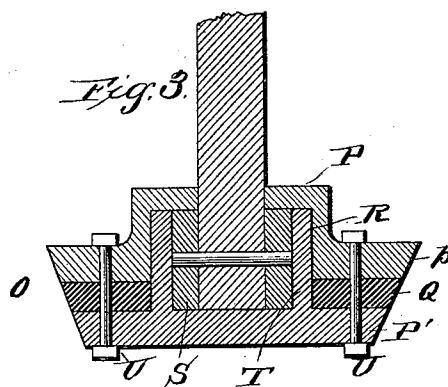
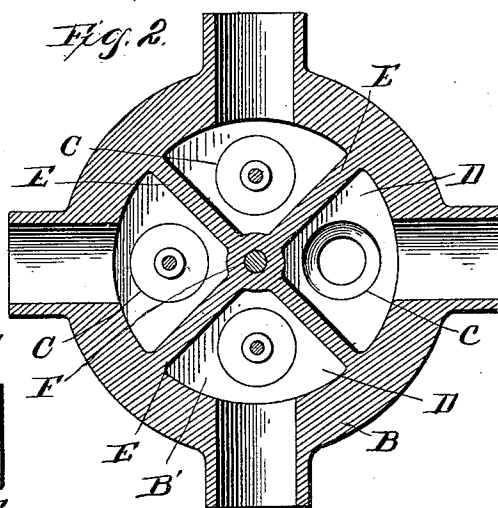
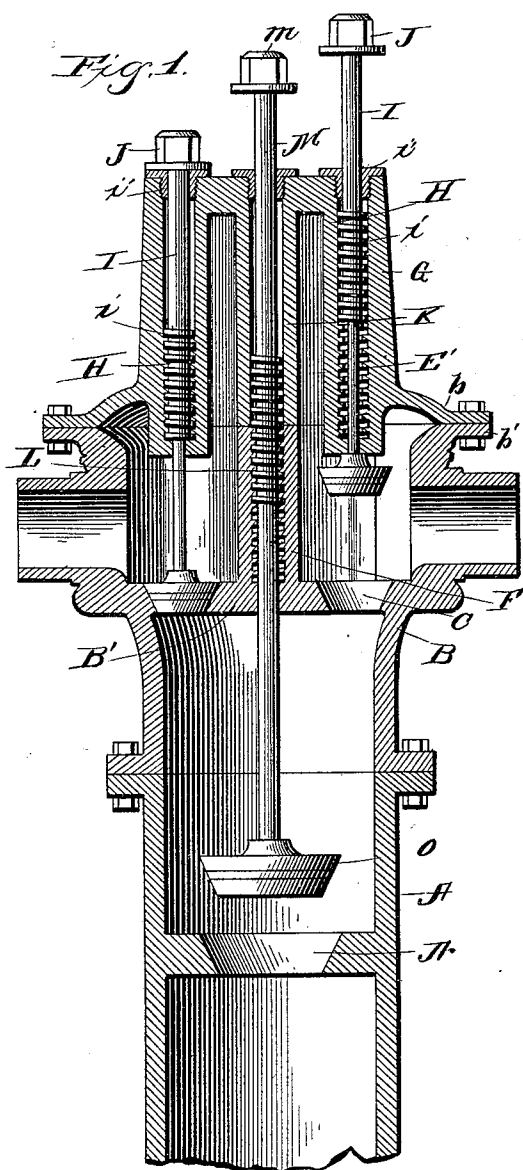


(No Model.)

S. GUSTIN.
DISTRIBUTING VALVE.

No. 481,943.

Patented Sept. 6, 1892.



Witnesses

E. C. Werdeman
D. P. Wethaupt,

Inventor

Samuel Gustin

By *his* Attorneys,

Chas. Snow & Co.

UNITED STATES PATENT OFFICE.

SAMUEL GUSTIN, OF SING SING, NEW YORK.

DISTRIBUTING-VALVE.

SPECIFICATION forming part of Letters Patent No. 481,943, dated September 6, 1892.

Application filed April 15, 1892. Serial No. 429,324. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL GUSTIN, a citizen of the United States, residing at Sing Sing, in the county of Westchester and State of New York, have invented a new and useful Distributing-Valve, of which the following is a specification.

This invention relates to distributing-valves; and it has for its object to provide an improved valve having a series of separate and independent valve-chambers which are independently and separately controlled, while at the same time the valve is simple in construction, inexpensive, and easily adapted for use in connection with any line of piping used for distributing water or gas.

It is the main object of this invention to provide means whereby one or more streams of water or gas may be taken from a main without interference with each other in any particular, which is a point of particular advantage in repairing where the defective or injured valve can be easily repaired without cutting off the entire supply of water from the main.

With these and many other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a vertical sectional view of my improved distributing-valve connected with a distributing stand-pipe. Fig. 2 is a horizontal sectional view of the same. Fig. 3 is an enlarged detail sectional view of one of the swiveled valves.

Referring to the accompanying drawings, A represents a hydrant stand-pipe or other suitable supply-pipe, to the top of which is secured the valve-casing B. The said valve-casing B is provided with a series of beveled valve-seats C, which communicate with the stand-pipe A below the same and are inclosed by the series of valve-chambers D, formed over said valve-seats and openings by a series of radially-extending partitions E, cast integral with the valve-base B', in which are formed said valve-seats, and extending radially from the central perforated hub F and projecting upwardly through the body of the valve-casing and forming joints with similar

partitions E' in the valve-casing cap G. The said cap G is provided with the lower securing-flange b, which is securely bolted to a corresponding flange b', surrounding the top of the valve-casing, whereby the said cap can be readily removed from the casing when desired.

Depending from the top of the cap G and centrally within each of the partition-inclosed valve-chambers D is a series of interiorly-threaded hubs H, which project within the valve-chambers above the valve-openings therein and accommodate the valve-stems I. The said valve-stems I are provided with threaded portions i, engaging the threaded portion of said hub. The said stems extend upward through the packing-boxes i' in the top of the cap G and terminate in the squared heads J, which receive a suitable wrench or tool for raising and lowering the screw-stem.

Depending centrally from the top of the cap G and centrally within the several surrounding hubs H is the main hub K, which extends down and registers with the central perforated hub F of the valve-base and is itself provided with a threaded portion L, which receives the threaded valve-stem M, working therein and projecting through the top cap of the valve-casing and terminating in a squared operating-head m, similar to the other smaller surrounding stems just described. The main-valve stem M passes through the valve-base and projects into the stand-pipe A to work over the main-valve opening N therein for entirely shutting off the supply when desired, but is usual left open, inasmuch as any one of the several valve-openings in the valve-base can be brought into play or closed when desired.

To the lower ends of the main-valve stem projecting into the stand-pipe and the several surrounding smaller stems are swiveled the valves O, which are easily secured to and removed from the stems for repairing, and which, on account of their connection with the stems, will close tightly on an imperfect seat. The valves O comprise the upper and lower valve-disks P and P', respectively, between which is securely clamped the bevel-washer Q. The upper valve-disk P is provided with the beveled edge p and the central perforated recess R, which accommodates the

swiveled collar S, secured to the end of the valve-stems projecting into the perforated recessed portion R, so as to provide means for swiveling the upper valve-disk upon the lower end of the stem to which the same is attached. The lower valve-disk P' is provided with an upwardly-extending flange T, which fits within the recessed portion of the upper disk and incloses the collar S therein. The two disks and the intermediate washer Q, turned to fit the beveled edges of said disk, are securely bolted together by means of suitable bolts U, which permit the same to be readily detached for the purpose of repair and removal, while at the same time providing a valve swiveled freely upon the end of the stem to which the same is attached. Now it will be seen that the central or main valve may be open to its fullest extent without letting on the stream. Connections can then be made with any of the outlets communicating with each of the several water or valve chambers, so that each separate valve can be manipulated independent of the other valves to either discharge a separate stream or shut the same off at will. It will also be observed that the cap G, inclosing the several valve-chambers, forms an air-chamber above the several outlets opening from the several chambers, so as to form an air-cushion which materially assists in the steady flow of the stream.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the main supply-pipe, of a distributing-valve casing having a series of partitioned valve-chambers and valve-seats within each of said chambers, of an inclosing cap secured to said casing to form an air-chamber and provided with a series of

interiorly-threaded hubs projecting into each of said valve-chambers, threaded valve-stems working in said hub and terminating above the cap in squared operating-heads, and valves swiveled to the lower ends of said stems within said chambers, substantially as set forth.

2. The combination, with the main supply-pipe having a valve-seat, of a distributing-valve casing mounted upon said supply-pipe and having a series of partitioned valve-chambers and valve-seats within each of said chambers, an inclosing cap secured to said casing and provided with a central interiorly-threaded hub extending to the valve-seats within said casing, and a surrounding series of shorter interiorly-threaded hubs projecting into each of said valve-chambers, threaded valve-stems working through the several hubs and terminating above the cap in squared operating-heads, and valves swiveled to the lower ends of said stems, substantially as set forth.

3. The combination, with a valve-stem, of a valve having an upper valve-disk provided with a central recessed portion having a top perforation, a swiveled collar secured to the end of the valve-stem projecting within said recessed portion, a lower valve-disk provided with an upwardly-extending flange fitting within the recessed portion of the upper disk and inclosing the collar therein, and a beveled washer also fitting over the flange of the lower disk and clamped between both of said disks, substantially as set forth.

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

SAMUEL GUSTIN.

Witnesses:

EDGAR L. RYDER,
SMITH LENT.