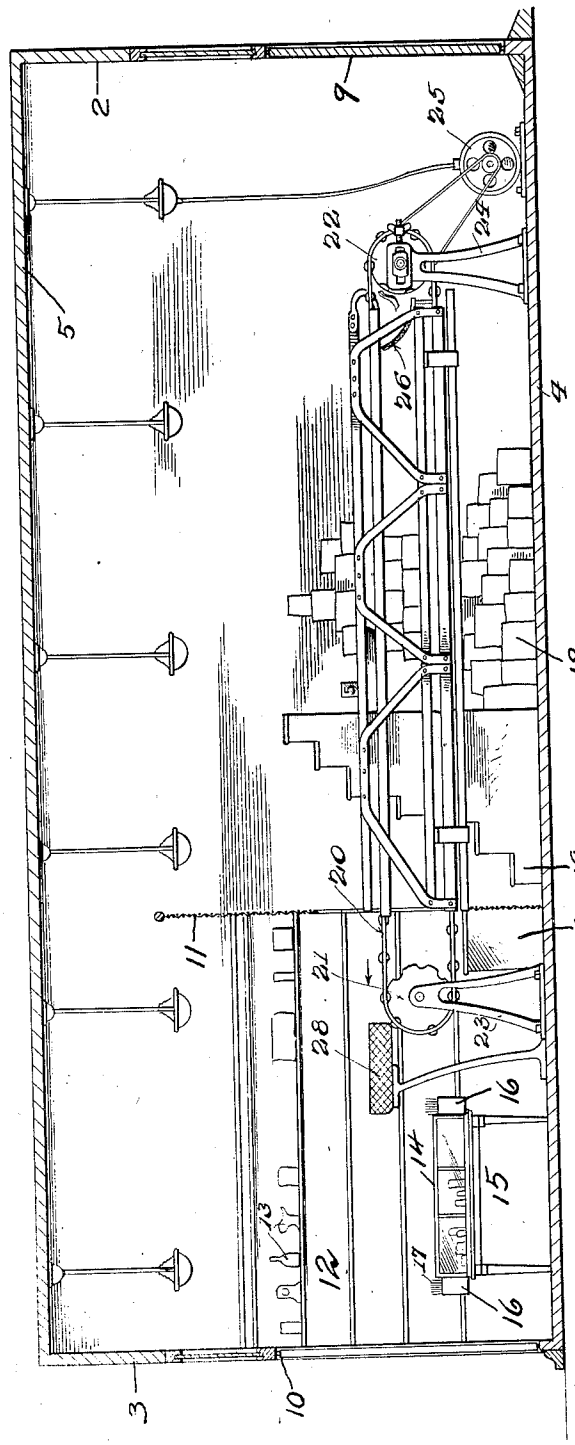


Fig. 2.

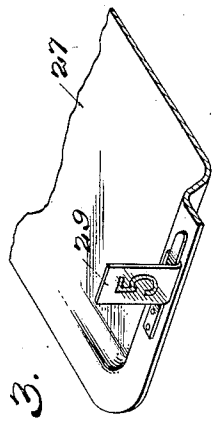


Fig. 3.

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UNITED STATES PATENT OFFICE.

CLARENCE R. BALL, OF WASHINGTON, DISTRICT OF COLUMBIA.

STORE SERVICE.

1,408,679. Specification of Letters Patent. Patented Mar. 7, 1922.

Application filed January 30, 1920. Serial No. 355,083.

To all whom it may concern:

Be it known that I, CLARENCE R. BALL, a citizen of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Store Service, of which the following is a specification.

This invention relates to an improved method of store service and has as one of its objects to provide an arrangement whereby customers may select their purchases without actually handling the goods or articles comprising the stock on hand so that the goods will not become shop worn or damaged through handling, and articles of food or toilet articles will not be liable to contamination, the invention contemplating the selection of purchases from samples which are kept on display entirely separate from the actual stock of goods, the samples being, if desired, accompanied by suitable descriptive matter and being designated by number and the prices of the goods or articles which they represent being displayed in connection with them so that all necessary information is afforded the prospective purchaser to the same extent as though he was brought into actual contact with the stock of goods or articles and had their merits explained by a salesman.

By the arrangement above briefly explained, the invention contemplates providing against theft or shoplifting on the part of visitors to the store inasmuch as the samples may be arranged in show cases, may be secured in place, or may otherwise be guarded against removal.

It will be evident that the invention also contemplates the saving of much time and confusion by the arrangement stated and that a great economy in floor space may be effected as compared with that required to display complete stocks of goods or articles. Likewise it will be evident that the expense of clerk hire may be eliminated to a great extent by reason of such arrangement inasmuch as such attendants as are employed will be occupied practically solely in the filling of written orders.

In the accompanying drawings:

Figure 1 is a plan view illustrating the arrangement contemplated by the present invention;

Fig. 2 is a vertical longitudinal sectional view illustrating the proposed arrangement;

Fig. 3 is a fragmentary perspective view illustrating a portion of the service apparatus.

In the drawings there is shown a store the interior of which is arranged in accordance with the principles of the invention and the said store includes side walls 1, a rear wall 2, a front wall 3, a floor 4, and a ceiling 5. A counter or railing indicated in general by the numeral 6, extends transversely of the interior of the store across the floor 4 and divides the interior of the store into a stock-room 7 and a show room 8. Entrance to the stock room may be had for example through a door 9 in the rear wall 2, and the customers may enter and leave the show room 8 through a doorway 10 in the front wall 3. Of course, the doors may be otherwise arranged and there may be any desired arrangement of windows. If desired the counter or railing 6 may be supplemented by a screen or railing as indicated by the numeral 11 or the space above the counter may be left clear either as desired.

Within the show room 8 and for example along the side walls 1, there may be arranged tiers of shelves 12 upon which may be displayed various articles of merchandise, as indicated by the numeral 13, each of which articles may be accompanied by any suitable descriptive matter explaining its merits and use, the selling price of the same and any other desired information, and each article will preferably be given a designating number. The articles of merchandise may likewise be displayed in suitable showcases 14 arranged in any desired manner within the show room 8 and in fact any type of store furniture or store fixtures whatsoever may be employed within the show room for displaying and setting off to the best advantage the goods or articles of merchandise carried in stock. In the preferred arrangement, a showcase or table 15, located preferably centrally of the show room 8, is provided with one or more boxes or compartments 16 within which are placed order blanks 17 which are individually numbered. While this arrangement will probably be preferred, it will be evident that these order blanks may be placed at any other desired location within the show room where they will be accessible to the customers.

Within the stock room 7 is stored the general stock of goods or articles of merchan-

dise and these may be arranged in piles or upon shelves or within cabinets, or in fact in any manner found most suitable, this stock merchandise being indicated in general by the numeral 18. Also if desired, within the stock room 17 there may be provided display shelves 19 located more or less closely to the counter 6 and facing the same so as to not only practically hide from the customers' view the remaining stock within the stock room but at the same time display to advantage any articles of merchandise placed thereon. Of course, showcases or other store fixtures might be employed in lieu of the shelves 19.

In a co-pending application filed by me January 15, 1919, Serial No. 271,232, I have disclosed a self-serving apparatus which may be very successfully employed in the store arrangement contemplated by the present invention. This apparatus, being fully illustrated and described in the said co-pending application, need not be disclosed in great detail herein and it will suffice to say that the same comprises, generally speaking, an endless conveyor belt 20 which is trained about rolls 21 and 22 mounted in suitable bearings 23 and 24 respectively, the lower stretch of this belt being, of course, designed to travel in one direction and the upper stretch in the opposite direction. In the present arrangement, the roll 21 is located above and close to the c unter or railing 6 and the conveyor extends from this point rearwardly into the stock room, preferably centrally thereof as shown in Fig. 1 of the drawings. The roll 22 may be either continuously or intermittently rotated by hand or by the application of power as for example from a motor 25 and the direction of rotation is such that the lower stretch of the conveyor belt will travel rearwardly or, in other words, in the direction of the rear wall 2 while the upper stretch will travel forwardly or, in other words, in the direction of the counter or railing 6.

A customer entering the show room 8, will first select one of the order blanks 17 and then as he inspects the articles on display in this room, will write down on this blank the numbers of the articles and the cost of each. Having made his selections he will total the amount and then, bearing in mind the number of his order slip, will place the same upon the upper side of the lower stretch of the conveyor belt 20 by which it will be carried rearwardly into the stock room and from which it may be removed at any point in its travel by any one of the attendants in the said room or, if there is no attendant immediately present, the order blank will be carried by the conveyor belt around the roll 22 and deposited into a suitable basket or receptacle 26 from which it may be subsequently removed. An attendant in the stock room will fill the order which has been written upon the order blank and will collect the money which is to pay for the same, the required amount having been placed by the customer in an envelope together with the order blank. Having filled the order the same, together with any change due the customer, is placed, suitably wrapped, in a tray 27 which is disposed upon the upper stretch of the conveyor belt 20 and is carried thereby to the counter 6 where it is deposited in an open ended basket 28 provided at the respective end of the said upper stretch of the conveyor. The customer will recognize his order by a number tag 29 which the attendant will apply to the tray 27 and which will correspond to the number upon the order blank used by the customer.

It will be understood from the foregoing that by the arrangement illustrated and described, sales may be made more rapidly and with less handling of the goods or articles of merchandise and by the employment of fewer clerks or attendants. Also it will be evident that much floor space may be saved and that the service will generally be found to be more satisfactory both to the merchant and to the customer than is the present method. While by the arrangement disclosed it is wholly unnecessary for a customer to have any oral dealings with a clerk or attendant, it will be understood that one or more attendants may be employed either at the counter 6 or within the show room if occasion requires.

Having thus described the invention, what is claimed as new is:

In store service, a stock room, a show room, a counter or the like dividing the rooms, means in the show room for displaying articles of merchandise, merchandise displaying means in the stock room facing the said counter or the like, and a single conveyor extending from the said counter or the like into the stock room and including belt stretches traveling in opposite directions.

In testimony whereof I affix my signature.

CLARENCE R. BALL. [L. S.]