A. C. JEWELL.

STILL.

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1,325,199.

Patented Dec. 16, 1919.

Fig. 1.

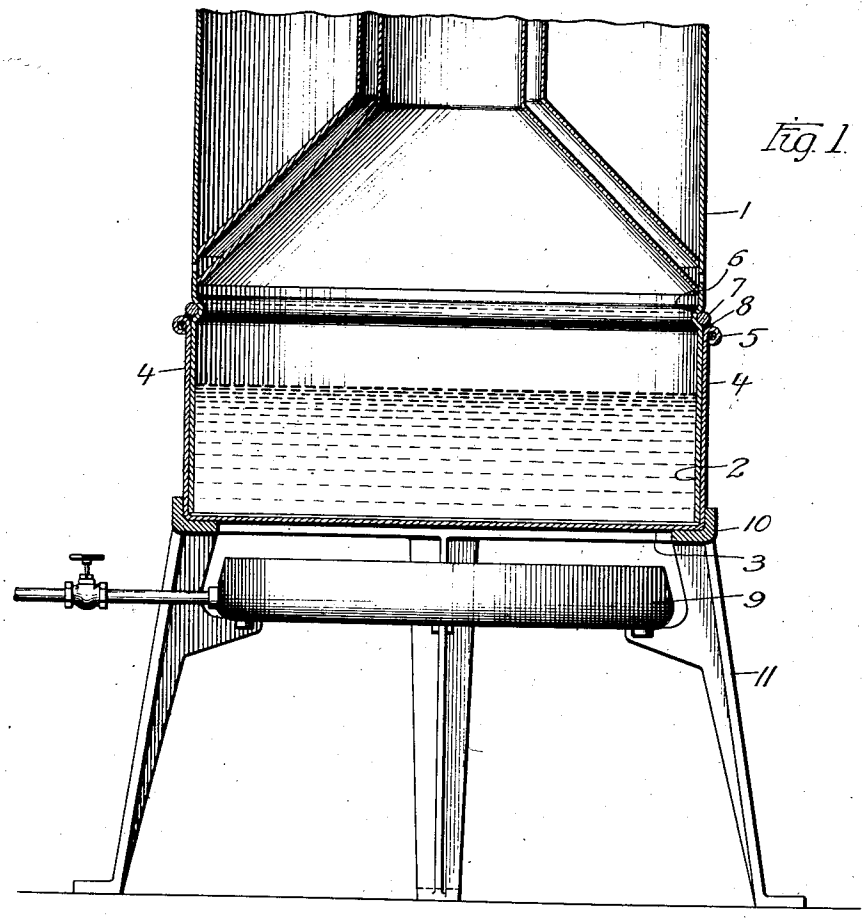


Fig. 2.

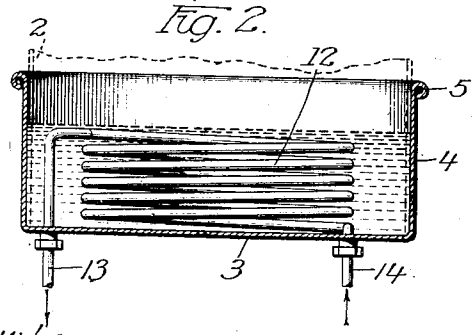
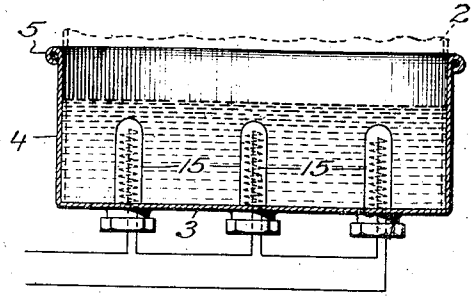


Fig. 3.



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STILL.

1,325,199. Specification of Letters Patent. Patented Dec. 16, 1919.

Application filed November 20, 1917. Serial No. 202,895.

To all whom it may concern:

Be it known that I, ARIEL C. JEWELL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Stills, of which the following is a description.

My invention relates to that general class of devices known as stills or the like and relates particularly to an improved construction of still in which the still may be operated by various kinds of heat by merely interchanging one base or bottom adapted for one kind of heat to another base suitable for another kind of heat. Heretofore it has been customary to construct the still special for each kind of heat, although the main bodies of the various stills are all substantially similar. The invention has among its objects the production of an interchangeable still construction of the kind described that is simple, efficient, economical, convenient and satisfactory for use wherever found applicable. More particularly it relates to an improved still having a detachable bottom or container and associated heating means, whereby a portion of the still may be easily and quickly transferred to another bottom and a different source of heat employed. Many other objects and advantages of the construction herein shown and described will be obvious to those skilled in the art from the disclosure herein given.

To this end my invention consists in the novel construction, arrangement and combination of parts herein shown and described and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts,

Figure 1 is a sectional view of a portion of the still with one of my improved interchangeable bottoms attached thereto, and adapted to be heated by gas or the like;

Fig. 2 is a sectional view of a similar bottom arranged for heating the contents of the bottom by steam or the like; and

Fig. 3 is a similar view showing a bottom equipped with electric heating means.

Referring to the drawings, it may be mentioned that I have not shown a complete still in all its details as this is immaterial in so far as the present invention is concerned. For the purposes of illustration, I have shown a portion of the still as illustrated in my pending application Serial No. 198,025, filed October 23, 1917, in which 1 represents the still body shell or casing thereof provided with a depending part 2. Referring particularly to Fig. 1, 3 represents a bottom portion having upturned side walls 4, forming a pan-shaped receptacle of the desired size and of a contour to closely fit the contour of and frictionally engage the part 2 of the still. I have shown the upper edge or rim of the wall 4 turned over as at 5, adding strength and rigidity as well as obviating the sharp edge. In addition this facilitates assembling the top and bottom and improves the appearance. In the construction shown I have shown the upper body part 1 grooved or corrugated as at 6, and a flange or ring 7 secured thereto, which may seat on the top edge or rim of the bottom part. Within the space between the ring 7 and the turned over portion 5 I have illustrated packing 8 of the desired material. While I have found the packing is not essential, it is nevertheless desirable and in most cases I prefer to employ the same. In the type of apparatus illustrated in the above figure, 9 represents a suitable gas heater or burner carried by a base having a support 10 for the still, and provided with legs 11. Any equivalent construction may be employed.

In Fig. 2 I have illustrated a similar receptacle 4, but provided with a steam coil 12, having the intake and discharge pipes 14 and 13. It will be noted that with the exception of the change in method of heating the contents of the base the parts 3, 4 and 5 are similar to the same as shown in Fig. 1. A similar interchangeable bottom or receptacle is shown in Fig. 3, except that electric coils or heaters 15 are shown associated with the bottom part. It is immaterial just how the coil 12 or the electric heaters 15 or the gas heater 9 be assembled or associated.

It will be noted by referring to Fig. 1 that the depending end 2 of the upper part of the still extends substantially close to the bottom 3 of the receptacle. While it is only necessary to extend the same below the lowest level of the water within the still, I prefer to extend the same to adjacent the bottom 3. The fit between the walls 2 and 4 being substantially close, the lower edge of 2 being below the water level, there is practically no leakage between the walls,

and if any, its escape is prevented by the packing 8. The advantages of the construction are many. Among them it may be mentioned that a small stock of completed stills may be carried as the particular type ordered may be assembled in a moment's time. A user may have a still and several different bases or bottoms so that he can use the desired heat, for example steam from his heating system in the winter and gas or electricity in the summer, or at such time as the steam cannot be obtained. The bottoms may be interchanged without tools or skilled labor, and immediately at such time or times as may be desired.

Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention, hence I do not wish to be understood as limiting myself to the exact form, construction, arrangement and combination of parts herein shown and described or uses mentioned.

What I claim as new and desire to secure by Letters Patent is:—

1. A still comprising a body part and a detachable pan-shaped bottom part therefor, said parts of a contour and size to frictionally engage each other, and means for supporting the body on said bottom part with the lower edge of the body adjacent the bottom thereof to form a water seal and heating means associated with the bottom part.

2. In a device of the kind described, a pan-shaped bottom having its upper edge rolled outward and reinforced, and means for heating the pan, in combination with a body part provided with depending edges adapted to be inserted inside the pan and snugly fitting the same and extending to substantially the bottom thereof to form a water seal, a circumferential groove in the body, a ring within the circumferential groove adapted to rest in close proximity to the top of the pan, and packing material between the ring and top of the pan.

3. In a still, a main body part comprising the still proper, in combination with a cooperating detachable bottom therefor provided with means for heating a liquid therein, and means for forming a water seal between the body and the bottom.

4. In a device of the kind described, a still body provided with a depending marginal flange, in combination with a cooperating detachable bottom for said body provided with upwardly extending walls, whereby the depending walls of the body will extend therein below the water level to form a water seal between the two, and means for packing the juncture of the upper part of the bottom with the wall of the body to render the same vapor tight.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

ARIEL C. JEWELL.

Witnesses:
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