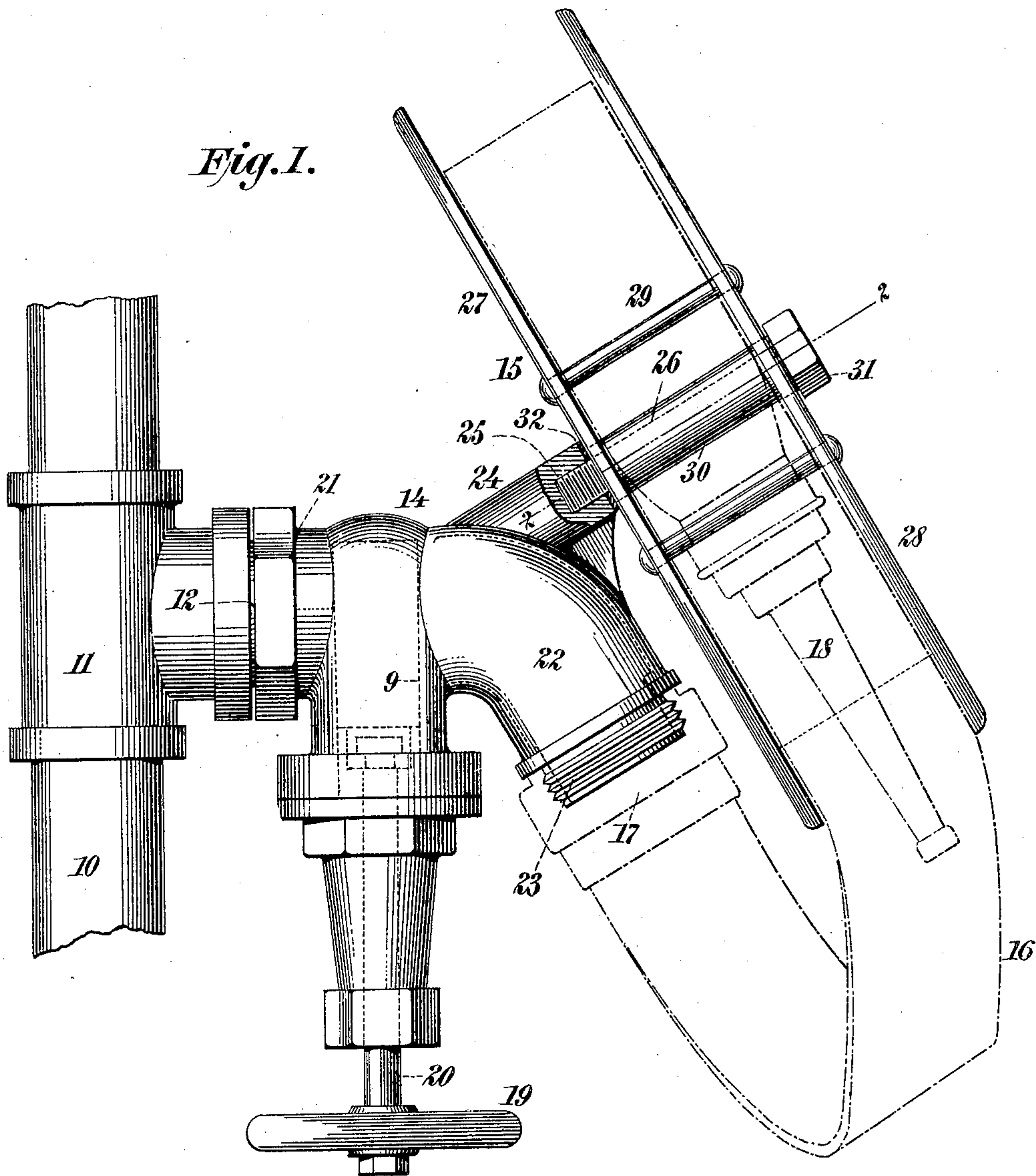


No. 803,095.

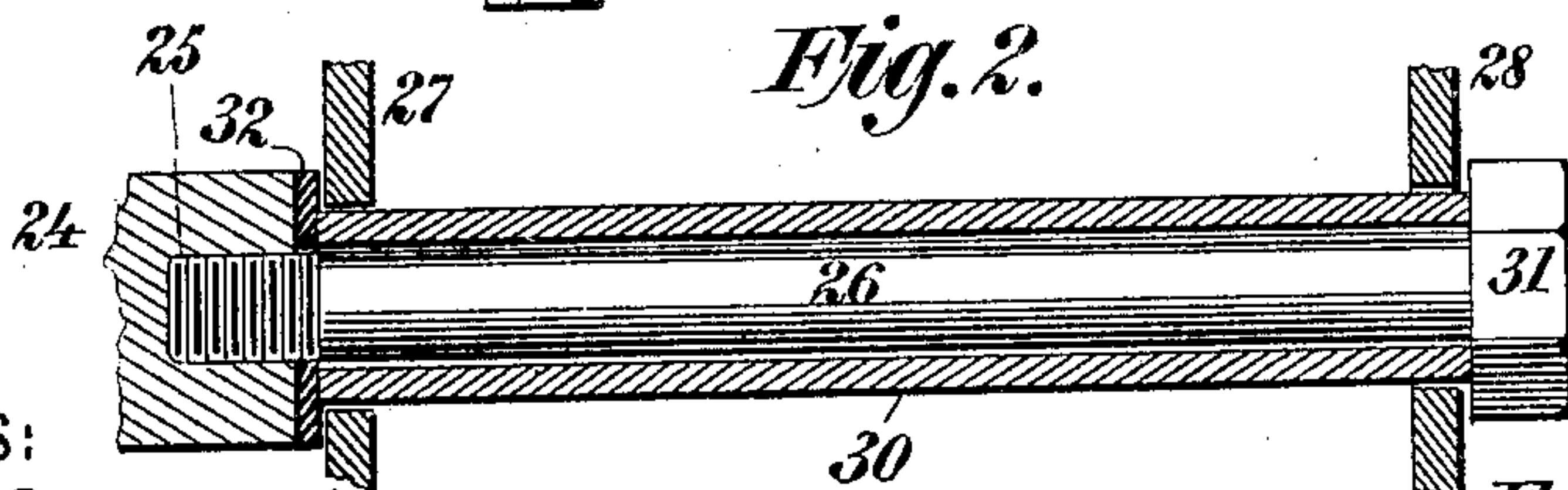
PATENTED OCT. 31, 1905.

E. CLIFF.  
FIRE HOSE APPARATUS.  
APPLICATION FILED MAY 11, 1904.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## FIRE-HOSE APPARATUS.

No. 803,095.

Specification of Letters Patent.

Patented Oct. 31, 1905.

Application filed May 11, 1904. Serial No. 207,401.

*To all whom it may concern:*

Be it known that I, EDWARD CLIFF, a citizen of the United States, and a resident of East Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Fire-Hose Apparatus, of which the following is a specification.

The invention relates to improvements in fire-hose apparatus of the character employed in buildings having fixed water-supply pipes, to which said apparatus may be applied, and pertains more particularly to improvements in the character of apparatus described and claimed in Letters Patent of the United States No. 608,651, granted to me August 9, 1898, which Letters Patent illustrate a valve-casing having an inlet-nozzle at one vertical side, an outlet-nozzle at its bottom for connection with the hose, and a vertical post on its upper side to receive in a pivotal manner the reel or rack, as the case may be, for supporting the hose. The valve-stem is shown in the drawings of said Letters Patent as having its hand-wheel at the upper side of the valve-casing, and said wheel being in this position it is when the apparatus is installed at certain elevations inconvenient to be reached, and due to the position of the wheel and its valve the water from the supply-pipe of the building even when the valve is closed fills within the valve-casing.

In accordance with my present invention the hose-support is held by a pivot-post disposed on the valve-casing as before; but I locate the hand-wheel for the valve below the hose-support, so that it may be readily reached, and I arrange the valve so that when closed it cuts off the water in the supply-pipe from the valve-casing, whereby when the apparatus is not in actual operation the water-pressure is not only excluded from the hose, but also from the valve-casing and from about the valve-stem. The entire apparatus, comprising the valve-casing, valve, and hose-support, constitutes one combined structure occupying the minimum amount of space and capable of efficient and convenient use.

I have conveniently illustrated my invention herein as embodied in a combined valve-casing and reel, with the reel disposed at an angle to the vertical line of said casing, the reel itself being of known construction and

of substantially the character disclosed in Letters Patent No. 597,100.

The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, partly in section, of a valve-casing and hose-reel constructed in accordance with and embodying the invention, the hose being represented by dotted lines; and Fig. 2 is a longitudinal section through a portion of the apparatus on the dotted line 2 2 of Fig. 1.

In the drawings, 10 designates the usual water-supply pipe, and 11 a coupling therein, to which by means of an ordinary nipple 12 the hose-reel apparatus of my invention is attached, said apparatus comprising a valve-casing 14, a reel 15, and a suitable length of hose 16, the latter being coupled at its end 17 to said valve-casing and at its other end being supplied with a suitable discharge-nozzle 18.

The valve-casing 14 contains an ordinary valve 9, operable by means of a hand-wheel 19, secured upon the lower depending end of the valve-stem 20, and the said valve-casing embodies at one end the member 21 to engage the nipple 12 and at its other end the downwardly-curved nozzle 22, provided at its lower end with the threaded section 23 to receive the hose-coupling. Upon the upper side of the nozzle 22 and integral therewith is provided the lug 24, which extends upwardly and outwardly at an angle from the upper side of said nozzle and contains a threaded socket 25 to receive the end of the central bolt 26 for the reel 15, the said bolt 26 being on the angle of said lug 24 and socket 25.

The reel 15 comprises the disks 27 28, connected by rods 29, as usual, and mounted upon a tube or sleeve 30, through which the bolt 26 passes, the ends of said sleeve 30 loosely fitting within apertures in the disks 27 28, and the outer end of said sleeve taking the pressure of the head 31 of said bolt, while the inner end of said sleeve presses against the packing-washer 32 at the outer end of the lug 24, as more clearly illustrated in Fig. 2.

The apparatus hereinbefore described thus comprises the valve-casing 14, reel 15, and hose 16, and this apparatus may be easily applied to the water-supply pipe 10.



In the employment of the apparatus the same will be applied to the pipe 10 in the manner shown in Fig. 1, the valve being closed and the hose being doubled upon itself and wound upon the reel. The hose will be wound upon the rods 29, as usual, and the apparatus when once in position will be left there undisturbed until an emergency shall call for its use. In the event of a fire an attendant will open the valve 9 and then take hold of the nozzle 18 and run with it toward the fire, this action causing the reel to unwind the hose. The curved nozzle 22 will direct the water from the pipe 10 with the least amount of friction and in the proper direction to the hose 16. After the fire shall have been extinguished the valve 9 will be closed, the water drained out of the hose, and the latter then doubled at its middle portion and rewound upon the reel 15. I prefer to mount the reel 15 on an incline of about thirty degrees, because when the reel is thus mounted an attendant desiring to unwind the hose may run with the nozzle 18 either directly to the right or left or to the front of the reel, which is an advantage.

While I do not limit my invention in every instance to the inclined or angular arrangement of the reel 15 shown, I do regard such arrangement of said reel in connection with the valve-casing 14 and manually-operable valve as a part of my invention to be claimed herein.

The valve 9 is an ordinary gate-valve, and when in its closed position it excludes the water-pressure in the supply-pipe 10 from the interior of the valve-casing and from about the valve-stem as well as from the hose. The hand-wheel 19 for the valve is located below the hose-support, whereby the hose apparatus may be attached at a considerable elevation above the floor without rendering it unduly inconvenient for the said wheel to be reached and operated. It is desirable that in hotels the hose apparatus be disposed at a proper elevation from the floor to prevent the apparatus from being in the way of persons passing through the halls and yet at such elevation as to render it convenient to get at and operate the apparatus when desired.

The entire apparatus is supported from the pipe 10, the same as is the case with the apparatus described in my aforesaid Letters Patent No. 608,651; but in the present instance the valve-casing has at one part a nozzle to receive one end of the hose, at another part a valve, valve-stem, and hand-wheel, and at a third part—to wit, on its upper side—a pivot-post to receive the hose-support, the said hand-wheel being below said post and said hose-support and said valve being adapted to close the inlet to the chamber of the valve-casing.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The valve-casing to be connected with the water-supply apparatus and having at one part a nozzle to receive one end of the hose, at another part a valve, valve-stem and means for manually operating the same, and at a third part, to wit: on its upper side a post, combined with means mounted on said post and projecting beyond said casing for supporting the hose, the wheel for operating said valve-stem being below said post and said hose-support; substantially as set forth.

2. The valve-casing having at one side an inlet-nozzle to be connected with the water-supply apparatus, at another part an outlet for connection with one end of the hose, at another part a valve, valve-stem and hand-wheel therefor, and at another part, to wit: on its upper side a post, said valve being arranged to close said inlet and exclude the water-pressure in the water-supply apparatus from about the valve-stem, combined with means mounted on said post and projecting beyond said casing for supporting the hose, said hand-wheel being below said post and said hose-support; substantially as set forth.

3. The valve-casing having at one side an inlet-nozzle to be connected with the water-supply apparatus, at its opposite side an outlet for connection with one end of the hose, at the bottom the valve-stem and hand-wheel for the valve within the casing, and on its upper portion a post, said valve being arranged to close said inlet and exclude the water-pressure in the water-supply apparatus from about the valve-stem, combined with means mounted on said post and projecting beyond said casing for supporting the hose; substantially as set forth.

4. The valve-casing having at one side an inlet-nozzle to be connected with the water-supply apparatus, at its opposite side an outlet for connection with one end of the hose, at its bottom the valve-stem and hand-wheel for the valve within the casing, and on its upper portion a post which inclines upwardly and outwardly, said valve being arranged to close said inlet and exclude the water-pressure in the water-supply apparatus from about the valve-stem, combined with a reel mounted on said post to receive the hose when the latter is not in actual use, said reel being inclined downwardly and outwardly; substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 10th day of May, A. D. 1904.

EDWARD CLIFF.

Witnesses:

CHAS. C. GILL,  
ARTHUR MARION.