A. ENGERT.

WATER HEATER AND COOKER.

APPLICATION FILED MAY 12, 1915.

1,166,822.

Patented Jan. 4, 1916.

3 SHEETS—SHEET 1.

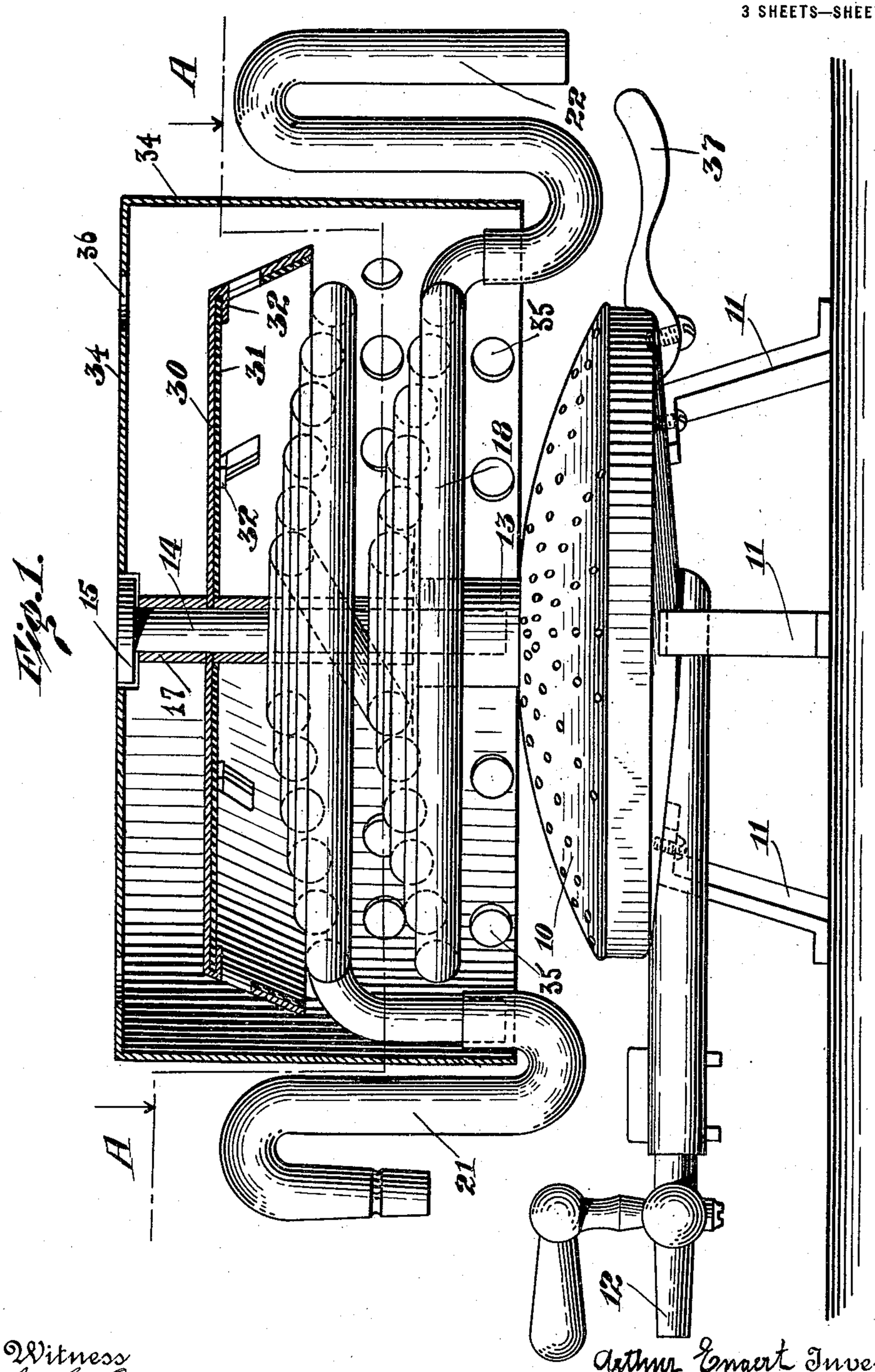

Fig. 1.

Witness
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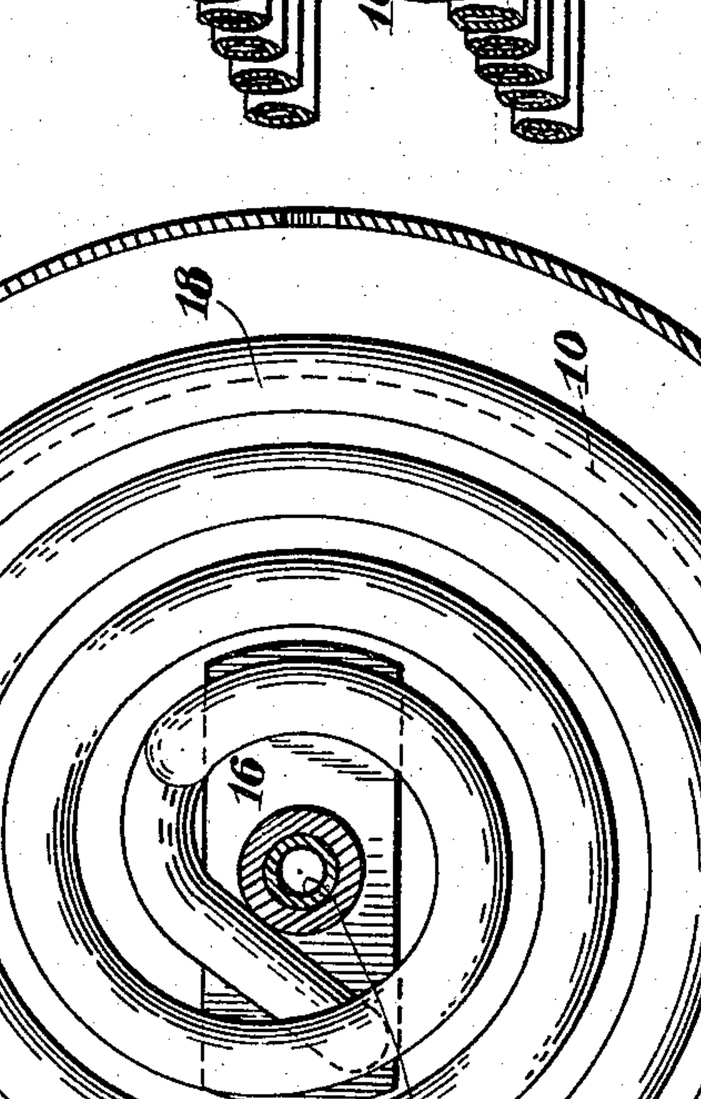

Fig. 5.

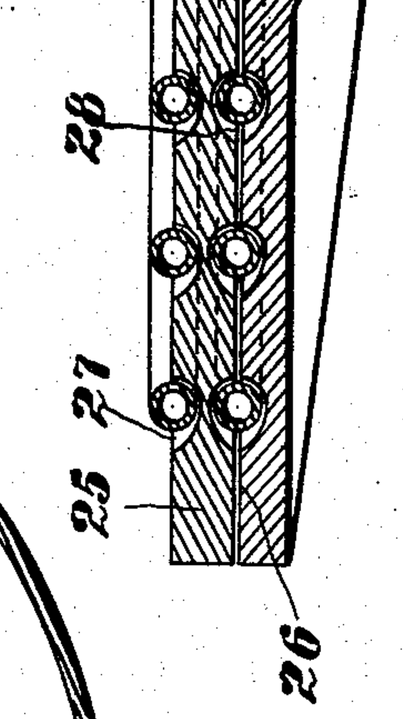

Fig. 3.

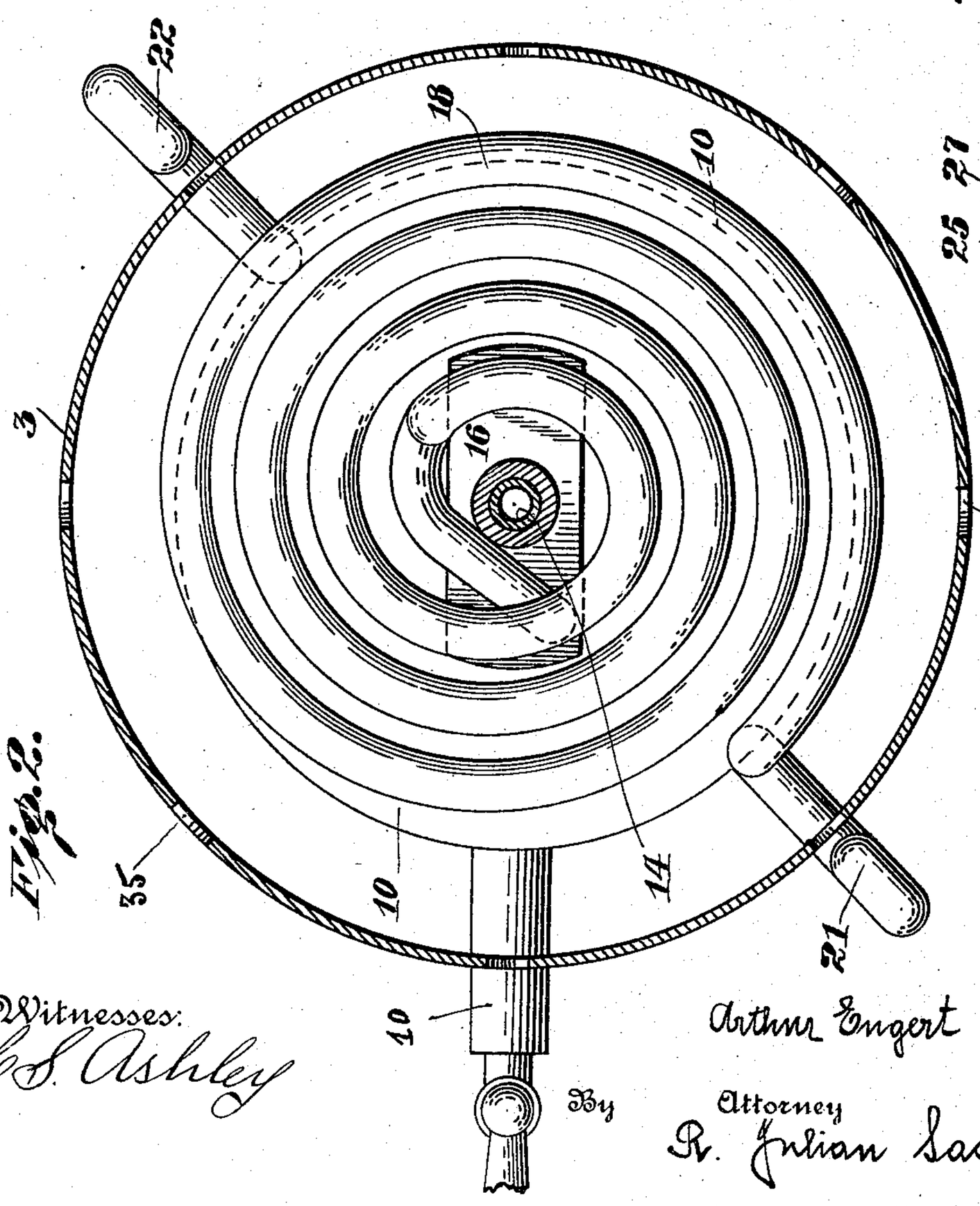

Fig. 2.

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3 SHEETS—SHEET 3.

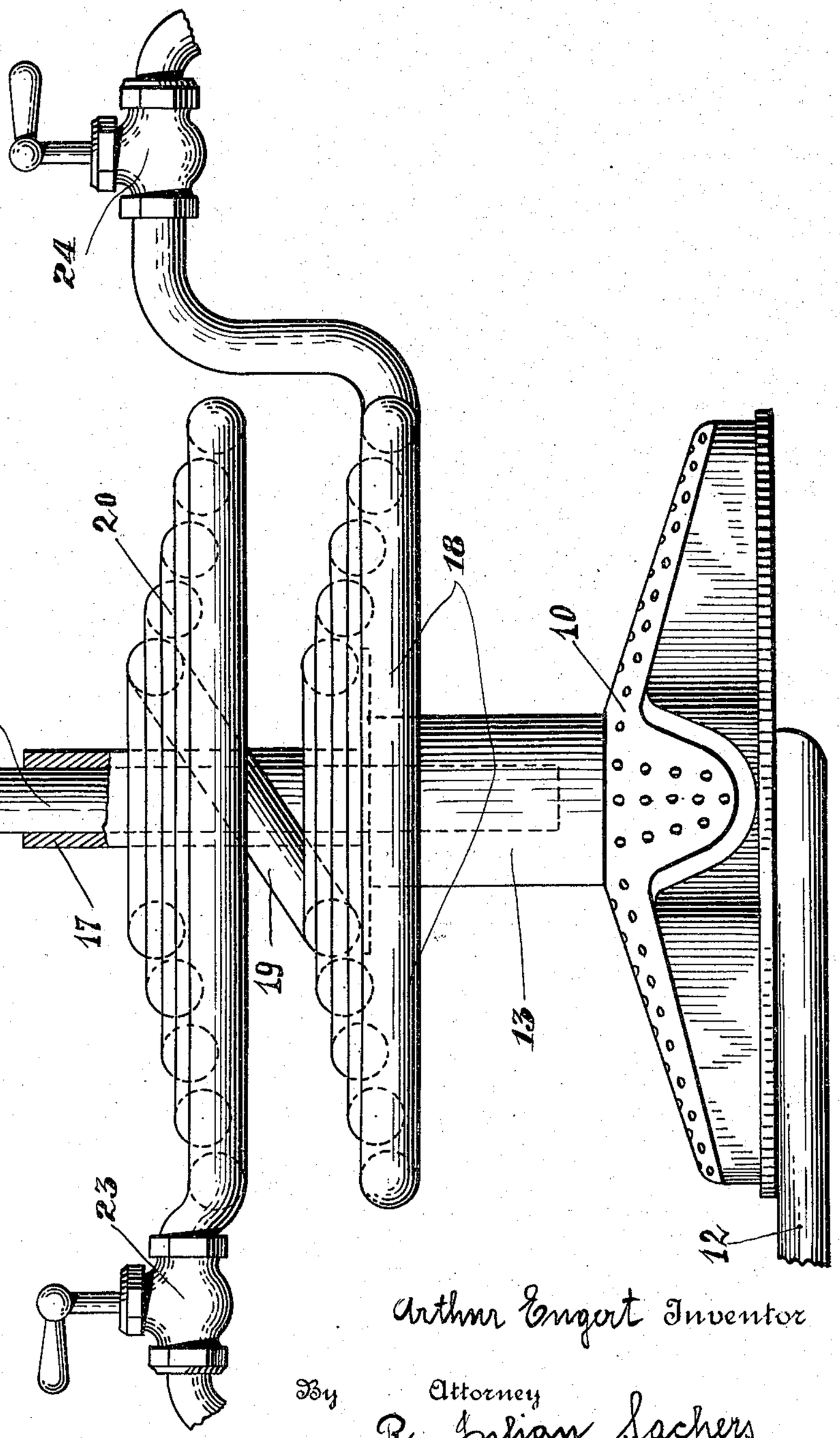

Fig. 4.

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UNITED STATES PATENT OFFICE.

ARTHUR ENGERT, OF BROOKLYN, NEW YORK.

WATER-HEATER AND COOKER.

1,166,822. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed May 12, 1915. Serial No. 27,499.

To all whom it may concern:

Be it known that I, ARTHUR ENGERT, a citizen of the German Empire, and resident of Brooklyn, in the county of Queens and State of New York, have invented an Improved Water-Heater and Cooker, of which the following is a specification.

The present invention refers to water heaters, and cookers particularly adapted to be connected to any of the usual supplies of running water and receiving heat from a source, such as a gas-, liquid hydro-carbon- or alcohol-burner, or an electric heater.

One of the main objects for which the device, forming the subject matter of the present invention is constructed, is to produce a device of simple construction and great compactness which is rotatable on its support, can easily be transmitted from place to place, and be connected to any available supply of heat as well as water, wherever located.

The invention is illustrated in Figure 1, in a side elevation and in part in cross section of the device. Fig. 2 is a cross section in the line A—A, of Fig. 1, Fig. 3, is a vertical cross section of a modification of the device, showing special supporting means for the water coils, Fig. 4, is a side elevation of a modification of the device, the heat-retaining hood being removed, and Fig. 5, is a vertical cross section of another supporting means of the water coils.

The device consists of a gas burner 10, resting upon supports 11, and having a connection 12, leading to any suitable supply of gas. A socket 13, is provided preferably in the center of the gas burner 10, for the purpose of receiving a bolt 14, having a shouldered head 15. A disk 16, located on top of the socket 13, and secured to a sleeve 17, rotatable on the bolt 14, is employed to act as a support for a lower set of coils of water tubes 18, preferably arranged in a spiral, the central winding of which by means of a cross connection 19, leads to the central winding of an upper set of coils 20. The coils are provided with either siphon connections 21, and 22, used as inlets and outlets for the water to be heated, or with faucets 23 and 24.

In the modification of the device, shown in Fig. 3, preferably spider-shaped coil supports 25, and 26, are employed, having spirally arranged recesses 27, and 28, sufficiently wide to permit of the expansion of the coils under the influence of heat.

The windings of the lower coils are so arranged in relation to those of the upper coils that heat may pass from the burner through the interspaces between the windings of the lower coils to the windings of the upper coils located directly above the interspaces of the windings of the lower coils.

A heat deflector 30, of sheet metal or other similar material, is centrally supported upon, and, if desired, secured to the sleeve 17, and provided with an asbestos lining 31, held to the deflector by means of holding lugs 32.

The hood 34, of cylinder shape, secured to the sleeve 17, is provided with side openings 35, and top openings 36, for the purpose of permitting the heat to pass through the hood. A suitable handle 37, may be attached to the device for easily lifting the same.

The entire device, except the burner and its connection, is rotatable on the center support, so that, if flexible connections are used for the supply of water, the device may be rotated in any suitable manner for conveniently permitting water to run into the device from a suitable supply and out of the device, into a suitable receiver.

The top of the hood may be used for supporting cooking utensils and the heat of the burner is forced to take a tortuous route, and draft is produced by causing air to enter from the open bottom of the hood and the side openings 35, and to leave at the top of the hood through the openings 36.

A handle 37, is employed in conjunction with, for instance, the gas inlet pipe, for carrying the device from place to place.

Claims:

1. The combination with a source of heat, of a plurality of rotatable liquid containers located above said source, and having an inlet and outlet, a support for said containers and carried by said source, and a rotatable hood on said support and surrounding said containers.

2. The combination with a source of heat, of a plurality of rotatable liquid containers, located above said source and having an inlet and outlet, a support for said containers and carried by said source, a rotatable hood on said support and surrounding said containers, and a rotatable heat deflector be-

tween said containers and the top of said hood.

3. The combination with a source of heat, of one or more coils, located above said source adapted to contain liquid and having an inlet and outlet, and a hood surrounding the top and sides of said containers and rotatable therewith whereby the inlet of said containers may be connected to any suitably located supply of liquid.

4. The combination with a source of heat, of one or more coils, located above said source, adapted to contain liquid and having an inlet and outlet, a hood surrounding the top and sides of said containers, and a heat deflector between said coils and the top of said hood and rotatable with said coils and said hood, for permitting connection of said coil inlet with any suitably located supply of liquid.

5. The combination with a source of heat, of a support, a rotatable sleeve on said support, one or more coils carried by said sleeve and adapted to contain liquid, a hood on said sleeve surrounding the top and sides of said coil, and a heat deflector on said sleeve and located between said coil and said hood.

Signed at New York, in the county and State of New York, this 26th day of March, 1915.

ARTHUR ENGERT.

In presence of—
R. JULIAN SACHERS,
EMANUELE SIATTA.