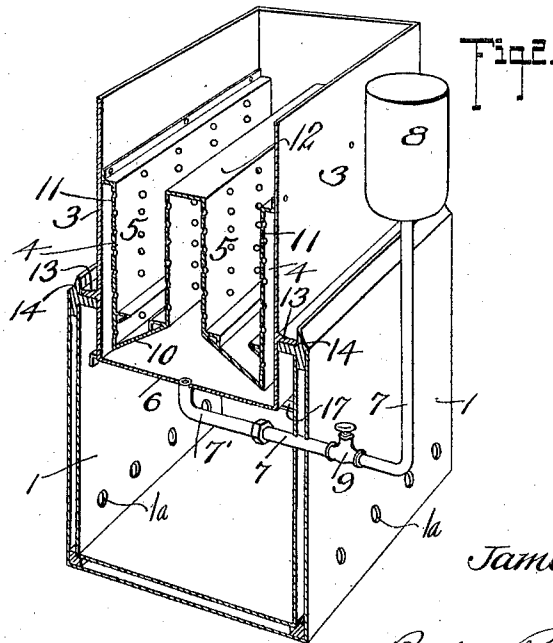
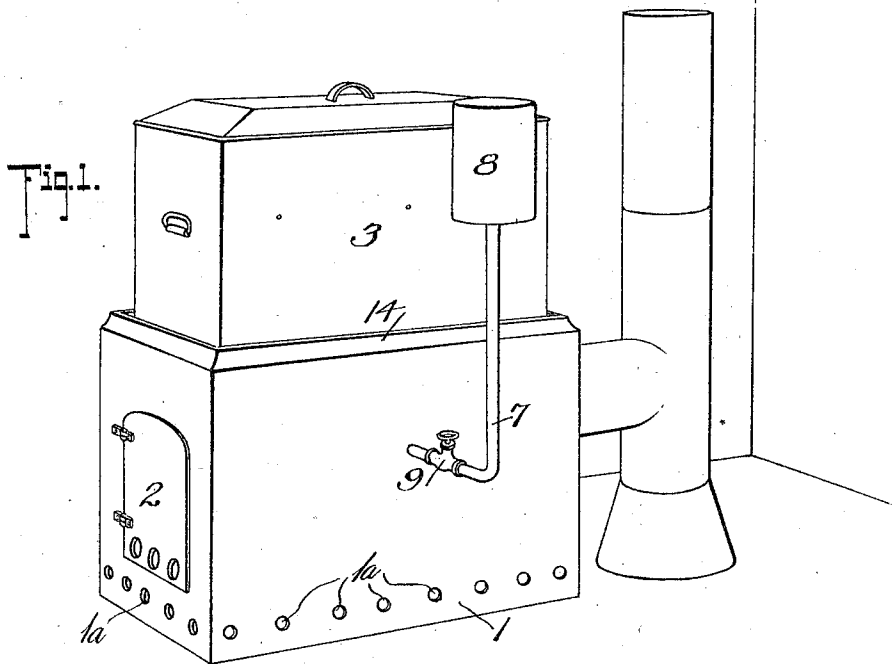


J. C. EVERTON.
CANNING AND DRYING APPARATUS.
APPLICATION FILED JAN. 25, 1912.

1,036,985.

Patented Aug. 27, 1912.

2 SHEETS—SHEET 1.



Witnesses
Ed. Wagner
J. W. Kirkley

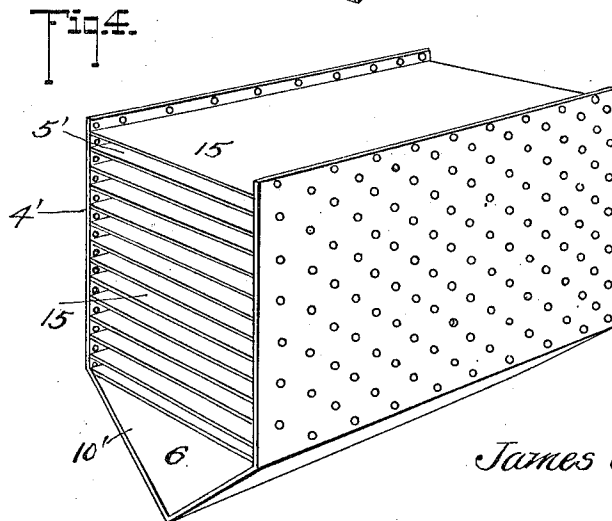
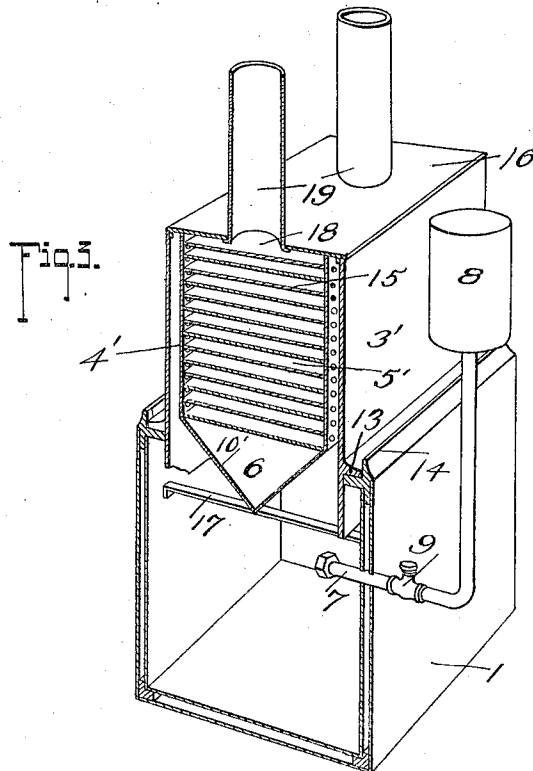
Inventor
James C. Everton
By *Beeler & Robb*
J. Robb Attorneys.

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James C. Everton

By *Robert Robb*
J. D. Robb Attorneys

UNITED STATES PATENT OFFICE.

JAMES C. EVERTON, OF CHATTANOOGA, TENNESSEE.

CANNING AND DRYING APPARATUS.

1,036,985.

Specification of Letters Patent.

Patented Aug. 27, 1912.

Application filed January 25, 1912. Serial No. 673,322.

To all whom it may concern:

Be it known that I, JAMES C. EVERTON, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented certain new and useful Improvements in Canning and Drying Apparatus, of which the following is a specification.

The present invention appertains to apparatus of the type designed especially for canning and drying or evaporating fruits, vegetables, or the like.

Heretofore, an apparatus of the above type has involved the employment of means for canning the fruit or vegetables separate from that by which the drying of the products is effected.

The primary object of the present invention therefore has been to produce a combined apparatus utilizing a furnace in association with which heating devices of separate general construction may be used, one device being capable of drying the products and the other adapted to facilitate the canning operation.

The invention involves further a special construction of the heating devices to permit of interchangeably mounting the same in proper relation to the furnace or other heat producing means, and the special features of advantage of the invention will appear more fully upon reference to the detail description hereinafter, and to the accompanying drawings, in which—

Figure 1 is a perspective view showing the adaptation of the invention as a canning apparatus. Fig. 2 is a sectional perspective view bringing out more clearly the special form of heating device shown in Fig. 1. Fig. 3 is a view similar to Fig. 2 but showing the heating device for drying purposes mounted upon the furnace. Fig. 4 is a perspective view of the circulating chamber of the heating device, as shown in Fig. 3.

Specifically describing the essential features of the invention, 1 denotes the furnace which may be of any general type but is preferably a metallic structure, as illustrated, a suitable door 2 being located at one end thereof for access to the combustion chamber of said furnace, and the latter being capable of supporting and heating a heating device now to be described.

The furnace 1 has draft apertures 1^a in its sides and ends and is provided in its top with a comparatively large opening in which

the heating device is mounted, said device comprising an outer casing 3 and an inner casing 4, which provides a circulating chamber 5. Adjacent to the bottom 6, the casing 3 has an opening therein through which water is supplied by a pipe 7, coupled with the casing at said opening. The pipe 7 leads from a reservoir 8 or other point of water supply and has a valve 9 by which the passage of water into the casing 3 may be cut off or regulated. The inner casing 4 has an angularly shaped bottom 10 in spaced relation to the bottom 6 of the casing 3, and also has apertured side walls 11 which are spaced from the sides of said casing 3. A longitudinal hollow partition 12 is supported by the upper portion of the bottom 10 and its sides and top are apertured. It is contemplated that the water, when admitted to the space between the bottoms 6 and 10 of the outer and inner casings 3 and 4 respectively, shall be heated to a proper degree by the furnace 1 beneath the heating device, and said water circulates through the openings in the walls of the casing 4 and partition 12, also circulating through the chamber 5 at the same time.

The cans of fruit, vegetables, or similar products which are to be subjected to heat in the heating device above described will be arranged in the casing 3 and supported in any suitable manner.

The heating device above set forth is removable bodily from the furnace, being provided on opposite sides with laterally extending supporting flanges 13 which rest on the top of the furnace between the guide members 14 which are formed of angle plates secured to the upper portion of the furnace.

After the canning operation has been performed by using the heating device above described, the pipe 7 may be disconnected from the bottom portion of the casing 3, a coupling section 7' being provided as a part of said pipe to facilitate the above. When disconnected from the furnace, the heating device aforesaid may be removed and a similar heating device adapted for drying fruit and similar products substituted therefor. The last mentioned heating device is illustrated in Figs. 3 and 4 and comprises an outer casing 3' and an inner casing 4', the bottom 10' of the inner casing being of angular form with its side portions diverging upwardly toward the side walls of the casing 3'. The sides of the inner cas-

ing 4' are spaced from the sides of the outer casing 3' and are apertured to permit of circulation of the heating medium through the chamber 5' in the casing 4'. The heated
 5 air from the furnace 1 passes upwardly and is deflected in opposite directions by the bottom 10' of the casing 4'. Said air is circulated between suitable shelves 15 in the casing 4' by the provision of the apertured
 10 walls of said casing and the top 16 of the outer casing 3' will be provided with one or more outlet openings 18 and an outlet pipe 19 for the heated air which circulates through the chamber 5'.

15 One or more transverse supporting members or cross bars 17 extend across the combustion chamber of the furnace 1 and engage with the heating devices above described when the latter are placed on the
 20 furnace.

Having in view the foregoing, it will be apparent that the canning and drying apparatus set forth is especially advantageous because it facilitates the heating of the
 25 chambers 5 and 5' and contents thereof evenly at all parts of said chambers, this being essentially desirable in an apparatus of this type.

When either of the heating devices described is placed in position on the furnace 1, it is firmly held in place by the cooperation of the parts 13 and 14 as well as the engagement of the bars 17 with the lower end portion of said device.

35 Having thus described the invention, what is claimed as new is:

1. In apparatus of the class described, the combination of a furnace provided in its top with an opening, guides carried by the top
 40 of the furnace and surrounding said opening, a heating device mounted on the furnace in the opening aforesaid and comprising spaced outer and an inner casing, means for supplying a heating medium to the
 45 spaces between the walls of said casings, the inner casing having its side walls apertured, flanges projecting outwardly from the outer sides of the outer casing intermediate its upper and lower ends and engaging
 50 with the top of the furnace and guides carried thereon for the purpose set forth, and transverse supporting members in the

furnace cooperating with the flanges to hold the heating device in position on the furnace.

2. In apparatus of the class described, the
 55 combination of a furnace provided in its top with an opening, a heating device mounted on the furnace in the opening aforesaid and comprising an outer casing
 60 and an inner casing arranged with their sides in spaced relation to one another, flanges projecting outwardly from the outer casing at its sides and located between its upper and lower ends so as to engage over
 65 the top of the furnace at the opening therein, a cross bar connecting the walls of the furnace and engaging the lower end of said heating device, the inner casing aforesaid having an angularly shaped bottom and a
 70 hollow partition supported by said bottom and communicating with the spaces between the casings, the sides of the inner casing and the sides of the partition being apertured for the purpose described.

3. In apparatus of the class described, the
 75 combination of a furnace provided in its top with an opening, a heating device mounted on the furnace in the opening aforesaid and comprising an outer casing and an inner
 80 casing arranged with their sides in spaced relation to one another, flanges projecting outwardly from the outer casing at its sides and located between its upper and lower ends so as to engage over the top of the furnace
 85 at the opening therein, a cross bar connecting the walls of the furnace and engaging the lower end of said heating device, the inner casing aforesaid having an angularly shaped bottom and a hollow partition supported by said bottom and communicating
 90 with the space between the casings, the sides of the inner casing and sides of the partition being apertured, and the outer casing having a bottom spaced from the bottom of
 95 the inner casing, and a water supply pipe detachably connected with the bottom of the outer casing.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES C. EVERTON.

Witnesses:

W. MITCHELL,
 GEO. C. BASS, Jr.