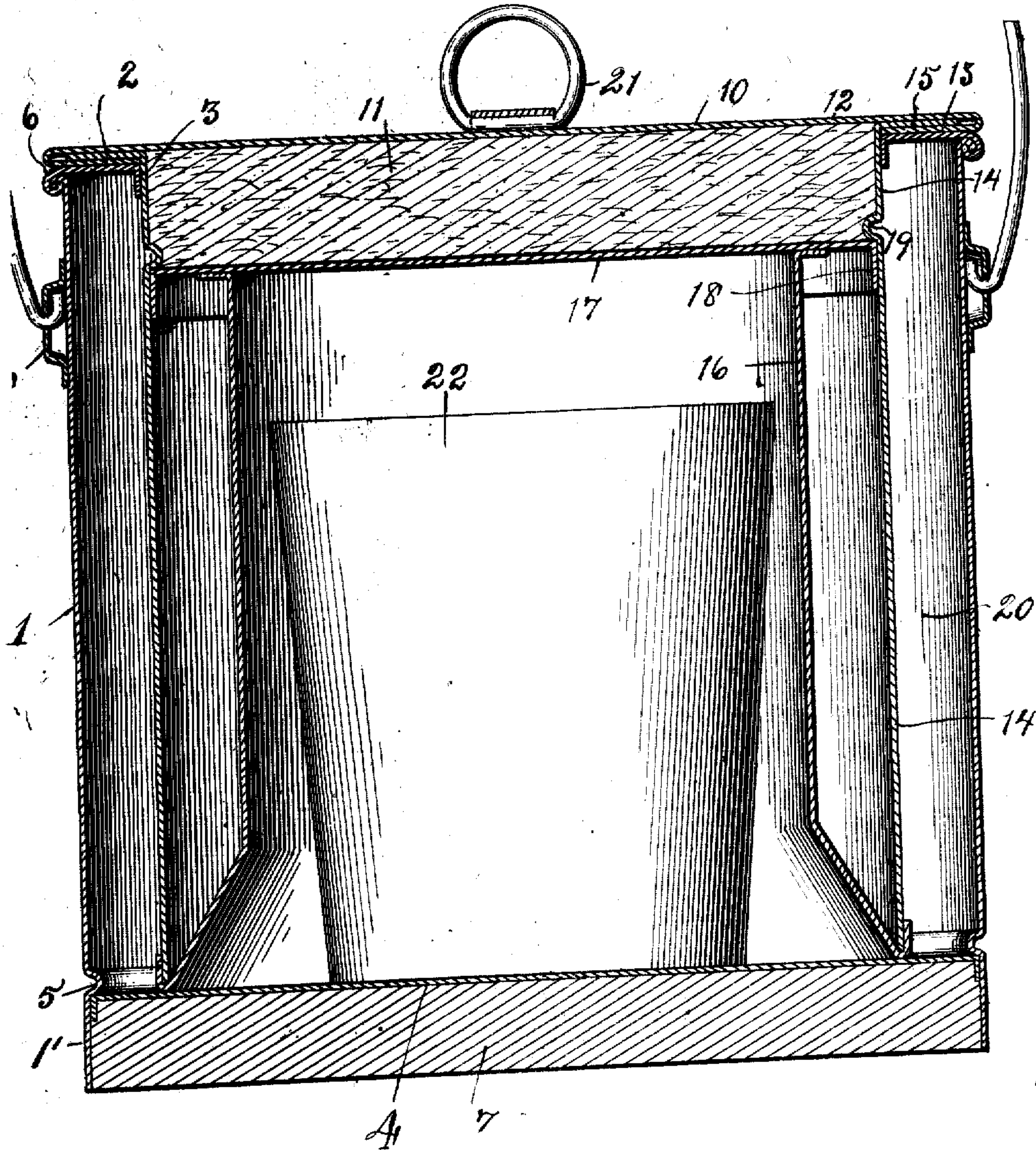


J. H. WILSON & T. S. FRIEND.
HEAT CONSERVING RECEPTACLE.
APPLICATION FILED FEB. 4, 1908.

Patented July 20, 1909.

928,414.



Witnesses
Milton Lenoir
Emilie Rose

Inventors:
Thomas S. Friend,
James H. Wilson.
By Albert N. Graves
Attorney

UNITED STATES PATENT OFFICE.

JAMES H. WILSON AND THOMAS S. FRIEND, OF CHICAGO, ILLINOIS.

HEAT-CONSERVING RECEPTACLE.

No. 928,414.

Specification of Letters Patent.

Patented July 20, 1909.

Application filed February 4, 1908. Serial No. 414,264.

To all whom it may concern:

Be it known that we, JAMES H. WILSON and THOMAS S. FRIEND, respectively a citizen of the United States and a subject of the King of Great Britain, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Heat-Conserving Receptacles, of which the following is a specification.

10 This invention relates to improvements in heat conserving receptacles, and refers more specifically to improvements in receptacles of that type which are used for cooking foods and the like by first heating the material to be cooked, then placing it in the receptacle and conserving the heat for a sufficient period to accomplish the cooking by this initial heat.

20 Among the salient objects of the present invention are to provide a receptacle in which a double insulation is provided as to its side walls, and this is accomplished without necessitating the handling of numerous separate parts by means of a peculiarly constructed cover of which one of the insulating members is an extension; to provide in a receptacle of this character means whereby the latter becomes self-sealing and incloses the commodity in a hermetically sealed chamber; to provide a construction composed of comparatively simple and cheaply formed parts; to provide a receptacle in which all parts of its interior are readily accessible for cleansing and in which there are no recesses or deep angles which might become fouled; and in general to provide a simple and improved receptacle of the character referred to.

40 To the above ends the invention consists in the matters hereinafter described, and more particularly pointed out in the appended claims.

45 In the single figure of the drawing, the receptacle proper is shown in axial section, a portion of the bail being broken away, and an inner vessel for containing food or the like is shown in side elevation.

50 In the preferred embodiment of our invention illustrated in the drawing, 1 designates as a whole an outer bucket-like receptacle, preferably having cylindric side walls, provided at its upper end with a radially inturned extension or flange 2, the inner perimeter of which is downturned, as indicated at 3, and provided at its lower end with an inset sheet metal bottom 4 which

is conveniently seated against an internal bead 5. The flange member 2 is desirably made as a separate piece having its outer edge interlocked with the upper edge of the side body proper, as indicated at 6. The space below the inset bottom 4 and inside of the extension 1' of the side body is desirably filled with a block of wood or non-insulating material 7. The outer receptacle is conveniently provided with ears 8, to which is attached a bail 9 in the usual manner.

10 designates as a whole the cover, the main body of which is made of suitable diameter to fit snugly inside of the flange member 2 and is made hollow to provide an insulating space 11 which is desirably filled with some suitable insulating material, preferably mineral wool, in order that it may not only serve as an insulator but add some weight to the cover to hold the latter firmly down. The upper wall member 12 of the cover is extended radially outwardly so as to overlie the flange member 2 and returned upon itself as indicated at 13 to receive the outturned flanged edge 15 of the cylindric side body 14 of the cover. This cylindric side body is continued downwardly substantially to the bottom of the vessel and is there joined with a second inner annular member 16 which is spaced away from the member 14 and is at its upper edge joined to the bottom wall member 17 of the cover; the two members 14 and 16 together forming an annular hollow extension joined to the cover. The member 17 of the cover is conveniently of cap form, i. e. provided with an outturned peripheral flange 18, and is seated and secured against a bead 19 in the member 14. The several joints of the hollow extension are soldered so that the annular space within the latter is hermetically sealed and the lower edge of said extension is made to fit accurately against the bottom of the receptacle so that the accumulation of a very small amount of water of condensation in the bottom of the vessel will effectually seal the space inside of the hollow extension against communication with the space intervening between the side wall of the vessel and the hollow extension. The cover is conveniently provided with a ring-pull 21 whereby it may be lifted out of the receptacle.

110 In operation any suitable dish or other food receptacle, as for example that indicated at 22, with its contents, which have

been previously heated, is arranged centrally within the receptacle and the cover adjusted to place. Ordinarily the material to be cooked will be steaming hot when placed in the receptacle, and as soon as the latter is closed the steam within the chamber will be condensed upon the inner walls of the latter and will flow down upon the inner surface of the hollow extension to the lower blunt edge of the latter. At this point the water of condensation will, at first by reason of its capillary attraction, immediately fill the angle between the lower edge of the hollow extension and the bottom wall of the receptacle. As more water of condensation accumulates, the bottom of the vessel will be covered and the seal thus effectively maintained. It is to be noted that the flange-like radial extension of the cover is constructed to fit with approximate exactness upon the inturned flange member 2 of the receptacle, and so also the cylindric side member 14 of the cover is arranged to fit with considerable exactness inside of the cover opening of the receptacle. It follows that as to the outer insulating space 20 it is so nearly hermetically sealed that no appreciable circulation of air therethrough will occur, while the steam and vapors are entirely prevented from escaping from the interior of the receptacle into this space. The hollow extension being hermetically sealed in itself, forms a very effective insulation. The hollow packed main body of the cover serves to effectually retain the heat while the insulating bottom is also effective to the same end.

While we have herein shown the preferred embodiment of our invention, nevertheless it will be understood that the details of construction may be modified without departing from the invention.

We claim as our invention:

1. In combination, an outer receptacle, a heat insulating cover fitting and closing the upper end of said receptacle, an inner hollow annular member attached to and removable with said cover, said annular member having concentric spaced apart side walls, the outer member of which is in turn spaced away from the outer side walls of the receptacle.

2. In combination, an outer receptacle, a heat-insulating cover fitting and closing the

upper end of said receptacle, an inner hollow annular member attached to and forming a downturned extension of said cover, said annular member being spaced away from the side walls of the outer receptacle and extending from the cover down into close proximity to, or contact with, the bottom of the receptacle.

3. In combination, an outer receptacle provided at its upper end with a radially inwardly extending flange-like extension, a heat-insulating cover having spaced apart inner and outer walls fitting within the upper end of said receptacle and resting against said flange-like extension, a hollow annular extension connected with the periphery of said cover and extending thence downwardly to and resting against the bottom of the receptacle, said extension being spaced away from the side walls of the receptacle and the interior thereof being hermetically sealed.

4. In combination, an outer receptacle provided at its upper end with a radially inwardly extending flange-like extension, a heat-insulating cover having spaced apart inner and outer walls fitting within the upper end of said receptacle and resting against said flange-like extension, a hollow annular extension connected with the periphery of said cover and extending thence downwardly to and resting against the bottom of the receptacle, said extension being spaced away from the side walls of the receptacle and the interior thereof being hermetically sealed and the lower end of said hollow extension terminating in a narrow edge, substantially as described.

5. In combination, an outer receptacle and heat-insulating cover fitting and closing the upper end of said receptacle, an inner hollow annular member attached to and forming a downturned extension of said cover, said annular member extending from the cover down into close proximity to, or contact with, the bottom of the receptacle.

JAMES H. WILSON.
THOMAS S. FRIEND.

Witnesses:

ALBERT H. GRAVES,
EMILIE ROSE.