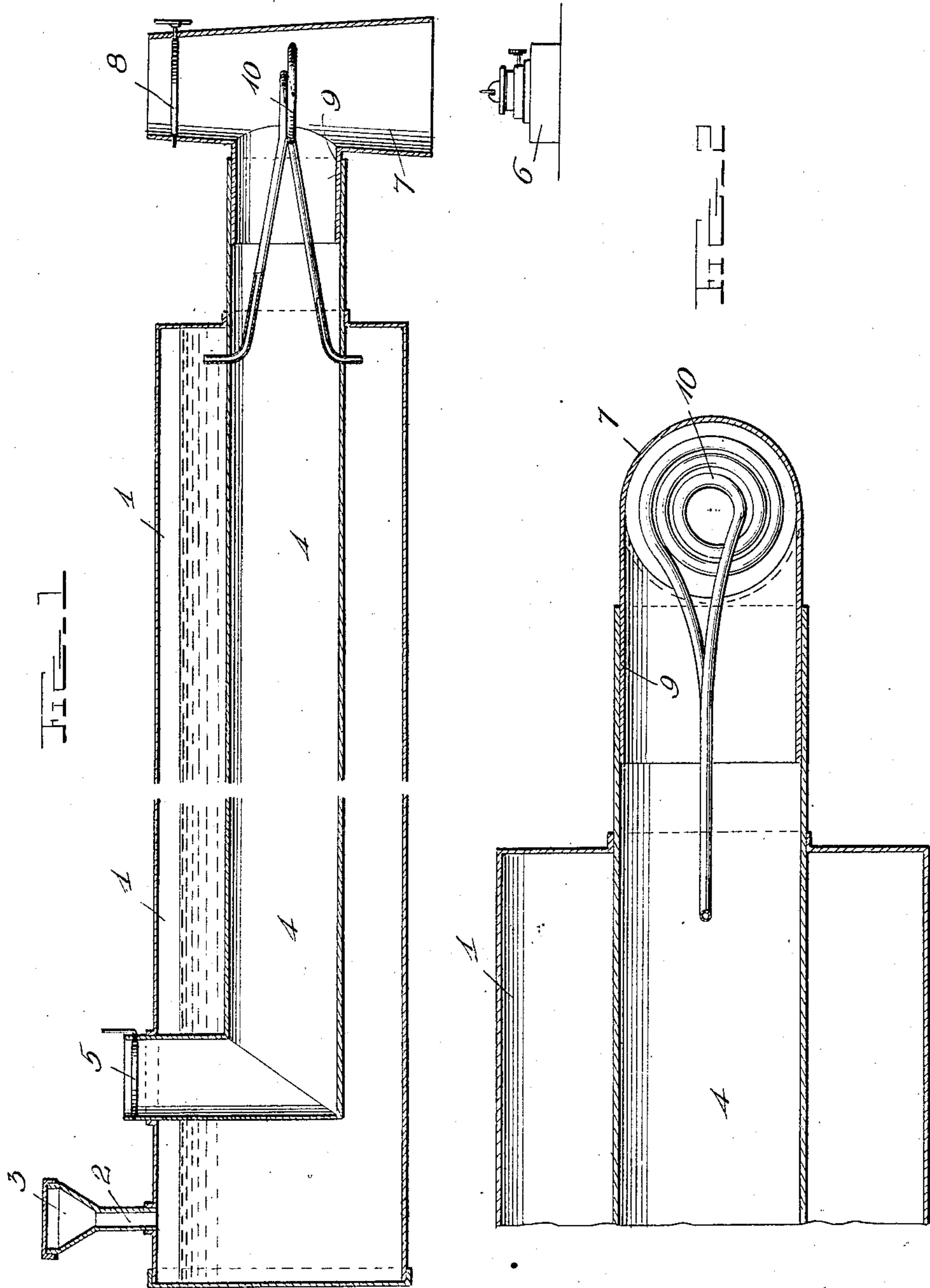


No. 896,846.

PATENTED AUG. 25, 1908.

G. E. MERRITT & L. D. GRUBB.
HEATING TANK FOR BROODERS.

APPLICATION FILED MAR. 19, 1908.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE E. MERRITT AND LOUIS D. GRUBB, OF GREAT BEND, KANSAS.

HEATING-TANK FOR BROODERS.

No. 896,846.

Specification of Letters Patent.

Patented Aug. 25, 1908.

Application filed March 19, 1908. Serial No. 422,091.

To all whom it may concern:

Be it known that we, GEORGE E. MERRITT and LOUIS D. GRUBB, citizens of the United States, residing at Great Bend, in the county of Barton and State of Kansas, have invented certain new and useful Improvements in Heating-Tanks for Brooders; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved hot water heating tank especially designed for use in brooders.

The object of the invention is to provide a hot water heater for brooders in which the water is quickly and economically heated and which will hold the heat for a long time.

With this and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 represents a longitudinal section of this improved heater; Fig. 2 represents a horizontal section on the front end thereof containing coiled heater.

In the embodiment illustrated a water tank 1 is shown having a filling tube 2 provided with a closed funnel 3, preferably arranged at one end. A hot air flue 4 extends longitudinally through the greater portion of the tank 1 and outwardly through the top thereof, and this flue is preferably provided near its outer end with a damper 5 for turning on or shutting off the heat as desired.

A heating medium is shown in the form of a lamp 6, arranged below a flue or chimney 7 provided at its upper end with a damper 8 and having a lateral tubular extension 9 opening through one side thereof and adapted to be connected with the flue 4.

An auxiliary water heater in the form of a hollow wire coil 10 is adapted to extend within the chimney directly above the flame of the lamp and has its ends extending through the lateral extension 9 of the chimney into the hot air flue 4 where they preferably di-

verge and extend through opposite walls of the flue 4, into the tank 1 and are fixed therein. This coil 10 formed of hollow wire or small metal tubing being arranged directly in the path of the flame the water therein is quickly heated and causes a circulation of the water in the tank 1, thereby greatly facilitating the heating of the water in the tank.

When the water has become heated to the desired temperature, the flame of the lamp may be lowered or turned entirely out and the heat in the tank will be retained for a long time.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention, as defined in the appended claims.

We claim as our invention:—

1. A hot water heater comprising a water containing tank, a lamp disposed adjacent thereto and provided with a chimney having a laterally extending tubular member, a hot air flue connected with said member and extending through said tank, and a coil of hollow wire arranged in said chimney and extending through said flue into said tank.

2. A hot water heater comprising a water containing tank, a lamp disposed adjacent thereto and provided with a chimney having a laterally extending tubular member, a hot air flue connected with said member and extending through said tank, and a coil of hollow wire arranged in said chimney and having its ends extending through said flue into said tank.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

GEORGE E. MERRITT.
LOUIS D. GRUBB.

Witnesses:

FRED W. SIMPSON,
F. W. BRINKMAN.