No. 615,243. Patented Dec. 6, 1898.

A. E. BOCQUET.

GAS COCK OR VALVE.

(Application filed June 3, 1898.)

(No Model.)

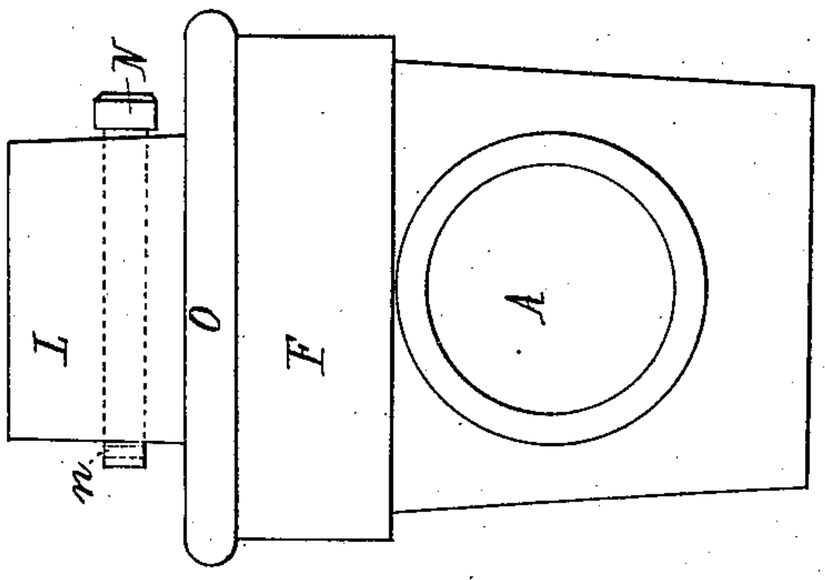

FIG. 3

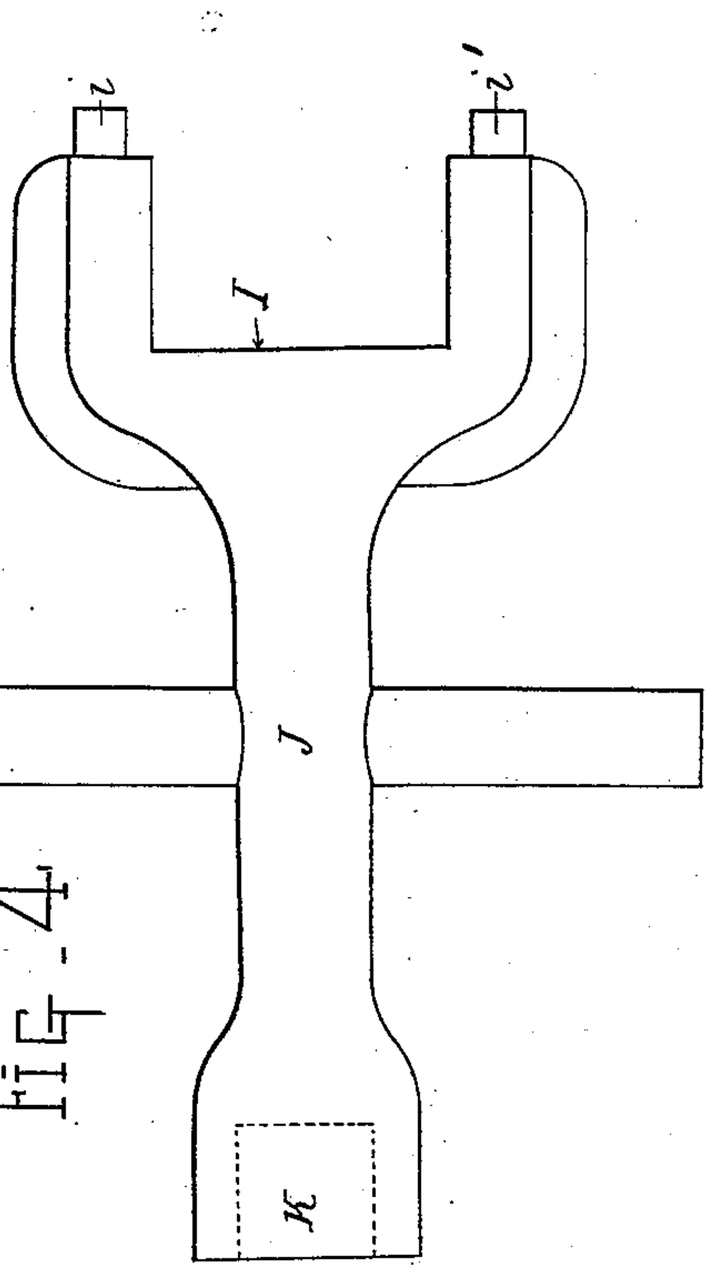

FIG. 4

FIG. 1

FIG. 2

Witnesses:
H. K. Boulter
D. Whittemore

Inventor
Albert E. Bocquet,
By Wm. E. Boulter,
attorney

UNITED STATES PATENT OFFICE.

ALBERT EUGENE BOCQUET, OF MAROMME, FRANCE.

GAS COCK OR VALVE.

SPECIFICATION forming part of Letters Patent No. 615,243, dated December 6, 1898.

Application filed June 3, 1898. Serial No. 682,452. (No model.)

To all whom it may concern:

Be it known that I, ALBERT EUGENE BOCQUET, a citizen of the Republic of France, and a resident of Maromme, near Rouen, France, have invented certain new and useful Improvements in Gas Cocks or Valves, of which the following is a full, clear, and exact description.

This invention has relation to gas cocks or valves; and among the objects in view are to provide a gas cock or valve which shall be simple in construction, which shall have a plug whose gas-passage is of a diameter equal to that of the supply-pipe in which it is located, which is adapted to be locked and sealed in a position to cut off the supply of gas, thus preventing unauthorized manipulation of the cock and preventing any supply of gas to a customer after the cock has been closed; and with the above and other objects in view the invention consists in the novel construction, arrangement, and combination of parts, as hereinafter fully described, illustrated in the drawings, and pointed out in the appended claims.

In the drawings, Figure 1 is a vertical sectional view, partly broken away, of a gas-cock embodying my invention. Fig. 2 is a plan view of the cock. Fig. 3 is an end view. Fig. 4 is a plan view of a special form of tool employed for manipulating parts of the cock.

A indicates the stop-cock casing, which may be made of any desired size, and B indicates a plug having a bore or passage of a diameter equal to that of the interior of the casing A. Said plug is conical and fits within a conical seat, and it will be observed that the casing at one side is projected, as at a', and diametrically opposite has an annular flange or extension a. Within the projection a' the lower end of the plug is fitted, while the upper end of said plug fits within the extension a. The flange a is threaded externally to receive a hollow cap F.

For the purpose of holding the plug firmly and closely within its seat I employ a coiled spring E, seated at opposite ends within recesses M M', formed in the cap and flange a, respectively. By thus recessing the cap and flange the height of the cap above the plug, to permit the introduction of the spring between them, is lessened.

The plug is provided with an integral upwardly-projecting stem C', whose upper end is squared, as at C, to adapt it to be grasped and turned by a suitable key or other tool. A convenient tool for the purpose is shown in Fig. 4, wherein the tool J is shown as provided at one end with a socket K, adapted to fit over the squared end C of the stem C' of the plug to effect the turning of the latter. The opposite end of the tool is forked, as at I, the fork ends being provided with projections $i\ i'$, which are adapted to fit in sockets H H' in the cap F to adapt the latter to be readily screwed on and off the flange a.

For the purpose of providing means whereby the supply of gas through the cock may be cut off and unauthorized tampering with the cock without detection be prevented I provide the stem C' and the upwardly-extending portion L of the cap with elongated slots X, which when the plug is turned into a position to entirely cut off the flow of gas, as indicated in Fig. 1, will aline with each other. When the slots are thus alined, a pin N is passed therethrough, said pin being headed at one end and being of sufficient length to extend beyond the cap at the opposite end, and said pin is provided with an aperture n, through which a wire or small key may be passed to seal the pin in position.

The length of the slots is slightly greater than the diameter of the pin, so as to avoid the possibility of the pin not being able to be inserted when the plug has from use worn farther down into its seat, and the diameter of the pin is exactly the width of the slots, so as to prevent the plug being turned in either direction after the pin has been inserted. The pin can only be introduced when the cock is closed and the cap screwed down, said cap screwing from left to right and the plug closing against its stop when turned from right to left. Thus with this arrangement there is no waste of gas and there is an absolute security for the gas company when the gas is cut off from a consumer.

Instead of using the tool shown in Fig. 4 for operating the plug and cap any other instrument might be used, and the cap may be provided with a bead O, which might, if desired, be milled to enable said cap to be turned.

My improved cock is applicable wherever

cocks might be desirable or necessary in gas-distributing systems.

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

1. In a gas cock or valve, the combination with a casing and a conical plug, having a bore, revolubly seated in the casing and having an extension or stem, of a cap detachably secured to the casing, the said stem and cap being provided with apertures adapted to aline with each other when the plug is turned to cut off the supply of gas, the said apertures having a greater length than width and adapted to receive a pin of a diameter equal to the width of the said apertures.

2. In a gas cock or valve, the combination with a casing, and a conical plug having a bore and revolubly seated in the casing, and having an extension or stem, of a cap detachably screwed to the casing and having a hollow extension surrounding the plug-stem, a spring interposed between the plug and cap and pressing upon the plug, and elongated apertures in the plug-stem and the extension of the cap and adapted to aline, as set forth, and to receive a pin, for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of May, 1898.

ALBERT EUGENE BOCQUET.

Witnesses:
P. PELFRÉRE,
G. DELEANY.