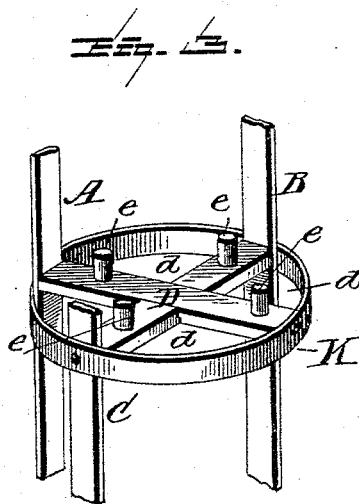
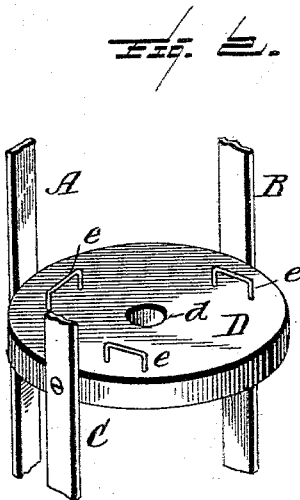
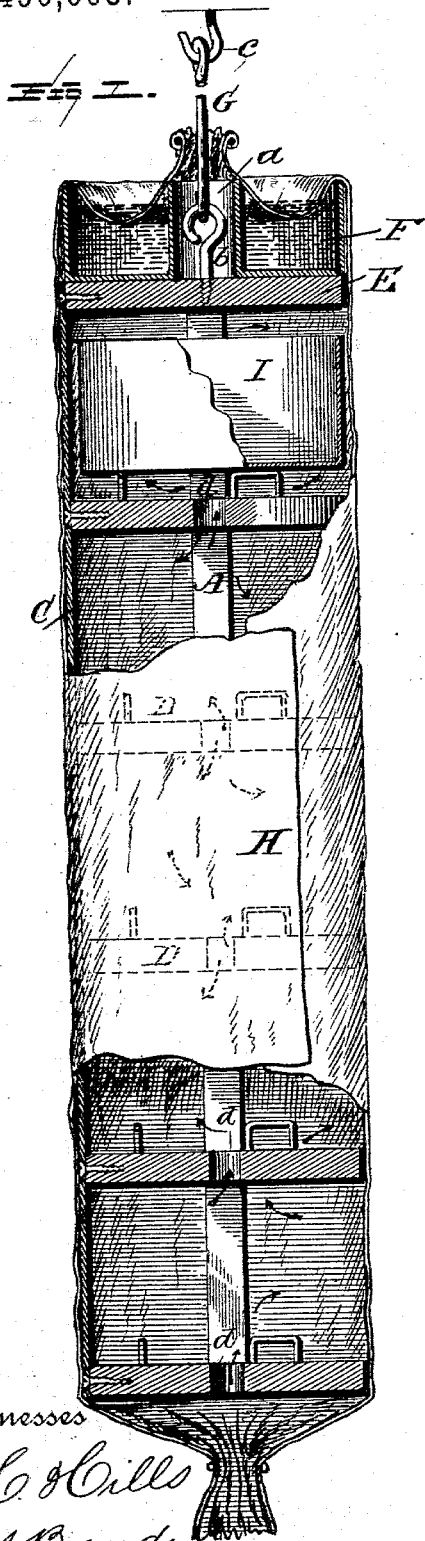


(No Model.)

J. L. WILDER.  
DEVICE FOR COOLING MILK OR BUTTER.

No. 490,005.

Patented Jan. 17, 1893.



Witnesses

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# UNITED STATES PATENT OFFICE.

JOSEPH L. WILDER, OF MEXIA, TEXAS.

## DEVICE FOR COOLING MILK OR BUTTER.

SPECIFICATION forming part of Letters Patent No. 490,005, dated January 17, 1893.

Application filed August 27, 1892. Serial No. 444,272. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH L. WILDER, a citizen of the United States, residing at Mexia, in the county of Limestone and State of Texas, have invented certain new and useful Improvements in Devices for Cooling Milk and Butter; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has relation to that class of devices for cooling and preserving milk, butter and other articles of food by the reduction of the temperature through the medium of evaporation, and the invention consists in the details of construction substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings represents a part sectional elevation of my improved device. Fig. 2 a detail perspective view of one of the shelves showing the vertical bars connected thereto which form the frame of the device. Fig. 3 a modification thereof.

In the accompanying drawings A B C represent vertical bars which form together the frame of the device, said bars being of wood or other suitable material and having connected thereto a series of horizontal shelves D for supporting suitable receptacles which contain the milk, butter, or other food to be retained in a cool temperature. The upper one of the shelves as shown at E is somewhat different in construction and is for the purpose of supporting a vat F for containing water, said vat being of any suitable size to hold any amount of liquid as circumstances may require. If preferred the vat may be of such capacity as will hold a sufficient amount of water to last at least twelve hours so that it will not require filling as often as otherwise, but this may be discretionary with the manufacturer, or if desired vats of different sizes may be adapted for use with the device. The vat as will be seen has a central tubular opening *a* to admit the screw-eye *b* which extends into the tubular opening and has engaging therewith a suspension rod G, the upper end of said rod being connected to a hook *c* secured to the ceiling, bracket, or any other stationary object found most convenient.

Around the vertical bars which constitute the frame of the device is wrapped the jacket H of suitable material such as textile or woven fabric or any like absorbent material. This jacket is gathered at both top and bottom by suitable strings, or any other preferred means may be employed for drawing the jacket around the upper and lower ends of the device after said jacket has been wet with water and placed around the same. As will be seen, the upper end of the jacket rests in the water contained in the vat and by capillary action, the water will be thoroughly distributed over the jacket and the drippings at the bottom thereof will be caught in a pail or other receptacle placed there for the purpose.

It is the purpose of the invention to secure a free circulation of cool air around the milk or other food in the receptacles which are placed upon the shelves, and to successfully secure this object it will be necessary to have the air pass into the space from one shelf to the other. Were there not some means to secure this free circulation of the air from top to bottom of the device and around the shelves and into the spaces between the same, the process of preserving and cooling the food would not be as successfully accomplished.

To secure a passage for the air into the spaces above and below the shelves, the same are provided with outlets *d*, and the receptacles to contain the milk or other food as shown at I, are held above the shelves by suitable supports *e*. By this means the air has a free circulation from top to bottom of the device and around the receptacles containing the milk, butter or other food.

In Figs. 1 and 2 I have shown the shelves as made solid in the shape of a disk, and to provide an outlet for the air, a central hole is made through the shelf, and the supports are in the form of wire staples, but this construction is not necessary to the successful operation of the device, as in place of the solid shelves above described, the shelves may be constructed of slats as shown in Fig. 3 and studs in place of the staples will serve the same purpose. In such construction however it would be found desirable to provide strengthening hoops K connected as shown in Fig. 3 which will tend to make the device more rigid and serviceable and the slatted

shelves secure lightness. I do not wish however to be confined to the form of shelves shown, as any construction of shelf may be used so long as it is provided with some means  
5 for the passage of the air through the same, and any form of supports may be used so long as the receptacle for the milk or food is retained above the shelf to allow the air to pass against and around the bottom of the receptacle. These changes or any such as may  
10 come within ordinary skill I reserve the right to make without departing from the principle of my invention.

If found desirable the central tubular opening of the vat for containing the water may be used as an ice receptacle when it is considered preferable to retain the water at a lower temperature, and the meeting edges of the jacket may be provided with hooks and  
20 eyes, buttons, or other like fastenings, but this is not thought necessary from the fact that the jacket being thoroughly wet and retained so, the edges thereof would naturally adhere to each other without the aid of fastenings along its edges.  
25

When the shelves are constructed of metal, in place of the screw eye shown, a hook or other suitable device would be secured to the

upper one of the shelves by solder or connected in any other preferred and well known  
30 manner.

Having now fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

A cooling apparatus or device consisting of 35 an upright frame, horizontal shelves rigidly connected thereto and having outlets for the circulation of air and supports for retaining the food receptacles above the shelves to allow the air to pass between them, a water-vat 40 supported upon the upper one of the shelves and having a central tubular opening, a jacket of absorbent material inclosing the frame of the device and the top thereof resting in the water in the vat, and means for 45 suspending the apparatus or device from a ceiling, bracket, or other stationary object, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence 50 of two witnesses.

JOSEPH L. WILDER.

Witnesses:

V. E. KIRVEN,

J. S. GROOVER.