

F. A. NOPENZ.

COOLING BOX.

APPLICATION FILED JULY 29, 1907.

Patented Sept. 22, 1908.

899,231.

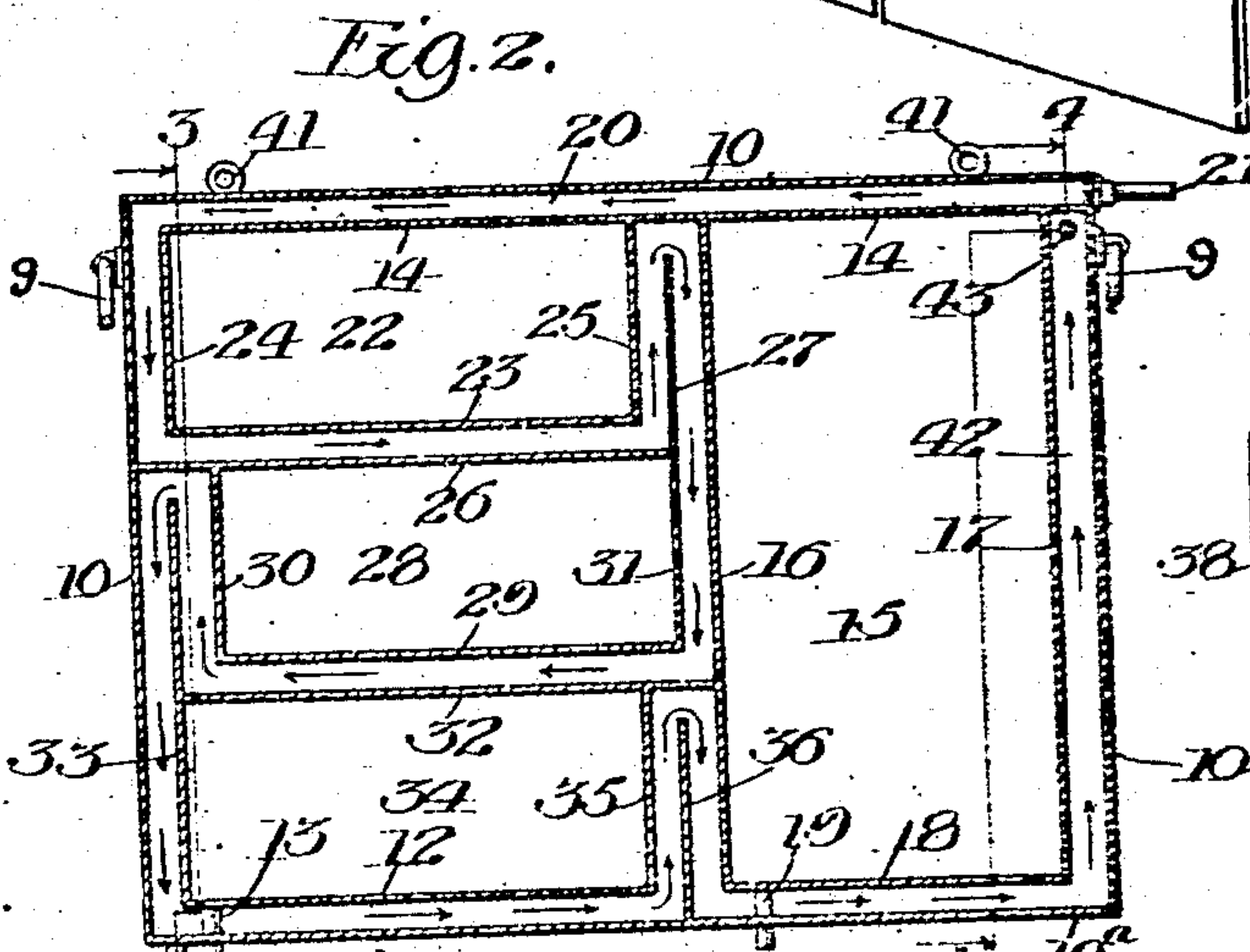
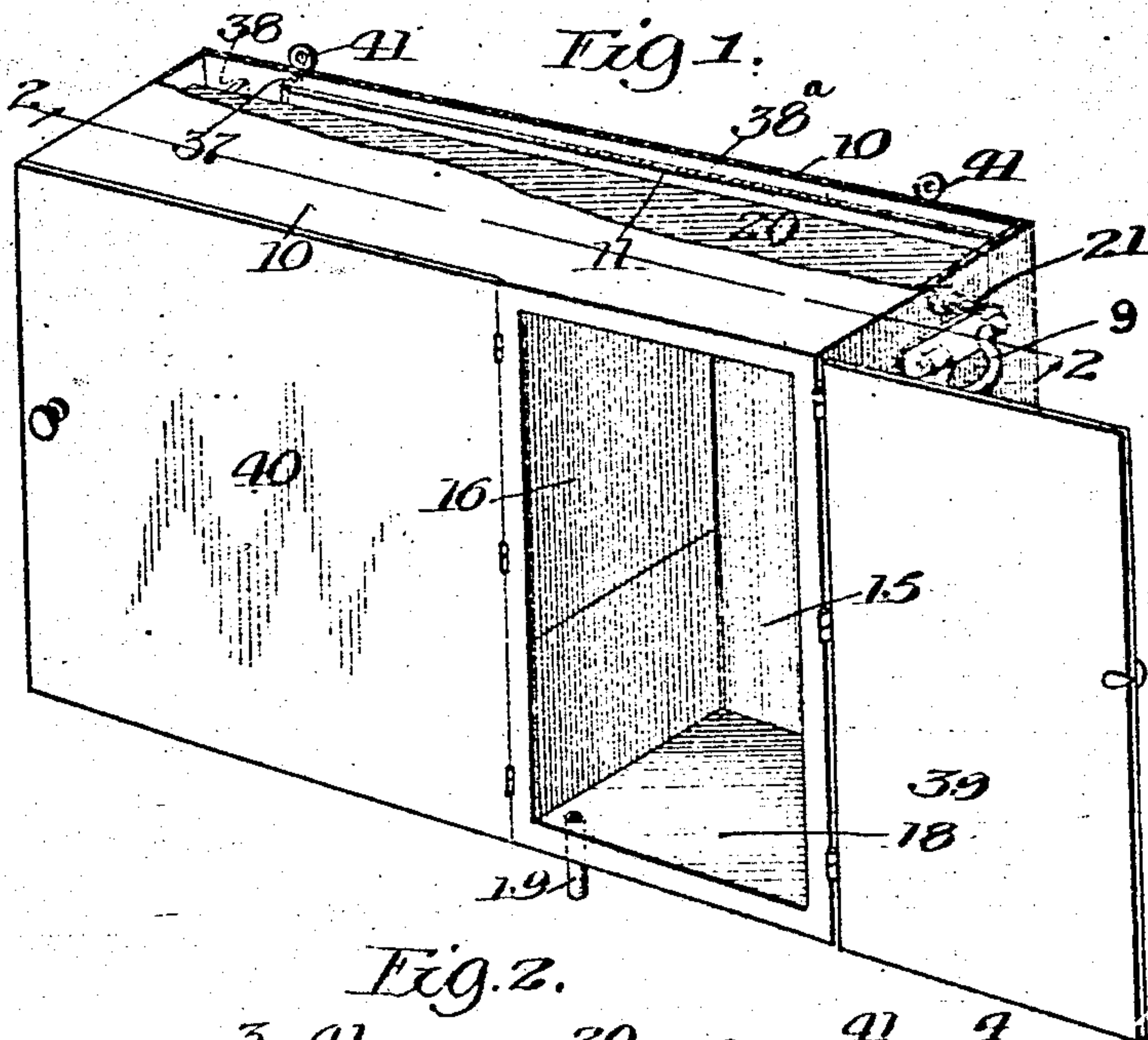
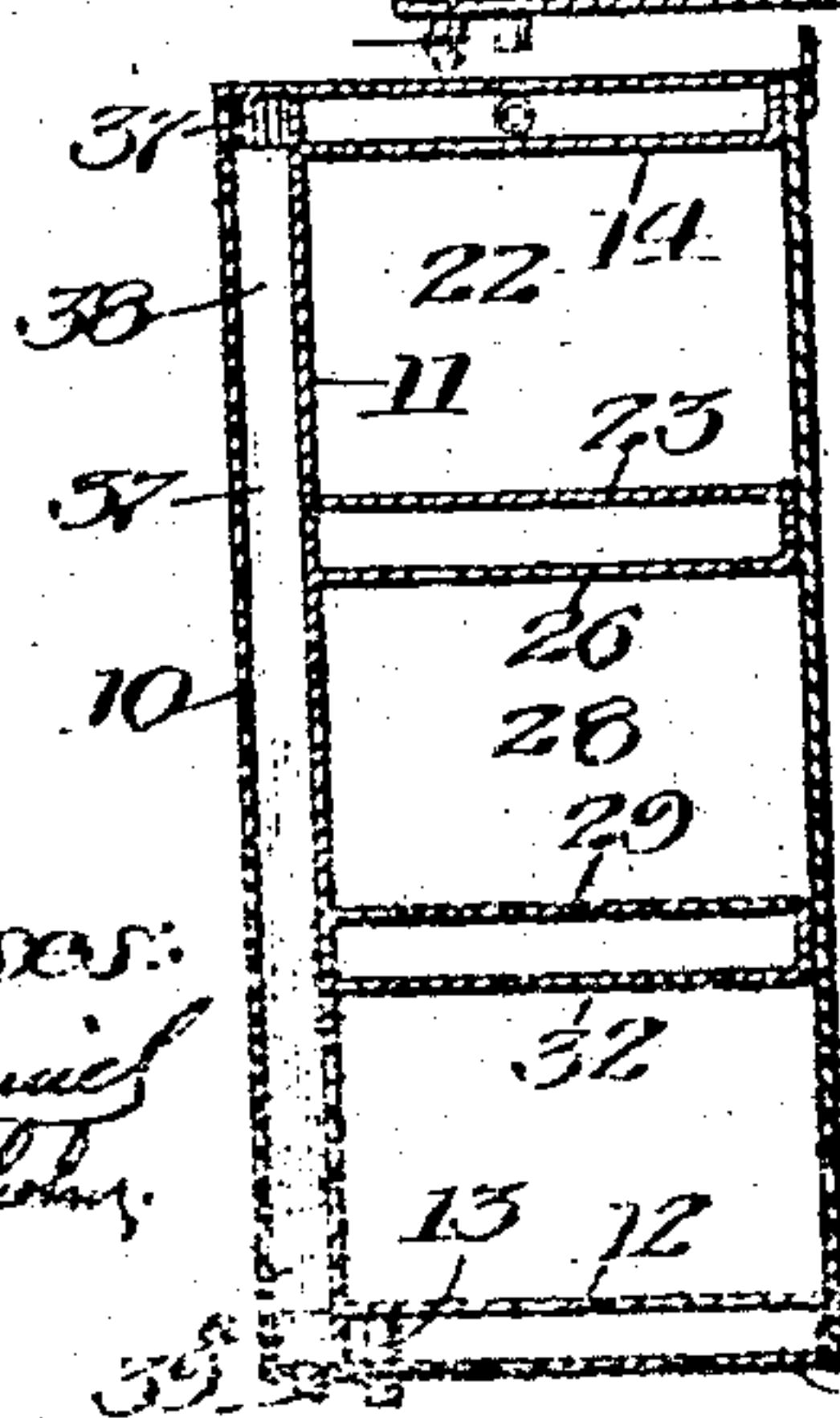


Fig. 3.



Witnesses:  
G. W. H. H. H.  
C. W. H. H. H.

Fig. 4.

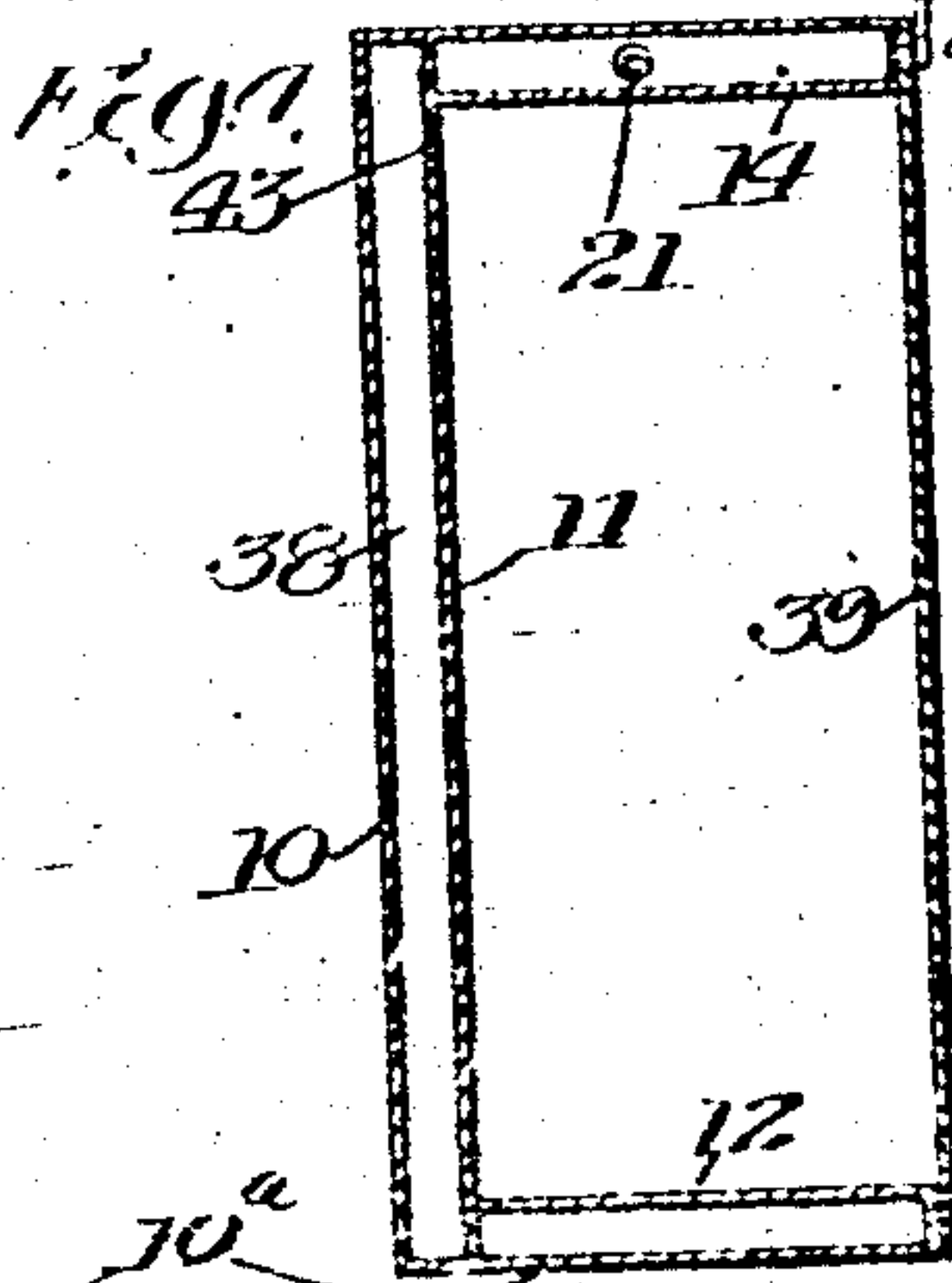
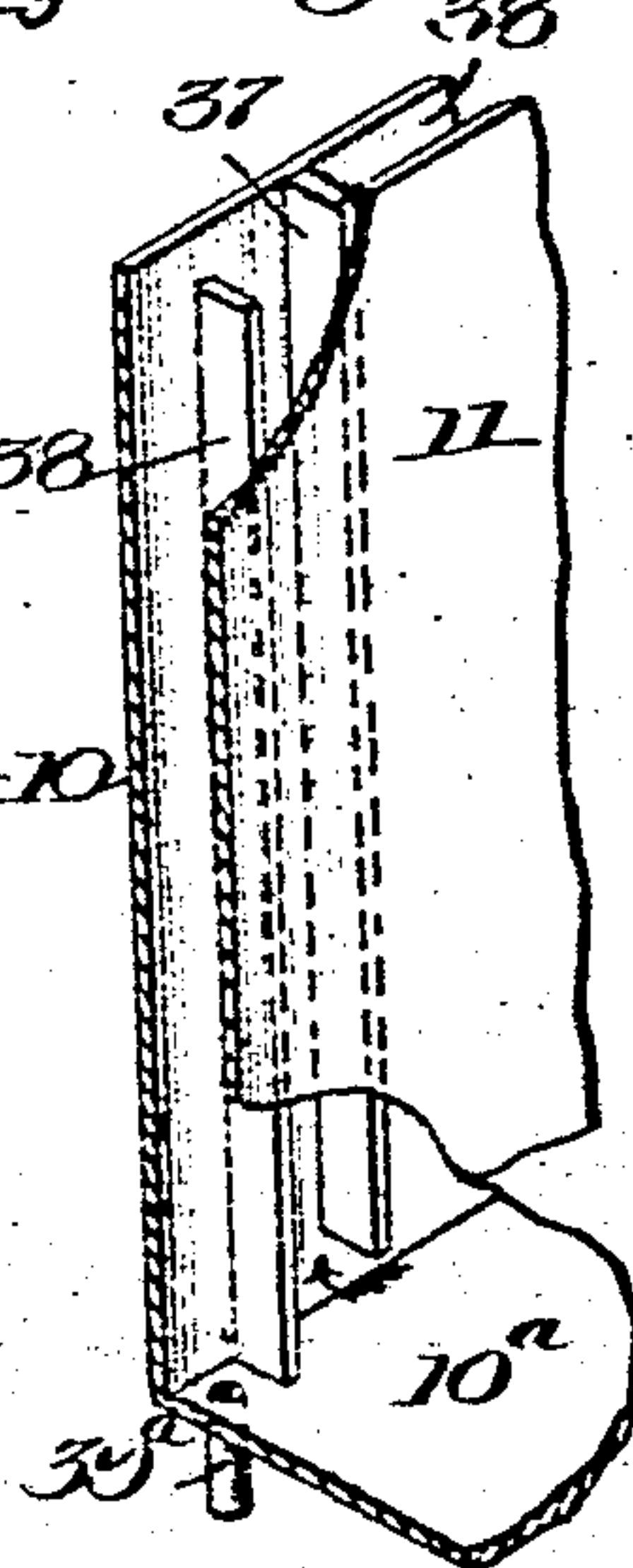


Fig. 5.



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# UNITED STATES PATENT OFFICE.

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## COOLING-BOX.

No. 899,231.

Specification of Letters Patent.

Patented Sept. 22, 1908.

Application filed July 29, 1907. Serial No. 385,963.

*To all whom it may concern:*

Be it known that I, FREDERICK A. NOPENZ, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cooling-Boxes, of which the following is a specification.

This invention relates to improvements in a cooling box or receptacle, to be used for receiving and maintaining at a low degree of temperature, articles of food, such as meats, vegetables, fruit, milk and other edibles, to the end that they may be preserved for a considerable length of time or until required for use, and it consists in certain peculiarities of the construction, novel arrangement and operation of the various parts thereof, as will be hereinafter, in full, set forth and specifically claimed.

The principal object of the invention is to provide a cooling box which shall be simple and inexpensive in construction, portable, compact in form and so made that a volume of water may be caused to circulate around all of the sides of the compartments in the box, with the exception of the front or open side.

Another object of the invention is to so construct and arrange the parts of the box that it may be supported on a wall or other suitable support above a sink or drain basin, so that the water may be discharged through said sink or basin, and also in such a manner that the box may be readily connected with a supply of water under pressure.

Other objects and advantages of the invention will be disclosed in the subjoined description and explanation.

In order to enable others skilled in the art to which my invention pertains, to make and use the same, I will now proceed to describe it, referring to the accompanying drawing in which—

Figure 1 is a perspective view of a box embodying the invention, showing one of its doors in an opened position, and the other door closed and illustrating a part of the top of the box broken away to disclose the passages for the water. Fig. 2 is a vertical, longitudinal sectional view, taken on line 2—2 of Fig. 1, looking in the direction indicated by the arrows. Fig. 3 is a cross sectional view taken on line 3—3 of Fig. 2, looking in the direction indicated by arrows. Fig. 4 is a simi-

lar view taken on line 4—4 of Fig. 2 and—Fig. 5 is a perspective view of a portion of the rear wall and floor of the casing, and a part of the inner wall of the box, showing their relative positions and the construction of the rear passage for the water.

Like numerals of reference refer to corresponding parts throughout the different views of the drawing.

The outer shell or casing of the box is designated by the reference numeral 10, and may be made of any suitable size, form and material, but preferably rectangular in shape, and with its front portion open. Secured to each of its ends near its top is a handle 9 by means of which the box may be moved from one place to another. Located within the casing 10, at a distance from the rear wall thereof, is a vertical wall or partition 11, which extends from the top of casing 10 to the bottom 10<sup>a</sup> thereof, as is clearly shown in Figs. 3 and 4 of the drawing.

Extending horizontally from near the bottom of the partition 11, to the front portion of the casing 10, is a floor 12, which is spaced from the bottom of casing 10 and has a discharge pipe 13, which passes through both the floor 12 and the bottom of the casing 10, and is for the discharge of water which may accumulate on the floor 12. Located horizontally and at a slight distance below the top of the casing 10, is a partition 14, which extends from one end of the casing to near the other end thereof, and also extends from the inner wall or partition 11, to the front of the casing, as will be readily understood by reference to Figs. 2, 3 and 4 of the drawing.

Extending downwardly from the partition 14 near the end thereof, which is connected to one end of the casing, is a vertically disposed compartment 15, which is formed by the vertical walls, 11, 16, 17 and the horizontal partitions 14 and 18, the latter of which is spaced from the bottom of the casing, and is provided with a drain pipe 19, which passes through both the floor 18 and bottom of the casing. By referring to Fig. 2 it will be seen that the wall 16 divides the box vertically and that the floor 12 extends from near one end of the casing to about its middle only. Communicating with the space 20 at one end of the casing 10, is a water supply pipe 21, which leads to and has communication with a supply of water under



pressure (not shown). Below the partition 14 and extending from about its middle to that end thereof, opposite the supply pipe 21, is a compartment 22, which comprises the partitions 11, 14, floor 23 and end walls 24 and 25, the front of the compartment being left open.

It will be observed that the walls 24 and 25 of the compartment 22 are spaced from the partition 16 and end wall of the outer casing, and also that a partition 26 is horizontally located at a distance below the horizontal floor 23, and extends from one end of the casing 10 to near the partition 16, at which end is located a vertical baffle plate 27, which extends to near the lower surface of the partition 14 and transversely of the casing. Below the partition 26 is a compartment 28, which comprises the inner wall 11, partition 26, floor or partition 29 and end walls 30 and 31, the front portion of said compartment being left open. Horizontally located below the floor 29 is a partition 32, which extends from the partition 16 to near that end of the casing opposite the supply pipe, and from the wall 11 to the front of the casing. At the end of the partition 32, adjacent to the end of the casing, is a vertical and transversely located partition 33, which is interposed at a distance from each, between the end piece 30 of the compartment 28 and the end of the casing, and extends at its upper end to near the partition 26, and at its lower end to near the floor of the casing. Below the partition 32 is a compartment 34, which comprises the wall 11, partition 32, floor 12 and walls 33 and 35, the front portion of said compartment being left open. Located vertically and transversely of the casing between the lower portion of the partition 16, and the wall 35, and spaced from each, is a baffle plate 36, which extends from the floor of the casing to near the partition 32. Transversely located between the rear wall of the casing 10 and the inner wall 11, are two spaced apart vertical partitions 37 and 38, which are located near one corner of the box in that end thereof, opposite the supply pipe 21.

As will be clearly seen by reference to Fig. 5, the lower end of the partition 37 is spaced from the bottom or floor 10<sup>a</sup> but has its upper end flush with the top of the rear wall of the casing and inner wall 11, while the partition 38 rests at its lower end on the bottom or floor 10<sup>a</sup>, and has its upper end spaced from the top of the rear wall and inner wall, thus permitting water to pass in the direction indicated by the arrows, from the space 38<sup>a</sup>, out through an outlet pipe 39<sup>a</sup>, located in the lower portion of the casing and between one of its ends, and the partition 38, as shown in the Fig. 5 of the drawing. Hinged to one end of the casing 10, is a door 39, used for closing the compartment 15, and hinged to

the vertical wall 16, is another door 40, used for closing the compartments 22, 38 and 34. The upper rear portion of the casing is provided with apertured brackets or lugs 41, by means of which the box may be supported on a wall or other suitable support over a sink or drain basin.

From the foregoing and by reference to the drawing, it will be readily understood and clearly seen that a box constructed according to my invention will be compact in form, and may be connected to a supply of water under pressure, and suitably supported, so that when the water is admitted to the space 20, through the supply pipe 21, it will take the course indicated by the arrows in Fig. 2, and circulate around the various compartments, and will be discharged from the space or passage 42, between the wall 17 and adjacent end wall of the casing, through an outlet 43, into the space 38<sup>a</sup>, from whence it will pass over the top of the partition 38, and out through the outlet 39<sup>a</sup>, which may lead to any suitable receptacle or drain.

By the peculiar arrangement of the partitions strips 37 and 38 in the rear hollow wall of the device, it is apparent that the water supplied through the supply-pipe 21 will be retained in the shell or casing so as to cause it to completely surround, except at the front, all of the compartments, and that none of the water will escape until its level has reached the top of the partition strip 38. This arrangement also prevents any back flow, and as the water is supplied under pressure it is evident that there will be a continuous circulation of the same through the spaces therefor.

Having thus fully described the invention, what I claim as new, and desire to secure by Letters-Patent, is—

1. In a cooling-box, the combination with a casing having communication with a supply of water and provided with an inner vertical wall spaced from its rear wall, of two transverse vertical partitions located in said space, near one corner of the box, one of said partitions having its lower end spaced from the floor of the box, and the other one having its upper end spaced from the top of the box, an outlet in the lower portion of the box between the last named partition and one of the end walls of the box, and one or more compartments located within the casing and spaced therefrom to permit of the circulation of water therebetween.

2. In a cooling-box, the combination with a casing having communication with a supply of water and provided with an inner vertical wall spaced from its rear wall, of two transverse vertical partitions located in said space near one corner of the box, one of said partitions having its lower end spaced from the floor of the box, and the other one having its upper end spaced from the top of the box,



an outlet in the lower portion of the box between the last-named partition and one of the end walls of the box, and a series of compartments located within the casing and  
5 spaced apart as well as spaced from the casing to permit of the circulation of water between said compartments and around the

same and between the casing and said compartments.

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Witnesses:

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E. M. LINDHOLM.