(No Model.)

G. T. KENLY.

FAUCET.

No. 575,840. Patented Jan. 26, 1897.

Fig. 1

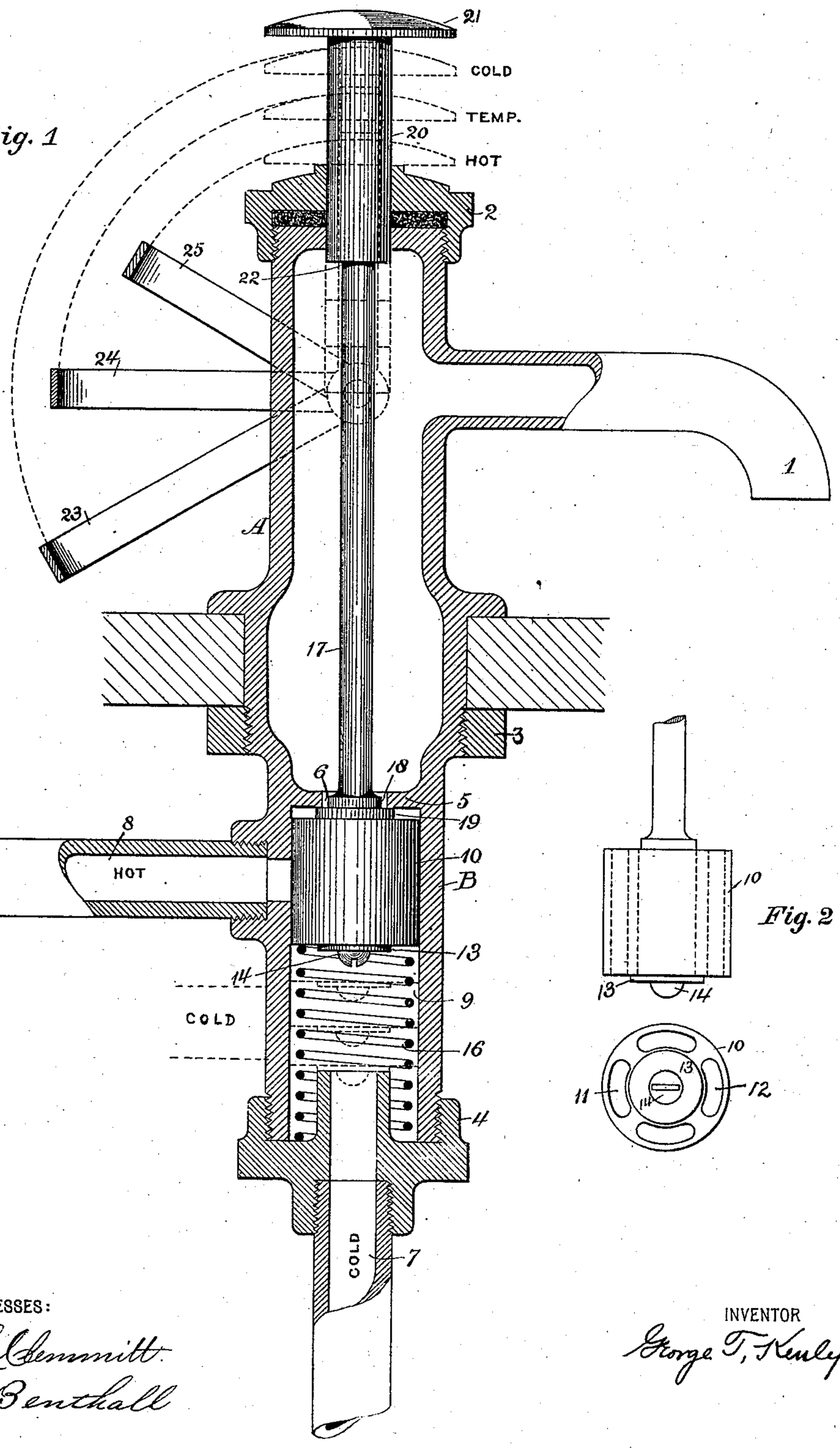

Fig. 2

WITNESSES:

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GEORGE T. KENLY, OF BALTIMORE, MARYLAND.

FAUCET.

SPECIFICATION forming part of Letters Patent No. 575,840, dated January 26, 1897.

Application filed May 21, 1896. Serial No. 592,424. (No model.)

To all whom it may concern:

Be it known that I, GEORGE T. KENLY, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Faucets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to faucets, and more particularly to those faucets which are adapted to supply either hot or cold water or a mixture of the two.

My object is to provide a superior faucet of the class described, and one which, owing to its simplicity, cheapness, and adaptability, will prove very valuable in those situations where a faucet of this class is desired.

My invention consists of certain novel features and combinations, which will appear more fully hereinafter.

In the accompanying drawings, Figure 1 is a sectional side elevation of my complete invention, but with certain parts shown in full lines, dotted lines representing different positions of the valve or piston and plunger when in operation; and Fig. 2 is a side and end view of the valve or piston.

A designates an ornamental spigot having the usual spout 1. A screw-threaded packing-cap 2 is adapted to screw on the upper portion of the spigot.

B represents a cylindrical casing which forms the lower part of the faucet or spigot.

3 represents a nut screwed on the casing B for the purpose of holding the faucet firmly in position.

The lower end of the casing B is covered with a removable screw-thread cap 4 and is provided with a centrally-disposed fixed partition 5, having the central aperture 6. A cold-water-delivery pipe 7 projects up through the cap 4, while a hot-water-delivery pipe 8 opens into the upper part of the valve or piston compartment 9. If preferred, the cold-water pipe could also be located at the side of the casing, as shown by dotted lines, and I always do this when the pressure of water is high.

A cylindrical valve or piston 10 is adapted to fit the casing snugly yet easily, so as to be capable of free movement in the compartment 9. This piston is provided with arc-shaped diametrically opposite longitudinal delivery-channels 11 and 12, which afford water communication between its upper and lower ends. The lower end of the piston is provided with a centrally-disposed washer-valve, which consists of a rounded washer 13 and a screw-threaded bolt 14, that screws into the piston and holds the washer in place. The washer-valve is adapted to close the cold-water-delivery pipe 7 when the piston is at a limit of its downward movement, as shown by dotted lines. The piston is kept normally at the top of the compartment 9 by a coil-spring 16, on which it rests. A piston-rod 17 is connected to the upper end of the piston and passes up through the spigot. A second washer-valve, consisting of a circular portion 18 and a rounded washer 19, is adapted to close the aperture in the dividing-partition when the piston is at the top of its compartment.

An elongated cylindrical plunger 20, provided with a head 21, is adapted to fit snugly or screw on the upper end of the piston-rod 17 at 22 and to be capable of free movement within the packing 2. The body of this plunger is provided with suitable graduations or lettering to designate the distance it has to be depressed in order to get the proper water. In order to hold the piston or valve open, so that the water may run without the operator having to hold it down, I provide a series of pivoted bails 23, 24, and 25, which are of suitable lengths to keep the plunger properly depressed. The shorter bail is to be used for hot water, the next size for temperate, and the third for cold water. When it is desired to allow the water to run continuously, the plunger is depressed, and the piston in connection therewith, and the proper bail pushed up on top of it.

It is obvious that many slight changes of construction might be resorted to without materially affecting the character of my invention. For instance, the valve or piston might be so constructed and the pipes arranged in such a manner that it could be turned instead of depressed, or depressed in any manner, as by screw or lever, and the same desirable results obtained. I do not therefore limit myself to the precise construc-

tion herein shown and described, but consider myself entitled to all such variations as come within the spirit and scope of my invention.

The operation is as follows: Upon depressing the plunger until the cold-water mark comes in line with the top of the packing-cap, or upon depressing the piston in any manner the proper distance, the upper washer-valve is unseated and cold water is delivered up through the channels in the piston, the aperture in the partition into the spigot, and out through the spout. Upon depressing the plunger until the temperate-mark comes in line with the top of the packing-cap, or upon depressing the piston in any manner the proper distance, or until the top of the piston half opens up the hot-water pipe, hot water is also admitted, and a mixture of the two provides water of a moderate temperature. Upon depressing the plunger until the hot-water mark comes in line with the top of the packing-cap, or upon depressing the piston in any manner until the lower washer rests on top of cold-water-delivery pipe, or side of piston goes below the cold-water pipe where it enters the side, the cold water is shut off entirely, while the hot-water pipe is entirely opened, thus allowing only the hot water to flow up through the aperture in the partition, through the spigot, and out at the spout. When it is desired to maintain a steady flow of any water, the proper bail is pushed up over the head of the plunger.

One of the main advantages of my invention is that there is no likelihood of waste of water, as the faucet closes itself automatically and has the combined action of the spring and the pressure of the water to keep the valve tightly closed, thus preventing the slightest possible leak whatever.

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

1. In a faucet the combination with a spigot provided with a cylindrical chamber and a partition extending across the chamber and provided with an opening, of a depressible piston-valve movable in the chamber, said valve being provided with a channel or channels extending therethrough, a hot-water pipe leading into the chamber, a cold-water pipe extending up through the bottom of the chamber, a coil-spring encircling the projecting portion of the cold-water pipe and pressing against the piston-valve, and washer-valves connected to the upper and the lower faces of the piston-valve, substantially as described.

2. In a faucet the combination with a spigot provided with a cylindrical chamber, and a partition extending across said chamber and provided with an opening, of hot and cold water delivery pipes leading into a chamber, a spring-pressed piston-valve freely movable in the chamber, said valve being provided with a channel or channels extending therethrough but normally seated to prevent the delivery of water, a depressible plunger connected to the piston-valve, and a series of pivoted bails of different length adapted to engage with the plunger, substantially as described.

3. In a faucet the combination of a spigot provided with a cylindrical chamber and a partition extending across the chamber and provided with an opening, of a depressible piston-valve movable in the chamber, said valve being provided with a channel or channels extending therethrough, a hot-water pipe leading into the chamber, a cold-water pipe extending up through the bottom of the chamber, washer-valves connected to the upper and the lower faces of the piston-valve, and means for raising and lowering the piston-valve, substantially as described.

4. In a faucet the combination with a spigot provided with a cylindrical chamber and a partition extending across the chamber and provided with an opening, of a depressible piston-valve movable in the chamber, said valve being provided with a channel or channels extending therethrough, a plunger connected to the piston-valve, a hot-water pipe leading into the chamber, a cold-water pipe extending up through the bottom of the chamber, a coil-spring encircling the projecting portion of the cold-water pipe and pressing against the piston-valve, washer-valves connected to the upper and lower faces of the piston-valve and means for locking the plunger at different heights, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

GEORGE T. KENLY.

Witnesses:
LOUIS G. RANDALL,
JAS. M. O'CONNOR.