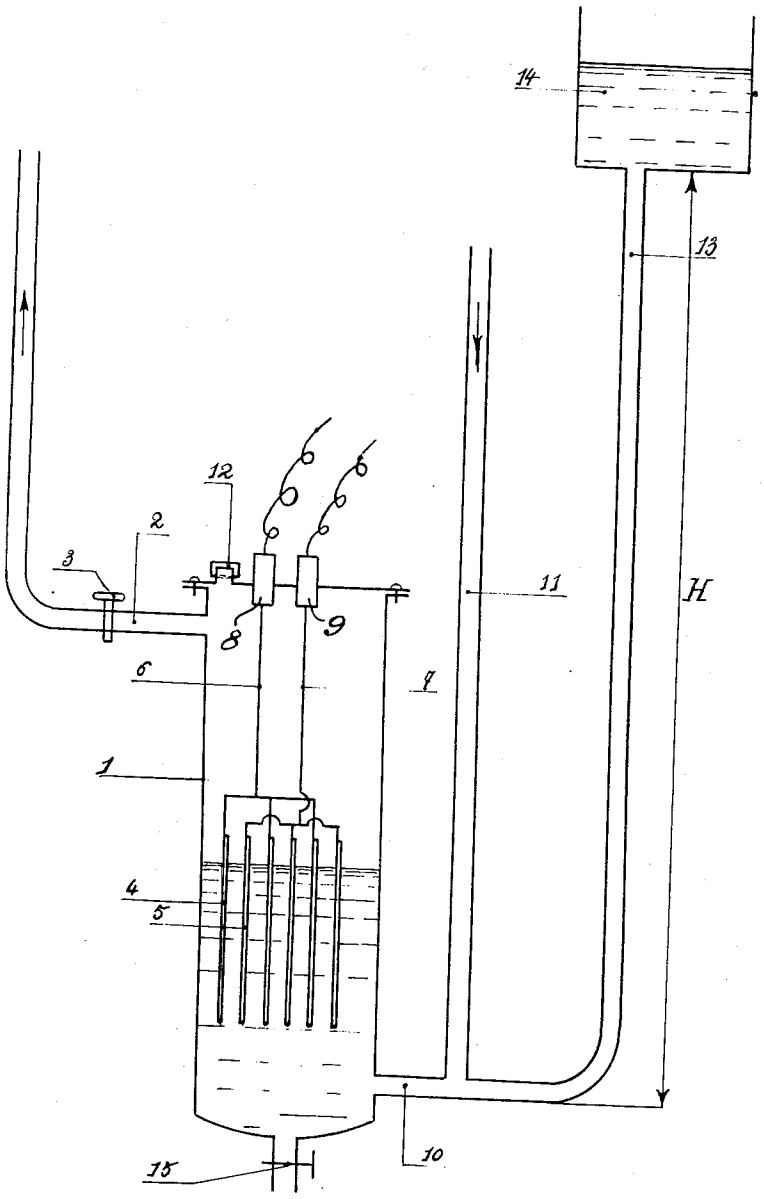
Apr. 3, 1923.

1,450,833

P. BERGEON

STEAM HEATING APPLIANCE

Filed Oct. 6, 1921



Inventor.
Paul Bergeon
By B. Singer. Atty

Patented Apr. 3, 1923.

1,450,833

UNITED STATES PATENT OFFICE.

PAUL BERGEON, OF GRENOBLE, FRANCE.

STEAM-HEATING APPLIANCE.

Application filed October 6, 1921. Serial No. 505,867.

To all whom it may concern:

Be it known that I, PAUL BERGEON, residing at Grenoble, France, have invented new and useful Improvements in Steam-Heating Appliances, of which the following is a specification.

The invention relates to steam heating appliances. The steam generator, in which water is vaporized by means of electrodes fed by an electrical circuit, is connected with an expansion tank, the height of which depends on the pressure at is desired in the generator. The production of steam is so automatically regulated.

The annexed drawing shows a way of performing the present invention.

The steam generator is a receiver 1 partially filled with water. Electrodes 4 and 5 dip in water and are connected with an electrical circuit by means of conductors 6 and 7 supported by insulators 8 and 9. When the circuit is closed, steam is produced in the receiver 1 and is supplied to radiators by means of a pipe 2 provided with a stop-valve 3.

At the lower part a pipe 10 receives water condensed in the radiator and coming back through the pipe 11.

A tube 12 covered by a suitable plug allows introduction of water into the receiver 1 and a cock 15 allows to discharge water.

According to the invention, the pipe 10 is connected by a pipe 13 to an expansion tank 14, and the higher the desired normal pressure in the receiver 1, the greater must be the height H of the pipe 13.

The operation is as follows:

If the steam output in the pipe 2 increases above its normal pressure, the pressure diminishes at the upper part of the generator. Consequently, the level of water rises, the immersed area of electrodes is increased and the production of steam is augmented.

If, on the contrary, the output of steam diminishes, the level of water sinks and the production of steam is reduced.

Therefore the apparatus performs an automatic regulation so as to obtain at any time a production of steam in proportion with the wanted output.

The tank 14 may be entirely closed, the surface of water being submitted to the pressure of a compressed gas, and in that case the height H need not be so great.

I claim:

A steam generator for steam heating appliances, containing water in which dip electrodes fed by an electrical circuit, this generator being connected at its lower part with an expansion tank full of water, the surface of which is submitted to the pressure of a compressed gas, so as to automatically regulate the production of steam.

In witness whereof I affix my signature.

P. BERGEON.

Witness:

JULIAN CEMBLE SMEDREIG.