

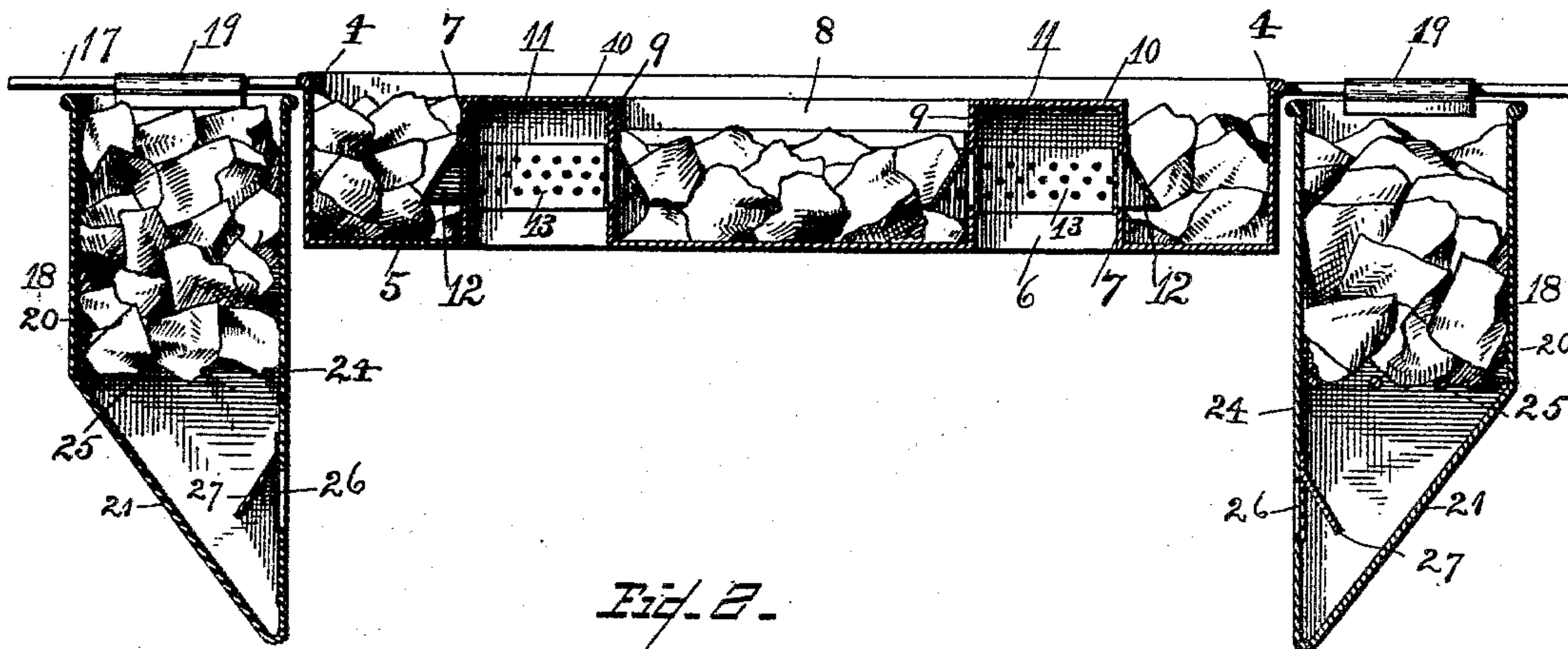
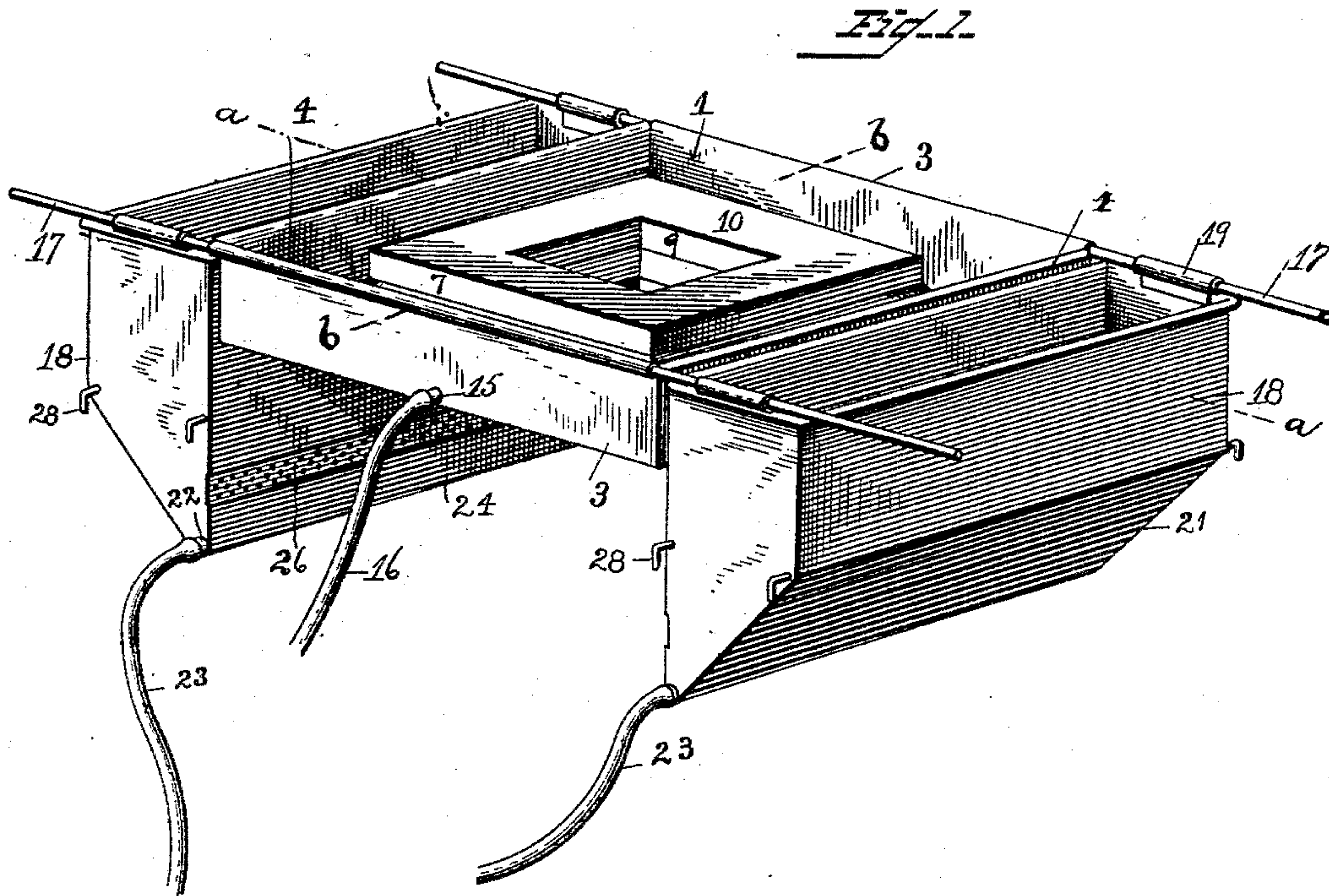
(No Model.)

2 Sheets—Sheet 1.

E. B. MAGILL.
BODY COOLER AND FEVER REDUCER.

No. 414,559.

Patented Nov. 5, 1889.



Witnesses
Wm. H. Steiden
E. B. Magill

Inventor
Edwin Belmont Magill
By—his—Attorney
Chas. J. Gooch

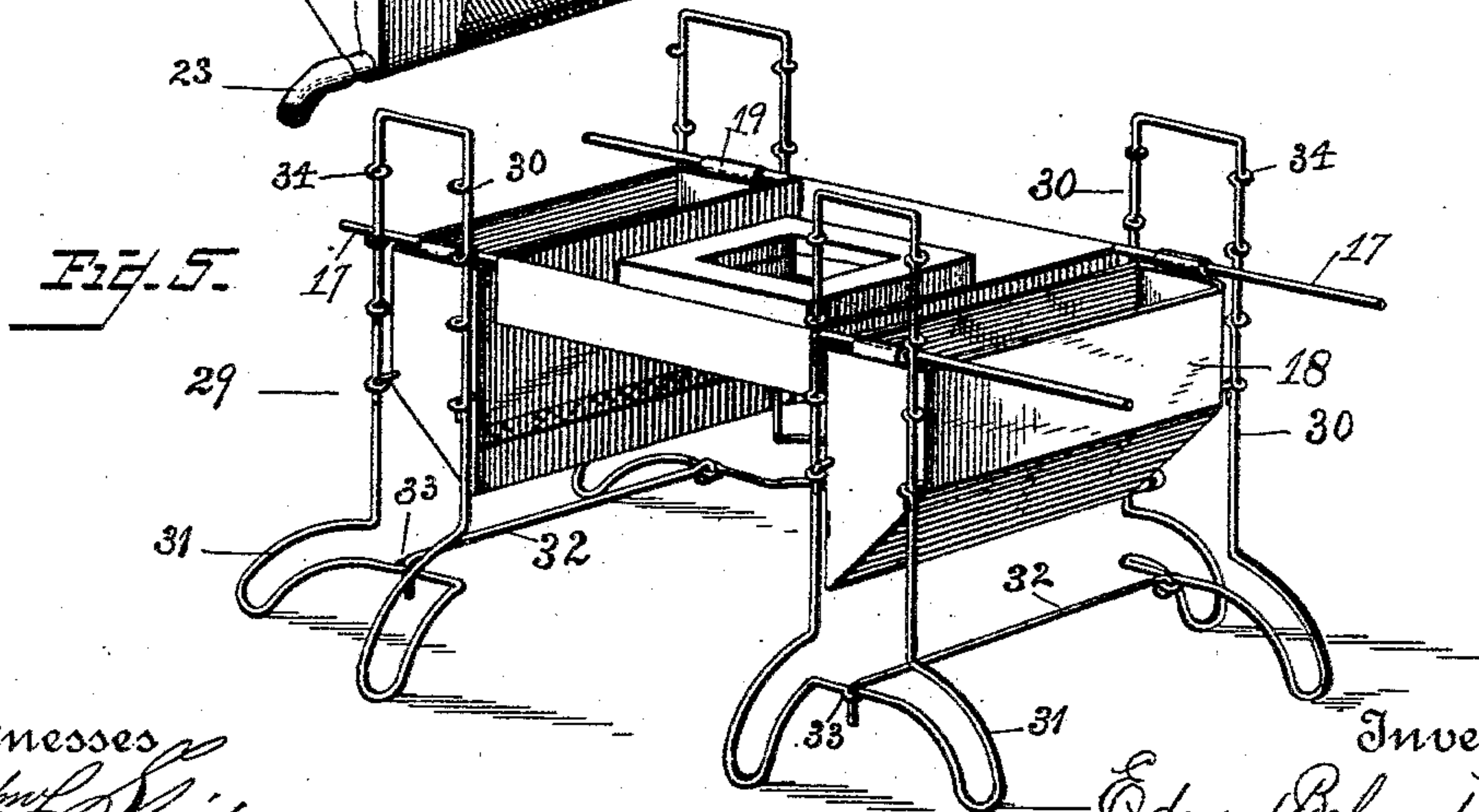
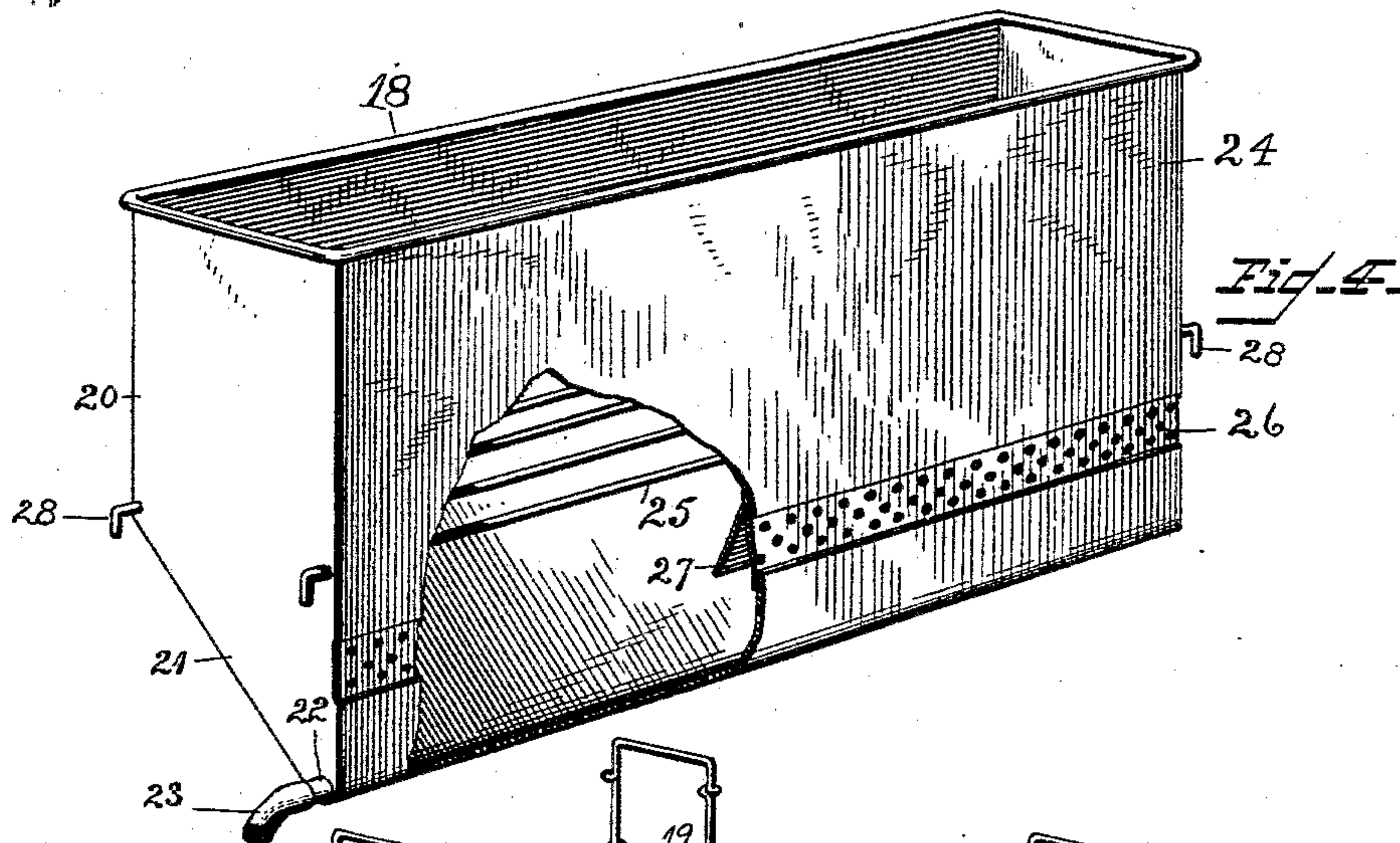
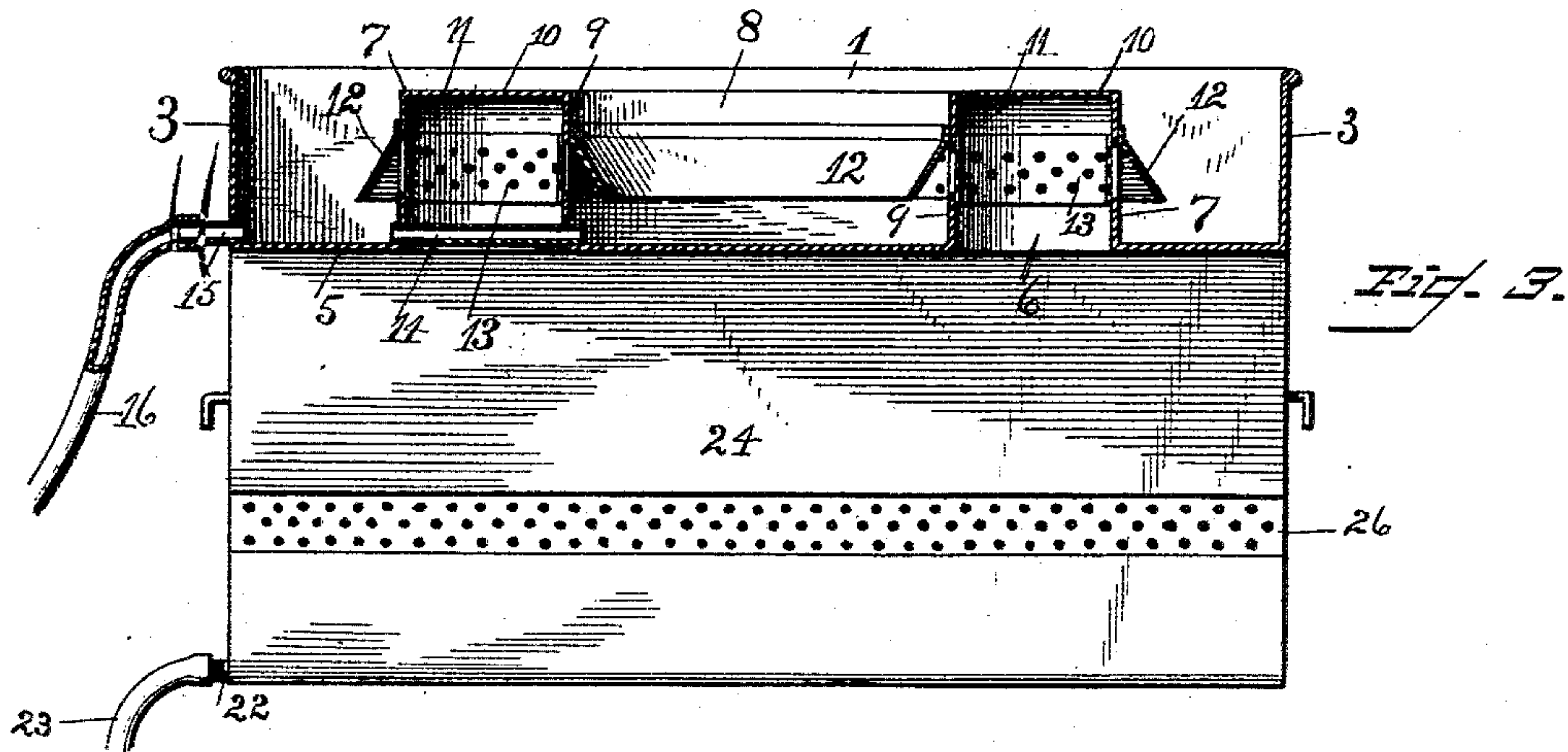
(No Model.)

2 Sheets—Sheet 2.

E. B. MAGILL.
BODY COOLER AND FEVER REDUCER.

No. 414,559.

Patented Nov. 5, 1889.



Witnesses
Wm. H. Schindler,
J. A. Domet.

Inventor
Edwin Belmont Magill,
By his Attorney
Chas. J. Cochr.

UNITED STATES PATENT OFFICE.

EDWIN BELMONT MAGILL, OF LA CROSSE, WISCONSIN.

BODY-COOLER AND FEVER-REDUCER.

SPECIFICATION forming part of Letters Patent No. 414,559, dated November 5, 1889.

Application filed July 9, 1888. Serial No. 279,419. (No model.)

To all whom it may concern:

Be it known that I, EDWIN BELMONT MAGILL, a citizen of the United States, residing at La Crosse, in the county of La Crosse and State of Wisconsin, have invented certain new and useful Improvements in Body-Coolers and Fever-Reducers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates, as hereinafter set forth, to a novel device for cooling various portions of the human body in the reduction of fevers and for other purposes, and to a frame or support for adjustably supporting the cooling device in appropriate position relatively to the body.

In the accompanying drawings, Figure 1 represents a perspective view of my improved body-cooler and fever-reducer of a shape suitable for employment in cooling various portions of the body. Fig. 2 represents a longitudinal section thereof, taken on the line *a a* of Fig. 1. Fig. 3 represents a transverse section taken on the line *b b* of Fig. 1. Fig. 4 represents a detail view, partly broken away, of one of the side boxes or ice-receptacles and air-coolers. Fig. 5 represents my frame or support for adjustably supporting the cooler at any desired altitude above the body, and so as to adapt the same for application to different parts of the body and to people of varying size, this figure also representing the manner in which the cooler is adjustably supported thereon.

In the drawings I have represented but one form or shape of cooler, the form shown being one adapted for use in cooling and reducing fever in the several parts of the human anatomy generally. In some cases, however, it may be found advantageous to modify somewhat the contour of either one or more of the respective sections of the device—as, for instance, to curve either of the sections so as to more readily conform to the shape of the portion of the body to be treated; but as the general construction of the apparatus would be followed in its essential characteristics, and such changes in shape would readily suggest themselves to those skilled in the art and hav-

ing knowledge of the specific requirements in individual cases, I have not deemed it necessary to illustrate herein such modifications in contour as may be made without departing from the spirit of my present invention.

The form shown in the drawings herewith is one especially adapted for use in cooling the abdomen and other parts of the trunk or body of a person, though it is equally well adapted in the form shown for cooling the limbs and also the neck and head.

The ice-receptacle and air-cooler consist of a central section 1, which may be either of substantially square form, as shown, or of circular, oblong, curved, or other shape, according to requirement, and a plurality of other ice-receptacles and air-coolers suspended from and supported upon said central ice-receptacle with capability of ready attachment to and removal therefrom, and also of horizontal adjustment relatively thereto, as will be presently explained.

The central ice-chamber and air-cooler 1 consists of a tray or open-topped box having vertical plane outer side walls 3 and end walls 4, a bottom 5, and a central recess or opening 6, guarded by upwardly-extending perforated walls 7. Within this central recess or opening 6 is another ice-receiving box or chamber and air-cooler 8, also having perforated vertical side walls 9.

10 represents a hood, which rests upon the top edges of the side walls 7 and 9 and extends across and covers the air-space 11 between the same, said hood being provided on each side with outwardly-flaring depending flanges or aprons 12, which extend across the perforations or wire-gauze 13 in the vertical walls 7 and 9, for the purpose of fending the ice contained within the respective ice-chambers 1 and 8 from said perforations and forming a space intervening the ice and the side walls 7 and 9, through which air, after being cooled by its passage over the ice within said chambers, passes to the patient. By means of these flanges or aprons the water resultant from the melting of the ice will be deflected from the perforations in the side walls and prevented from passing therethrough, and as naturally the cooled air will seek the lowest point of exit, said aprons form a flue along

which the cooled air will pass to and through the perforated side walls to that portion of the body to which they are adjacent.

14 represents a waste pipe or tube connecting the chambers 1 and 8, through which the waste water resultant from the melting of the ice in the chamber 8 passes to the ice-chamber 1, and 15 represents a similar water-discharge pipe extending outwardly from the ice-chamber 1, and to which a rubber or other tube or pipe 16 is connected for conveying the waste water to a similar receptacle. This tube or pipe 16 may, if desired, be carried to one of the side or end ice-holders, to be presently described, so as to discharge the waste water therein, and thus reduce the number of waste-water receptacles employed.

From or adjacent to the respective corners of either or each end or side of the outer ice-chamber 1, and either from the upper or other suitable portion thereof, extend horizontally wires or rods 17, upon which side or end ice-receiving vessels 18 are removably supported. A convenient mode of suspending these vessels 18 is represented in the drawings, wherein sleeves or tubes 19 extend from the upper edges of said vessels, so as to permit of their being readily slipped on or off said rods, though of course said rods may extend from any other portion than the top of the chamber 1. These rods are of a length to permit of the side ice-chambers being adjusted in position in any desired proximity to the central chamber 1 to accommodate the size of that portion of the body to which the apparatus is applied.

The side or, as the case may be, end ice-receiving and air-cooling chambers 18 are of greater depth than the depth of the central chambers 1 and 8. By this construction, while the central chambers 1 and 8 furnish a supply of cooled air to the upper surface of that portion of the body under treatment, the depending side or end chambers 18 furnish a supply of cooled air to the side surfaces of that portion of the body under treatment.

While I do not confine myself to the precise form and shape of said side or end chambers illustrated in the drawings, I find that form a very desirable one, as by constructing the lower portion of the outer wall 20 of downwardly-tapering form 21 the waste water from the ice within said chambers 18 will readily flow down to the bottom and discharge through the exit-pipe 22, to which one end of a rubber or other tube 23 is connected, through which the waste water is carried off. The inner walls 24 of the side or end chambers 18 are of a shape to permit of their resting snugly, when desired, against the adjacent face or wall of the central ice-chamber and air-cooler 1.

In the drawings I have shown the central ice-chamber and air-cooler of square form and the side chambers of oblong form; but the shapes thereof may be varied without de-

parting from the fundamental details of construction of my invention.

25 represents an ice-supporting grating within each of the chambers 18 a suitable distance above the bottoms thereof. In the drawings I have represented said gratings as just above the tapering bottom portion of the outer walls, though they may be arranged in any other desired position.

26 represents air-passages in the inner walls 24, a suitable distance, preferably, below the ice-supporting gratings 25. These air-passages may be either formed directly in the walls 24 or a slot or opening may be formed in each wall and covered with wire or other gauze.

27 represents a hood or apron extending across and depending below the air-passages and within the ice-chambers 18, so as to guard said passages from contact with water or ice and prevent water passing through said air-passages. These hoods or aprons 27 extend at a suitable angle, so as to form flues up which the cooled air passing down through the ice will pass to and through the air-passages 26, and so as also to constitute an effectual shield for said air-passages and fend them from contact with either ice or water.

28 represents hooks extending from the respective ends of the end or side chambers 18, and 29 represents a wire or other suitable frame or support for supporting the air-cooling device in position above or relative to the patient. In the drawings I have represented this frame as composed of four sections, each having eyed sides 30, and an outwardly-extending foot 31, for supporting and bracing the frame in position. Each adjacent pair of sections of this frame is removably connected and braced together by a hooked brace-rod 32, which hooks into an eye 33 on the lower portion of the adjacent section. By this means the respective sections can be readily connected together and disconnected from each other, while also furnishing a secure bracing-connection to the several members of the frame.

A convenient, ready, and inexpensive manner of constructing this frame is to form the respective sections each of a single length of wire bent or doubled over to form the side walls 30 of a distance apart equal to the width transversely of the side or end ice-chambers 18, and with the wire forming said side walls curved or bent at suitable distances apart to form eyes 34, with which the hooks 28 engage to support the ice-chambers thereon. By constructing the frame 29 with eyed supports 34 and providing the end chambers 18 with hooks 28 it will be observed that the ice-chambers can be supported at any desired height and their vertical adjustment readily secured at any time.

Where wire is employed in the construction of the frame-sections, the free ends thereof are bent over into outwardly-curved form to

form the feet 31, and their extreme ends then connected together by soldering or other suitable means.

In lieu of forming the respective sections of the frame of wire, they may each be formed by casting or of sheet or other metal or material, as desired, as long as they are provided with means, substantially as described, for affording a vertically-adjustable support for the ice-chambers.

If desired, the end chambers 18 may be provided with eyes and the frame with hooks to engage therewith.

In such cases as may be desired either one or both of the chambers 18 may be employed independently of the central chamber 1. Such application and use would be desirable where it is desired to cool or reduce fever in side or vertical portions of the anatomy and not treat the adjacent horizontal portion thereof. Furthermore, in lieu of providing the side or end chambers 18 with suspension devices, such as described, to connect the same with the frame, such suspension devices may be formed on or attached to the central chamber 1 and the frame engaged therewith, so as to afford a central support to the several chambers or permit of the central chamber alone being employed, as may be deemed necessary in individual cases.

What I claim is—

1. A body-cooling device consisting of a central ice-receptacle having guarded air-passages therein, one or more ice-receptacles attached to said central ice-receptacle at the sides and having guarded air-passages therein, suspension devices, as hooks, eyes, or pins, extending from the side receptacles, and a frame adapted to engage said suspension devices and support the respective receptacles with capability of vertical adjustment thereon.

2. A body-cooling device consisting of a central ice-receptacle having guarded air-passages in its walls, one or more ice-receptacles removably supported on said central receptacle with capability of horizontal adjustment thereon and having guarded air-passages in the walls thereof, a supporting-frame, and suspension devices, as hook- and -eye connec-

tions, between the frame and ice holder or holders for securing vertically-adjustable supporting-connections between said frame and ice-holders.

3. The ice-holder 1 herein described, consisting of an outer ice-receptacle having air-passages in its walls and an apron shielding the air-passages from contact with ice and water and an inner ice-holder having air-passages in its side walls and an apron shielding said air-passages from ice and water contact.

4. The ice-holder 1 herein described, consisting of an outer ice-receptacle having air-passages in its walls, and a central ice-holder having air-passages in its side walls and of less circumference than and arranged within the central portion of the outer ice-holder, and a hood connecting the adjacent walls of the respective ice-holders and covering the space between the same, and having depending flanges for the purpose of guarding the air-passages in the respective ice-receptacles from ice and water contact, substantially as and for the purpose set forth.

5. A body-cooler consisting of an ice-receptacle having plane outer walls and walls having air-passages therein, and a central ice-receiving box having air-passages in its side walls, a hood connecting the air-conducting walls and depending across and guarding said air-passages, horizontal rods extending from the exterior of said ice-receptacle, and one or more ice-receptacles adapted to be removably supported upon said rods with capability of horizontal adjustment thereon, and having an ice-supporting grating and flange-guarded air-passages in the inner walls thereof, a sectional frame having a vertical series of supports thereon, and devices, as hooks or eyes, upon said ice receptacle or receptacles to engage the supports on the frame, whereby a vertically-adjustable support is afforded the body-cooler.

In testimony whereof I affix my signature in presence of two witnesses.

EDWIN BELMONT MAGILL.

Witnesses:

THEODORE RODOLF,
D. O'SULLIVAN.