A. L. GIBSON.

WATER HEATER.

APPLICATION FILED MAY 29, 1907.

907,590. Patented Dec. 22, 1908.

Fig. 1.

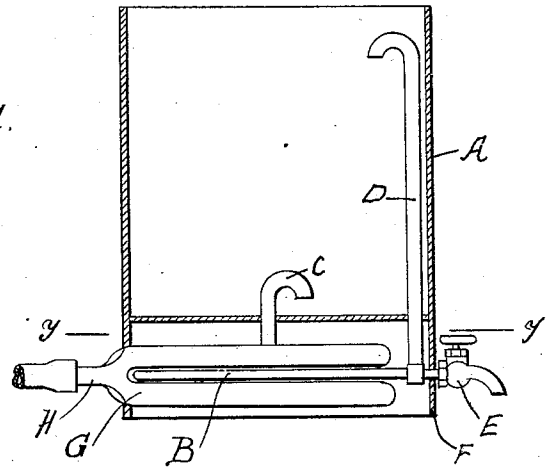


Fig 2.

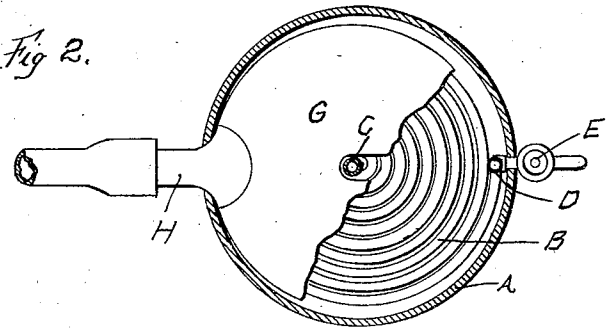
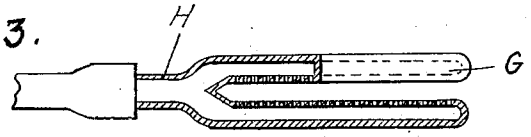


Fig. 3.



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WATER-HEATER.

No. 907,590. Specification of Letters Patent. Patented Dec. 22, 1908.

Application filed May 29, 1907. Serial No. 376,242.

To all whom it may concern:

Be it known that I, ANNA L. GIBSON, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Water-Heaters, of which the following is a specification.

My invention relates to a new and useful improvement in water heaters, and has for its object to provide an exceedingly simple and effective device by means of which water may be instantaneously heated while being drawn through a coil, and when not being drawn off the coil will continue to heat the water, setting up circulation in the tank. Thus when a considerable quantity of water is to be drawn off at a time the coil will not be unduly lowered in temperature, as the water passing therethrough having previously been heated will extract but little additional heat from the coil.

A further object of my invention is to provide an exceedingly effective form of burner by which gas flames will be projected upon a coil from the top and bottom, thus increasing the heating capacity of the coil.

With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring by letter to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a vertical section of the device. Fig. 2, a section at the line *y*—*y* of Fig. 1. Fig. 3 is a view in side elevation, partly in section, of the burner.

In carrying out my invention as embodied in the drawings, A represents a receptacle of any suitable size for containing the water to be heated, and beneath the bottom of this receptacle is located a coil pipe B, the inner end of which is passed through the bottom of the receptacle and curved downward, as clearly indicated at C to form the downtake. The outer end of this coil has connected therewith the tube D which leads upward through the bottom of the receptacle, its upper end being curved downward, and this pipe serves as the uptake.

E represents a faucet, which is connected with the outer end of the pipe and passes through the flange F, which serves as the base of the receptacle inclosing the coil, the object of this faucet being to draw off any quantity of the water contained in the receptacle when desired.

The coil B is heated by means of a double circular burner G, a section thereof lying below the coil B, while another section thereof lies above the coil, and the flames issuing from these sections of the burner will impinge against the coil and at the same time house the heat generated therefrom so as to impart the maximum heat to the coil. This burner may be connected in any suitable manner to a gas supply through the pipe H. The inner wall of each section of burner G is provided with gas openings, the openings of one section facing those of the other section. Water is admitted to coil B through down-take C, is heated therein and rises up through uptake D. Heated water is taken off through faucet E.

Having thus fully described my invention, what I claim as new and useful, is—

1. In combination with a receptacle, means for containing the water to be heated, a burner consisting of a pipe and a pair of spaced oppositely disposed circular sections receiving said water containing means in said space, the upper of said sections being formed with an opening, and a pipe extending from said water containing means through said opening in the upper section into said receptacle, said sections having gas openings the openings of one section facing those of the other section so as to individually discharge the gas in said space.

2. In combination with a receptacle, a water coil beneath said receptacle having communication with the interior of said receptacle and a burner consisting of a single pipe having a pair of hollow spaced disk-like oppositely disposed sections receiving said coil in said space, said sections having openings formed therein the openings of one section facing those of the other section.

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

ANNA L. GIBSON.

Witnesses:
S. M. GALLAGHER,
E. N. SCHOFIELD.