

Nov. 20, 1923.

1,475,149

E. E. SMITH

STORE APPARATUS

Filed Feb. 14, 1923

2 Sheets-Sheet 1

Fig. 1.

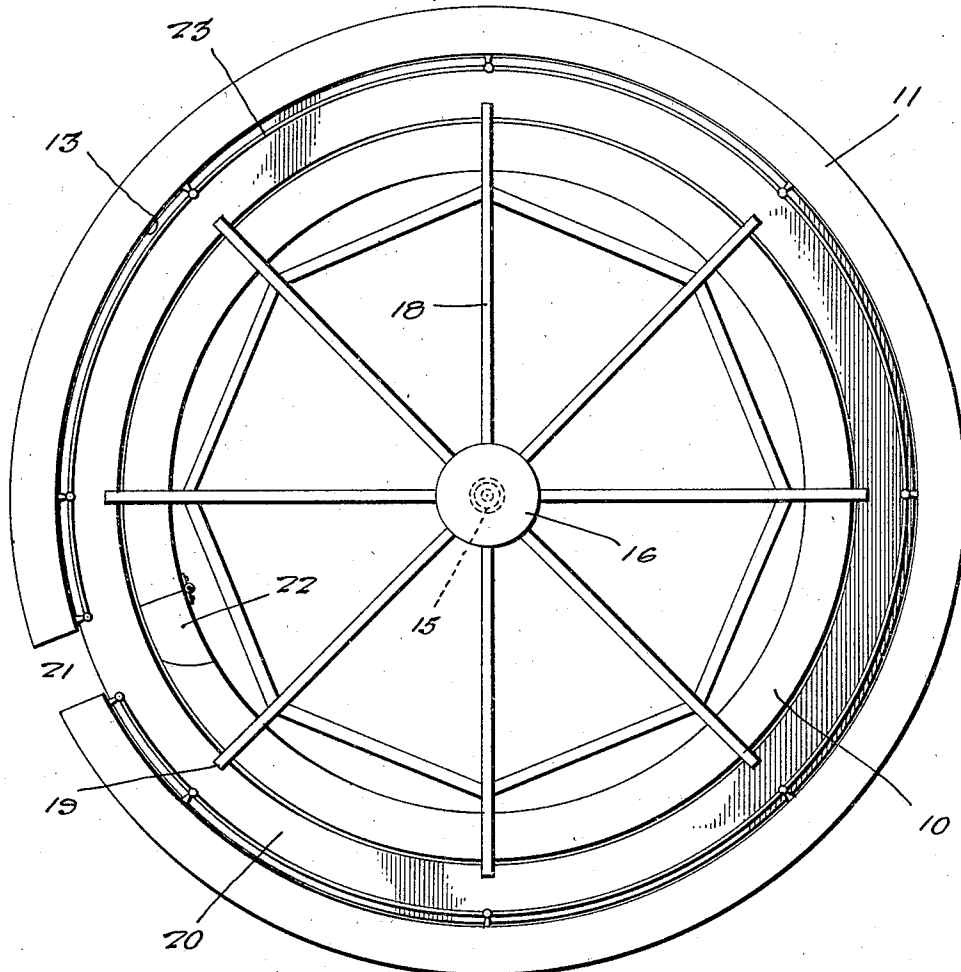
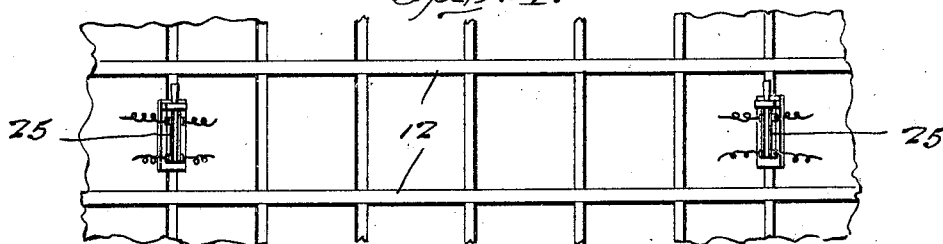


Fig. 4.



Paul M. Hunt.

WITNESS:

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Fig. 2.

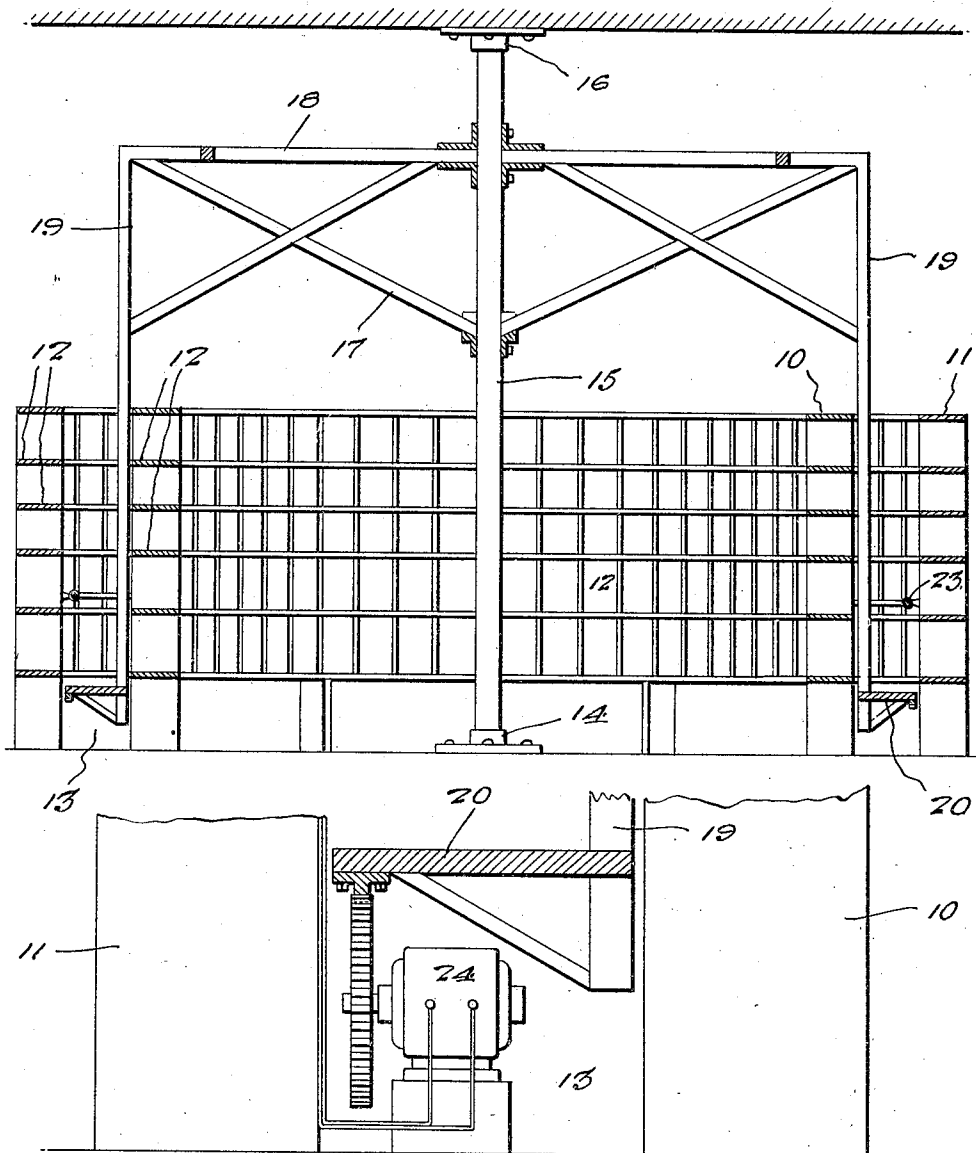


Fig. 3.

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UNITED STATES PATENT OFFICE.

EDWARD E. SMITH, OF EL PASO, TEXAS.

STORE APPARATUS.

Application filed February 14, 1923. Serial No. 618,993.

To all whom it may concern:

Be it known that I, EDWARD E. SMITH, a citizen of the United States, residing at El Paso, in the county of El Paso and State of Texas, have invented new and useful Improvements in Store Apparatus, of which the following is a specification.

This invention relates to store apparatus and has for its object the provision of a store construction, arrangement or system in which the merchandise is stored upon a plurality of shelves arranged in tiers, the shelves being furthermore disposed in concentric series to define an annular space within which is located a rotatably mounted wheel upon which the clerk or salesman stands so that he will be carried by the wheel between the series of shelves and be able to reach down the desired articles and place them within a box or other receptacle, likewise disposed on the wheel.

Another object is the provision of an apparatus of this character in which the wheel may be driven by an electric motor or other mechanical means within control of the operator riding on the wheel, or in which propulsion of the wheel or moving platform may be effected manually by pulling upon a hand rail or the like suitably mounted at some desired height along the shelf.

An additional object is the provision of an apparatus of this character which will be simple and inexpensive to manufacture and install, a great time and labor saver and a general improvement in the art.

With the above and other objects and advantages in view the invention consists in the details of construction to be hereinafter more fully described and claimed and illustrated in the accompanying drawings, in which:

Figure 1 is a plan view of the complete device,

Figure 2 is a vertical section,

Figure 3 is a detail view showing transmission means for driving the wheel and

Figure 4 is a detail view of a control means operable by the clerk or salesman.

Referring more particularly to the drawings, I have shown the apparatus as consisting of inner and outer shelving 10 and 11 respectively which may be built in any desired manner and which may be of any size and material. There may also be any desired number of shelves 12 in each series and these shelves may be of ordinary or plain construction or some of them may be of

special design to hold certain commodities, while, if desired, some of them may be constructed either as or to hold bins. The two series of shelving are spaced apart as shown to define an annular or circular space 13.

Rising from the floor and mounted in a suitable bearing 14 thereon is a vertical shaft or standard 15 which has its upper end journaled in a suitable bearing 16 mounted on the ceiling. Radiating from this shaft or standard are upwardly and outwardly inclined bars 17 braced by other bars or rods 18 and constituting a species of spoke construction. Depending from the outer ends of these spoke members are uprights 19 which have their lower ends carrying a circular platform or wheel 20 which is located between the outer and inner series of shelves. At some point the outer series of shelves must be interrupted to provide an entrance opening 21 through which the salesman may pass when stepping onto the rotary platform or wheel. A convenient arrangement would be to use the space within the inner series of shelves for storage purposes, that is for reserve stock so that the supply of articles on the shelves may be readily replenished from time to time and a very neat arrangement is to provide a hingedly mounted section in the inner series of shelving to constitute a door giving access to the inside or storage compartment.

It is of course conceivable that a hand rail 23 may be provided supported from either series of shelves so that the salesman may grasp this rail and pull the rotary platform or wheel along as desired while he selects from the shelves the various articles desired to fill the particular order.

It would however be advisable to provide an electric motor 24 having a suitable gear connection with either the shaft 15 or preferably with the inner or outer periphery or underside of the rotating platform for the purpose of furnishing power to drive the wheel. It would of course be essential to provide a conventional control 25 at the operator's station or at a plurality of points on the wheel so that the motor and consequently the wheel may be started and stopped at will. It is likewise conceivable that a further modified drive means may be provided.

In the use of the device the salesman steps upon the platform and either operates the motor or whatever means may be provided

for effecting rotation of the platform so that the salesman will be carried around between the inner and outer series of shelves. This will enable him to make his selection from the merchandise on the shelves in accordance with the orders of a customer, the various articles being taken at the different places and deposited within a basket, box or other receptacle if preferred until the entire order is filled upon which the salesman operates the device to carry him to the entrance so that he may then step down with the filled order. In case of a self service store it is to be noted that the customer may stand upon the platform and in case the same is stationary walk there along to the desired points where he may reach the articles of merchandise he wishes to purchase, or the customers might be permitted to go, one at a time on the platform and operate the same so as to reach the desired articles. The space within the rotary device is intended for the storage of reserve supplies which are intended for the purpose of replenishing the supplies on the shelves when they become exhausted.

From the foregoing description and a study of the drawings it will be apparent that I have thus provided a simple, inexpensive and easily constructed and installed store service apparatus which will be unique, attractive and a great time and labor saver.

While I have shown and described the preferred embodiment of the invention it

is of course to be understood that I reserve the right to make such changes in the form, construction and arrangement of parts as will not depart from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention I claim:

1. A store apparatus comprising outer and inner series of shelving spaced apart to define a circular passage, said shelving being designed to carrying commodities on sale, and a wheel like rotary platform designed to support the salesman and traveling in the space between the shelving.

2. A store apparatus comprising an outer and an inner series of shelves spaced apart to define a circular passage and adapted to support commodities on sale, a shaft located at the center of the series of shelves, and a wheel like platform supported from said shaft and movable within said circular passage.

3. A store apparatus comprising an outer and an inner series of shelves spaced apart to define a circular passage and adapted to support commodities on sale, a shaft located at the center of the series of shelves, and a wheel like platform supported from said shaft and movable within said circular passage, and means for rotating the shaft and wheel.

In testimony whereof I affix my signature.

EDWARD E. SMITH.