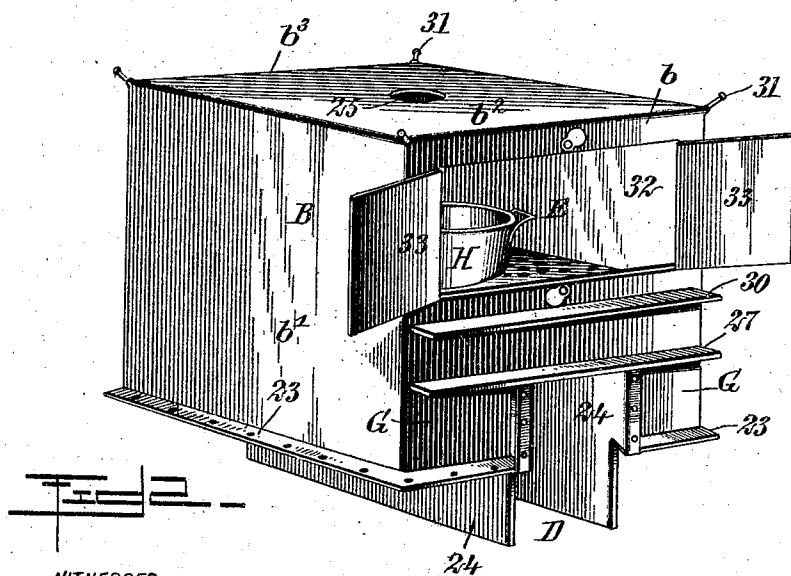
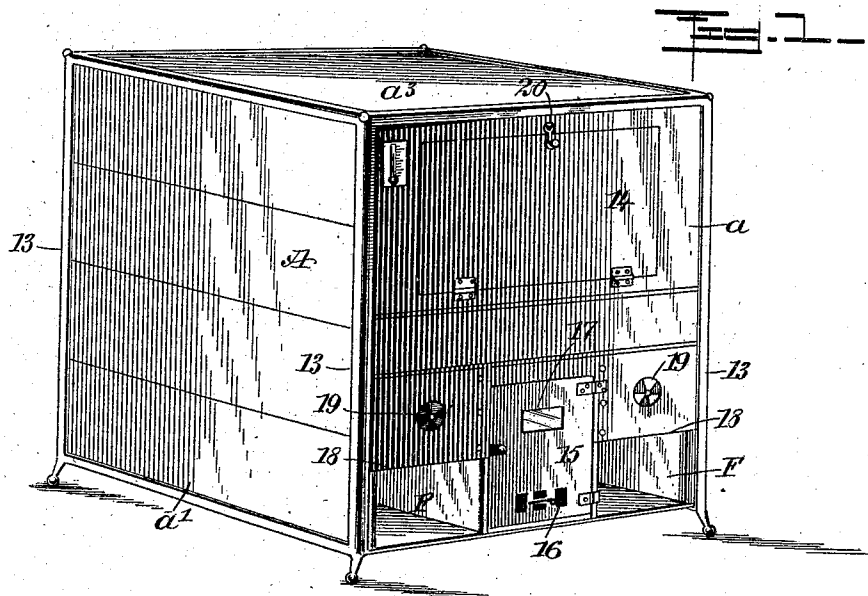


No. 814,965.

PATENTED MAR. 13, 1906.

J. N. KNACKSTEDT.
KITCHEN FURNITURE.
APPLICATION FILED JULY 27, 1905.

2 SHEETS--SHEET 1.



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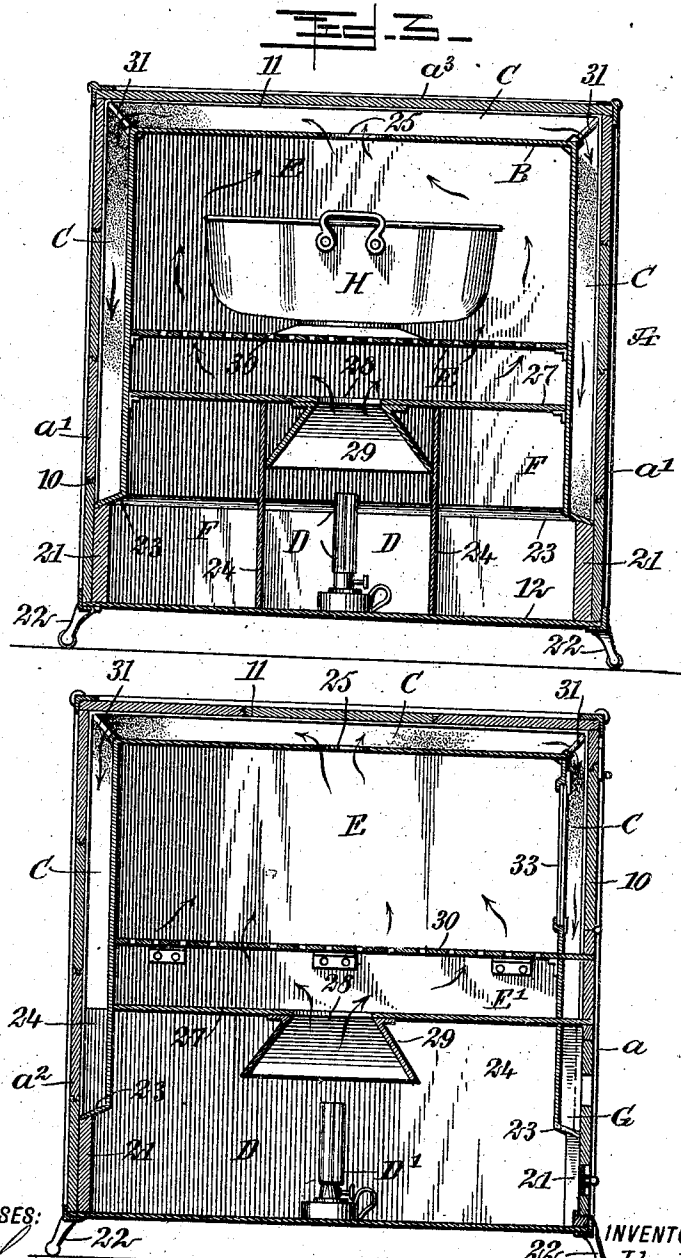
ATTORNEYS

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2 SHEETS—SHEET 2



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JOHN N. KNACKSTEDT, OF OMEMEE, NORTH DAKOTA.

KITCHEN FURNITURE.

No. 814,965.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed July 27, 1905. Serial No. 271,455.

To all whom it may concern:

Be it known that I, JOHN N. KNACKSTEDT, a citizen of the United States, and a resident of Omeme, in the county of Bottineau and State of North Dakota, have invented a new and useful Improvement in Kitchen Furniture, of which the following is a full, clear, and exact description.

My invention relates to kitchen furniture especially adapted for family housekeeping; and the purpose of the invention is to provide a uniformly-heated cabinet especially adapted for use in bread-making to raise the dough.

It is also a purpose of the invention to construct the cabinet in a simple, durable, and economic manner and so that the heat will be used to the best advantage, and the device will make bread-making easier than ordinary and more perfect and certain.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improved cabinet. Fig. 2 is a perspective view of the inner shell, the outer one having been removed. Fig. 3 is a longitudinal section through the cabinet, the section being taken in direction of its sides; and Fig. 4 is a vertical section taken at right angles to the section shown in Fig. 3—namely, in direction of the front of the cabinet.

The cabinet is constructed in two main sections—namely, an outer shell A and an inner shell B. The cabinet is shown square, as such shape is preferred; but it may be otherwise formed, and in the drawings the outer shell consists of a removable front a , sides a' , a back a'' , and a top a''' .

The outer shell A is constructed mainly of strips 10 of wood, usual furniture-lumber being employed for the purpose, and this construction is preserved with the exception of the bottom 12, which is of sheet metal. The inner face of the sides, top, front, and back of the shell are given a lining of asbestos paper 11, or other fireproof material, and also, preferably, the said outer shell is provided with sustaining-strips of metal 13, constituting framings for the slats 10. The front a of the said outer shell A is provided with a door 14

at its upper portion, and preferably the said door is hinged to drop downward when open, and a suitable latch 20 is provided for the door. At the central lower portion of the front A of the outer shell A a second door 15 is properly hinged, and this door has a ventilated grating 16 therein and a sight-opening 17. At the side portions of the lower edge of the front a the material of the front is cut away at each side of the door 15, forming bottom openings 18 in the said front a , as best shown in Fig. 1. In the panels thus formed at the sides of the door 15 ventilators 19 are located. In the further construction of the outer shell A a base-board 21 is secured along the front, back, and sides, the top portion of which base-board is more or less beveled, as shown best in Figs. 3 and 4.

With reference to the construction of the inner shell B, which is shown in detail in Fig. 2, said shell is preferably made of light sheet metal and comprises a front section b , side sections b' , a top section b'' , and a rear section b''' , but the bottom of this inner shell B is open. At the lower portion of the shell B a marginal flange 23 is formed, and when the said inner shell is placed in position in the outer shell, as shown in Figs. 3 and 4, the flanges 23 rest upon the beveled upper edges of the base-boards 21 and are suitably secured to said boards. At each side of the center of the bottom portion of the inner shell B, two parallel partitions 24 are placed, extending through the front and the rear of the said shell, and in the central portion of the top b'' of the said shell B an opening 25 is made. When the inner shell is in position in the outer shell, the partitions 24 engage with the bottom 12 of the outer shell and extend the full width from the front to the rear, as is shown especially in Fig. 4.

The inner shell B is smaller than the outer shell A, so as to provide a continuous chamber C between the two shells extending practically from the flange 23 of the inner shell to the top of the outer shell, as is shown in both Figs. 3 and 4. A horizontal partition 27 rests on the upper edge of the partition 24, and this horizontal partition 27 extends from side to side of the inner shell B and from its center out through the front sufficiently to have its forward edge received in the front a of the outer shell A, as is shown in Fig. 4. Thus it will be observed that a chamber D is formed at the central lower portion of the

cabinet, extending through from front to rear and closed at the front by the door 15 of the outer shell. The lamp D', employed for heating purposes, is placed in this chamber 5 D below an opening 28, made, preferably, in the central portion of the horizontal partition 27, and this opening 28 is surrounded by a flaring hood 29, extending within the lamp-receiving chamber D over the said lamp, as 10 shown in both Figs. 3 and 4. A perforated or reticulated partition 30 is located above the horizontal partition 27, and the two partitions 27 and 30 are parallel. The upper partition 30 extends out at the front in similar manner to the lower horizontal partition 15 27, so that the heat-circulating chamber C at the front is not as deep as at other portions of the structure. The space between the two partitions constitutes a heat-conducting chamber E', and the space above the upper 20 partition 30 constitutes the receiving-chamber E, in which the pan H is placed containing the dough, as is illustrated best in Fig. 3.

It will be observed that when the front *a* 25 of the outer shell A is in place two side compartments F are provided at the bottom portion of the cabinet, and these compartments or chambers F are open at the front and may be employed as warming-chambers. It will 30 be further observed by reason of Figs 2 and 4 that when the front *a* is in place front lower chambers G are obtained just back of the panels in the front containing the ventilators, and these chambers G are closed except at 35 their outer sides, where they connect with the side heat-circulating chambers C and where the ventilators 19 are located.

In order to strengthen the structure, brace-bars 31 are usually provided at the corners, 40 the said brace-bars being made to connect both of the shells, and in the upper front portion *b* of the inner shell B an opening 32 is formed, leading into the dough-receiving chamber E. This opening 32 is preferably 45 normally closed by two doors 33 of substantially equal size; but their combined area is less than that of the door 14, so that when the latter door is opened the doors 33 can swing outward without interruption.

50 The operation of the device is clearly shown in Figs. 3 and 4, as when the lamp has been placed in position and lighted the heat passes up through the opening 28 in the partition 27, into the distributing-chamber E', and then 55 through the perforated partition 30 into the dough-receiving chamber E, passing all around and over the pan H, the latter being slightly elevated, and then the heated products of combustion pass out through the upper 60 opening 25 in the inner shell B and around, over, and down the circulating-chamber C until said products of combustion find their way to the chambers G, from which they escape through the ventilators 19.

65 The temperature in the cabinet may be

readily read upon a thermometer placed in the outside shell A back of a transparent pane.

The device is very simple, easily managed, and the heat can be readily regulated and is 70 distributed in the most satisfactory manner. The cabinet can be placed wherever needed and is supported usually by legs 22.

Having thus described my invention, I 75 claim as new and desire to secure by Letters Patent—

1. In kitchen furniture, a cabinet for raising dough, comprising an outer and an inner shell having a continuous circulating-chamber between them, extending uninterrupt- 80 edly around the inner shell from a point near the bottom and having communication with the inner shell, the said inner shell being provided with a heat-producing chamber, a heat-distributing chamber in communication with 85 the heat-producing chamber, a dough-receiving chamber separated from the heat-distributing chamber by an open-work partition, a door carried by the inner shell, leading into the dough-receiving chamber, and a door also 90 provided for the outer shell for access to the dough-receiving chamber, and a door for the heating-chamber.

2. In kitchen furniture, a cabinet for raising dough, comprising an outer and an inner 95 shell having a continuous circulating-chamber between them, extending uninterruptedly around the inner shell from a point near the bottom and having communication with the interior of the inner shell, the said inner 100 shell being provided with a heat-producing chamber, a heat-distributing chamber in communication with the heat-producing chamber, a dough-receiving chamber separated from the heat-distributing chamber by an 105 open-work partition, doors carried by the inner shell, leading into the dough-receiving chamber, a door also provided for the outer shell for access to said dough-receiving chamber, and a door for the heating-chamber, 110 compartments at each side of the heating-chamber, which compartments are in communication with the heat-distributing chamber and are provided with outlets for discharge of the heated air. 115

3. In kitchen furniture, the combination with an outer shell provided with a door at one side near the top, a lower centrally-located door having a sight-opening and a ventilating-slide, and a compartment for the 120 reception of heated air at each side of the lower door, which compartments are provided with ventilating devices, and a base-board extending around the lower portion of the said outer shell, resting on the bottom of the 125 same, of a perforated inner shell of corresponding shape but of lesser dimensions than the outer shell, forming thereby a circulating-chamber for air between the said inner and outer shells, the inner shell being provided 130

with a marginal flange at its bottom, which is open, the said flange being secured to a base-board.

4. In kitchen furniture, the combination
5 with an outer shell provided with a door at one side near the top, a lower centrally-located door having a sight-opening and a ventilating-slide, and a compartment for the reception of heated air at each side of the lower
10 door, which compartments are provided with ventilating devices, and a base-board extending around the lower portion of the said outer shell, resting on the bottom of the same, of an inner shell of corresponding shape but of
15 lesser dimensions than the outer shell, forming thereby a circulating-chamber for air between the said inner and outer shells, the inner shell being provided with a marginal flange at its bottom, which is open, said
20 flange being secured to said base-board, a horizontal partition located in the inner

shell, having an opening therein, vertical partitions extending down from the said horizontal partition, one at each side of the opening therein to the bottom of the outer shell
25 and from front to rear of the said outer shell, forming a heat-producing chamber at the rear of the lower door in the outer shell, a perforated partition located above the first-named partition, forming an upper dough-re-
30 ceiving chamber which has communication with the circulating-chamber, which latter chamber is in communication also with the said compartments for the reception of heated air.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

JOHN N. KNACKSTEDT.

Witnesses:

JAMES WRIGHT,
A. R. BATIE.