

No. 869,751.

PATENTED OCT. 29, 1907.

N. W. THARP.  
CANNING APPARATUS.  
APPLICATION FILED AUG. 8, 1906.

FIG. 1.

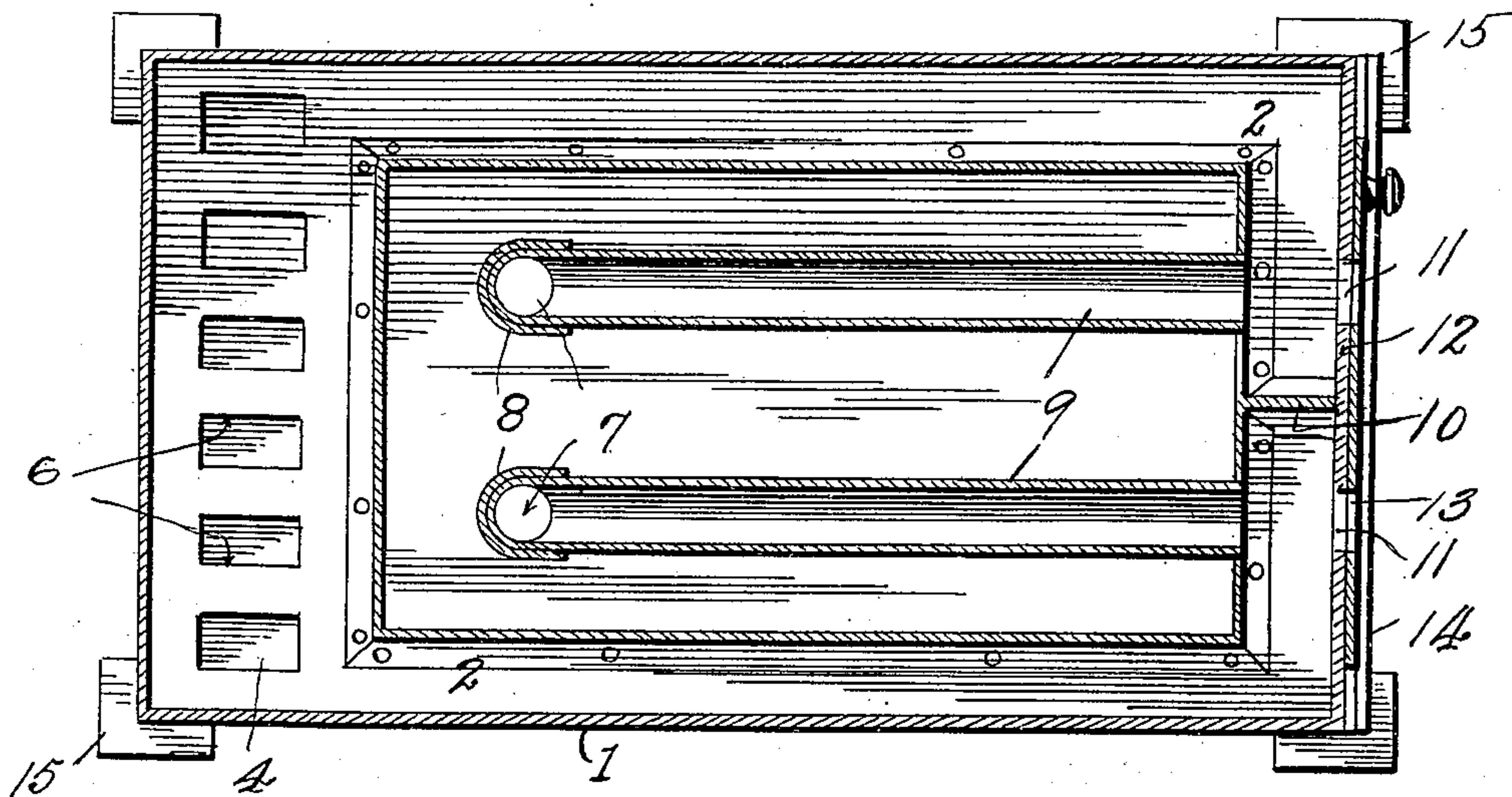
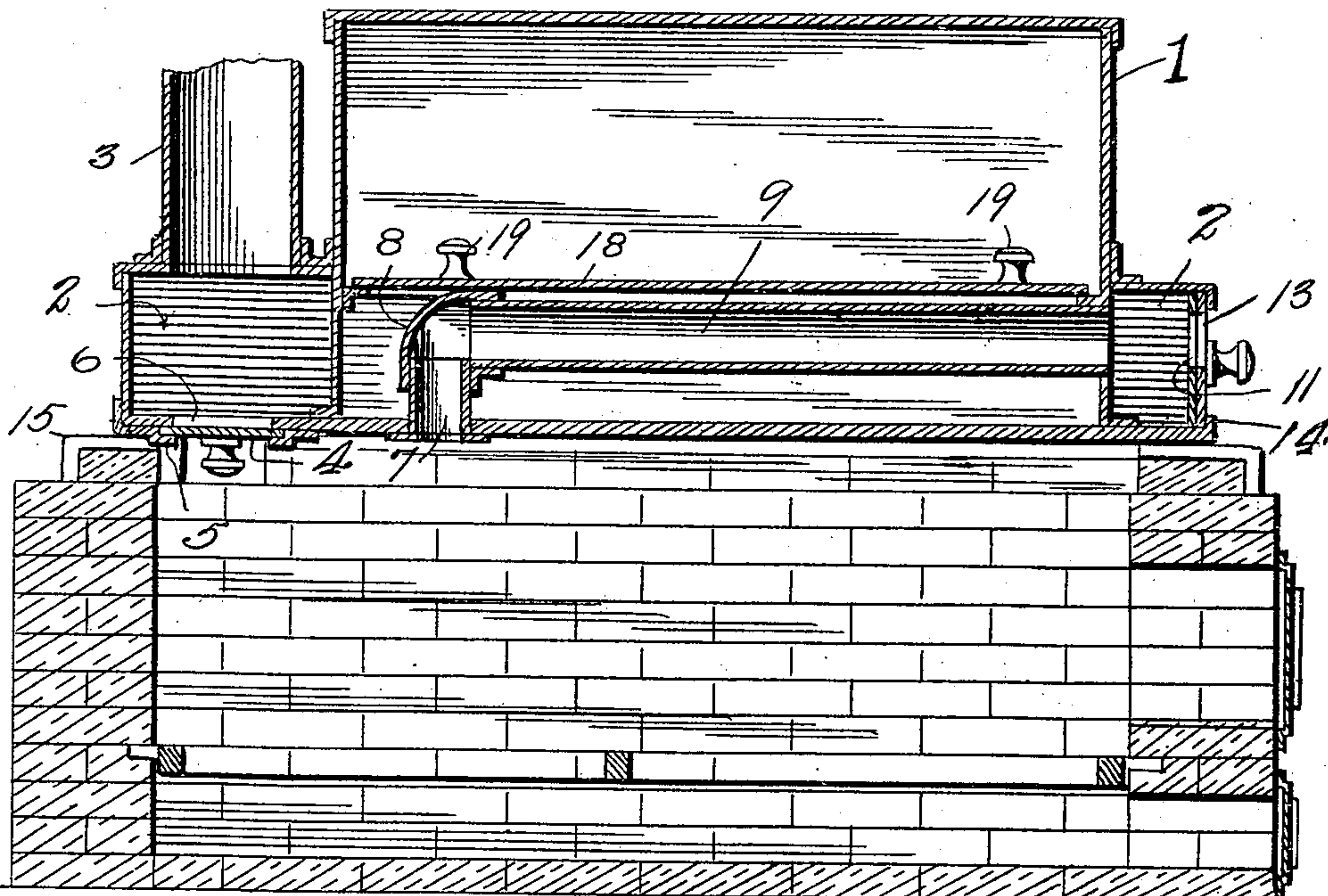


FIG. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

NOAH W. THARP, OF ELKIN, NORTH CAROLINA.

## CANNING APPARATUS.

No. 869,751.

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed August 8, 1906. Serial No. 329,744.

*To all whom it may concern:*

Be it known that I, NOAH W. THARP, a citizen of the United States, residing at Elkin, in the county of Surry and State of North Carolina, have invented certain new and useful Improvements in Canning Apparatus, of which the following is a specification.

My invention relates to improvements in canning apparatus, and has for its object, the provision of a simple and inexpensive device of this character which may be utilized for canning and preserving processes and which will be thoroughly practical and efficient in every particular.

Another object of the invention is the provision of an apparatus of this character which may be used for a variety of purposes where a boiling process is required, which is portable, and may be used equally as well on an ordinary kitchen stove as upon a furnace.

To attain the desired objects, my invention consists of a tank, a heating compartment entirely surrounding the lower portion of the tank, and flues passing through the tank, said flues in communication with the heating compartment.

My invention further consists of a boiler and canning apparatus embodying certain other novel features of construction, combination and arrangement of parts, substantially as herein specified.

Figure 1, is a horizontal sectional view of the device taken through the heating chamber and flues, looking downward. Fig. 2, is a longitudinal vertical sectional view showing my improved canning apparatus mounted for use on an ordinary furnace.

In the drawings: the numeral 1, designates the tank of the apparatus, adapted to hold water and to contain the products to be treated. Entirely surrounding the lower portion of the tank and on a level with the lower edge thereof, is a heating compartment or chamber 2, which is widened at the rear end of the tank and provided with an outlet stack 3. A slide 4, retained in guiding cleats 5, closes an opening 6, in the bottom of the heating chamber directly under the stack, and this slide serves to regulate the draft in the stack, or to allow cleaning of the stack.

Extending upward through the bottom of the tank near the rear end thereof, are a plurality of short pipe sections 7, which by means of the elbows 8, are connected to the longitudinal flues 9, which are horizontally disposed in the tank and pass through the front wall thereof. These flues are thus in direct communication with the heat compartment at the front end of the tank, and a dividing partition 10, is placed midway in this portion of the heating chamber at the front end of the tank. Openings 11, are formed in the outer wall of the heat compartment in alinement with the

flues in the tank, and a slide 12, provided with complementary openings 13, is secured in guideways 14, so as to form a closure to the openings in the heat chamber. By means of this slide, as the openings in the slide are in alinement with the flues, these flues may be readily cleaned at any time. At the lower corners of the apparatus, are provided the depending corner extensions or lugs 15, which are adapted to engage the corners of the stove or furnace to secure the device in position upon the stove.

When used in connection with an ordinary brick furnace, the tank is placed directly upon the open top of the furnace with the tank flues in direct communication with the fire box. With both of the draft slides closed, the only course open to the products of combustion is as follows: The heat passes up through the pipes in the bottom of the water tank, thence through the horizontal flues to the heat compartment at the front end of the tank. Here it is diverted by the dividing partition and caused to flow through the chambers along the sides of the tank, back to the rear of the chamber and thence to the stack. During this passage most of the heat is given up to the water in the tank and the water is constantly kept at the desired temperature. The draft may be increased by opening the slide at the foot of the stack, so that the degree of heat may be regulated at will.

When it is desired to cook tomatoes, beans or like products, a false bottom 18, provided with suitable handles 19, may be placed in the tank resting upon the flues, and the products placed upon the said false bottom.

By causing the products of combustion to circulate both through and around the water tank, the water is quickly heated and maintained at the same even temperature without any waste of fuel. The apparatus may be used equally as well in connection with an ordinary cooking stove, by mounting the apparatus upon the stove with the flues in connection with the fire, and the stack connected with the chimney. The apparatus may also be used for boiling clothes or in fact in any place where a constant heat is required.

From the above description taken in connection with the drawings it will be evident that I have accomplished all the objects herein set forth, and have produced a boiler or canning apparatus which is economical of production and operation.

I claim:

1. A canning apparatus comprising a tank, a heating compartment entirely surrounding the lower portion of the tank, a stack mounted on said compartment, a damper slide in the bottom of the compartment beneath the mouth of the stack, flues extending up through the bottom of the tank and laterally the full length of the tank to the com-

partment at the forward end thereof, there being openings formed in the front wall of the compartment in alinement with the flue exit openings, a partition in the compartment between said openings and a damper to close said openings.

- 5 2. A canning apparatus comprising a tank, a heating compartment completely surrounding the lower portion of said tank, an outlet stack to the compartment, a damper slide in the bottom of the compartment beneath the mouth of the stack, flues extending up through the bottom of the
- 10 tank and directed laterally the full length of the tank to the compartment at the forward end thereof, a deflecting partition located in the front portion of the heating cham-

ber adjacent and between the flue exit openings, there being draft openings formed in the front wall of the compartment on either side of said partition, a slidable damper to close said openings, and means to retain the whole in position upon a stove or furnace.

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

NOAH W. THARP.

Witnesses:

GEO. BAILY,  
S. G. COOK.