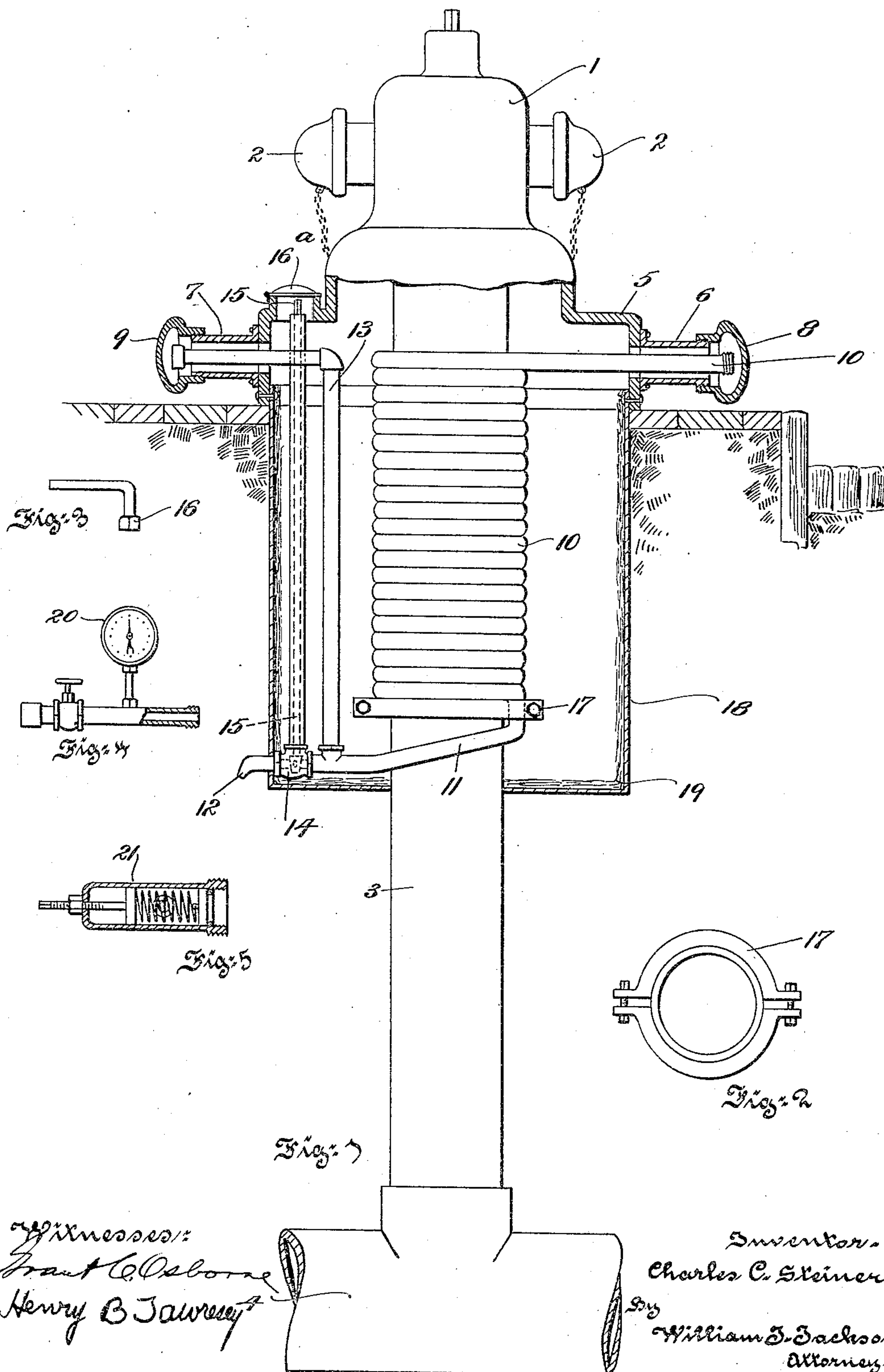


No. 862,593.

PATENTED AUG. 6, 1907.

C. C. STEINER.
FIRE HYDRANT.

APPLICATION FILED MAR. 5, 1907.



UNITED STATES PATENT OFFICE.

CHARLES C. STEINER, OF PHILADELPHIA, PENNSYLVANIA.

FIRE-HYDRANT.

No. 862,593.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed March 5, 1907. Serial No. 360,746.

To all whom it may concern:

Be it known that I, CHARLES C. STEINER, a citizen of the United States, and a resident of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Fire-Hydrant, of which the following is a specification.

It frequently happens in cold weather that the water in the stand pipes of hydrants, freezes, and in case of a fire it is necessary after the fire engine has reached the locality, to thaw out the same before a stream of water may be played upon the blaze. This thawing process requires a great deal of time and hampers the work of the firemen to a great degree. To meet difficulties of this class and provide means for expeditiously thawing out the stand pipes of hydrants is one object of the present invention.

A further object is to provide simple inexpensive, reliable and easily operated means for attaining this end.

Other objects will appear hereinafter.

To these and other ends the invention stated in general terms comprises the improvements to be presently described and finally claimed.

The nature, characteristic features and scope of my invention will be more readily understood by reference to the accompanying drawings forming part hereof and in which

Figure 1, is an elevational view principally in section illustrating a fire-hydrant embodying the invention. Fig. 2, is a detail view of a supporting bracket shown in Fig. 1, and Figs. 3, 4, and 5, are accessories carried by the firemen for application to fire-hydrants to use the same.

In the drawings 1 represents the housing or casing of a hydrant, which may be of any well known design, and is equipped with removable plugs 2. The hydrant casing 1, is arranged in the usual manner adjacent to the curb and incloses a stand-pipe 3, connected in the well understood manner with the water-main 4. Secured to and projecting from the base 5, of the hydrant casing 1 are members 6 and 7, the ends of which are screw-threaded for the reception of detachable caps 8 and 9. Leading from the member 6, is a steam pipe 10, that is adapted to closely coil around the stand-pipe 3, to form a steam jacket, as it were. The lower end of the coiled pipe is slightly inclined, as at 11, in a downward direction and terminates in a lateral portion having an outlet or drip 12. Rising upwardly from the lateral portion of the steam pipe 10, is an exhaust connection 13, that extends within the member 7. Also rising from the lateral portion, or more properly speaking from the drip valve 14, is a

valve stem 15, projected through the base 5, of the hydrant casing 1. This valve stem is provided with a suitable head for receiving a tool 16, Fig. 3, carried by the firemen, the head being normally covered by means of a plate 16^a. The coiled portion of the steam pipe 10 may be supported by means of a two-part bracket 17, clamped around the stand pipe 3, as by means of nuts and bolts, as shown. Secured to and depending from the base of the hydrant casing 1 there may be a housing 18, the interior of which may be lined with a material as asbestos 19. Such a construction serves to protect the above described parts from moisture and also serves to retain heat in and around the stand-pipe during the thawing operation.

A description will now be given of the mode of thawing out a frozen stand pipe according to the invention.

Fire-engines are accustomed to carry a small steam hose for various purposes and in addition under the present conditions will be required to carry a tool 16, Fig. 3, a valved connection having a pressure gage 20, Fig. 4, and a connection equipped with a safety valve 21, Fig. 5. The connection having the pressure gage 20, is applied to the inlet end of the steam pipe 10, the cap 8, having been removed, and the steam hose applied to this connection and to the engine. The connection carrying the safety valve 21, is then applied to the exhaust end of the steam pipe 10, upon the removal of the cap 9. Steam is then admitted to the pipes, suitably regulated, and traverses the coiled portion of the piping in a downward direction, and exhausting by way of the pipe 13. In case too great a pressure is passing through the piping the safety valve 21 will serve to properly allow a blow-off. When the stand-pipe has been thawed out the above connections may be removed and the piping drained by means of the drip valve 14, operated through the medium of the stem 15 and tool 16.

I do not intend by the use of the above language or words to limit my invention any further than the prior state of the art may require, but

Having thus described the nature and objects of my invention, what I claim as new and desire to secure by Letters Patent is

1. The combination with a hydrant casing and its stand-pipe of a steam pipe closely coiled around the stand-pipe, said coils snugly fitted one against the other to provide a compact steam jacket, the inlet of which is above the surface of the ground and is adapted to receive the discharge end of a steam hose, the lower section of the coil being provided with a lateral extension having a drip, a steam exhaust pipe rising upwardly from said extension to a point opposite the steam inlet, a safety valve adapted to be removably fitted to said outlet, a pressure gage adapted to be removably fitted to the inlet end of

the steam pipe, a drip valve located in said extension and means carried by the stand-pipe for supporting the steam coil.

2. In combination a hydrant casing inclosing a stand-
5 pipe, the base of said hydrant casing being provided with lateral extensions having removable caps, a steam pipe the inlet of which is projected through one of said extensions and is closely coiled around the stand-pipe, said coils snugly fitting one against the other and terminating in an
10 inclined extension, means clamped to the stand-pipe for

supporting said steam coil, a steam exhaust pipe projected upwardly from said extension and extended through the other of said lateral extensions upon the base of the hydrant casing and a drip valve located in said inclined extension.

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In witness whereof I have hereunto signed my name.
CHAS. C. STEINER.

Witnesses:

W. J. JACKSON,
GRANT C. OSBORNE.