No. 834,227. PATENTED OCT. 23, 1906.

V. W. BLANCHARD.

COOKING APPARATUS.

APPLICATION FILED JAN. 22, 1906.

Fig. 1.

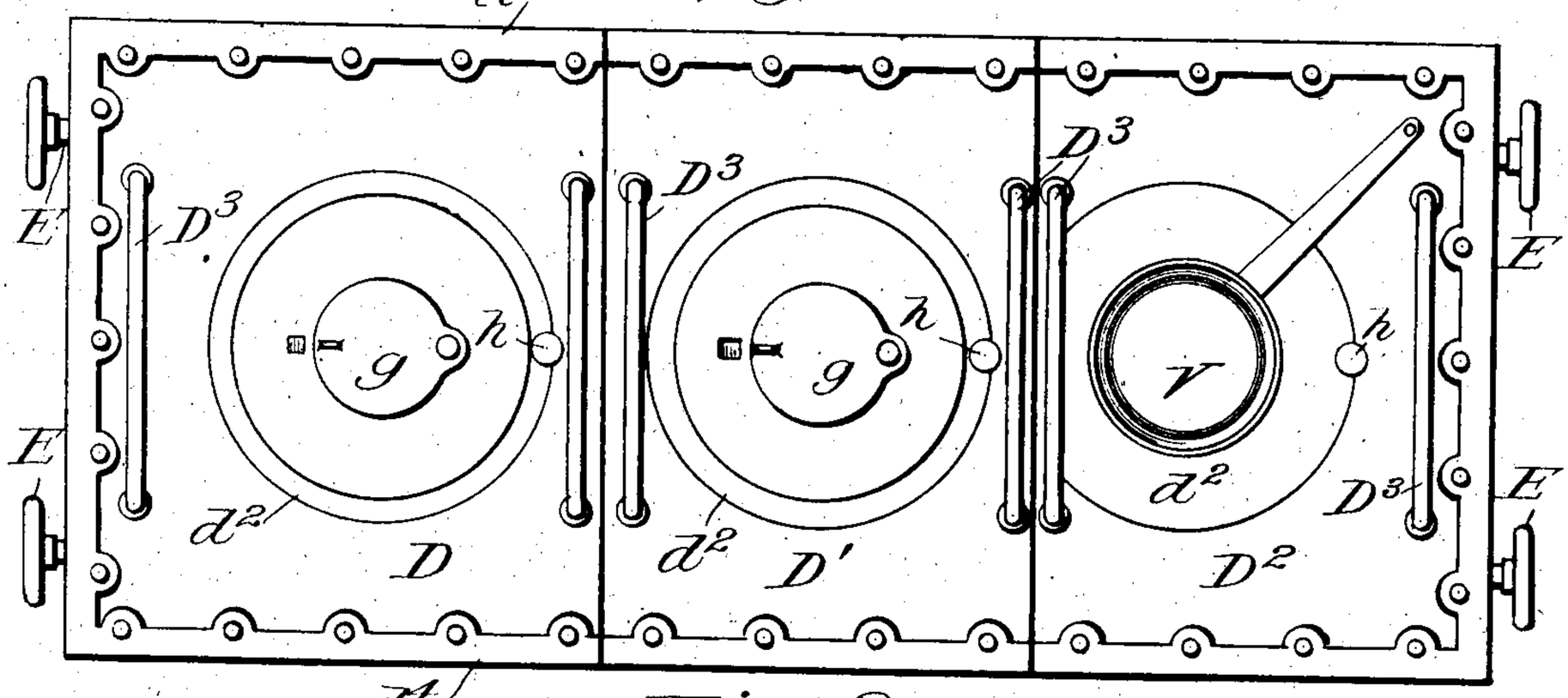

Fig. 2.

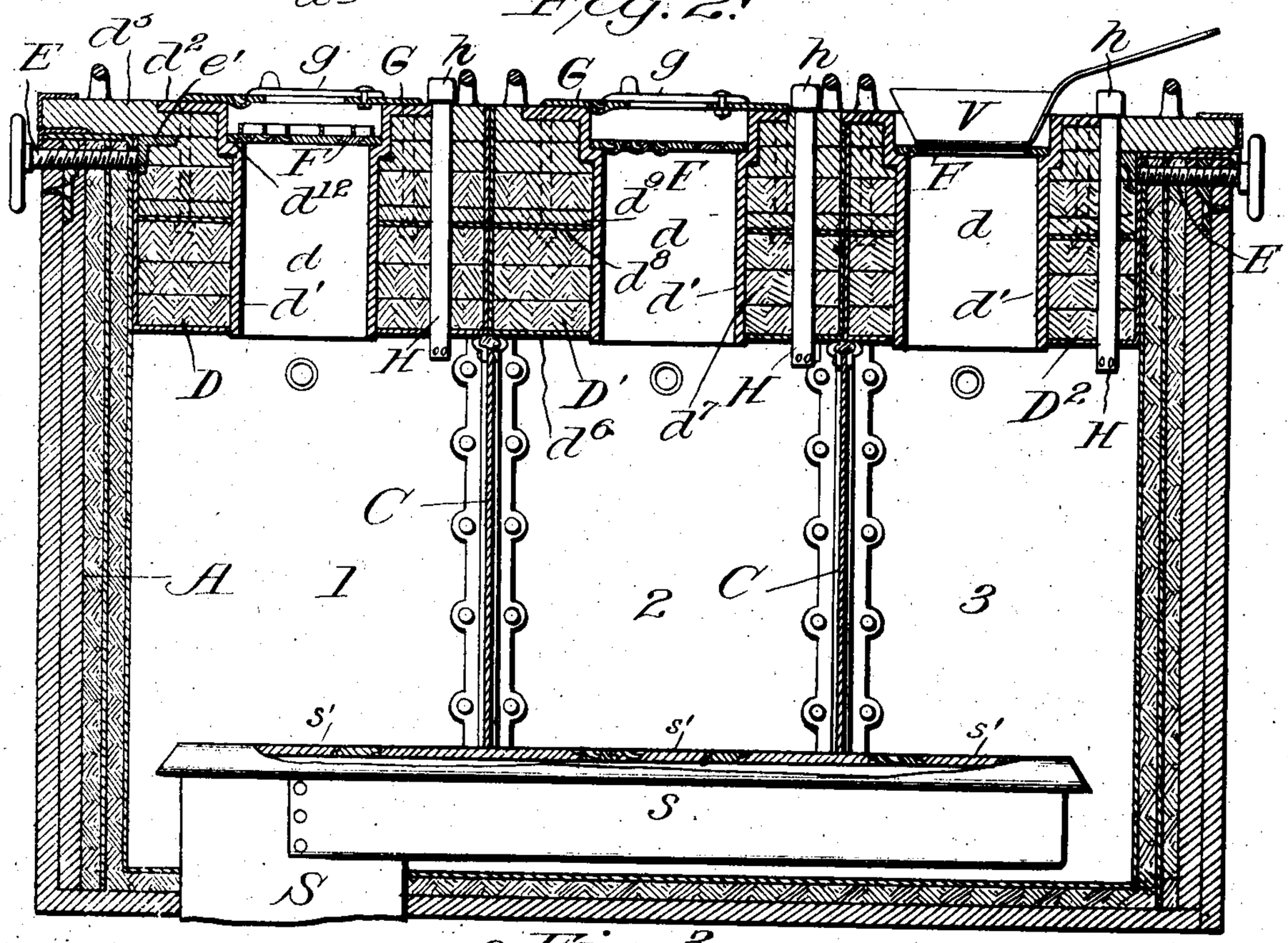

Fig. 3.

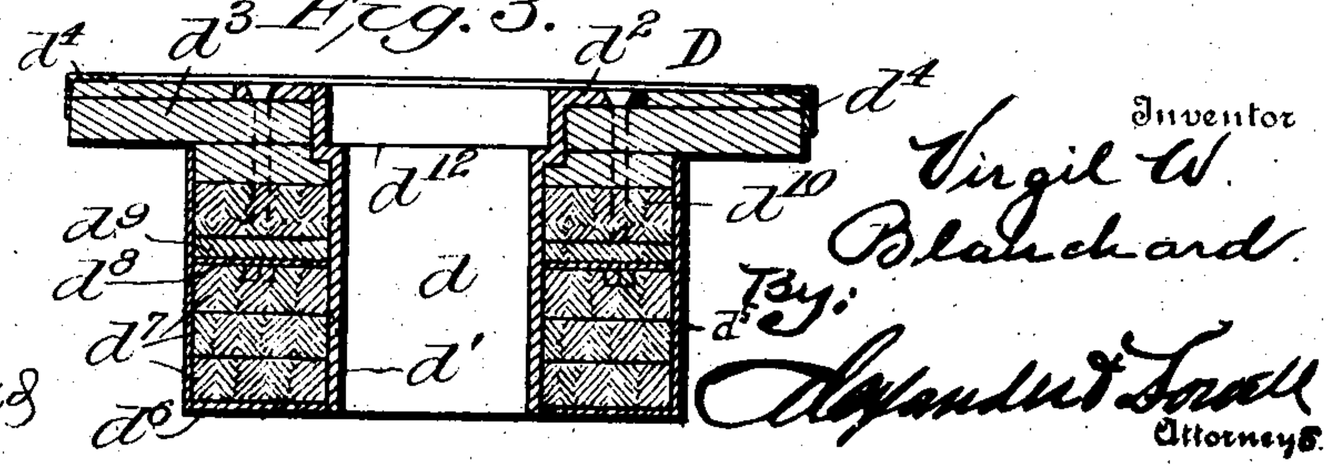

Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

VIRGIL W. BLANCHARD, OF NEW YORK, N. Y.

COOKING APPARATUS.

No. 834,227. Specification of Letters Patent. Patented Oct. 23, 1906.

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To all whom it may concern:

Be it known that I, VIRGIL W. BLANCHARD, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Cooking Apparatus; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is an improvement in cooking apparatus, and in particular relates to heat-storing or heat-accumulating chambers wherein the cooking is effected principally by the heat stored up within the walls of the vessel. It is desirable in constructing this form of apparatus to have the covers of the compartments provided with openings through which a direct draft can be established, if desired, and it is also desirable in practice to have the covers removable and at the same time to so construct them that as far as possible loss of heat by radiation and convection will be prevented.

The objects of the present invention are to provide such an apparatus with removable covers; to provide the covers of each compartment with openings whereby access can be had to the interior of the compartment, if desired, also whereby the direct flow of gases through the compartments can be regulated, and also whereby, if desired, utensils can be heated in or over these openings by the heat in the compartments simultaneously with the cooking operations being performed therein.

The invention therefore consists in the novel construction and combination of parts hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the heat-storing chamber and covers, and Fig. 2 is a longitudinal vertical section therethrough. Fig. 3 is a transverse vertical section through one of the covers, and Fig. 4 is a detail of the gasket on top of one of the partitions.

The main body A of the heating-chamber incloses the upper range portions *s* of a gas-burning stove S, by which heated gases are generated and discharged into the several compartments 1, 2, and 3 of said heating-chamber through openings closed when not in use by lids *s'*. Said compartments are separated by partitions C. The upper part of the chamber as a whole is closed by removable covers D D' D², one for each compartment, which are constructed substantially alike, similar parts being similarly lettered, and the variations therein will be hereinafter pointed out. Each of these covers has a central opening *d*, the wall of which is preferably formed by a cylinder *d'*, of metal, on the upper portion of which is a flange *d²*, which supports the cylinder upon the top plate *d³* of the cover, which plate *d³* is preferably of wood, and the outer edges of the plates *d³* of covers D and D² are extended sufficiently to cover the adjacent top edges of the sides and end of the casing A and support the cover thereon, as indicated in the drawings. The top plate of the intermediate cover D' simply extends over the adjacent top edges of the side portions of the casing. The corners of the covers may be braced by metal strips *d⁴*, as shown.

The covers are preferably built up below the plate *d³* of a bottom plate *d⁶* of metal, superimposed layers of asbestos *d⁷* or other non-heat-conducting material, a layer of metal *d⁸*, which may be superimposed by a layer of wood *d⁹*, between which and the top plate *d³* are additional layers of asbestos or non-heat-conducting material *d¹⁰*, the whole being preferably inclosed by a sheet-metal jacket *d⁵*. (Shown more particularly in Fig. 3.) The parts of the cover can be fastened together in any suitable manner. By this construction of the covers loss of heat by direct radiation or conduction is prevented. In the drawings the openings are shown disproportionately large to the covers; but the relative size of the opening and the covers is not a feature of the invention.

The adjacent edges of the covers abut very closely, as shown in Fig. 2, and after the covers are in place they may be pressed together laterally by means of hand-screws E, tapped through the upper end walls of the casing and bearing against metal plates *e'*, attached to the end covers, as shown in the drawings. By this means tight joints are formed between intermediate sections. The weight of the covers will be sufficient to keep them properly tight, and the overhanging edges and side portions of the covers resting upon the upper edges of the casing will form sufficiently tight joints to prevent any material loss of heat or gases. The covers may also rest upon packed gaskets *c* on the upper edges of the partitions C, as indicated in Figs. 2 and 4, thus forming tight joints be-

tween the covers and the tops of the partitions, so as to prevent passage of vapors or odors from one compartment to the other over the partitions. Preferably each cylinder *d* is provided with a shoulder d^{12} near its upper end, upon which may be supported nested lids F. Above these lids and closing the open end of the cylinder is a removable plate G, provided with an opening closed by a valve *g*. Each of the cylinders in the several covers may be provided with such devices. When both the lids and cover-plates are in position and the valves closed, there will be practically no chance for heat or gases to escape from the compartment. If it is desired to produce a circulation of gases through either compartment or to reduce the temperature in any compartment for any reason, the valve *g* thereof can be partly opened and one lid F removed, thereby providing a direct vent-passage of any desired size.

If desired, the covers G may be removed and one or more lids F removed and a culinary vessel (indicated at V in the drawings) may be supported upon the lids and heated by direct heat from the compartment. The covers may also be provided with tubes H, extending into the compartments provided with removable caps *h*, and through these tubes pyrometers may be introduced into the compartments to determine the temperature therein. Each cover may also be provided with handles D^3, by which it can be removed and replaced.

By the means described the gases delivered into the compartments 1 2 3 from the heater S can be retained therein and stored and accumulated in the walls thereof, or, if it be desired, the compartments may be kept at different temperatures by means of the valves *g*, or, if desired, cooking can be accomplished in some compartments by stored heat, while live heat is being introduced into other compartments, and, if necessary, any of the covers can be removed, so as to open up one or more compartments, while at the same time the other compartments are being heated or used for cooking purposes.

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

1. The combination of a heating-chamber, a cover or closure for the upper end thereof composed of similar separable sections, and means for forcing the sections laterally together when in place.

2. In combination with a heating-chamber, a closure therefor comprising a series of covers each having top plates adapted to overreach and rest upon the adjacent top edges of the chamber-walls and provided with openings, and removable closures for said openings, said covers having non-heat-conducting walls, and means for pressing the covers together laterally when in position.

3. The combination of a heating-chamber having a series of compartments, a top for each compartment provided with an opening surrounded by a metal cylinder, lid-supports in said cylinder and a removable cover provided with a valve-opening closing the upper end of the cylinder.

4. The combination of a heat-storing chamber, having an open top, a series of vertical partitions in said chamber, a cover for each compartment, said covers together forming the top of the chamber and each having extending portions adapted to rest upon the upper edges of the sides and the two end covers also having extending portions adapted to rest upon the adjacent end walls of the chamber, and having interior non-heat-conducting layers.

5. The combination of a heat-storing chamber having an open upper end, a series of vertical partitions in said chamber having gaskets on their upper edges, a cover for each compartment, said covers together forming the top of the chamber and each having extending portions adapted to rest upon the upper edges of the sides and the two end covers also having extending portions adapted to rest upon the adjacent end walls of the chamber, said covers also resting upon the gaskets on top of the partitions to close the compartments.

6. The combination of a heat-storing chamber, having an open upper end, a series of vertical partitions in said chamber, a series of covers, one for each compartment, together forming the top of the chamber and each having extending portions adapted to rest upon the upper edges of the sides and the two end covers also having extending portions adapted to rest upon the adjacent end walls of the chamber and also having interior non-heat-conducting layers, each cover having an opening, lids supported in such opening, and a closure for the opening above the lids.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

VIRGIL W. BLANCHARD.

In presence of—

T. H. ALEXANDER,

JAMES R. MANSFIELD.