J. S. NAGEL.

HEATER.

APPLICATION FILED MAR. 1, 1920.

1,414,299. Patented Apr. 25, 1922.

Fig. 1.

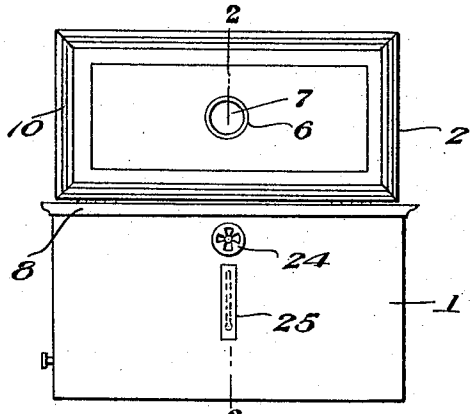


Fig. 2.

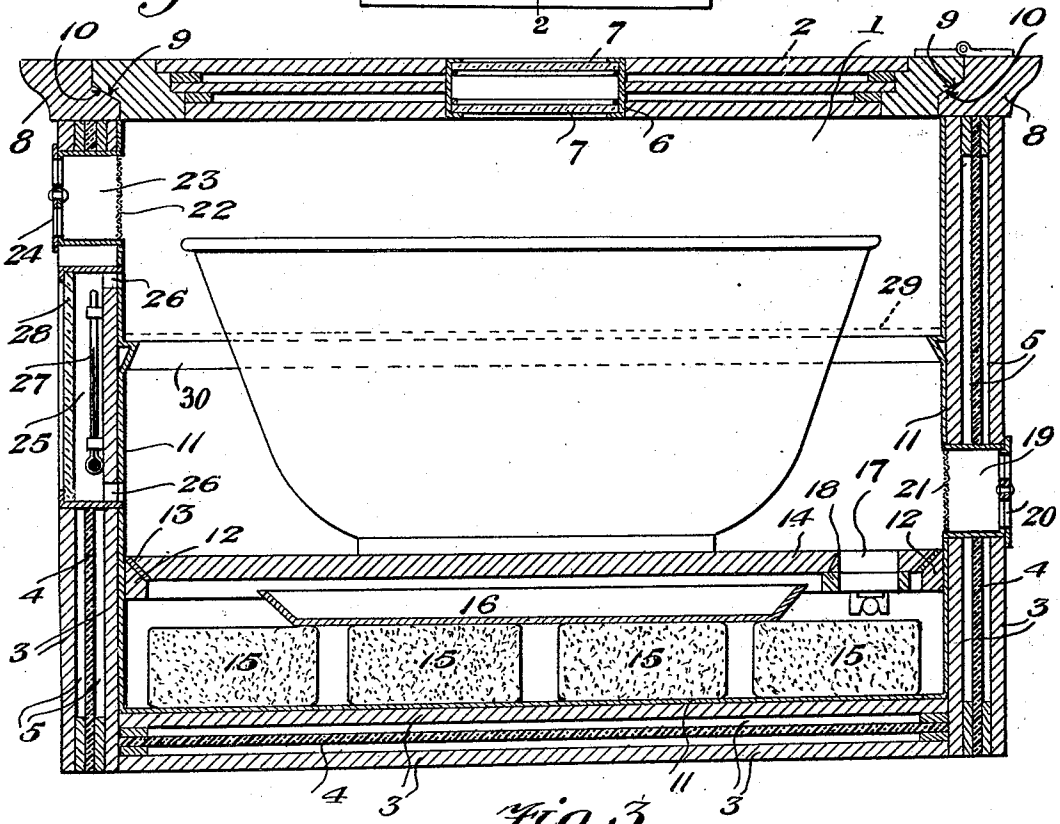
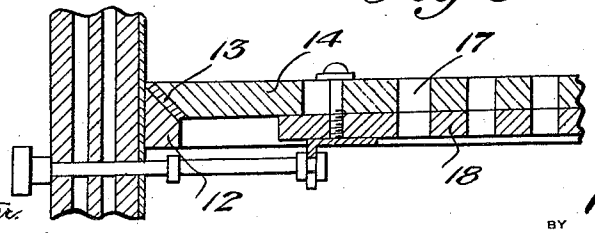


Fig. 3.



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JOSEPH S. NAGEL, OF WHITE, SOUTH DAKOTA.

HEATER.

1,414,299. Specification of Letters Patent. Patented Apr. 25, 1922.

Application filed March 1, 1920. Serial No. 362,507.

To all whom it may concern:

Be it known that I, JOSEPH S. NAGEL, a citizen of the United States, residing at White, in the county of Brookings and State of South Dakota, have invented new and useful Improvements in Heaters, of which the following is a specification.

This invention relates to a dough raising box and the principal object of the invention is to provide a box, the walls of which are constructed to retain the heat therein, and adapted to contain blocks of soap-stone or the like which are to be heated before being placed in the box.

Another object of the invention is to provide a thermometer for indicating the temperature within the box and ventilators for controlling said temperature.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claim.

In describing my invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a front view of the box with the cover raised.

Figure 2 is a sectional view through the center of the box taken on line 2—2 of Figure 1.

Figure 3 is a detail view showing the controlling means in the partition.

In these views 1 indicates the box and 2 the cover therefor. The walls of the box are composed of inner and outer strips of wood, indicated at 3 and an intermediate layer of insulating material, indicated at 4, said layer 4 being spaced from the wooden strips so as to leave air spaces, as indicated at 5. The cover 2 is similarly constructed and an opening 6 is formed in the center of said cover, said opening being closed by the inner and outer plates of glass, indicated at 7. The upper edge of the box is formed by the strips 8, said strips having inclined shoulders 9 formed on their inner edges with which an inclined face 10 on the cover engages. The cover is hinged to one of the strips 8 as shown. An inner lining of metal is secured to the inner walls and bottom of the box as indicated at 11. Cleats 12 are secured to the inner wall of the box an appreciable distance above the bottom thereof and these cleats are provided with inclined inner edges to which are secured strips of felt as indicated at 13. A partition 14 has its edges beveled for engaging these inclined edges of the cleats so that said cleats will support the partition across the box. The strips of felt will form a tight fit. In the space formed by said partition I locate the bricks 15 of heat retaining material such as soap-stone. A pan 16 is adapted to be placed on said blocks below the partition and is to contain water so as to moisten the heated air within the box. At the rear end of said partition openings 17 are formed which are controlled by the slide 18. A part of this slide projects through an opening in the box so that it may be operated from outside the box to cover and uncover the openings so as to regulate the passage of air passing from the space below the partition to the space above the partition. An opening 19 is formed in the rear of the box immediately above the partition and this opening is controlled by the shutter 20. Wire gauze 21 is placed over said opening so as to prevent the entrance of insects and the like therethrough. A similar opening 22 is formed in the front side of the box adjacent its upper end, this opening having the wire gauze 23 therein and being controlled by the shutter 24. An elongated opening 25 is formed in the front face of the front wall of the box, the ends of which are in communication with the inside of the box by means of the ports 26, and a thermometer 27 is placed in said opening. The front part of the opening is closed by a plate of glass 28 so the thermometer can be read through said glass. The air from the interior of the box will circulate through the opening by way of the ports and thus the air coming in contact with the thermometer will cause the same to register the temperature within the box.

If desired a wire rack 29 may be placed in the box to form a rest for a pan of dough, said rack resting on the ears 30 formed by punching the metal lining inwardly.

In using the device the blocks 15 are first heated and then placed in the bottom of the box. The pan of water is then placed on the said blocks and then the partition 14 is placed in the box. The receptacle containing the dough is then placed in the box and the top closed. If the temperature is too high, as recorded by the thermometer, the shutters 20 and 24 may be manipulated to

permit the entrance of cool air and the escape of hot air. The dough may be inspected through the glass covered opening in the top.

While the box is mainly designed for quickening the rising of the dough it will of course be understood that it may be used for other purposes such as keeping different kinds of food hot. The heated blocks may be removed and the box used as a bread box.

It is thought from the foregoing description that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What I claim is:

A box of the class described having its walls thereof composed of inner and outer strips of wood, a cover provided for said box, an intermediate layer of insulating material being spaced from the strips so as to provide air spaces, said cover having an opening formed in the center thereof, and inner and outer plates closing said opening, strips forming the upper edge of the box and having inclined shoulders formed on their inner edges, an inclined face provided on said cover and engaging the latter, an inner lining of metal secured to the inner walls and bottom of the box, cleats secured to the inner wall of the box being provided with inclined inner edges, strips of felt being secured thereto, a partition having its edges beveled for engaging the inclined edges of the cleats, said partition having openings therein and means for controlling the openings from the outside of the box, blocks of retaining material located in the lower chamber, adjustable ventilators in the walls of the box above the partition and a glass sight opening in the cover.

In testimony whereof I affix my signature.

JOSEPH S. NAGEL.