J. Q. DAVIS.

Milk Cooler.

No. 52,691. Patented Feb. 20, 1866.

Fig. 1.

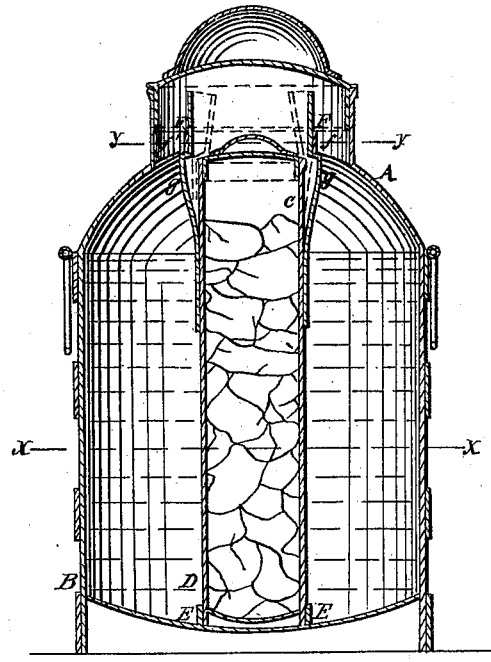


Fig. 3.

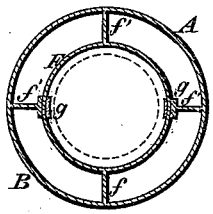
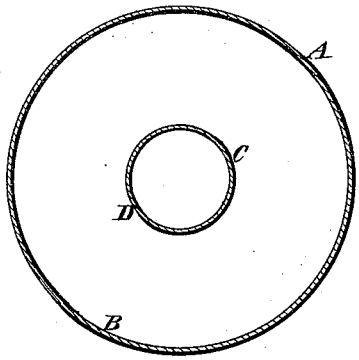


Fig. 2.



Witnesses:

Amy Morrison

Jos Winsmore

Inventor:

John Q Davis

UNITED STATES PATENT OFFICE.

JOHN Q. DAVIS, OF SALEM, NEW JERSEY.

MILK-CAN.

Specification forming part of Letters Patent No. **52,691**, dated February 20, 1866.

To all whom it may concern:

Be it known that I, JOHN Q. DAVIS, of Salem, in the county of Salem and State of New Jersey, have invented a new and useful Improvement in Portable Milk-Cans; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a central vertical section of a portable milk-can having my improvement applied thereto; Fig. 2, a horizontal section on the dotted line *x* of Fig. 1; and Fig. 3, a like section on the dotted line *y* of the same figure.

Like letters of reference indicate the same parts when in the different figures.

The milk-cans now used for daily transporting fresh milk from the country to the cities are simply cylindrical tin vessels provided each with a wide mouth and closely-fitting removable stopper. The milk, sometimes warm from the animal, is poured into the cans, and transported, generally by rail-cars, to the cities; but in summer weather it often becomes sour before it can be distributed to the consumers; and to obviate this objectionable result, or to preserve the milk in its original sweet condition while in the cans is the object of my invention.

It consists, substantially as hereinafter described, in applying to the interior of a portable milk-can a readily-removable vessel provided with a closely-fitting stopper for the reception and retention of a sufficient quantity of ice to keep the milk cool and sweet during the time required for its transportation and distribution in warm weather, by means of a fixed flange in the bottom of the can and an annular band fixed concentrically in the mouth of the same, the removable ice-vessel having suitable catches applied whereby it can be secured in or released from the milk-can with facility.

In the drawings, A B is the milk-can, and C D the removable vessel for receiving and retaining the ice.

The milk-can A B is constructed of sheet metal in the usual well-known form and manner, with the addition of an annular flange, E, which is soldered fast in the middle of the inner side of the bottom of the can, (see Fig. 1,) and of a band, F, which is rigidly supported concentrically in the mouth of the can A B by means of four (more or less) intervening arms, *f' f'*, soldered fast to both can and band. (See Figs. 1 and 2.)

The ice-vessel C D is cylindrical, of sufficient length to bring its upper end about on a level with the lower end of the mouth of the can A B, and of a diameter about half that of the mouth of the can. It is fitted with a close stopper, and its lower end fits freely within the annular flange E when the said vessel C D is adjusted in the can A B. (See Fig. 1.) Its upper end is supported and the whole vessel retained steadily in the can A B by means of two catch-springs, *g g*, which are fastened, respectively, to opposite sides of the vessel C D, and so bent as to form a shoulder on each which will readily catch under the band F when the lower end of the said vessel C D is inserted in the annular flange E of the can A B, the band F being made of a diameter sufficiently large for the purpose.

It will be readily seen that the ice-vessel C D can be conveniently introduced into and withdrawn from the can A B at the pleasure of the milkman, and that when introduced it will be retained steadily in its proper position during the necessary transportation; and it will also be readily seen that when the said vessel C D is supplied with ice and inserted in the can A B, as described, it will necessarily keep the surrounding milk in the required cool condition to preserve it in its original sweet state during its transportation and distribution, the quantity of ice being proportioned to the time.

The device is simple of construction, and can be readily applied to any of the milk-cans in use at a small cost.

What I claim as new, and desire to secure by Letters Patent, is—

The flange E, in the bottom of the can A B, and the annular band F, in the mouth of the same, when they are used in combination with a removable ice vessel, C D, provided with the catch-springs *g g*, or their equivalents, the whole operating together substantially as and for the purpose described.

JOHN Q. DAVIS.

Witnesses:

BENJ. MORISON,

JAS. WINSMORE.