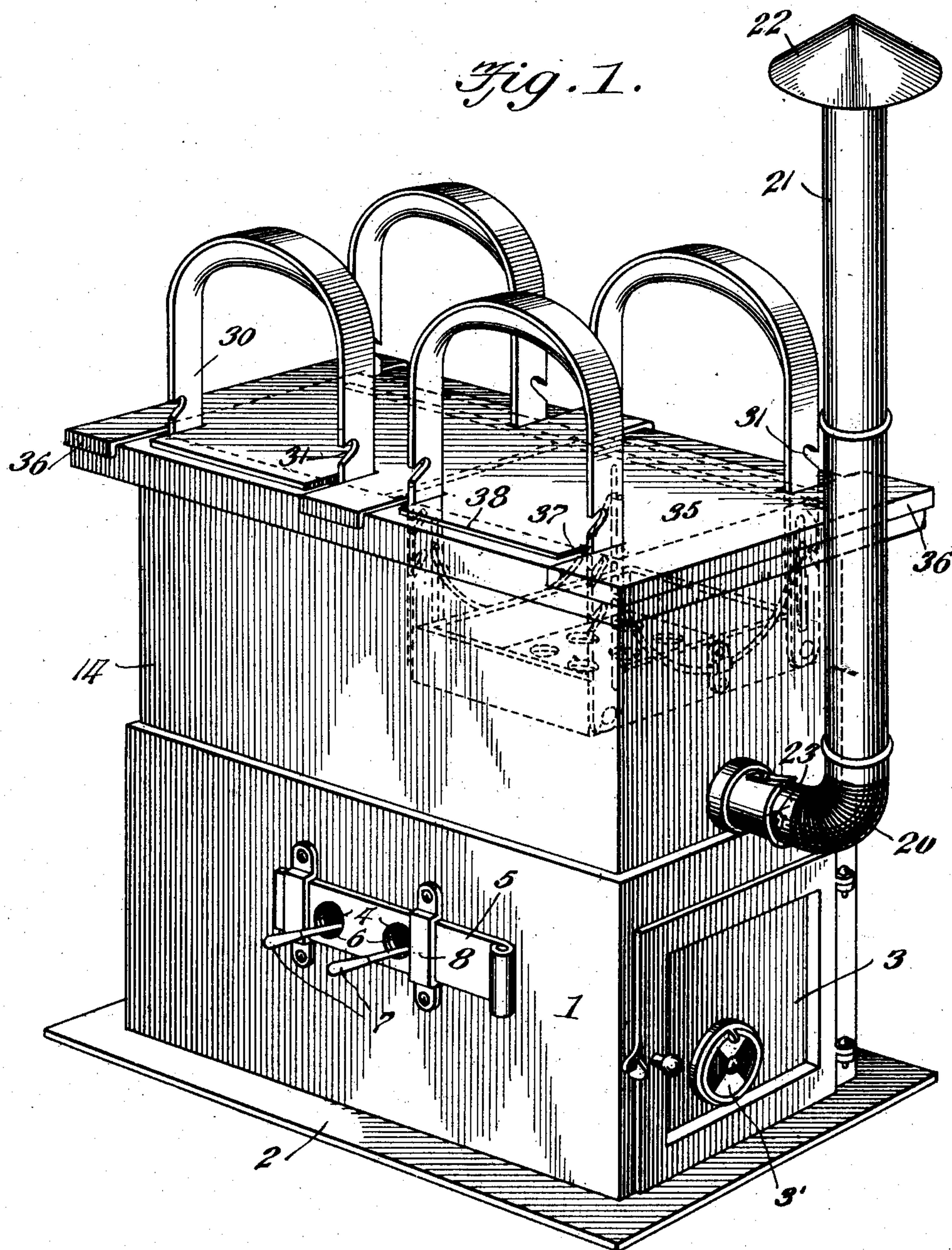


906,961.

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CANNING APPARATUS.
APPLICATION FILED MAR. 20, 1908.

Patented Dec. 15, 1908.
2 SHEETS—SHEET 1.

Fig. 1.



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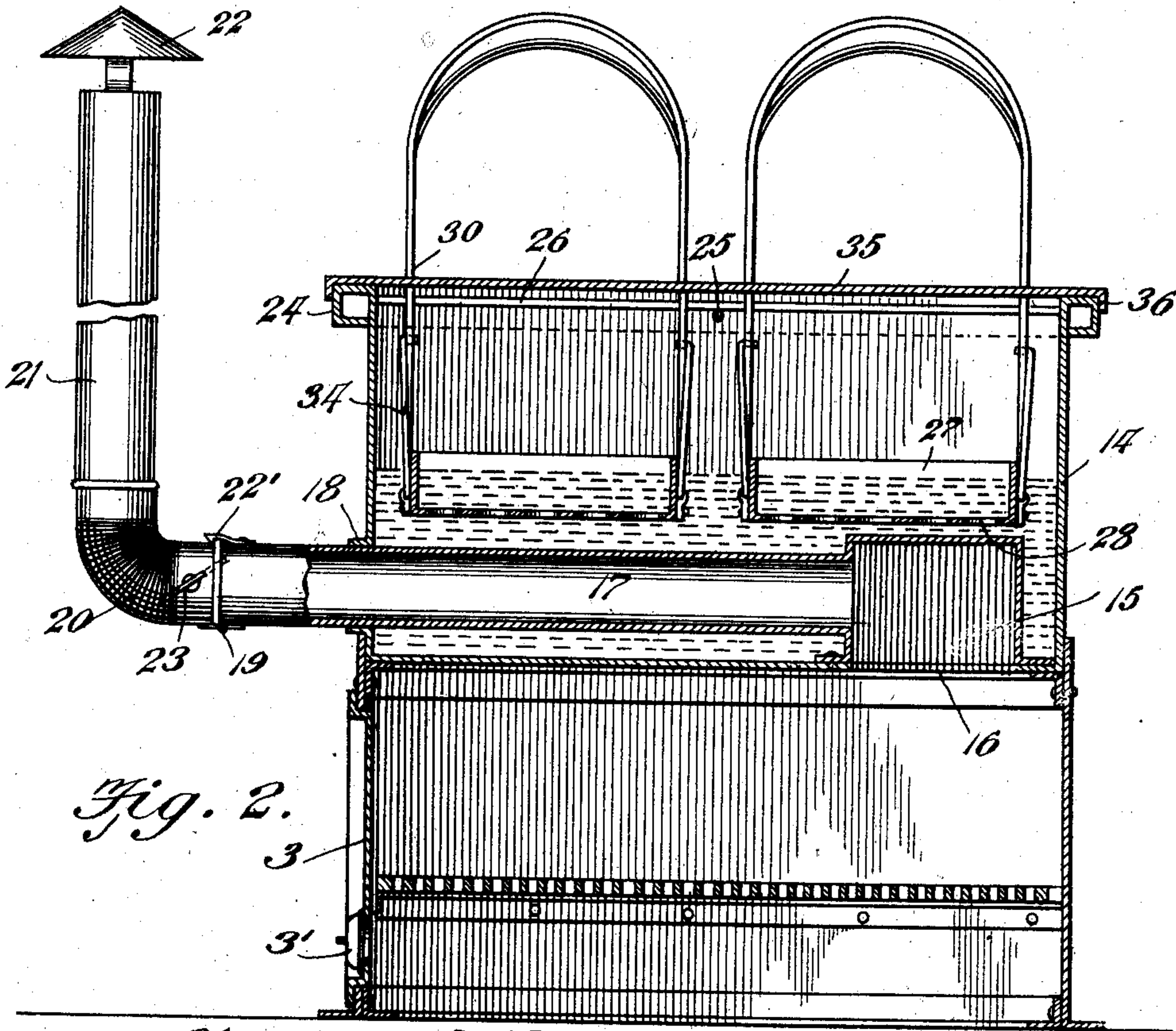


Fig. 2.

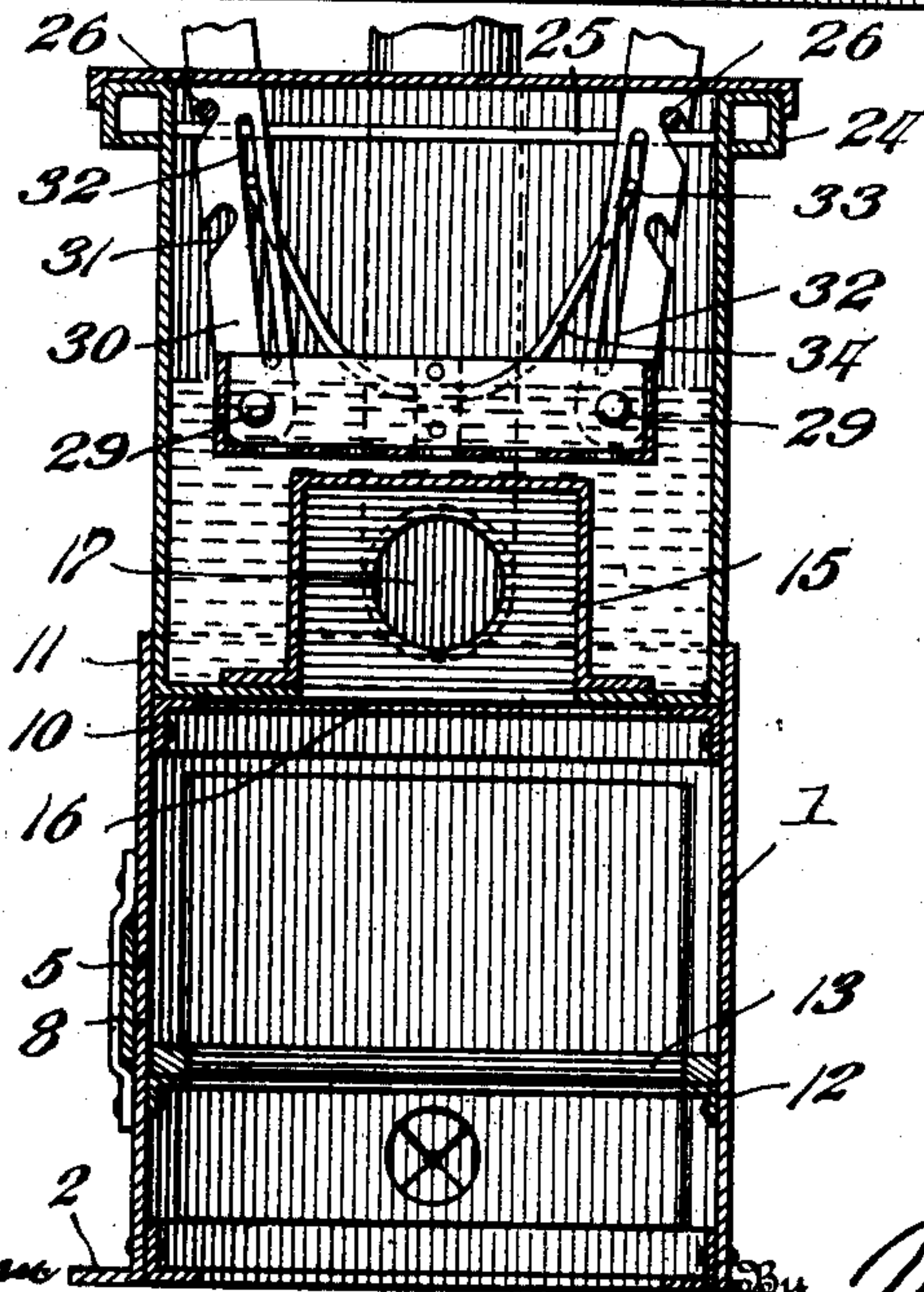


Fig. 3.

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CANNING APPARATUS.

No. 906,961.

Specification of Letters Patent.

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Application filed March 20, 1908. Serial No. 422,327.

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 new and useful Improvements in Canning Apparatus, of which the following is a specification.

This invention relates to canning apparatus, the object in view being to provide simple, practical and economical canning apparatus the parts of which are so constructed, combined and arranged as to render the same easily accessible for cleaning and repairing and for the introduction or removal of cans, jars and other containers in which the fruit or vegetables are placed preparatory to the canning operation.

With the above and other objects in view, the invention consists in the novel construction, combination and arrangement of parts as herein fully described, illustrated and claimed.

In the accompanying drawing:—Figure 1 is a perspective view of the complete apparatus shown in readiness for use. Fig. 2 is a vertical longitudinal section through the same. Fig. 3 is a vertical cross section thereof.

The apparatus comprises essentially a furnace 1 preferably comprising a flange base 2 and provided at one end with a hinged door 3 having means for retaining the same in a closed position and also provided with a draft register or damper 3' by means of which the admission of air beneath the grate of the furnace may be regulated. The furnace is also provided in one side and just above the plane of the grate with a plurality of ports 4 in connection with which I employ a slide 5 having other ports 6 adapted to register with the ports 4 in the side of the furnace thus providing for the introduction and removal of soldering irons 7 and also providing for the closing of the said ports when the soldering irons are in use. The slide 5 is mounted in suitable guides 8 secured to the outer surface of the furnace.

The furnace is braced on the inside by means of angle irons 9 extending around the sides and ends of the furnace body and other angle iron braces 10 extend around the sides and ends of the body adjacent to the top thereof, the ends and sides of the furnace body being formed of sheet metal and extending above the angle iron braces 10 to form the upstanding marginal flange 11

within which a boiler, hereinafter described is retained as shown in Fig. 3.

At a point intermediate the top and bottom of the furnace, the latter is provided with angle iron rests 12 upon which the grate or grate bars 13 are supported, said grate being located above the plane of the draft regulator 3 and below the plane of the ports 4 through which the soldering irons are introduced so that they will rest upon the bed of coals and be heated and be maintained in a heated condition.

The boiler illustrated at 14 is of the same general shape as the furnace but sufficiently smaller in dimensions so as to fit within the flange 11 of the furnace body and be retained thereby. In the bottom of the boiler 14 and at or near one end thereof is arranged a flue box 15 which registers with an opening 16 in the bottom of the boiler adapting or permitting of the combustion to pass from the furnace upward into the box 15 and thence into a horizontally extending flue 17 one end of which connects with the box 15 while the other end extends outward through a flange opening 18 in the opposite end of the boiler. To the projecting end of the flue 17 there is connected by a hinge joint at 19, an elbow 20 and to the latter is connected an upstanding stack 21 which is preferably provided at its upper end with a coil 22 as shown in Figs. 1 and 2. Opposite the hinge 19 there is arranged a catch 22' for holding the elbow 20 up against the projecting end of the flue 17 as clearly shown in Fig. 2. The projecting portion of the flue is also provided with a damper 23 and this damper may be arranged either in the elbow 20 or in the end portion of the flue 17 as may be preferred. By hinging the elbow and stack to the flue 17 they may be dropped downward so as to clean out the flue 17 and the feed box 15 in an easy and expeditious manner.

The upper edge of the sheet metal sides and ends of the boiler are turned outward and bent around into the form of hollow square beads as shown at 24 to reinforce the upper portion of the boiler and horizontal tie rods 25 and 26 extend across and lengthwise of the upper portion of the boiler as clearly shown in Figs. 2 and 3 and also indicated by dotted lines in Fig. 1, the said tie rods rigidly connecting the sides and ends of the boiler and imparting great strength thereto. The rods 25 and 26 also divide the upper portion of the boiler into a plurality

of rectangular compartments each of which is adapted for the reception of one of the trays hereinafter more particularly described. The rods 26 which extend longitudinally of the boiler are also designed for the support of said trays or holder thereby performing a double action.

In the embodiment of the apparatus illustrated in the drawings, I have shown only two trays each embodying a shallow rectangular pan 27 having a perforated or foraminous bottom 28 to admit of a free, circulation of boiling water through the bottom of the pan into contact with the cans, jars or containers carried thereby. Each of said pans has pivotally connected thereto at the points 29 a pair of bail-shaped handles 30 which normally extend upward there-through as shown in the drawings and are provided in the other outer edges with retaining notches 31 adapted to hook over and engage the rods 26 whereby the handles and trays carried thereby are supported at the proper elevation and rendered adjustable so as to submerge the jars or containers more or less into the boiling water. The handles 30 are also provided with longitudinal slots 32 which receive the bent extremities 33 of handle spreading springs 34 each of which is substantially U-shaped as shown in Fig. 3 and adapted to press the handles 30 apart so as to maintain the engagement between said handles and the supporting rods 26.

A lid or cover 35 is placed upon the top of the boiler and provided at intervals with marginal flanges 36 which embrace the beaded upper edge of the boiler and retain said cover in proper position upon the same. The lid or cover 35 is provided with inwardly extending slots 37 provided at the adjacent portions of the handles 30, as shown in Fig. 1 and in this connection it will be noted that in order to place the cover in position to remove the same from the boiler, the edge portions of the cover which lie between the handles are cut away as shown at 38, the flanges along such portions being omitted. Furthermore, when the lid or cover 35 is in position on the boiler it forms an additional safe guard to prevent the disengagement from the handles or supporting rods 26, the said lid or cover acting as a positive lock for holding said handles in engagement with the supporting rods, irrespective of the height to which the trays or holders 27 are adjusted.

It will be understood that the boiler may be used in connection with and placed upon an ordinary brick furnace wherever such arrangement may be found desirable.

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

1. In canning apparatus, the combination with a furnace, of a boiler detachably mounted thereon and comprising rods connecting the opposite walls thereof, and a tray having spring pressed handles pivotally connected thereto and provided with notches adapted to engage said rods, substantially as described.

2. In canning apparatus, a boiler provided with supporting rods which tie the opposite walls thereof together, a tray removably fitted in said boiler, supporting handles pivotally connected to said tray and provided with notches for engagement with supporting rods, and means for spreading the handles apart and maintaining said handles in engagement with the supporting rods.

3. In canning apparatus, a boiler having supporting rods which tie the opposite walls thereof together, a tray mounted in and removable from said boiler, handles pivotally connected to said tray and provided with notches for engagement with the supporting bars, a spring for urging said handles toward the supporting bars, and a cover for the boiler.

4. In canning apparatus, a boiler provided with supporting bars connecting the opposite walls thereof, a tray provided with handles pivotally connected thereto and provided with notches to engage the supporting bars, and a cover for the boiler provided with slots to receive said handles, said cover acting also as a lock which prevents the disengagement of the handles from the supporting rods.

5. In canning apparatus, a boiler provided with supporting rods connecting the opposite walls thereof, a tray removably fitted in said boiler, handles pivotally connected to said tray and provided with notches for engagement with the supporting bars, and a cover for the boiler provided with a marginal flange to engage the boiler and also provided with slots for the passage of the handles of the tray, the edge portions of the cover between the handles being cut away to admit of the application and removal of the cover relatively to the boiler, substantially as described.

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

NOAH W. THARP.

Witnesses:

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GEORGE F. JONES.