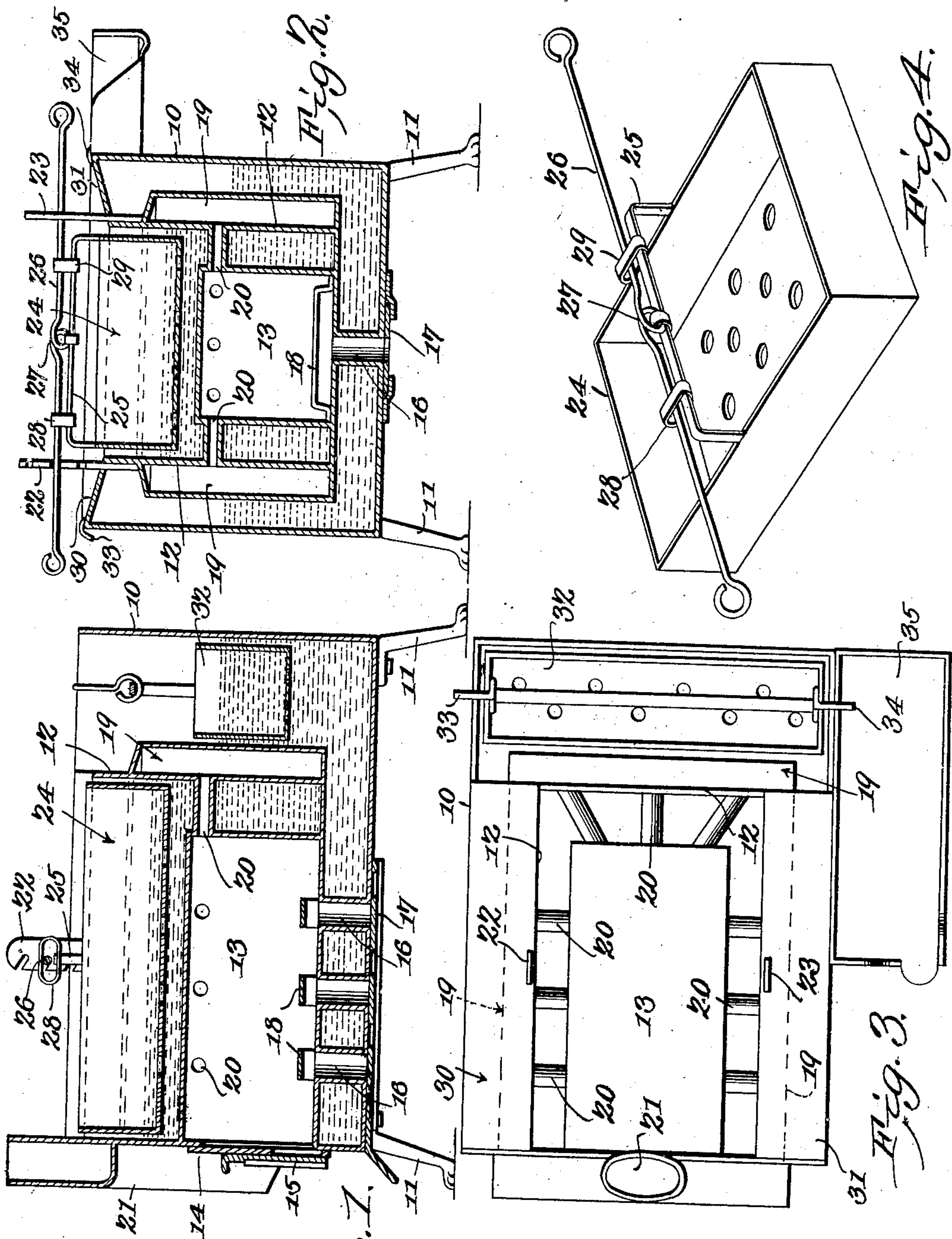


No. 837,884.

PATENTED DEC. 4, 1906.

J. F. RAGAN.
CANNING APPARATUS.
APPLICATION FILED DEC. 26, 1905.



WITNESSES:
E. H. Stewart
C. N. Woodward,

Fig. 1. Joseph F. Ragan, INVENTOR
By *C. H. Snow* ATTORNEYS

UNITED STATES PATENT OFFICE.

JOSEPH F. RAGAN, OF CHAPEL HILL, NORTH CAROLINA.

CANNING APPARATUS.

No. 837,884.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed December 26, 1905. Serial No. 293,381.

To all whom it may concern:

Be it known that I, JOSEPH F. RAGAN, a citizen of the United States, residing at Chapel Hill, in the county of Orange and State of North Carolina, have invented a new and useful Canning Apparatus, of which the following is a specification.

This invention relates to apparatus employed in canning fruits and vegetables and for like purposes, and has for its purpose to improve the construction and increase the efficiency of devices of this character.

With these and other objects in view, which will appear as the nature of the invention is better understood, the invention consists in certain novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation, it being understood that various changes in the form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention within the scope of the appended claims.

Figure 1 is a sectional side elevation. Fig. 2 is a transverse section. Fig. 3 is a plan view with the can-supporting tray removed. Fig. 4 is a perspective view of the can-supporting tray detached.

The improved apparatus is constructed of sheet metal and comprises an outer receptacle 10, supported upon suitable legs 11, an inner receptacle 12, extending from the front wall of the outer receptacle and spaced from the bottom and side walls and also from the rear end, the space at the rear being preferably greater than at the sides and bottom. It will be noted that there is no communication between the outer and inner receptacles, so that the masses of water therein are kept entirely independent and separate. Disposed within the inner receptacle 12 is a third receptacle 13, forming the fuel-chamber and spaced from the sides of the inner receptacle and provided with a fuel-door 14, leading through the front wall of the outer receptacle, the door having a damper 15 to control the inflow of air. Leading into the fire-chamber 13 through the bottom of the outer and inner receptacles are feed-flues 16, having a controlling-damper 17. Grate-bars 18

are arranged in the fire-chamber above the air-inlets 16 to hold the fuel above the flues and prevent the ashes from choking the same. Surrounding the sides and rear end of the inner receptacle 12 is a smoke-chamber 19 and connected to the fire-chamber by a plurality of smoke-flues 20. Leading from the forward ends of the smoke-chamber is a smoke-discharge flue 21. By this means two separate and distinct water-receptacles are formed, one within the inner receptacle 12, the water therein submerging the fire-chamber 13 and its flues 20, and the other between the outer and inner receptacles with the water therein partly or wholly submerging the smoke-chamber 19, as shown.

The fire-chamber is less in height than the inner receptacle in which it is disposed, thus leaving a relatively large water area above the chamber and in direct contact therewith. By this means the two masses of water are subjected to the influence of the heat radiating from the fire in the chamber 13 and also from the smoke, flame, and other products of the combustion passing through the flues 20 and chamber 19.

The water in the inner receptacle will be subjected to the greater heat and will be utilized for treating fruit and vegetables requiring a high degree of heat, while the water within the outer receptacle, which is less highly heated, will be utilized for treating material requiring a lower degree of heat. Rising from the inner receptacle 12 are notched standards 22 23, adapted to support a can-holding tray, (represented at 24,) the tray having a bail 25, upon which a rod 26 is mounted to swing at 27, the latter for engaging the notches in the standards, as shown. By this means it is obvious the tray may be supported at any desired elevation within the range of the notches in the standards.

The bail 26 is provided with spaced keepers 28 29 to limit the relative movements of the tray and rod. The space between the sides of the outer receptacle 10 and inner receptacle 12 is closed, as at 30 31, to prevent matter falling into the space between the receptacles when being deposited in or removed from the inner receptacle. A smaller tray 32 may be suspended by hooks 33 34 or other means within the larger receptacle to hold the material to be treated. A cutting-trough 35 is arranged upon the outer casing 10, in which the fruit or vegetables may be prepared for the cans or other receptacles.

What is claimed is—

1. In an apparatus of the class described, an outer water-receptacle, an inner water-receptacle spaced from the outer receptacle and having no communication therewith, a fire-chamber within the inner receptacle and with a closed upper side and spaced below the upper edges of the inner receptacle, a smoke-chamber embracing the inner receptacle, means for conducting the products of the combustion from the fire-chamber to the smoke-chamber, and means for discharging the products of the combustion from the smoke-chamber.
2. In an apparatus of the class described, an outer water-receptacle, an inner water-receptacle extending from one wall of said outer receptacle and spaced from the remaining walls thereof and having no communication therewith, a fire-chamber within said inner receptacle and spaced from its side walls and inner end wall and with a closed upper side spaced below the upper edges of said inner receptacle, a fuel-door leading through the wall of the outer receptacle from which said inner receptacle leads and communicating with said fire-chamber, a smoke-chamber embracing the inner receptacle, means for conducting the products of the combustion from the fire-chamber to the smoke-chamber, and means for discharging

the products of the combustion from the smoke-chamber.

3. In an apparatus of the class described, an outer water-receptacle, an inner water-receptacle extending from one end wall of the outer receptacle and spaced from the side walls of the other end wall and the bottom of the same and having no communication therewith, a downwardly-inclined closure between the side walls of said inner receptacle and the side walls of the outer receptacle, and a fire-chamber within said inner receptacle and submerged therein.

4. In an apparatus of the class described, an inclosing casing, a fire-chamber extending into said casing and spaced from its walls, a smoke-chamber between the fire-chamber and walls of the casing, a plurality of smoke-flues between said fire-chamber and smoke-chamber, a discharge-flue leading from said smoke-chamber, a plurality of inlet-flues leading into the bottom of said fire-chamber, and a damper arranged to control the flow of air through said feed-flues.

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

JOSEPH F. RAGAN.

Witnesses:

T. L. WHITAKER,
N. R. COLE.