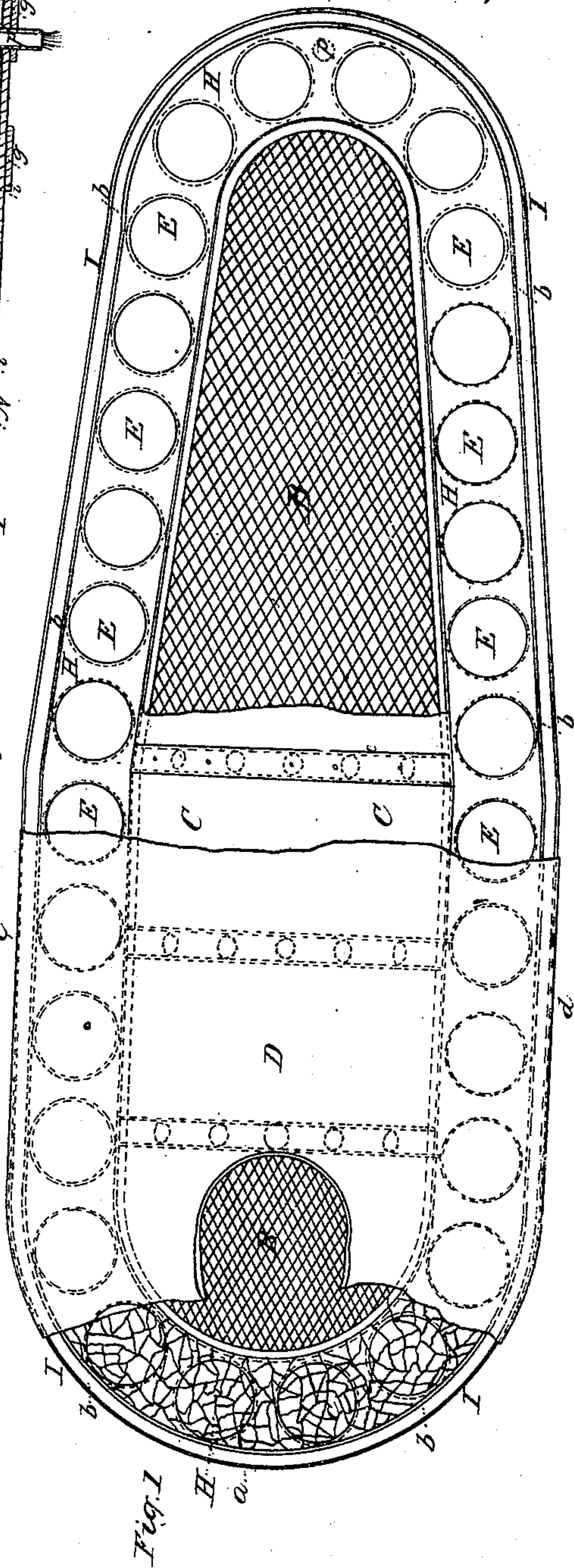
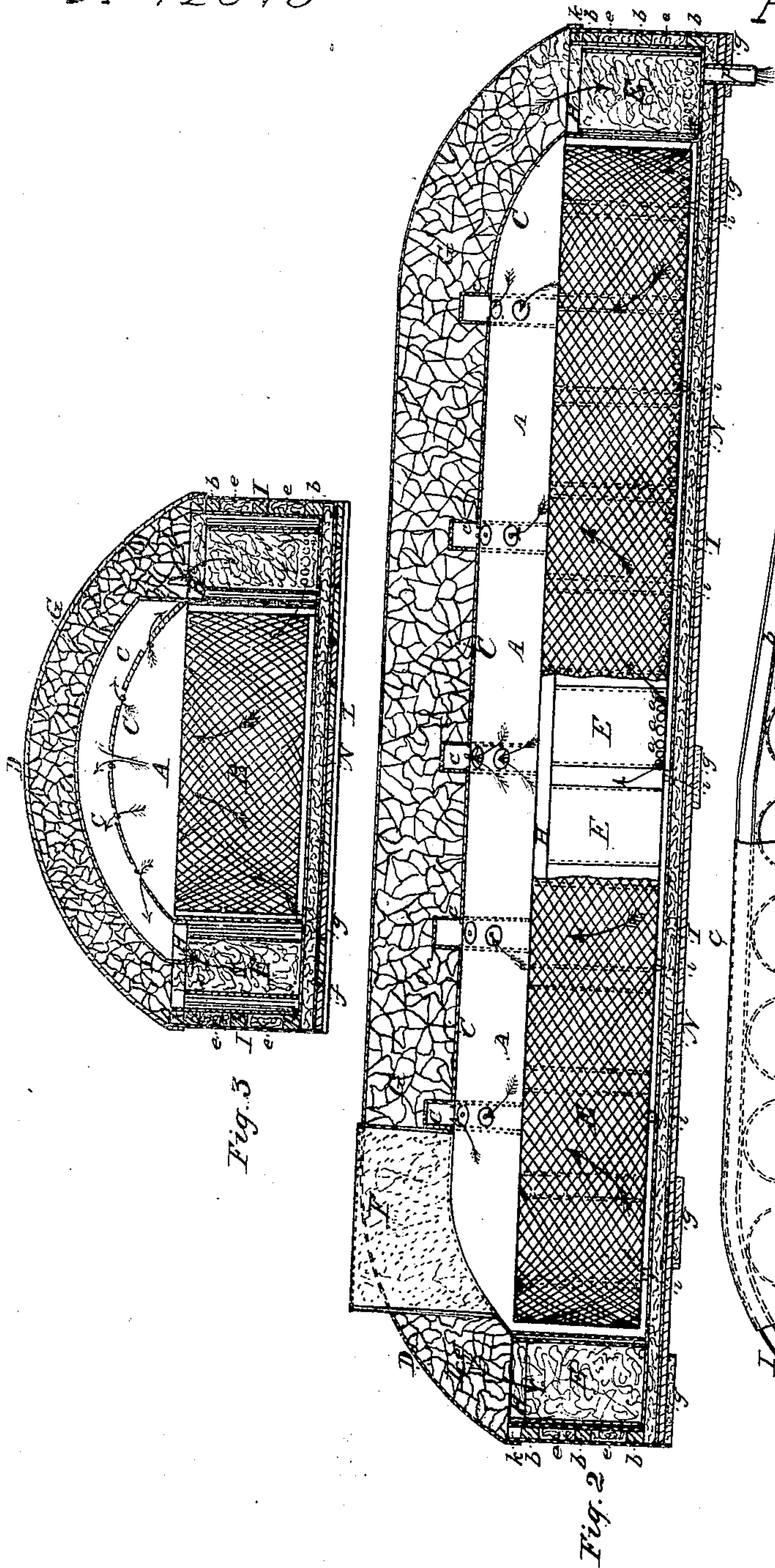


C. F. Pike.

Corpse-Preserver.

N^o 72893

Patented Dec. 31, 1867.



Witnesses

Henry Martin
Charles Selden.

Inventor

Charles F. Pike

United States Patent Office.

CHARLES F. PIKE, OF PROVIDENCE, RHODE ISLAND.

Letters Patent No. 72,893, dated December 31, 1867.

IMPROVED CORPSE-PRESERVER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES F. PIKE, of the city and county of Providence, State of Rhode Island, have invented a new and improved Corpse-Preserver for the preservation of the dead; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in having a metallic case, made of tinned copper or other metallic substance, (the outside case may be made of wood and lined inside with some metallic substance,) in form to receive the remains of a dead person, with a wire basket inside of the metallic case for the body to be deposited in; and upon the outside of the basket, and within the walls of the case, tubes or pipes, filled with ice, or ice and salt, or with any other well-known freezing-mixture; also a pan for these tubes or pipes to be fastened to. Over this wire basket is a cover that covers the person all over, with ribs on it, hollow pockets, or air-passages open at each end into the pans, to which are attached the tubes or pipes. Upon the under side of this inner cover are openings into the pockets or air-passages, to let the air into this pan that is attached to the pipes or tubes. The bottom of these pipes or tubes may or may not be opened to let this air out into the chamber in which the basket sets that contains the person to be preserved. This inside cover is covered with ice; and then there is still another cover that covers over all the pipes or tubes, and so protects it from the outside air, as will be seen by reference to the accompanying drawings and specification hereunto annexed.

To enable others skilled in the arts to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 is a ground-plan of the corpse-preserver.

B is the wire basket, that is made of wire on the bottom, ends, sides, about one-tenth of an inch in diameter, with meshes, two inches apart. Across the bottom are cleats, half inch square, so as to keep it up from the bottom of the case, and allow a free circulation of air under it. This basket is made of the proper length, width, and depth to hold a person. The object of this basket is to keep the body up out of the water, and the clothing that is upon the person from coming in contact with the pipes or tubes, with a free circulation of air around it, in a dry atmosphere. D is an outside cover, with a lip on its edge that shuts over the whole of the corpse-preserver; and for a more full description of this cover reference is made to the description hereafter to be made of figs. 2 and 3. C is a cover over the basket, with a lip on its lower edge that shuts into the pan H. The form of this cover will be more fully described in the description of figs. 2 and 3. E are the tubes or pipes which surround the basket, and are filled with ice, and extend down to the bottom of the inside case, with or without bottoms to them, with or without openings in the sides of the pipes or tubes. These tubes or pipes are about six inches in diameter, although they may be made of any size or form or shape. H is a pan, about six inches wide, with a flange on the outside edge, (the width of the flange is the thickness of the case between the inside and outside walls,) extending all around it, to which the tubes or pipes E are attached. This pan is about one inch deep; it can be made deeper if it is thought to be important; this will answer all practical purposes. b are the hoops between the inside and outside case, of any form that you desire them to be made. I get out a wooden bottom, and then form the hoops on that, making them in two pieces, and fastening the ends together in the centre.

Figure 2 is a longitudinal section on line *a* and *b* in fig. 1.

A is the chamber or interior space of the preserver that contains the wire basket B, tubes or pipes E, pan H, and is the room that contains the corpse to be preserved. B is the wire basket, which is made of wire, one-tenth of an inch in diameter; the meshes are in diamond form, about two inches apart. This basket has no wire cover; the cover C is the cover to this basket. The length, width, and depth are of any desired length, width, or depth. For the largest size preserver the basket would not be required more than six feet four inches long by ten inches deep and twenty-four inches wide. The shape of the cover would give some four to six inches more depth, as will be seen by reference to the drawing. C is the metallic cover that shuts over the basket that contains the corpse. This cover has a lip to it on one edge, which shuts into the pan H, and has a tower or pipe attached to it that extends up through the outside cover D, represented by the letter F. This tower or pipe is a part of the room A. It has also hollow pipes on the outside of this cover C, that are open at

both ends. There are also openings into these hollow pipes from the room A. These hollow pipes are represented by the letter *c*, from the room A, by the letter *o*. The form of this cover is rounding on the ends, the same as the sides, to let the ice and water slip off into the pipes E, to keep them supplied with ice. This metallic cover may be made of copper, tin, or iron. If of iron or tin, it had better be kept well painted. D is the outside cover, made of metal, either iron, tin, or copper, (if it were made double, and filled with hair or wool, it would improve it much, and be a great saving of ice,) and, in form, so as to cover over the outside case, with a lip on it to shut down about two inches, more or less, upon the sides. In this drawing, it is made in the same form as the cover C, in order to give a uniform space between the lids C and D. Through this outside cover D is an opening to admit the tower or pipe F, that has a glass inserted in it for the purpose of looking into the chamber A, to see the corpse, without removing the lids. This cover D fits as close as possible, to allow it to go free and easy. It would be a good plan to have a rubber ring to go over this tower or pipe F, to shut down close on to the cover D to prevent the air from passing in on to the ice between the lids or covers C and D. E are the pipes or tubes, together with the pan H, extending from the top of the preserver down to the inside bottom of the case. These tubes or pipes E may be made with or without a bottom. If with a bottom, there should be a hole in the bottom or side to let the water out; if without a bottom, the inside bottom to the case makes the bottom. These pipes may have holes in the sides near the bottom, or may not, as may be desired, (as shown in fig. 2,) to let the air out. F is the tower or pipe that is fastened to the lid C. It extends up through the lid or cover D, and is round or in oval form, or shaped to admit a glass to look upon the face of the corpse that lies in the room A, without removing the lids or covers C and D, or admitting any external air to the room A. This tower F should be made tight on the lid C to prevent any water from the ice melting upon the lid C, running into the room A, around the pipe or tower F. G is the broken ice resting upon the lid C, and between the lids or covers C and D. As this ice melts, it runs into the tubes or pipes E, and so on in its natural course to its outlet; and if the ice in the tubes E becomes wasted away in the pipes or tubes, this ice upon the lid or cover C is scraped down into the tubes or pipes E to replenish them. H is the pan that extends around the inside of the chamber A, and between the basket B, with a flange on it, on the outside edge, to rest upon the top of the case. This flange is as wide as the case is thick. To this pan H, which is one inch deep, more or less, are the pipes or tubes attached or fastened either by a collar on the under side of the pan, to slip into the pipe or tube E, or soldered tight to it. I is the outside metallic case, made of tinned copper, or other metallic substance. It may be made of wood; but my judgment and experience are that copper, about one and a quarter pound to a square foot, is the best. This outside case wants to be tight; the length, width, and depth may be varied, according to the size of the person. A good size, where you do not have but one, is seven feet six inches long; depth, about ten inches inside; width, about thirty-five inches inside of the case. J is the inside case or lining, made of copper, about one pound to the square foot. This case is one inch smaller all around sides and ends, on the bottom, than the case I. Between the cases I and J there are strips, put crosswise, to support the bottom of the inside case J. K is a strip that connects the inside case J with the outside case I, and has a flange turned down inside and outside, and is soldered tight to the cases I J. *b* are the hoops between the inside and outside cases I J, one at the bottom of the inside case J, one at the top, between the cases I and J, and the other in the middle, between the two. The object of these hoops is to press the outside of the metallic case out, and keep it in form and shape. *e* is the space between the inside and outside case, which is filled with a non-conducting substance, such as wool, hair, or air. N is a wooden bottom, about one-half inch thick, that covers the whole bottom of the corpse-preserver when made of thin metal. The object of this is to keep the bottom of the metallic case from being bruised. This wooden bottom N is fastened to this corpse-preserver by pieces of copper soldered to the sides of the preserver, and extending down on to this wooden bottom, and nailed or screwed to it on the edge. *g* are the cleats, one-half inch thick, that are fastened crosswise to the wooden bottom to prevent the wooden bottom from springing or warping out of shape. P is the pipe that connects to the inside casing J, and extends down through the outside case I, (being soldered tight to that casing I,) through the wooden bottom N and cleat *g*. The object of this pipe P is to take off the waste water from the melting of the ice. There may be any of the well-known forms of traps attached to this pipe P, to prevent the air from passing into the room A, but which will not obstruct the water from running off from the pipe P.

Figure 3 is section on line *c* and *d*, in fig. 1.

A is the chamber that contains the tubes or pipes E, wire basket B, and the corpse. C is the cover, which is fully described in fig. 2; but as that view will not show the operation of the air from the chamber A through the hollow pipes attached to the cover C, down through the pipes or tubes E, and out at the holes in the sides of the pipe E into the chamber A, I will describe it here, as that is an important arrangement, whether it is used as a whole or as a part.

When the corpse is laid in the basket, the coldest air will be in the bottom of the chamber A, the warmest in the top. The object of the openings in the cover C, and the hollow pipes attached to the cover C, with their ends open, is, as the air is warmed by coming in contact with the body, that it will rise in the chamber A, flow into the hollow pipe *c*, and pass out at the ends of these hollow pipes into the pan H, and thence down the pipes or tubes E out of the holes in the pipes or tubes E, near the bottom, into the chamber A, and it will so continue to rotate so long as there is ice in the pipes or tubes E. The holes in the pipes or tubes E are represented by the letter *o*. The object of this cover C being made in this form is threefold: first, that the meltings from the cover shall run through the pipes or tubes E; second, if you have a large, corpulent person, you can put him in it without having the cover press upon him, although the preserver is shallow; the third is that you can see the body without exposing it to the external air; or, if you wish to re-charge it with ice, you have only to take off the outside cover D. E are the pipes or tubes described in full in fig. 2; and I only need to say here that there may

be one tube extending around the case on the inside, with a circulation of air, but it would not have the surface of the row of tubes or pipes. This form of the ice-box may be changed in several ways.

All the other letters in this figure seem to be fully described and set forth in the preceding description of those, figs. 1 and 2.

For the construction of these pipes or tubes, and their connections and appendages, I refer to the specifications and drawings of former patents issued to me, and bearing the dates as follows, viz, June 12 and December 18, A. D. 1866; January 1 and December 10, A. D. 1867.

The forms of the case may be changed to suit the eye or fancy of the constructor. I have endeavored to give the best plan, so far as my experience upon the use of them has been. A good freezing-mixture is twenty pounds of the best coarse salt to eighty pounds of ice, although a less amount of salt will do. When one is constructed like the drawing, unless it is a very bad case, you will not require salt, for you can put this down to 34° above zero, two degrees above the freezing-point, with ice alone.

Having thus given a full and exact description of my improved corpse-preserver, what I claim as new, and desire to secure by Letters Patent, is—

1. The application of a tubular ice-box to a corpse-preserver, whether the same be made with openings near the bottom or on the bottom, or whether the same be made tight, and you get your cold by conduction, substantially as herein described, and delineated on the drawings hereunto annexed.

2. I claim the construction of the corpse-preserver, substantially in the manner set forth in the drawing, and described in the specification, of getting the rotation or movement of the air in the chamber A, substantially as described.

3. I claim the combination of the tubes or pipes E with the chamber A, cases I J, cover C, substantially as herein described, and for the purposes herein set forth.

CHARLES F. PIKE.

Witnesses:

HENRY MARTIN,
CHARLES SELDEN.