United States Patent [19]

Ishammar

[11] **3,836,220**

[45] **Sept. 17, 1974**

[54] **GOODS DELIVERY SYSTEM**

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[22] Filed: **Sept. 20, 1972**

[21] Appl. No.: **290,620**

[52] **U.S. Cl.** ..... **312/236,** 312/286, 312/290, 186/1 R

[51] **Int. Cl.** **A47b 77/08**

[58] **Field of Search** ..... 312/213, 236, 286, 287, 312/250, 116, 290; 186/1 R, 26, 27

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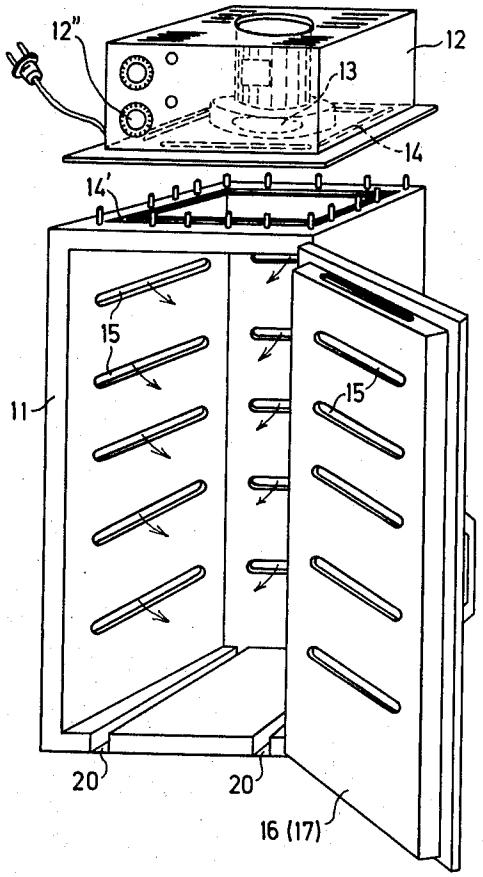
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[57] **ABSTRACT**

A goods delivery system includes a row of cabinets which are accessible through doors from opposite sides of a wall of a room or other space. On each cabinet there is provided an exchangeable top unit for circulating conditioned air in a closed path through the interior of the cabinet.

2 Claims, 4 Drawing Figures



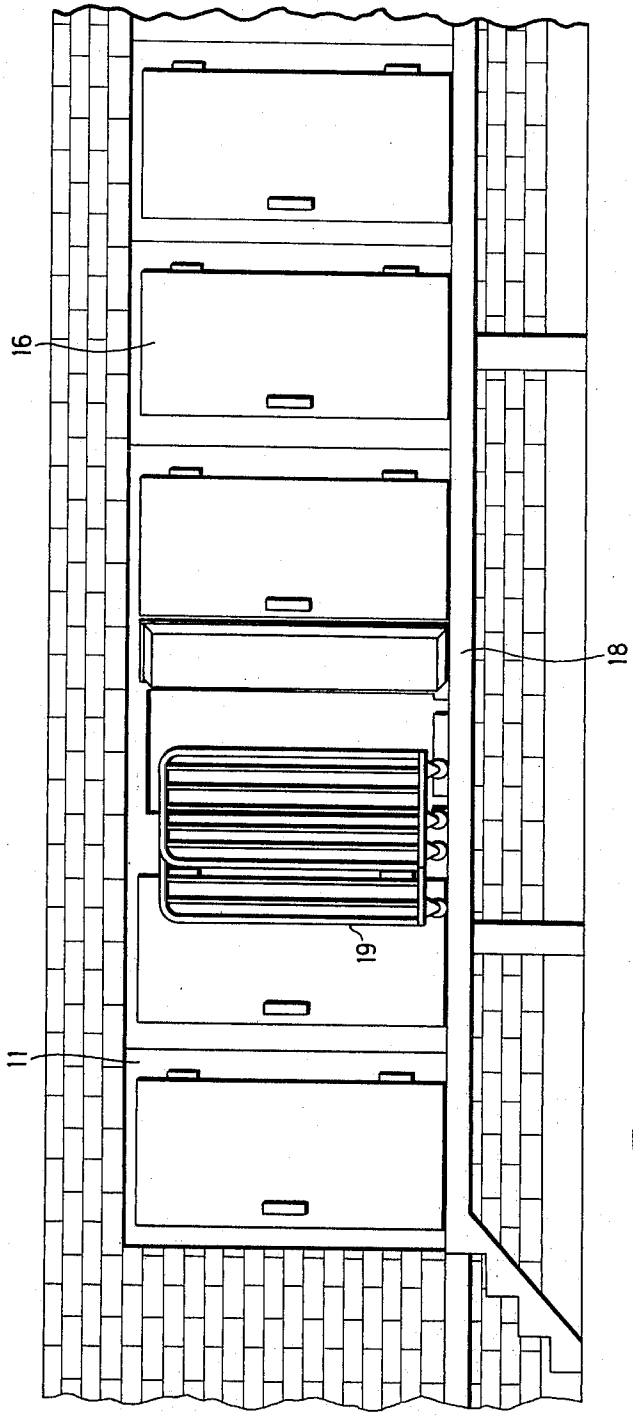


FIG. 1

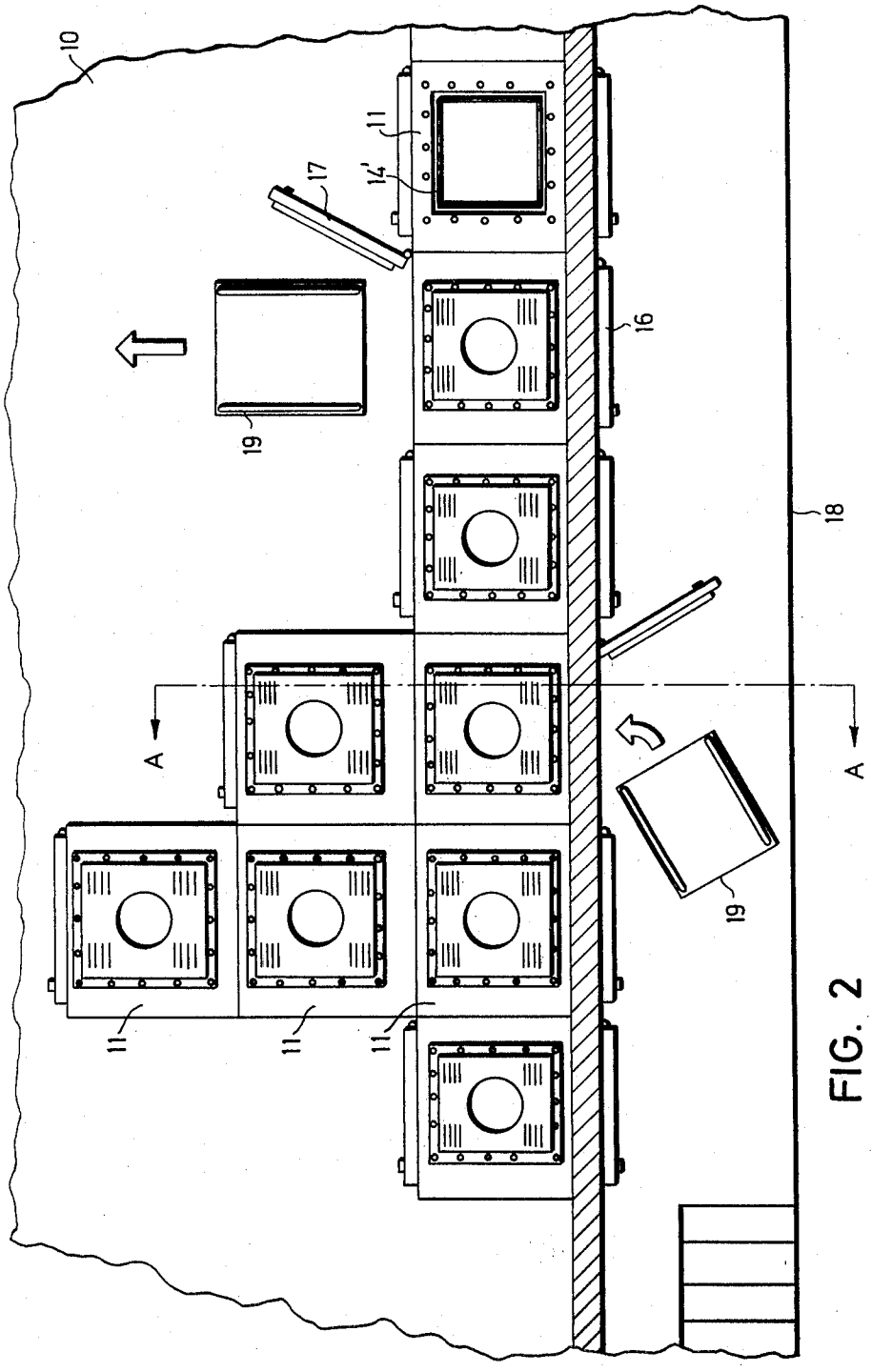


FIG. 2

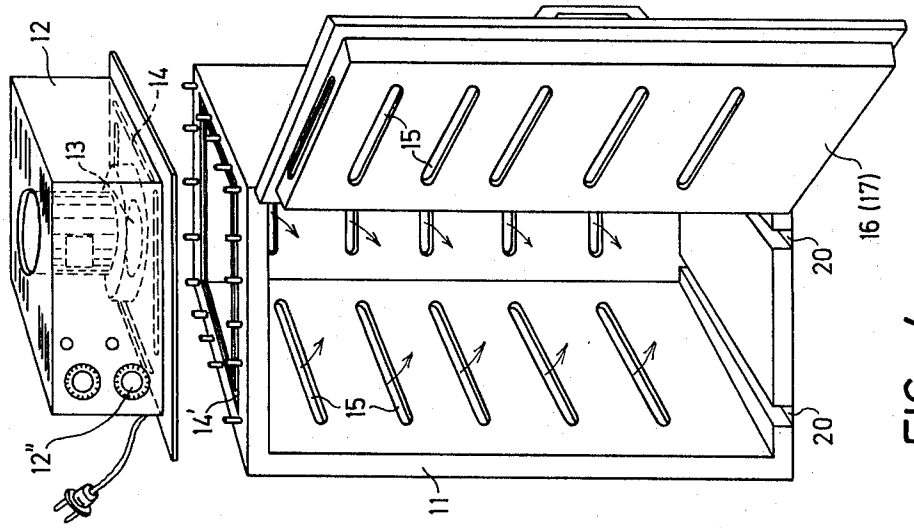


FIG. 4

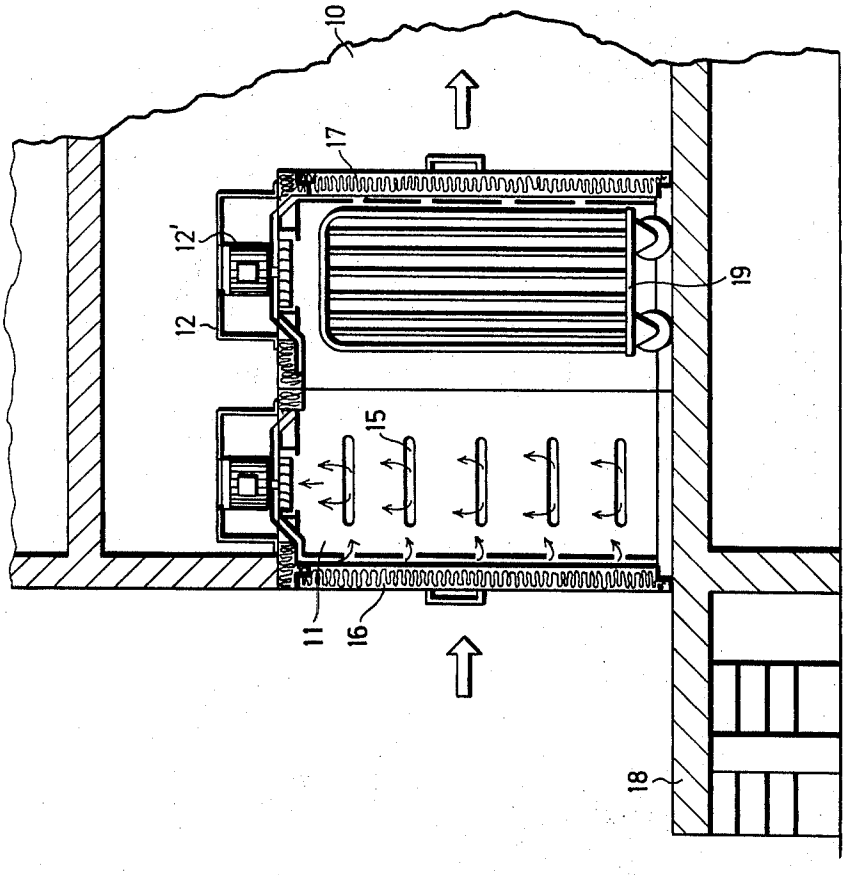


FIG. 3

GOODS DELIVERY SYSTEM

For rational handling of goods in shops and particularly in small shops of the local area type having very limited personal resources it is important to cut down as extensively as possible the assistance by the staff of the shop at the delivery of goods to the shop and to enable goods to be distributed and delivered at times which do not fall within the hours during which the shop normally is open and the staff is not available in the shop. Of course, the delivered goods have to be stored in the shop in such a manner and under such temperature and other conditions that the quality of the goods will not be affected between delivery and sale or the time when the staff takes care of the goods. Similar desiderata exist in hospitals, large households, canteens, bars, and restaurants.

One object of the invention is to provide a rational goods delivery which does not require assistance by the staff of the shop or the like.

According to the invention there is provided a goods delivery system for places such as shops, restaurants, and the like comprising a number of cabinets arranged side by side in a row at least as part of a wall defining an interior space, then backs facing such space, and their fronts facing outside, doors on each cabinet the interior of the cabinet being accessible from each side of the wall through said doors, an exchangeable top unit on each cabinet constituting a top closure for the cabinets, and means contained in the top unit for circulating air through the interior of the cabinet and through passages in the walls thereof and for regulating the temperature of the circulating air.

This goods delivery system enables the goods to be delivered from the outside in spaces where the conditions are suitable for the storing of the goods without the necessity that the supplier has access to the premises or has to be assisted by the staff of the shop when the goods are delivered at the place. The delivered goods will be stored in a satisfactory manner and may be taken by the customers directly from the several cabinets or be taken care of by the staff of the shop at a time which is the most convenient.

One embodiment of the invention will be described with reference to the drawings in which

FIG. **1** is a front view of the goods delivery system according to the invention;

FIG. **2** is a plan view of the goods delivery system in FIG. **1**;

FIG. **3** is a vertical sectional view along line A — A in FIG. **2**; and

FIG. **4** is an exploded perspective view of a single cabinet forming part of the delivery system.

In a room **10** such as a shop there are mounted in an outer wall thereof a number of cabinets **11** arranged in a row which may be extended into the room by two or more cabinets which are placed perpendicularly to the row according to FIGS. **2** and **3** and form a continuous unit. Each cabinet is provided with a detachable top unit **12** containing apparatus necessary for circulating air from the interior of the cabinet through a central opening **13** in the bottom of the top unit to slots **14** also arranged in the bottom of the top unit and communicating with passages **14'** in the side walls of the cabinet. These passages communicate with the interior of the cabinet through slots **15** such that air may be circulated in a closed part through the interior of the cabinet as

indicated by arrows. The apparatus contained in the top unit **12** may include a circulation fan **12'** as well as means **12''** for cooling, heating, or other conditioning of the circulating air. At the side facing the interior of the room as well as at the opposite side the cabinet (or each unit of two or more cabinets) is provided with a lockable door **16** and **17,** respectively, and also in these doors there are provided passages **14'** and associated slots **15.** Along the latter side of the cabinets extends a loading platform **18.** The side walls, bottom and doors of the cabinet are provided with suitable heat insulation.

It will be seen that the cabinets described are accessible both from the loading platform and from the interior of the room. Therefore, goods may be delivered by opening doors **17** and inserting the goods into the cabinets directly from a car or truck parked at the loading platform **18,** access to the interior of the room **10** from the outside being prevented by the closed and locked doors **16.** Through these doors the goods delivered to the cabinets may be made available from the interior of the room. The goods may be delivered on roller pallets **19** of standard type which may be provided with latticed sides or shelves, and in the bottom of the cabinets there may be provided grooves or rails **20** for guiding the roller pallets.

The goods delivered to the cabinets may be kept under such conditions as are suitable for the storage thereof in a satisfactory manner by operating the cabinets as freezers, refrigerators, cool stores, dry stores or heaters depending on the type of top unit **12** which is combined with the cabinet. The top unit is easily exchangeable and may be constructed as an easily connectable unit such that a cabinet may be conveniently changed from one type to the other. The exchangeable top unit provides the additional very important advantage that failure of the apparatus contained therein may be rapidly and easily overcome by exchanging the top unit; thereby is avoided the trouble connected with repairing at the place where the cabinet is being used, and the costs connected therewith.

The invention is not limited to the embodiment shown and described but may be modified within the scope of the appended claim as far as the construction and the mounting of the cabinets is concerned.

What I claim is:

1. A goods delivery system for premises, such as shops, restaurants and the like, comprising:

a. a plurality of cabinets arranged side by side in a row to form at least a part of a wall of said premises separating the outside of the premises from an enclosed inside space, with their fronts facing the outside and their backs facing the inside,

b. doors on the front and back of each cabinet arranged so that the interior of the cabinet is accessible from the outside and inside of the wall through said doors,

c. a top closure for each cabinet in the form of a detachable exchangeable unit, and

d. means located in each detachable exchangeable unit for circulating air through the interior of the corresponding cabinet and through passages in the walls thereof, and for controlling the temperature of the circulating air.

2. A system according to claim **1** in which means are provided in the cabinets for guiding pallets holding a supply of goods.

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