(No Model.)

H. C. JOHNSON.

CORPSE COOLER AND PRESERVER.

No. 311,764. Patented Feb. 3, 1885.

FIG. I.

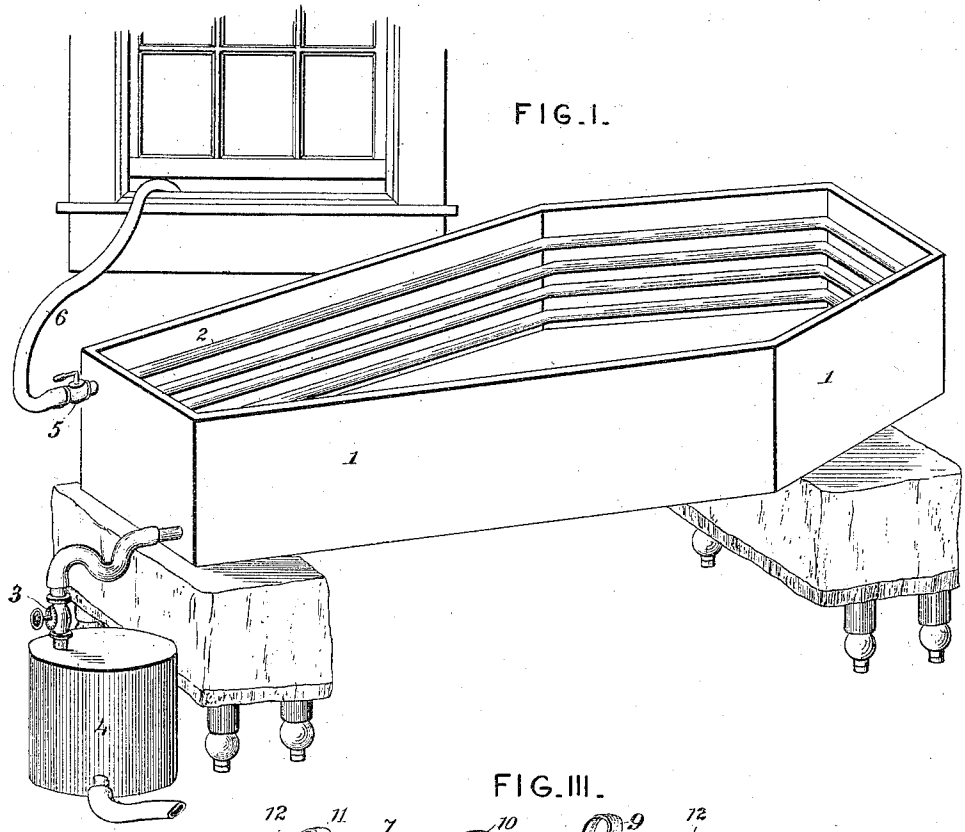


FIG. III.

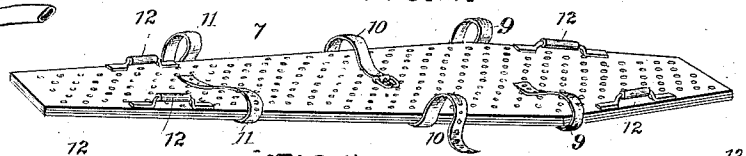
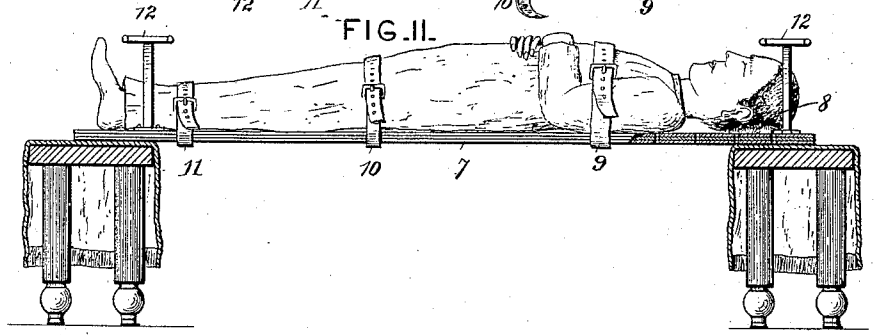


FIG. II.



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UNITED STATES PATENT OFFICE.

HENRY C. JOHNSON, OF MEADVILLE, PENNSYLVANIA.

CORPSE COOLER AND PRESERVER.

SPECIFICATION forming part of Letters Patent No. 311,764, dated February 3, 1885.

App'ication filed December 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY CLAY JOHNSON, a citizen of the United States, residing at Meadville, in the county of Crawford and State of Pennsylvania, have invented certain new and useful Improvements in Corpse Coolers and Preservers, of which the following is a specification.

My improved corpse-cooler is constructed with a coil of pipe, of tin or other metal, or of rubber or other suitable material, within the box or receptacle in which the body is placed, in combination with a condenser, generator, or receiver for containing a suitable cooling medium—as compressed carbonic-acid gas or ammonia, for example—which is allowed to expand from the receiver or condenser within the said pipes to produce the desired refrigerating effect. Under my improved construction the pipes are not used for holding condensed gas under pressure, and hence do not require to possess any particular strength. The coiled pipe is, moreover, provided with stop-cocks where it enters and leaves the cooling box or chamber—the first for regulating the passage of gas from the generator or receiver, where it is held under pressure, and the second for regulating the discharge, while the stop-cocks together serve the purpose of imprisoning the gas required within the coiled pipe, so that its refrigerating effect may be prolonged. I further provide a discharge-pipe for conducting the gas from the cooling-coil out through a window or to a suitable flue or sink, as may be most convenient.

My invention further relates to an improved cooling-board employed in connection with the refrigerating apparatus above described, constructed of laminated wood perforated to give free passage of air, and provided with straps for confining the body at suitable points, and also with handles for lifting the body, placing it within the cooling-chamber, or removing it therefrom and carrying it from place to place.

In the accompanying drawings, Figure I is a perspective view of a corpse-cooler illustrating my invention. Fig. II is a perspective view of the cooling-board used in connection therewith. Fig. III is a side elevation of the cooling-board, partly in section, showing handles of different form.

The case or box 1 may be of any form. The cooling-pipe 2 surrounds its interior in any necessary number of coils, and both the extremities of said coiled pipe project through one end of the case. The induction end is connected through the medium of a stop-cock, 3, with a receiver or condenser, 4, from which the cooling medium is supplied as rapidly as necessary under control of the said stop-cock 3. The discharge end of the pipe connects through a stop-cock, 5, with an exit pipe or conduit, 6, which may be made flexible, and of any necessary length to deliver the escape of gas into a flue or out through a window, as may be convenient. The regulating-cock 3 is preferably provided with a dial and index, as shown, to enable the accurate control of the gas.

My improved cooling-board 7 is made, as represented in Figs. II and III, of a number of layers of wood cemented together with the grain crossed, the whole being perforated, as shown, in order to permit free passage of air. The cooling-board is provided with a head-rest, 8, and with straps 9, 10, and 11, in suitable positions to pass over the breast and the hips and around the knees of the body in order to secure it to the board in the required posture. Standing handles 12 are also provided, preferably of metal, for the carrying of the board with its burden. These may be simple fixed handles, as shown in Fig. II, or they may be elevated, as shown in Fig. III, and hinged so as to turn down when out of the cooling-case 1.

The improved construction of cooling-board affords great facility and convenience in handling and dressing the corpse, and enables it to be put in and taken out of the cooler without disturbing the pipes. In practice the receiving-case 1 is of course covered with the customary tight lid, and this is preferably provided with a glass for viewing the face.

My present invention differs from that described and claimed in Patent No. 266,294, granted to me jointly with Francis McMillan, October 24, 1882, in that under my present invention I do not employ a double box or any water or other liquid, either for conveying the cold or saving the gases. Neither do I employ the pipes as a receiver for holding gas under pressure. As no pressure is developed within the pipes under my present invention, the pipes may be inexpensive and light, and the entire structure is so light and

portable as to be handled and removed from place to place with great facility.

Instead of employing pipes as a receiver for holding the gas under pressure, I now employ a separate holder, as above described, connecting with tin or other pipes through a stop-cock, which in operation confines the gas within the receiver, and allows only a limited flow through the cooling-pipe without developing any pressure therein.

It is manifest that flat boxes or connected chambers of any desirable form may be substituted for the coiled pipe 2 within the corpse-receiver, the form of the conduit not being essential.

I am aware that refrigerating apparatus for preserving corpses and for other purposes have before been constructed with cooling-pipes in which compressed gas is expanded to produce the refrigerating effect. In one instance such a cooling-coil has been connected at one end with a receiver or holder containing liquefied gas, and at the other end with a water-tank for absorbing the vapor. In another instance the cooling-coil is constructed of the necessary strength to serve as the compression-chamber for holding liquefied gas. In still another instance the cooling-coil, while being made of the necessary strength for holding the gas under pressure and passing through a non-freezing liquid, is made to communicate with the interior of the corpse-receiving chamber for antiseptic purposes.

My present invention differs from all the above and from any previous apparatus heretofore used within my knowledge, in that I employ a strong receiver or gas-holder in which the pressure is maintained, a coil communicating therewith which is not employed to maintain pressure, and hence does not require to be strong or expensive, and a regulating-valve between the two, by which the gas may be effectually confined within the compression-receiver or gas-holder, and may be permitted to escape therefrom into the expansion-pipe to a degree or amount accurately regulated. I also employ an exit-pipe for discharging the spent gas outside the building, and between this and the cooling-pipe another valve, by which the expanded gas may be confined within the cooling-coil when it is necessary.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. The combination of the corpse-receiving case or box 1, the cooling-conduit 2, placed directly within the corpse-receiving chamber, the gas-holder 4, and the stop-cock 3, for regulating the flow of gas through the gas-holder to the cooling-pipe, as described.

2. The combination of the corpse-receiving case 1, cooling-conduit 2, gas holder or receiver 4, and the stop-cocks 3 and 5, as described, for regulating the flow of gas and imprisoning the cooling medium within the pipe 2 at will.

3. In combination with the corpse-receiving case 1, the cooling-conduit 2, gas-holder 4, stop-cocks 3 and 5, and the discharge-pipe 6, as and for the purpose described.

4. The combination, with a corpse-preserver constructed, as herein described, with a receiving-case, 1, and coil of cooling-conduit 2, of the cooling-board 7, constructed as explained, and adapted for placing the corpse within the case and removing it therefrom without disturbing the cooling-pipe.

HENRY C. JOHNSON.

Witnesses:
HENRY H. LOCKWOOD,
A. MILLER.