

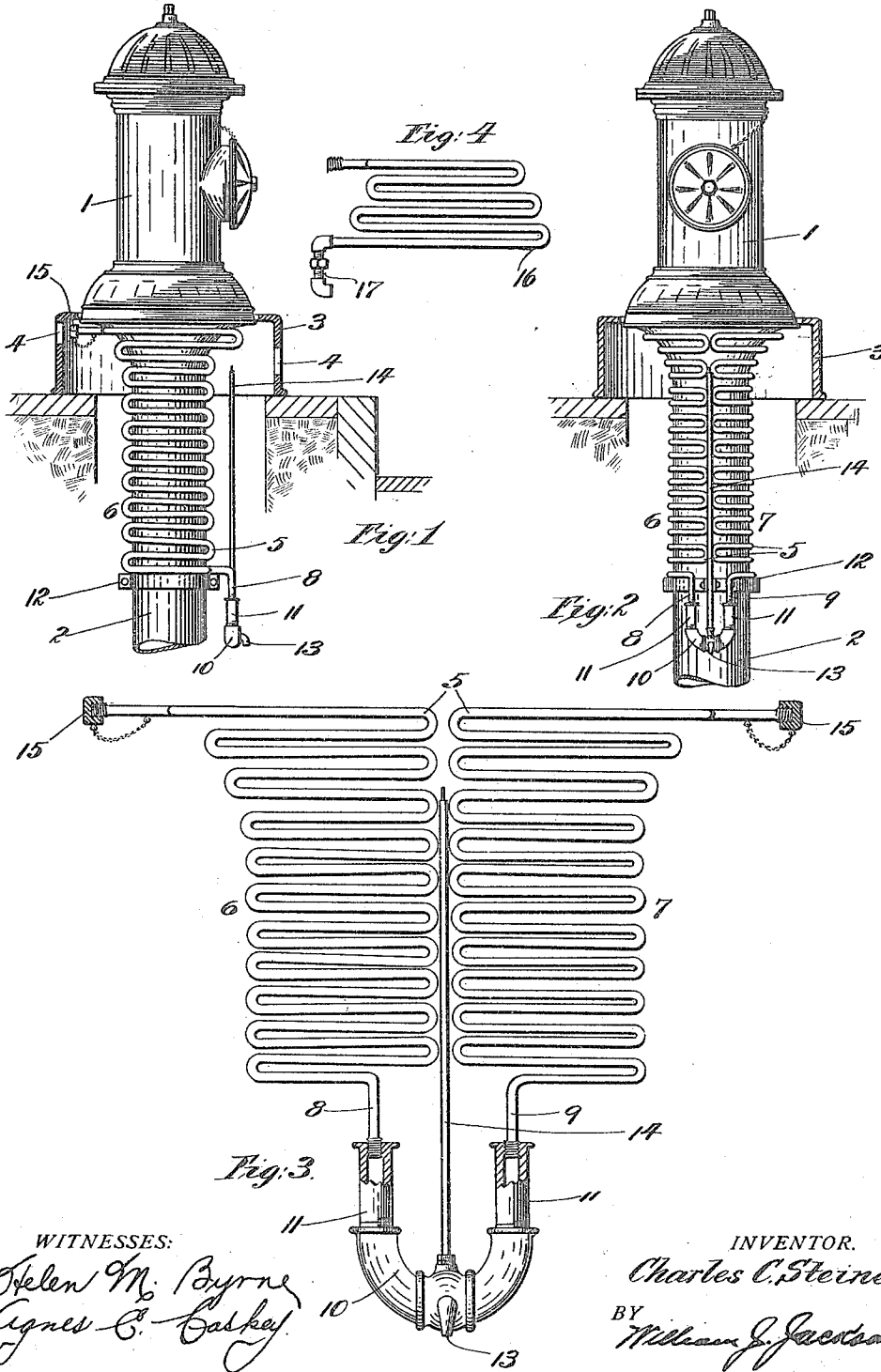
C. C. STEINER.

FIRE HYDRANT.

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1,123,418.

Patented Jan. 5, 1915.



WITNESSES:

Helen M. Byrne  
Agnes C. Oakley

INVENTOR.

Charles C. Steiner.

BY

William J. Jackson

ATTORNEY.

# UNITED STATES PATENT OFFICE.

CHARLES C. STEINER, OF PHILADELPHIA, PENNSYLVANIA.

## FIRE-HYDRANT.

1,123,418.

Specification of Letters Patent.

Patented Jan. 5, 1915.

Application filed December 22, 1913. Serial No. 808,248.

*To all whom it may concern:*

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

This invention relates to fire hydrants and has more particular relation to an improvement upon the apparatus disclosed in my Patent No. 862,593, dated August 6, 1907. While the steam jacket therein disclosed is efficient for the desired object, to wit: the expeditious thawing out of hydrant stand pipes in freezing weather, it has been demonstrated in practice, that it is somewhat lacking in commercial value. In so far as the installation of new fire hydrants is concerned, the structure shown and described in my aforesaid patent fully answers the purpose. However, in equipping fire hydrants now in use with the closely coiled steam pipes, as disclosed in said patent, experience has proved that, it is a tedious and expensive equipment, due to the fact that, much time is consumed in the handling by hand of the steam pipe into coiled relation with the stand pipe.

This invention has for its principal object to overcome these disadvantageous features and to provide a steam jacket, the closely coiled steam pipes of which may be cheaply manufactured, at a main plant and shipped for ready and expeditious attachment around the stand pipes of fire hydrants now in use.

A further object of the present invention is to provide a series of closely coiled horizontally extending steam pipes, in two semi-circular sections, having detachable hinged relation with one another, so formed that the hinged sections may be easily fitted around the stand pipe of a fire hydrant to have their respective ends meet.

Other objects of the present invention reside in the providing of general details of construction and arrangement of parts.

With these and other objects in view, the invention stated in general terms comprises the improvements to be presently described and finally pointed out in the claims.

The nature, characteristic features and scope of the invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof and in which:

Figure 1, is a view in side elevation partly sectioned illustrating a fire hydrant equipped with a steam jacket embodying the invention. Fig. 2, is an end view of Fig. 1. Fig. 3, is a view in elevation, illustrating in open position, the hinged steam pipes shown in the foregoing figures, and, Fig. 4, is a view illustrating a single section of an accessory carried by firemen and hereinafter referred to.

Referring to the drawings, there is shown a physical embodiment of the means best known to me at this time for practising the invention.

The hydrant casing which may be of any well known design is designated 1, and 2 designates the usual stand pipe. The base plate of the hydrant casing is designated 3, and may be provided with openings 4. Closely coiled around the stand pipe 2, to form a compact steam jacket are a series of horizontally disposed steam pipes 5, comprising two semi-circular sections 6, and 7, see Fig. 3, which sections have detachable hinged relation with one another in a manner to be presently described. Section 6, for the sake of illustration, comprises the inlet end of the steam jacket and section 7, the outlet end thereof although the parts are duplicates. In practice, the inlet end of section 6, constitutes a horizontal extension which terminates in a tortuous arrangement of horizontal pipings of semi-circular form which end in a depending vertical screw-threaded extension 8. Section 7, comprises a duplicate of the above described parts and terminates in a screw-threaded extension 9. Detachably securing together the ends 8, and 9, of the sections 6, and 7, with a union joint 10, are couplings 11. By virtue of the screw-threaded relation of the parts 8, 9, 11, and 10, the sections 6, and 7, have both detachable and hinged relation and so may be opened up as shown in Fig. 3, or closed together as shown in Fig. 1, if desired. It is to be noted at this point, that in installa-

tion by moving the sections 6, and 7, from the position shown in Fig. 3, to that shown in Fig. 1, the relation of the parts 8, 9, and 11 are tightened, so that the steam jacket as a whole when positioned around a stand pipe is relatively rigid. Obviously the parts may be shipped un-assembled, if desired, and fitted around a stand pipe piece by piece. The coils 6, and 7, may be supported by a bracket 12, clamped to the stand pipe 2. The part 10, is equipped with a drip valve 13, provided with an operating stem 14. In event of a fire, and upon arrival of a fire engine, if it be found that a fire hydrant is in a frozen condition, it is merely necessary to remove the caps 15, from the inlet and outlet ends of the sections 6, and 7, attach a steam connection between the inlet end, of the steam jacket and the fire engine and pass steam continuously, through the closely coiled pipes around the stand pipe, to effectually thaw out the fire hydrant. In case the hydrant is frozen up very tightly, the firemen may lift the base plate 3, and pass around the hydrant casing a pair of semi-circular auxiliary coiled pipes 16, see Fig. 5, coupling the same first to the coils 6, and 7, by means of couplers 17 and attaching steam connection from the engine to the inlet end of said auxiliary pipes. The firemen are provided with these auxiliary pipes.

The above described steam jacket, may be cheaply manufactured and assembled at a factory and readily shipped for convenient attachment around fire hydrants now in use, which obviously is advantageous. The parts are few in number, simple in construction and no parts are present for getting out of order, which in this class of apparatus, is particularly advantageous. It is to be further observed that the pipes are shaped and proportioned to fit snugly around a stand pipe as shown. In other words the sections 6, and 7, are flared at their tops to fit around the flared part of the stand pipe. The openings 4, in the base plate 3, permit firemen to attach steam connections without lifting the base 3.

What I claim is:

1. As a new article of manufacture, a steam jacket comprising a closely coiled tortuous arrangement of piping having a steam inlet and outlet connection, said piping being sectional in construction and provided intermediate of said inlet and outlet connections with means forming hinged relation between said sections.

2. As a new article of manufacture, a two-part steam jacket comprising semi-circular sections of closely coiled tortuous horizontally disposed piping, of which one section is provided with a steam inlet and of

which the other section is provided with a steam outlet, said sections having hinged relation with one another and adapted to be folded tubular fashion around a hydrant stand pipe.

3. The combination with a hydrant casing and its complemental flared stand pipe of a steam jacket comprising horizontally disposed closely coiled piping arranged to form hinged sections adapted for detachable application around said stand pipe, said sections being generally flared at their tops to fit snugly around the flared part of the stand pipe, and means for supporting said steam jacket in operative position.

4. As a new article of manufacture, a two-part steam jacket comprising sections of closely coiled horizontally disposed piping, which sections are duplicates and comprise a short horizontal section extending in a tortuous arrangement of coils terminating in a vertical screw-threaded section, a union joint provided with a drip valve, and screw-threaded couplings for forming hinge joints between the respective coils and said union joint.

5. A fire hydrant the combination of a water pipe, a casing surrounding the pipe, a valve rod between the pipe and casing, and a thawing coil consisting of sections hinged together with space between them for the accommodation of the rod.

6. The combination with a hydrant casing and its complemental stand pipe of a thawing coil embracing sections detachably secured together around the stand pipe with space between said sections for valve rod accommodation, a drip valve operatively fitted between said sections and a valve rod for said valve.

7. The combination with a hydrant casing and its complemental stand pipe of a thawing coil embracing separable sections operatively fitted together around the stand pipe, a valve intermediate the juncture points thereof, and a valve rod projected from said valve.

8. The combination with a hydrant casing and its complemental stand pipe of a thawing coil comprising a closely coiled, tortuous arrangement of piping made up of separable sections operatively fitted together around the stand pipe, a valve intermediate the juncture points thereof and a valve rod projected from said valve.

9. As a new article of manufacture, a steam jacket comprising a closely coiled, tortuous arrangement of piping forming semi-circular sections separably connected together, a valve intermediate the juncture points thereof and a valve rod projected from said valve.

10. As a new article of manufacture, a

steam jacket comprising a closely coiled,  
tortuous arrangement of piping forming  
semi-circular sections separably connected  
together with valve rods accommodating  
5 space therebetween, a drip valve intermedi-  
ate the juncture points of said sections and  
a valve rod for said valve.

In testimony whereof, I have hereunto  
signed my name.

CHARLES C. STEINER.

Witnesses:

WILLIAM J. JACKSON,  
HELEN M. BYRNE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,  
Washington, D. C."