No. 706,902. Patented Aug. 12, 1902.

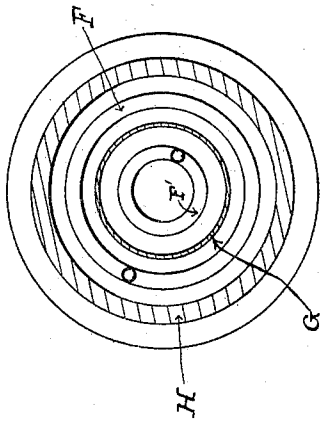
# N. W. CONDICT.

## ABSORPTION REFRIGERATING APPARATUS.

(Application filed Apr. 29, 1902.)

(No Model.)

Fig. 2.



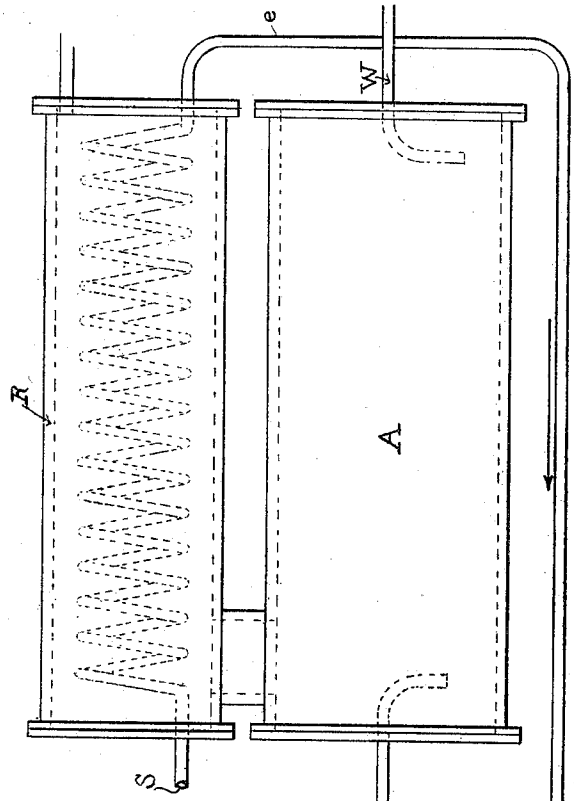
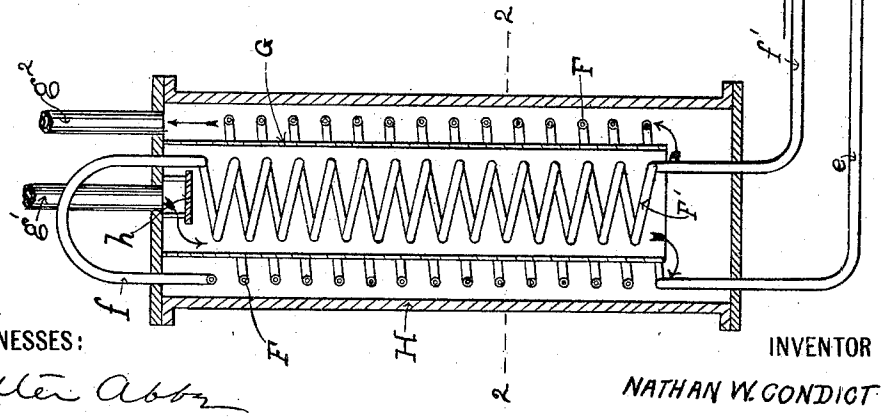




Fig. 1.




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# UNITED STATES PATENT OFFICE.

NATHAN W. CONDICT, OF JERSEY CITY, NEW JERSEY.

## ABSORPTION REFRIGERATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 706,902, dated August 12, 1902.

Application filed April 29, 1902. Serial No. 105,202. (No model.)

*To all whom it may concern:*

Be it known that I, NATHAN W. CONDICT, a citizen of the United States of America, residing in Jersey City, in the county of Hudson, State of New Jersey, have invented Improvements in Absorption Refrigerating Apparatus, of which the following is a specification.

My invention has reference more particularly to that class of refrigerating apparatus which work by the ammonia or other absorption process; and the main object of my invention is to so construct the apparatus as to facilitate the generation of the gas in the still.

In the accompanying drawings, Figure 1 is a view, partly in section, of sufficient of the apparatus to illustrate my invention; and Fig. 2 is a sectional plan on the line 2 2, Fig. 1, drawn to a larger scale.

The still for generating the ammoniacal or other gas from the liquor may be of any suitable construction. In the drawings I have represented it as a horizontal cylinder A, which may be heated by any suitable and well-known means, such as internal steam coils or pipes. For the sake of simplicity I have not shown the heating-coils. The outlet-pipe for the weak liquor taken from the still is indicated at W. The inlet-pipe for the strong liquor returned to the still is indicated at S. This strong-liquor pipe passes through a rectifying-chamber R in the form of a coil, as usual and as indicated by dotted lines in Fig. 1. Thence and before entering the still this strong-liquor pipe passes at *e* to a heater H, in which the pipe is coiled, as at F and F'. The outer coil F in the case shown is connected with the inner one, F', by a bend *f*, while the other end of the coil F' leads through the pipe *f'* to the still A, into which it discharges the liquor, preferably near the bottom thereof.

Between the two coils F and F' in the heater is a cylindrical shield G, secured to that end of the heating-chamber at which the steam inlet and outlets are connected, but not reaching quite to the other end of the heating-chamber. The steam-inlet *g'* is on one side of the shield G and the steam-outlet $g^2$ on the other side, so that the steam is compelled to pass over all the coils F F' in passing from the inlet to the outlet. A baffle-plate *h* may be placed in front of the steam-inlet.

By the construction described the strong liquor entering the still is in a highly-heated state, and the formation of gas in the still is greatly facilitated.

I claim as my invention—

The combination of the still of an absorption refrigerating apparatus with a heating-cylinder containing two strong-liquor coils and connections and a cylindrical shield between the two coils, with steam inlet and outlet to the cylinder on opposite sides of the shield, as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NATHAN W. CONDICT.

Witnesses:

HUBERT HOWSON,

F. WARREN WRIGHT.