

John J. Bate

Imp^t in Refrigerating Provision Cars.

No. 123,078.

Patented Jan. 30, 1872.

Fig: 1

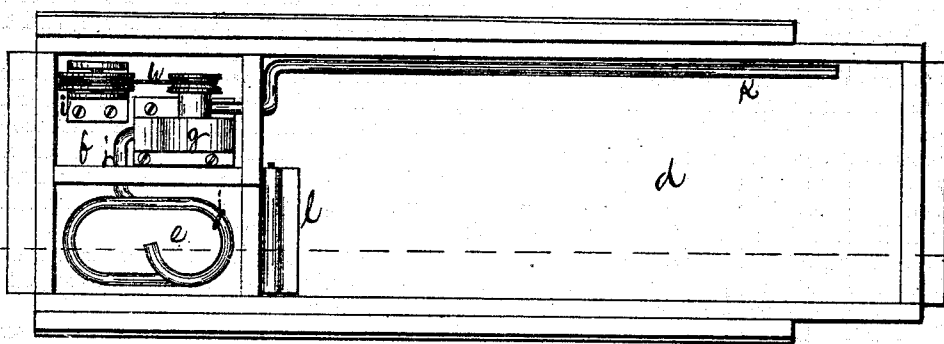
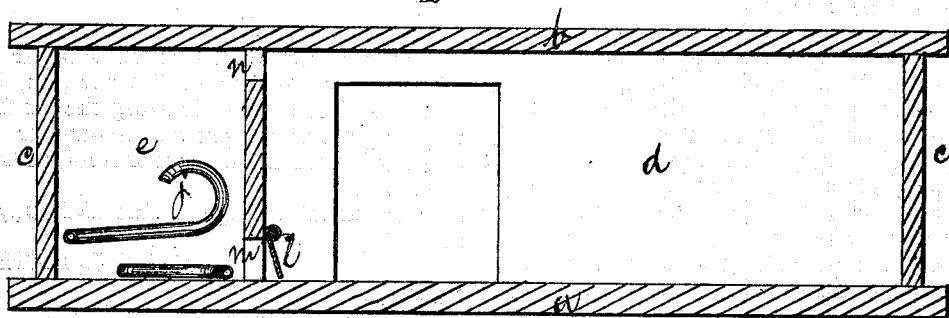


Fig: 2



Witnesses

Geo E Lambright.
Robert Everett.

Inventor

John J. Bate
by Atty Tho. D. Everett

UNITED STATES PATENT OFFICE.

JOHN J. BATE, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN REFRIGERATING PROVISION-CARS.

Specification forming part of Letters Patent No. 123,078, dated January 30, 1872; antedated January 15, 1872.

I, JOHN J. BATE, of the city of Brooklyn, in the State of New York, have invented certain Improvements in Refrigerating Provision-Cars, of which the following is a specification:

This invention has reference to an arrangement of means for drawing the air from the provision-chamber near its top and delivering it cooled and purified at the bottom of the chamber.

The accompanying drawing shows a car, of which *a* indicates the floor, *b* the roof, and *c* the ends. In Figure 1 the roof is removed to show the interior of the car, and Fig. 2 is a view, by vertical section, on the dotted line of Fig. 1. *d* indicates the provision-chamber; *e*, the ice-chamber; *f*, the messenger's room. In the messenger's room or in the ice-chamber is placed a fan-blower, *g*, which is operated by a band or cord, *h*, passing around a pulley on its shaft and around a pulley, *i*, which is operated by a band from and around the axle of the car. To the inlet of the blower is attached a tube, *j*, and to the outlet another tube, *k*. The tube *j* is coiled in the ice-chamber, as is shown by Fig. 2. The tube *k* lies upon the floor of the car, and can be perforated by the escape of the air, or the only escape-opening may be at the end of the tube. A hinged door, *l*, is at the bottom of the partition between the ice-chamber and the provision-chamber to control the space *m*. When the blower is not in action the door *l* will be left open so that there will be a circulation of air from the provision-chamber through the spaces *m* and *n*.

When the blower is in operation and the door *l* closed the air from the provision-chamber will be drawn through the space *n* and through the upper portion of the ice-chamber to the

mouth of the tube *j*, passing through the blower and through the tube *k*, and be delivered at the bottom of the provision-chamber. This arrangement of means is intended to use the air of the chamber over and over again, and thus keep the air cool and pure.

For store-rooms or warehouses or provision-chambers in buildings such motive power as is at hand may be used to operate the blower. In some cases I prefer to use watch or clock movements, and to actuate them by India-rubber springs instead of metallic springs or weights.

In the bottom of the ice-chamber there will be the usual drip or siphon for drawing off the water therefrom.

I am aware that it is not new to so construct provision-cars as to have a forced circulation of air, the same being set forth in the patents to D. E. Somes, granted in 1867 and 1868, and in a patent granted to W. Bray, 1867; and I therefore limit my claim to such an arrangement of means for such circulation as is different from either of the inventions here referred to.

Claim.

The arrangement of the coiled tube *j* in the ice-chamber in relation to the space *n*, fan-blower *g*, and tube *k* for drawing the air from the upper part of the provision-chamber and delivering it near the bottom thereof, as herein recited.

This specification signed this 12th day of April, 1871.

JOHN J. BATE.

Witnesses:

JOSEPH J. BATE,
F. H. BELL.

500 words