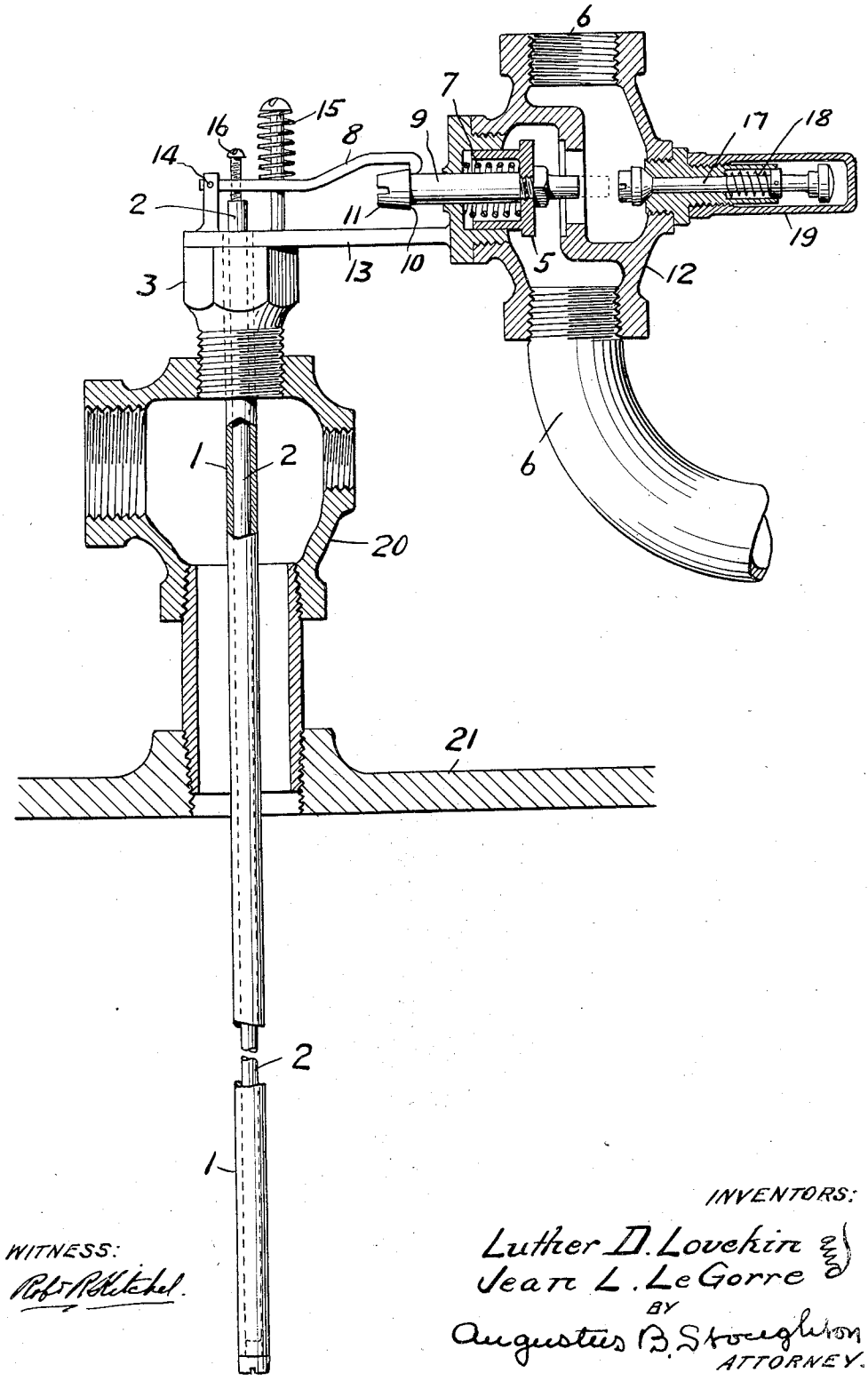
Dec. 3, 1935. L. D. LOVEKIN ET AL 2,023,276

GAS SHUT-OFF FOR HOT WATER SYSTEMS

Filed March 21, 1932



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Patented Dec. 3, 1935 2,023,276

UNITED STATES PATENT OFFICE

2,023,276

GAS SHUT-OFF FOR HOT WATER SYSTEMS

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Application March 21, 1932, Serial No. 600,150

2 Claims. (Cl. 126—351)

The principal object of the present invention is to provide simple, reliable and sensitive means for snapping or shutting off the supply of gas or fluid fuel to a water heater or device upon undue rise in temperature of the water; another object of the invention is to provide such a device in a form in which it can be conveniently applied for efficient operation; and another object of the invention is to provide for manually opening the gas valve and re-setting the device.

Other objects of the invention will appear from the following description at the end of which the invention will be claimed.

Generally stated, the invention comprises a thermostatic device consisting of a straight tube or sleeve and a straight core relatively movable at one end portion and relatively immovable at the other end portion upon rise in temperature, a self-closing gas valve, and a spring catch adapted to permit the valve to be manually opened and to hold it open and in respect to which the movable element of the thermostatic device operates as a trigger to release the valve.

The invention also comprises the improvements to be presently described and finally claimed.

In the following description reference will be made to the accompanying drawing forming part hereof and in which

The figure is a view principally in central section illustrating a device embodying features of the invention.

Referring to the figure, the thermostatic device consists of a straight tube or sleeve 1 and a straight core 2. The sleeve and core are made of different and appropriate metals. As shown the sleeve or tube 1 is immovable in the fitting 3, and the core 2 is movable through an opening provided in the fitting 3. 5 is a self-closing gas valve interposed in the gasway 6 and solicited to closed position by the spring 7. 8 is a spring catch adapted to permit the valve 5 to be opened manually and to hold it open. As shown the valve spindle 9 is provided with a shoulder 10 and a conical head 11. The hook on the end of the catch engages the shoulder and holds the valve in open position, and the hook slides on the conical head when the valve 5 is opened manually. The movable element 2 of the thermostatic device operates as a trigger to release the catch 8 and free the self-closing valve. As shown the fitting 3 and valve casing 12 are connected by a bracket 13. The catch 8 is pivoted at 14 and pressed by a spring 15. 16 is an adjusting screw engaging the catch and contacting with the element 2 of the thermostat. The rod 17 pressed by the spring 18 is a means for manually opening the valve 5 and re-setting the catch 8 in engagement with the shoulder 10. 19 is a removable cap for covering the rod 17 which is manually operated when the cap 19 has been removed. The fitting 3 is shown as mounted in a coupling 20 through which hot water is drawn from the interior of a vessel of which a wall is indicated at 21 and which is heated by gas supplied through the gasway 6. The thermostatic device extends through the coupling and projects into the hot water contained in the vessel indicated in part at 21.

The parts are shown in their normal positions and upon undue rise in temperature of the water the thermostatic device operates in the manner described, thus the supply of gas or fluid fuel is shut off and danger of overheating the water or vessel in which it is contained or other parts of the hot water system is avoided. When the water has sufficiently cooled the parts are restored to the positions shown in the figure by the simple manual operation of the rod 17.

It will be obvious to those skilled in the art to which the invention relates that modifications may be made in details of construction and arrangement and matters of mere form without departing from the spirit of the invention which is not limited to such matters or otherwise than the prior art and the appended claims may require.

We claim:

1. A gas shut off for hot water systems comprising a thermostatic device consisting of a straight tube and a straight core relatively movable at one end portion and relatively immovable at the other end portion upon rise in temperature, a self-closing gas valve having a spindle provided with a conical head and a shoulder, a catch having a hook for cooperation with the conical head and shoulder and in respect to which the movable element of the thermostatic device operates as a trigger to release the valve, a spring stressing said catch to hold said valve open, a spring pressed rod for manually opening the valve and setting the catch, and a cap for covering and uncovering said rod.

2. A fitting including a hollow chamber having a valve seat therein, a thermostatic device consisting of a straight tube attached to the fitting and a straight core movable through the fitting, a self-closing gas valve cooperating with said valve seat and having a spindle provided with a conical end and a shoulder, a catch mounted on a stationary part of said fitting and having a hook for cooperation with said conical end and shoulder and in respect to which the core of the thermostatic device operates as a trigger to release the valve, a spring stressing said catch into contact with said end and shoulder to hold said valve open, a spring-pressed rod for manually opening the valve and setting the catch, and a cap for covering and uncovering said rod.

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