

W. F. BENTON.

FIRE PLUG.

APPLICATION FILED OCT. 16, 1911.

1,038,523.

Patented Sept. 17, 1912.

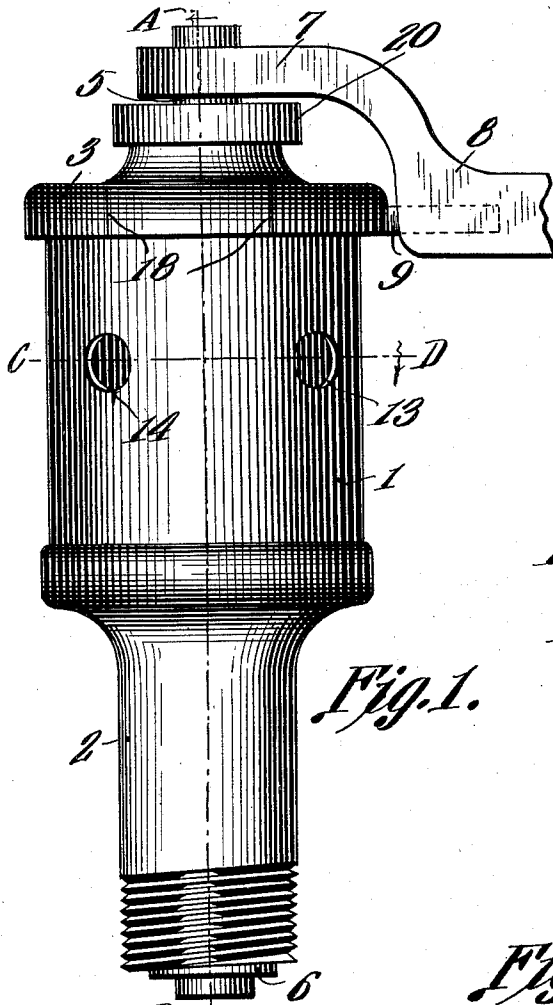


Fig. 1.

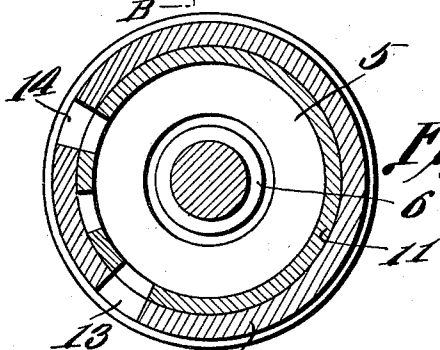


Fig. 3.

Witnesses

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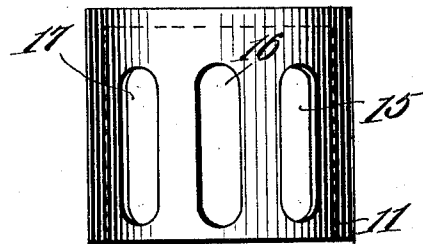


Fig. 4.

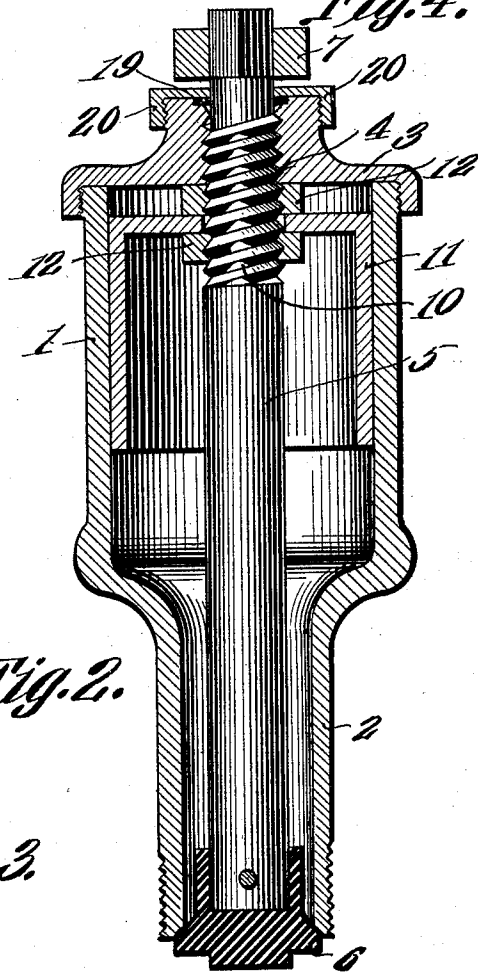


Fig. 2.

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FIRE-PLUG.

1,038,523.

Specification of Letters Patent.

Patented Sept. 17, 1912.

Application filed October 16, 1911. Serial No. 655,041.

To all whom it may concern:

Be it known that I, WILLIAM F. BENTON, a citizen of the United States, residing at Woodlawn, Birmingham, in the county of Jefferson and State of Alabama, have invented a new and useful Fire-Plug, of which the following is a specification.

This invention relates to fire plugs, its principal object being to provide means whereby one or more hose can be connected thereto, a single valve being employed for controlling the discharge of water from the plug.

A further object is to provide a novel form of valve by means of which the water can be permitted to escape through any or all of the outlet openings in the plug, it being unnecessary to cut off the supply of water to the plug during the adjustment of the valve.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a front elevation of a plug embodying the present improvements. Fig. 2 is a section on line A—B Fig. 1. Fig. 3 is a section on line C—D Fig. 1. Fig. 4 is an elevation of the valve.

Referring to the figures by characters of reference 1 designates the cylindrical casing of the plug, the same being formed with a downwardly extending tubular portion 2 adapted to be connected to a water main. The upper end of the casing 1 is closed by means of a cap 3 having a threaded bore 4 through the center thereof. A valve stem 5 extends longitudinally of the casing 1 and extension 2 and is provided, at its lower end, with a valve 6 adapted normally to be seated within the lower end portion of the extension 2 so as to cut off the supply of water to the casing. The upper end portion of the stem projects beyond the cap 3 and may be angular in cross sectional contour so as to be slidably engaged by an eye 7 formed at one end of an actuating lever or handle 8. This handle is extended downwardly and radially

from the plug and, when in normal position, abuts against a stop projection 9 extending from the cap 3, as shown in Fig. 1. When the handle is in this position the valve 6 is seated tightly upon the lower end portion of the extension 2. Quick screw threads 10 are formed on the stem 5 near the upper end thereof and are located in the threaded bore 4 of the cap 3. The stem 5 extends through the center of an inverted cup-shaped valve 11 which fits snugly within the casing 1 and is fixedly connected to the stem 5 by means of nuts 12 engaging the threads 10 and bearing upon the upper and lower faces respectively of the top of the valve 11. In the form of device illustrated the casing 1 has two outlet openings 13 and 14 respectively and the valve 11, which is open at its lower end, has three longitudinal slots 15, 16 and 17 respectively.

The parts are so proportioned that when the handle 8 is in contact with the stop 9 and the valve 6 is bearing upon its seat, all of the slots 15, 16 and 17, are out of register with the openings 13 and 14. When it is desired to couple a single hose to the plug, handle 8 is swung away from the stop 9, thus causing stem 5 and valve 11 to rotate. This movement is continued until either the slot 17 or the slot 16 is brought into register with the opening 13 to which the hose is coupled. The rotation of stem 5 causes valve 6 to move away from its seat and water will be free to enter the casing 1 from the main and then pass outwardly through the opening 13 and the slot registering therewith. Should it be desired to couple another hose to the plug, said hose is coupled at the opening 14 and by turning handle 8 the proper distance, slot 17 can be brought into register with the opening 14 while slot 15 will be brought into register with the opening 13. Further movement of the valve 11 in the same direction will cut off the supply of water to the opening 13 because slot 15 will be moved out of register with said opening. Slot 16, however, will be brought into register with the opening 14 and the supply of water to said opening 14 will continue. It will be apparent, therefore, that hose can be coupled to either or both of the outlets 13 and 14 and it is not necessary, in the structure disclosed, to cut off the supply of water to the plug when the hose are coupled or uncoupled successively.

Although but two openings 13 and 14

have been shown and described it is to be understood that three or more can be provided simply by increasing the number of slots in the valve 11. Any suitable means, such as graduations 18 may be provided upon the peripheral portion of the cap 3 and used in connection with the handle 8 to accurately indicate the positions of the slots 15, 16 and 17 relative to the openings 13 and 14.

In order to prevent leakage from the top of the plug, a packing ring 19 is seated within the upper end portion of the cap 3 and around the stem 5 above the threads 10, this packing being held in place by a retaining ring 20 screwed upon the end portion of the cap.

It is to be understood that the rotary valve 11 and its operating parts can be used with any style of intake valve other than that shown and can be applied to some types of plugs now in use.

What is claimed is:—

A fire plug including a casing having an inlet at its lower end and spaced outlets adjacent its upper end, a valve stem having screw threads engaging the upper end of the casing, means for rotating the stem to shift it longitudinally within the casing, a cut-off valve revoluble with the stem and normally closing the inlet, a cup-like valve detachably secured to and revoluble with the threaded portion of the stem and normally closing the outlets, said valve having elongated slots movable into position to open either or both of the outlets during the rotation of the stem and the unseating of the inlet valve.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM FRANCIS BENTON.

Witnesses:

JAMES HIBBLER,
J. C. ARNOLD.

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