

(No Model.)

H. P. McINTOSH.
DISPLAY REFRIGERATOR AND COUNTER.

No. 570,043.

Patented Oct. 27, 1896.

Fig. 1.

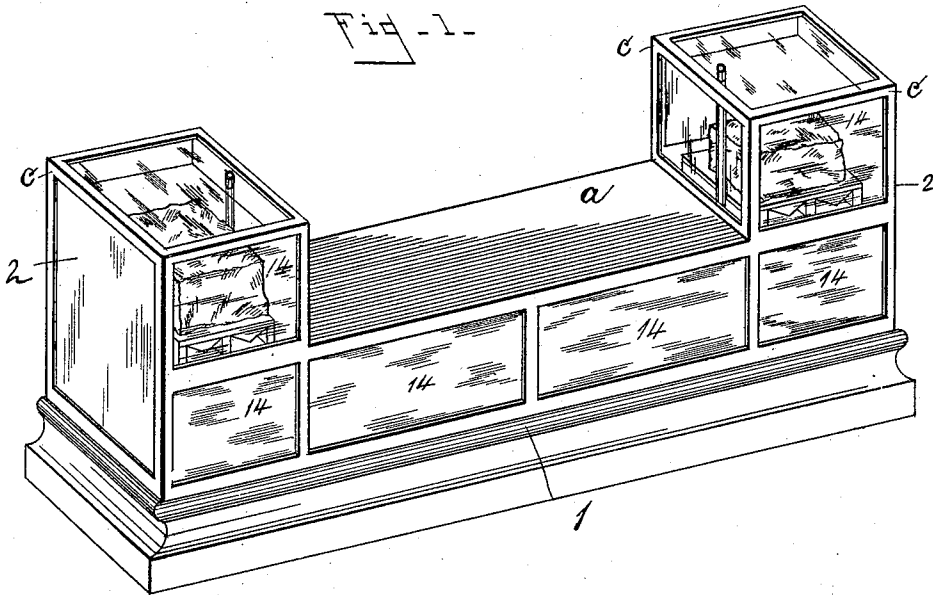
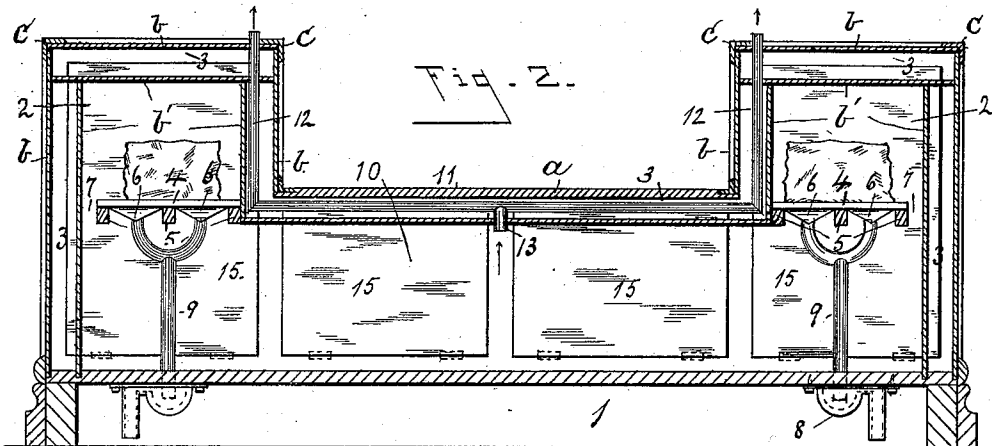


Fig. 2.



WITNESSES

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DISPLAY REFRIGERATOR AND COUNTER.

SPECIFICATION forming part of Letters Patent No. 570,043, dated October 27, 1896.

Application filed March 6, 1896. Serial No. 582,032. (No model.)

To all whom it may concern:

Be it known that I, HEZEKIAH P. MCINTOSH, a citizen of the United States, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in a Combination Counter, Refrigerator, and Show-Case; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to an improved combination-counter to be used by merchants dealing in perishable articles; and it has for its object to provide a structure embracing a counter, one or more refrigerators, means for ventilating the same, and storage capacity for the articles to be vended, and to so construct the whole that the interior may be in full view of customers to the end that its contents may be inspected at a glance, as more fully hereinafter specified.

The above-mentioned objects are attained by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a front view of my combination-counter in perspective; and Fig. 2 represents a longitudinal vertical sectional view thereof, looking toward the rear.

Referring to the drawings, the numeral 1 indicates the counter, which is rectangular in shape and at each end is provided with ice-chambers 2, which extend above the level of the top of the counter, as shown in the respective figures of the drawings. The counter is constructed with a solid top *a*, of wood or other suitable material, and with double walls *b b'*, which extend around it and the ice-chambers, forming a dead-air space or air-packing 3, designed to prevent the outside temperature from affecting the interior of the structure, and it is provided with means for ventilating the interior of the structure, so as to permit the escape of foul air without undue loss of cold air from the interior, as more fully hereinafter specified. In the lower portion of the ice-chambers are located the ice supports or pans 4, which are preferably made

of galvanized iron and are suitably supported by means of rails 5. These pans or supports are perforated, and below the perforations are located the chambers 6, which connect by means of pipes 9 with traps 8 below for the purpose of carrying off the drip-water without permitting the flow of cold air from within or warm air from without. Between the ice-pans and the inner walls of the counter and refrigerating-chambers at opposite ends are left narrow spaces 7 for the passage of cold air downward into the storage-chamber 10. Through the dead-air space in the top of the counter extends longitudinally a ventilating-tube 11, which at each end is provided with a vertical branch 12, extending upward through the dead-air space surrounding the ice-chambers and terminating in the open air above. Midway between its said ends the pipe 11 has a short branch 13 extending downward into the storage-chamber. It is thus located because at this central point the upward draft will be stronger, owing to the downward flow of the two currents of cold air from the ice-chambers at either end, which, coming together at the center and bottom of the storage-chamber, have a tendency to drive the impure and warmer air upward at their point of union. The result of this arrangement is a dry, sweet, pure, cold air throughout the chambers, which preserves both the ice and the articles on storage.

The front of the counter and ice-chambers is made of frames *c*, provided with walls of glass 14, forming a most perfect non-conductor of heat, in order to prevent waste of ice and at the same time to permit the interior to be freely inspected from without. The storage and ice chambers are provided at the rear with doors 15, which are hinged at the bottom, so as to drop down out of the way when opened.

The operation of my invention is as follows: The ice-chambers being properly charged with ice through their door-openings, the doors being down for the purpose, the doors are then closed and the storage-chamber is ready for the reception of perishable articles, which are inserted from the rear of the structure, after which the storage-chamber doors are closed and secured by suitable latches. A circulation of air then begins to take place

upward through the branch pipe 13, pipe 11, and branch pipes 12, permitting the foul air to pass out above, but retaining the pure uncontaminated air in the storage-chamber.

5 The advantages of my invention are obvious and may be stated as follows: The structure takes no more room than an ordinary counter, while at the same time it furnishes an attractive show-case whose contents are in
10 full view of customers, and its arrangement is such as to make it extremely convenient for the salesman. Again, it forms an admirably ventilated refrigerator, and in cold weather, when the outside conditions of tem-
15 perature would injure perishable articles, by omitting the ice it will form a storage-chamber that will prevent perishable articles from freezing. Another of its advantages is that it is unequalled for outside stands for exhib-
20 iting and selling fruits, as it preserves them from extremes of both heat and cold, as well as from dust, while at the same time exposing them to the view of all who pass by.

Having thus described my invention, what
25 I claim, and desire to secure by Letters Patent, is—

1. A combination counter and refrigerator, embracing a storage-chamber, and ice-cham-
30 bers extending above the same at either end thereof and communicating therewith by suitable air-passages, and a ventilating-tube ex-

tending from the upper part of the storage-chamber midway between said air-passages to the open air, substantially as described.

2. The combination with the storage-cham- 35
ber of a counter, having double walls and an intermediate air-space, and ice-chambers at either end of the counter connecting with the storage-chamber of the ventilating-tube ex-
40 tending through the dead-air space at the top of the counter and having a downwardly-ex-
tending branch entering the center of the storage-chamber and vertical branches ex-
tending through the dead-air spaces of the refrigerating-chambers, substantially as de- 45
scribed.

3. A combination counter, refrigerator, and show-case, consisting of a counter provided with a cold-storage chamber having non-heat-
conducting walls, an ice-chamber having cold- 50
air passages communicating with the bottom of the storage-chamber at either end thereof, and a warm-air passage midway between the outlets of said cold-air passages extending from the top of the storage-chamber to the
55 open air substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HEZEKIAH P. McINTOSH.

Witnesses:

J. E. BARNES,
E. I. STIRMAN.