

No. 641,601.

Patented Jan. 16, 1900.

G. O. MILLER.
FAUCET.

(Application filed Jan. 10, 1899.)

(No Model.)

Fig. 1.

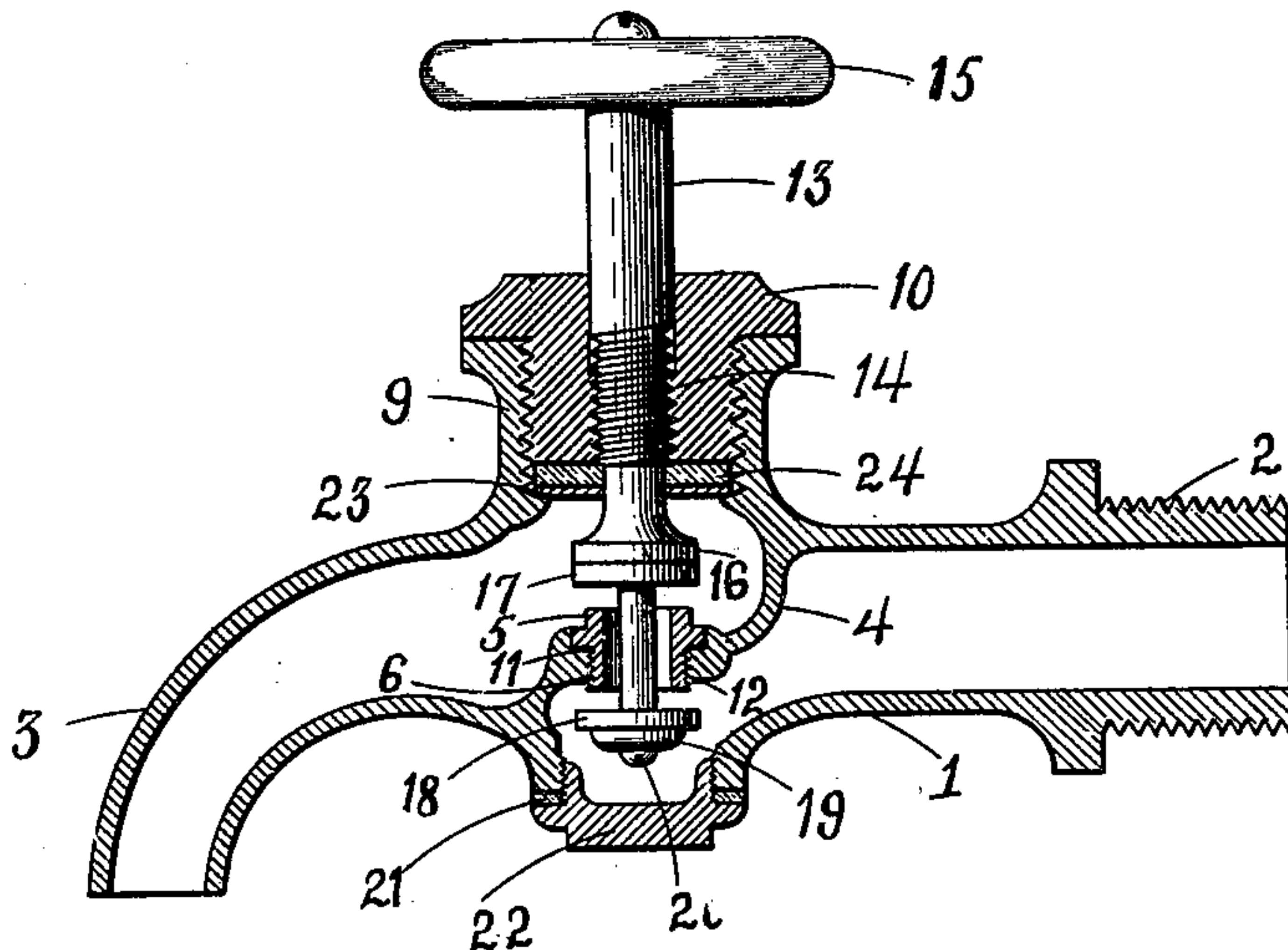


Fig. 2.

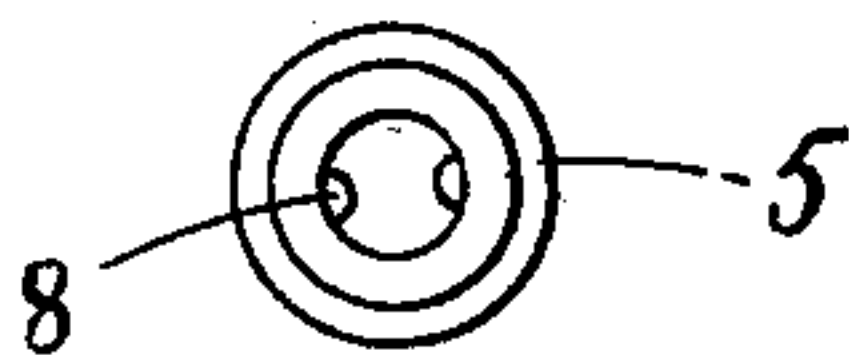
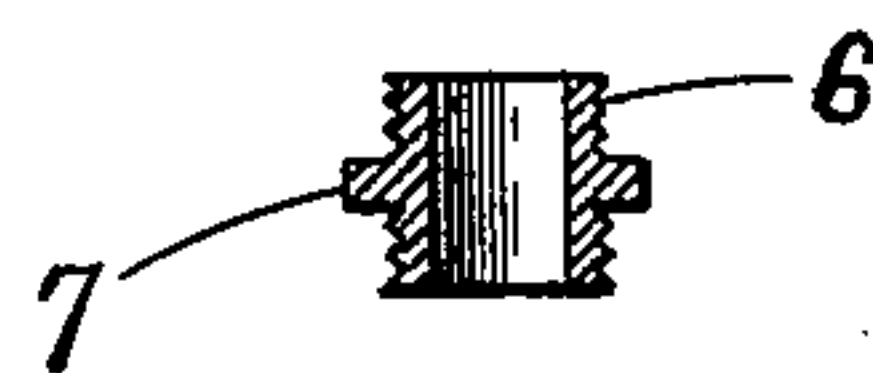


Fig. 3.



WITNESSES:
L. M. Billings.
J. A. Neubauer.

George O. Miller. INVENTOR

BY
A. J. Sangster.
ATTORNEY.

UNITED STATES PATENT OFFICE.

GEORGE O. MILLER, OF NORTH TONAWANDA, NEW YORK, ASSIGNOR TO
ALICE M. MILLER, OF SAME PLACE.

FAUCET.

SPECIFICATION forming part of Letters Patent No. 641,601, dated January 16, 1900.

Application filed January 10, 1899. Serial No. 701,702. (No model.)

To all whom it may concern:

Be it known that I, GEORGE O. MILLER, a citizen of the United States, residing at North Tonawanda, in the county of Niagara and State of New York, have invented certain new and useful Improvements in Faucets, of which the following is a specification.

My invention relates to an improved faucet, and particularly to the valve-seat construction thereof; and the main object of the invention is to provide a detachable seat portion that can easily be removed and replaced when injured or worn. It also relates to certain other details of construction, all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 represents a side sectional elevation, showing the interior construction of the faucet. Fig. 2 represents a detached top view of the detachable seat portion. Fig. 3 represents a detached side sectional elevation of the detachable seat portion, illustrating a modified form thereof, rendering it reversible.

Referring to the drawings in detail, in which like numerals represent like parts, 1 designates the body of the faucet, which is provided with the usual screw-threaded end 2 for connection to the water pipe and spout 3.

The interior of the faucet-body is divided into two compartments by means of the partition 4, which is provided with a screw-threaded opening 12, into which the short tubular portion 5, forming the detachable valve-seat, is inserted. This annular valve-seat can be formed with one of its ends 6 screw-threaded, as in Fig. 1, or with both screw-threaded, as in Fig. 3, the latter being preferable, as it enables the seat to be reversed, if desired.

The seat is provided with a central outwardly-extending peripheral enlargement or flange 7, and the upper portion 11 of the opening in the partition is enlarged sufficiently to provide a seat for the same. (See Fig. 1.) The seat is also provided with small projections 8, extending inwardly from the interior thereof, against which the sides of a screw-driver or other suitable instrument may be caught to rotate the seat, and thus insert it in or remove it from the opening in the partition. The faucet-body is also provided with the usual upper substantially vertical tubular portion

9, which is internally screw-threaded, and a top cap 10 is adapted to be inserted and screwed into said tubular portion. The top cap is provided with a central opening, which is smooth in its upper portion and screw-threaded in its lower portion, (see Fig. 1,) and the stem or plunger 13 is provided with a screw-threaded portion 14 of substantially the same lead and is adapted to be screwed into the lower portion of said opening, the upper smooth-surfaced portion of the opening being sufficiently large to allow the stem to pass freely through. The plunger is provided at its upper end with the usual handle or hand-wheel 15 and near its lower end, below the screw-threaded portion 14, with an enlargement 16, forming a shoulder or abutment. Below the enlargement 16 the stem or plunger is reduced sufficiently to allow it to pass freely through the opening in the valve-seat, and an upper washer 17, of leather or other suitable material, is secured upon said reduced portion with its upper face in contact with the abutment. A lower leather washer 18 is also secured upon the extreme lower end of the plunger by means of the metallic washer 19 and screw 20. A screw-threaded opening 21 is also provided in the faucet-body substantially vertically below the lower washer, and is closed by the screw-cap 22, thus providing means for the easy dismounting of the lower washer and its supports. The lower portion of the tubular portion is reduced sufficiently to provide a seat for a metallic washer 23, and a leather washer 24 is supported between said metallic washer and the lower end of the top cap, thus providing a packing for the plunger.

With my improved device the water can be shut off by turning the handle in either direction, as the upper washer will come in close contact with the upper face of the valve-seat and close the opening in the partition when it is turned in one direction, and the lower washer will come in contact with the lower face of the valve-seat and also close the opening when turned in the opposite direction. When it is desired to allow the water to flow, the plunger should be rotated to bring the washers in substantially the position shown in Fig. 1. By this means two practically independent valve-closures are

provided, and the danger of damaging the faucet by screwing it too far open is obviated, as the water is shut off by rotating the plunger too far in either direction.

5 With a little alteration the ordinary faucets now on the market can be provided with my improved detachable and reversible valve-seats and their value and lives greatly increased and lengthened thereby.

10 The faucet can be easily dismounted by removing the bottom cap, detaching the lower washer and its supports from the lower end of the plunger, and unscrewing the upper cap and removing it from the vertical tube. The
15 valve-seat can then be removed by any suitable instrument, as hereinbefore described.

I claim as my invention—

A faucet having a tubular screw-threaded extension for connection to the source of wa-
20 ter-supply, a spout and an upper and lower screw-threaded opening and having its inte-

rior divided into two compartments by a partition provided with a screw-threaded opening enlarging into an upper countersunk portion, a double-faced valve-seat having screw- 25 threaded ends screwing into the screw-threaded opening in the partition and a central flange seating in the countersunk portion, a plunger having a screw-threaded portion, a hand-wheel and upper and lower washers 30 adapted to contact with the faces of the valve-seat, a hollow cap having exterior screw-threads adapted to engage in the upper screw-threaded opening and interior screw-threads engaging with the screw-threaded portion of 35 the plunger, and a lower screw-cap adapted to close the lower screw-threaded opening, as set forth.

GEORGE O. MILLER.

Witnesses:

C. E. SAFFORD,
L. M. BILLINGS.