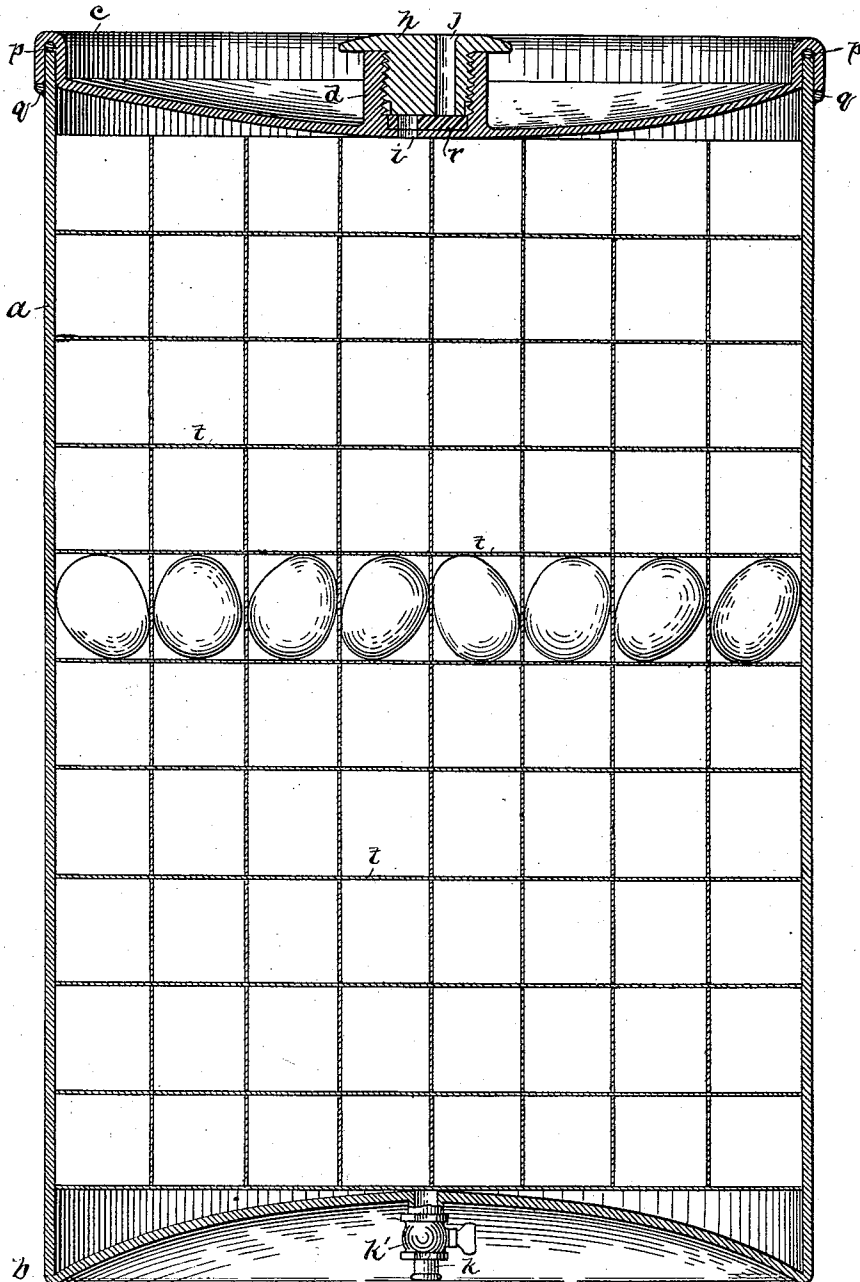


(No Model.)

L. O. DION.
EGG PRESERVING APPARATUS.

No. 466,333.

Patented Jan. 5, 1892.



WITNESSES.

C. H. Brown
James W. Hamlen

INVENTOR.

Leon. O. Dion

UNITED STATES PATENT OFFICE.

LÉON O. DION, OF NATICK, MASSACHUSETTS.

EGG-PRESERVING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 466,333, dated January 5, 1892.

Application filed January 16, 1891. Serial No. 378,038. (No model.)

To all whom it may concern:

Be it known that I, LÉON O. DION, of Natick, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Apparatus for Preserving Eggs and other Articles of Food, of which the following is a specification.

My invention has for its object to provide means for preserving eggs and other articles of food in a fresh state for an indefinite period of time; and it consists in the improved barrel, case, or storage-receptacle which I have devised for the purpose of keeping eggs or other articles in a vacuum, all of which I will now proceed to describe and claim.

The accompanying drawing represents a vertical central section of my improved vacuum storage-receptacle.

In carrying out my invention I provide a receptacle *a*, preferably of cylindrical form, of any suitable material. For the sake of lightness and strength I prefer to make it of any ordinary sheet metal. I provide the cylinder *a* with an inwardly-bent or concaved bottom *b*, which may be formed thereon or affixed thereto in any suitable way, so as to make an air-tight joint between the two parts. This concaved bottom is provided with a pipe or nozzle *k*, having a valve or cock *k'* therein. The outer end of this pipe or nozzle is within the outer edge of the bottom, so as to be protected from injury and permit the cylinder to stand flush. I also provide the cylinder *a* with a removable head or closure *c*, which is preferably slightly concave and is provided with a deep flange all around its circumference, said flange being first turned upwardly and then turned back upon itself, thus forming an annular groove, which is adapted to fit over the end of the cylinder *a*, the up-turned portion of the flange being on the inside of the cylinder, while the downwardly-turned portion of said flange comes over on the outside of said cylinder.

Any suitable packing *p* may be introduced between the head and the upper edge of the cylinder to make an air-tight joint therebetween. After the head has been placed on the cylinder I prefer to solder onto the outside of the latter a suitable packing or closing ring *q*, the said ring being placed so as to

bear on the lower edge of the flange of the head *c*, thus making a tight joint between the two parts at this point.

The head *c* is provided with an outlet *d* 55 near its center, which projects upwardly from said head. The top edge of said outlet is preferably in a line with or below the top edge of the head, as shown in the drawing. The outlet *d* is provided with a stopper *h*, which 60 is adapted to fit the outlet *d* and close the same. The said outlet connects with the interior of the receptacle only by a comparatively small hole *i* at one side of the center of said outlet. The stopper *h* is provided 65 with a similar hole *j*, which is so placed as to correspond with the hole *i* when the stopper is in a certain position in the outlet *d*, and the two holes *i j* are of such size and so placed that a slight revolution of the stopper *h* in 70 the outlet *d* will carry the hole *j* out of register with the hole *i*, the solid portion of the stopper *h* being moved over the said hole *i*, thus preventing communication between the interior of the receptacle and the outer air. 75 Between the head *c* and stopper *h* I provide a packing-ring *r* of rubber or other suitable compressible material, the said ring having a hole therein corresponding in size to the hole *i* in the head, said packing-ring being so 80 arranged that the hole therein corresponds in position to the said hole *i*. I have shown the stopper *h* as provided with an external screw-thread to engage an internal screw-thread in the outlet *d*; but I do not limit myself to this 85 particular form of engagement between said parts.

A packing-vessel thus constructed is specially designed for packing eggs or other articles and preserving the same in a vacuum 90 created in said vessel. When so employed, a series of trays *t* for reception of the articles to be stored are placed within the vessel before the head *c* is attached, and when eggs are to be stored I preferably employ the well-known card-board devices now in common 95 use. After the articles are packed and the head secured in place the air can be exhausted through hole *i* by means of an air-pump or other suitable device. Said hole is 100 closed by turning stopper *h* after the vacuum is secured, or after the air has been exhausted

the vessel may be filled with gas by inserting pipe *k* into a receptacle containing nitrogen gas, and by opening valve *k'* the gas will flow into and fill the vessel. In lieu of first exhausting the air in the vessel the gas used can be made to force the air therefrom.

By means of my improved packing and storing vessel eggs or other articles can be securely packed and preserved in a fresh state for a great length of time, and by making the head and bottom of the vessel as described the projecting portions thereof are protected from injury or contact with the floor or anything placed on the top of the vessel.

The top piece or head *c* may have its flange internally screw-threaded, and the upper part of the cylinder *a* may be externally screw-threaded to engage the same, instead of the parts being sealed or soldered together; or the said head and cylinder may be connected in any other suitable way, my invention not being limited to the specific manner of connection above described. For instance, I may make the upper end of the cylindrical portion *a* with a U-shaped annular groove adapted to receive a downwardly-projecting flange

formed on the head *c*, said flange being soldered down into the annular groove.

I claim—

The improved receptacle for storing eggs or other articles of food, comprising a cylinder having a concaved bottom, a pipe or nozzle secured thereto and having its lower end within the outer edge of said bottom, a concaved removable cover or closure having a flange forming an annular groove fitting over the open end of said cylinder and secured thereto, an outlet in said cover communicating with the interior of the receptacle, a stopper in said outlet adapted to close the same and having an opening designed to coincide with an opening in said outlet, the outer end of said outlet being within the edge of said concaved cover, substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 12th day of January, A. D. 1891.

LÉON O. DION.

Witnesses:

EWING W. HAMLEN,
A. D. HARRISON.