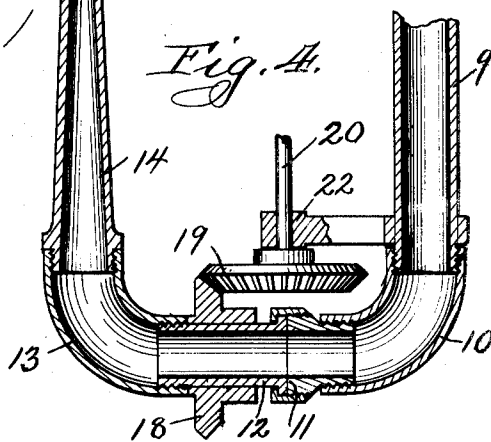
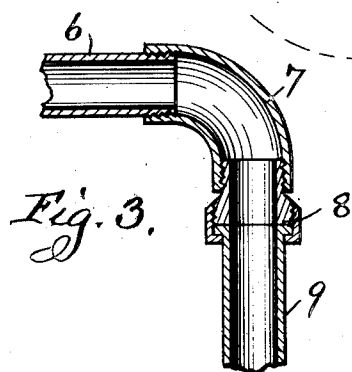
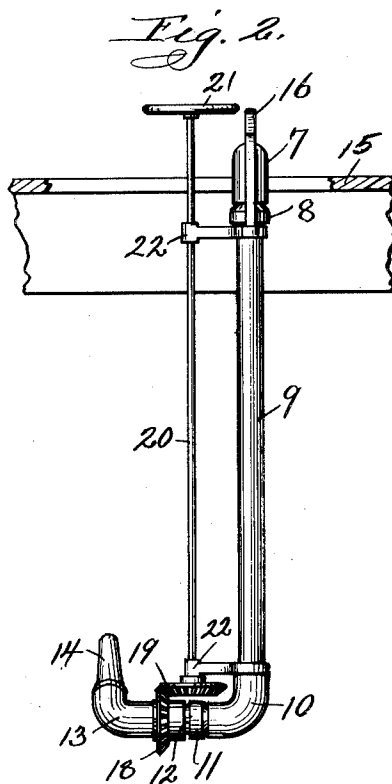
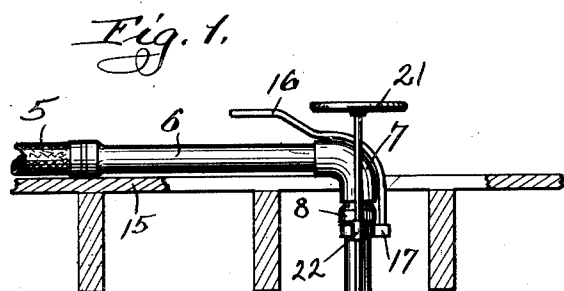


No. 864,910.

PATENTED SEPT. 3, 1907.

C. W. O'NEILL.
BASEMENT PIPE.

APPLICATION FILED MAY 23, 1906.



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UNITED STATES PATENT OFFICE.

CHARLES W. O'NEILL, OF CHICAGO, ILLINOIS.

BASEMENT-PIPE.

No. 864,910.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed May 23, 1906. Serial No. 318,429.

To all whom it may concern:

Be it known that I, CHARLES W. O'NEILL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Basement-Pipe, of which the following is a specification.

My invention relates to basement pipes used to extinguish fires in basements by dropping the pipe through a hole in the floor above, and the objects of my improvements are, first, to enable turning the nozzle in a complete circle in a vertical plane; second, to enable turning the nozzle in a circle in a horizontal plane without moving the hose connected thereto; third, to make a light, durable and cheap construction and other objects to become apparent from the description to follow.

In case a fire starts in a basement it often happens that the heat is so intense or the smoke so dense that it is impossible for a person to enter the basement in which case it is customary to cut a hole through the floor above and drop a basement pipe through the same to ply water onto the fire below. To obtain the best results the pipe or nozzle must be turned to direct the water onto the flame. In many cases the fire traveled from place to place and it was necessary to lift or move a portion of the charged hose each time the nozzle was turned in a different direction. This required considerable work on the part of the firemen, and if the hose happened to be in a confined place it was impossible to shift the nozzle.

By the use of my invention the nozzle can be turned to direct the stream of water in any desired direction. beneath the floor either in a vertical plane or a horizontal plane without lifting or moving the charged hose.

Heretofore basement pipes were so constructed that it was impossible to direct a stream of water directly up toward the opening through which the basement pipe extended and for this reason firemen were obliged to retreat from such opening when the fire came up through the same. With the use of said basement pipes, it was also impossible to direct a stream of water back under the sidewalk or pavement. These objectionable features are overcome by the use of my invention.

To describe my invention so that others versed in the art to which it pertains will understand it sufficiently to make and use the same I have illustrated it on the accompanying sheet of drawing forming a part of this specification in which:—

Figure 1, is a side elevation of a basement pipe embodying my invention shown in position through a hole in the floor; Fig. 2, is an end elevation of the same; Fig. 3, is an enlarged central section showing the swivel joint in the vertical pipe and Fig. 4, is an

enlarged central section showing the swivel joint in the horizontal section.

Similar reference characters refer to similar parts throughout the several views.

I have shown and will describe a construction which I at present consider the best, but it will be understood that the construction and arrangement of parts are capable of being modified without departing from the spirit of the invention.

The end of a hose 5 is coupled in the usual way to a short horizontal pipe 6 which has secured on its other end the elbow 7. The downwardly extending end of elbow 7 has secured to it one member of a swivel joint 8 the other member of which is connected to the upper end of the vertical pipe 9. The lower end of pipe 9 is provided with an elbow 10 the other end of which has connected thereto one member of a swivel joint 11. The other member of the swivel joint 11 is connected to the horizontal pipe 12, provided on its other end with the elbow 13. Secured in the other end of the elbow 13 is a nozzle 14 which determines the direction of the stream of water forced through the hose 5, pipe 6, elbow 7, joint 8, pipe 9, elbow 10, joint 11, pipe 12 and elbow 13.

When in use the hose 5 and pipe 6 are resting on the floor 15 and all parts below elbow 7 are extending below the floor having been passed down through a hole which had been cut through the floor 15. The swivel joint 8 permits the pipe 9 to be turned on its axis while the elbow 7 remains stationary, and to turn pipe 9 into any desired position a hand lever 16 is rigidly secured to pipe 9 by means of a bracket 17 having its free end terminating above elbow 7 within easy reach of the person operating the device. The swivel joint 11 permits the pipe 12 to be turned on its axis while the elbow 10 remains stationary and to turn pipe 12 into any desired position a bevel gear 18 is rigidly secured on pipe 12 which meshes with a bevel gear 19 mounted on the lower end of a shaft 20 which extends up to a point above the floor 15 to within easy reach of the operator where it is provided with a hand wheel 21. The shaft 20 is mounted in bearings 22 which are secured in position by brackets extending out from pipe 9.

In operation supposing a fire to be burning below floor 15, a hole is cut through the floor, the device forming the subject matter of this invention is passed down through the hole as described, the hose 5 is charged with water and the operator manipulates the hand lever 16 and hand wheel 21 directing the stream of water flowing from nozzle 14 by turning pipe 9 and pipe 12. It will be seen that pipe 9 is limited in its revolution by the hand lever 16 contacting with pipe 6, although considerable more than a one half turn can be made. The pipe 12 is free to make a complete revolution. The portion of the device extending below floor 15 is

all metal so it will not be damaged by heat, but the fire or flame may come so close to the hole in floor 15 that the operator would be in danger, so to protect himself he can direct the stream of water up all around the hole or even straight up through the hole, which is a novel feature of this invention.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent of the United States is:—

10 1. In a device of the class described, a horizontal pipe, a vertical pipe connected to and depending from said horizontal pipe arranged to swivel on a vertical axis, a nozzle connected to the lower end of said vertical pipe arranged to swivel on a horizontal axis, a handle rigidly secured to said vertical pipe to move the same and means for turning said nozzle on its axis.

15 2. In a device of the class described, a horizontal pipe, a vertical pipe connected to and depending from said horizontal pipe arranged to swivel on a vertical axis, a handle to move said vertical pipe on its axis, a nozzle

connected to the lower end of said vertical pipe arranged to swivel on a horizontal axis, a bevel gear secured to said nozzle meshing with a bevel gear mounted on a vertical shaft terminating above said horizontal pipe and a hand wheel secured on the upper end of said shaft to operate said nozzle. 25

3. In a device of the class described, a horizontal pipe, a vertical pipe connected to and depending from said horizontal pipe, a nozzle connected to the lower end of said vertical pipe arranged to swivel on a horizontal axis, a bevel gear secured to said nozzle meshing with a bevel gear mounted on a vertical shaft terminating above said horizontal pipe and a hand wheel secured on the upper end of said shaft to operate said nozzle. 30

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses this 17th day of May, 1906 at Chicago, Illinois. 35

CHARLES W. O'NEILL.

Witnesses:

WM. B. LOEB,
R. J. JACKER.