

No. 614,152.

Patented Nov. 15, 1898.

G. E. WEMHOFF.  
GAS KEY.

(Application filed Dec. 29, 1897.)

(No Model.)

Fig. 1.

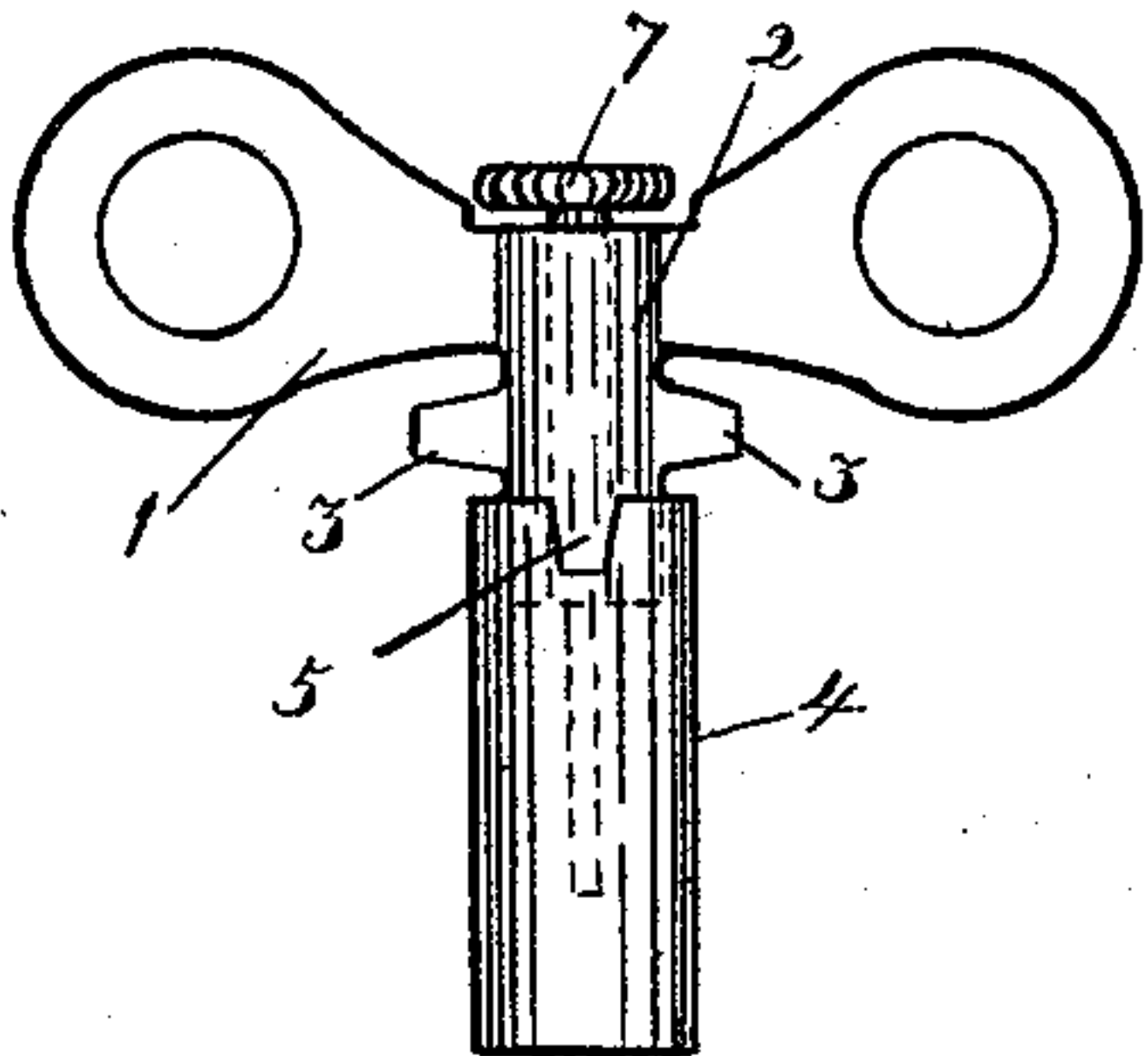


Fig. 4.

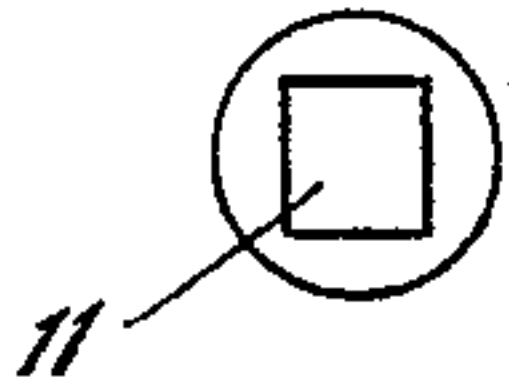


Fig. 3.

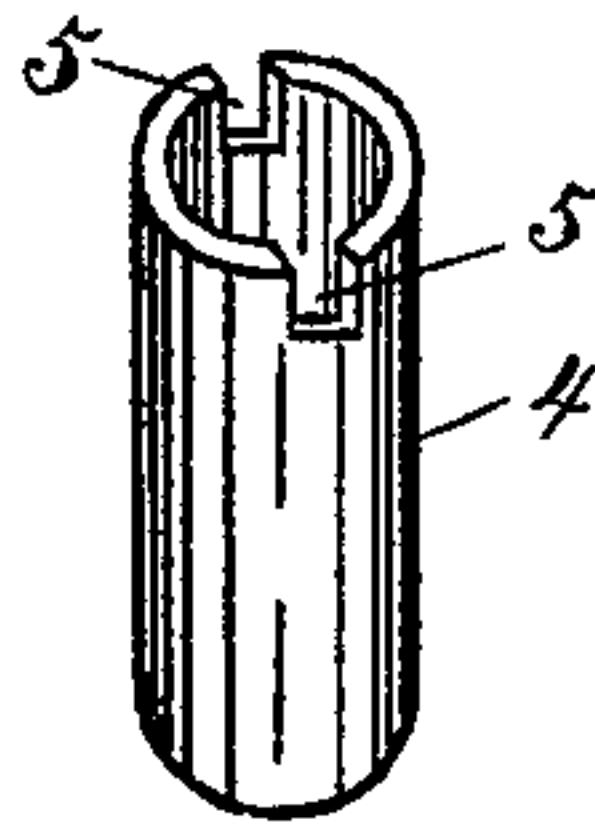
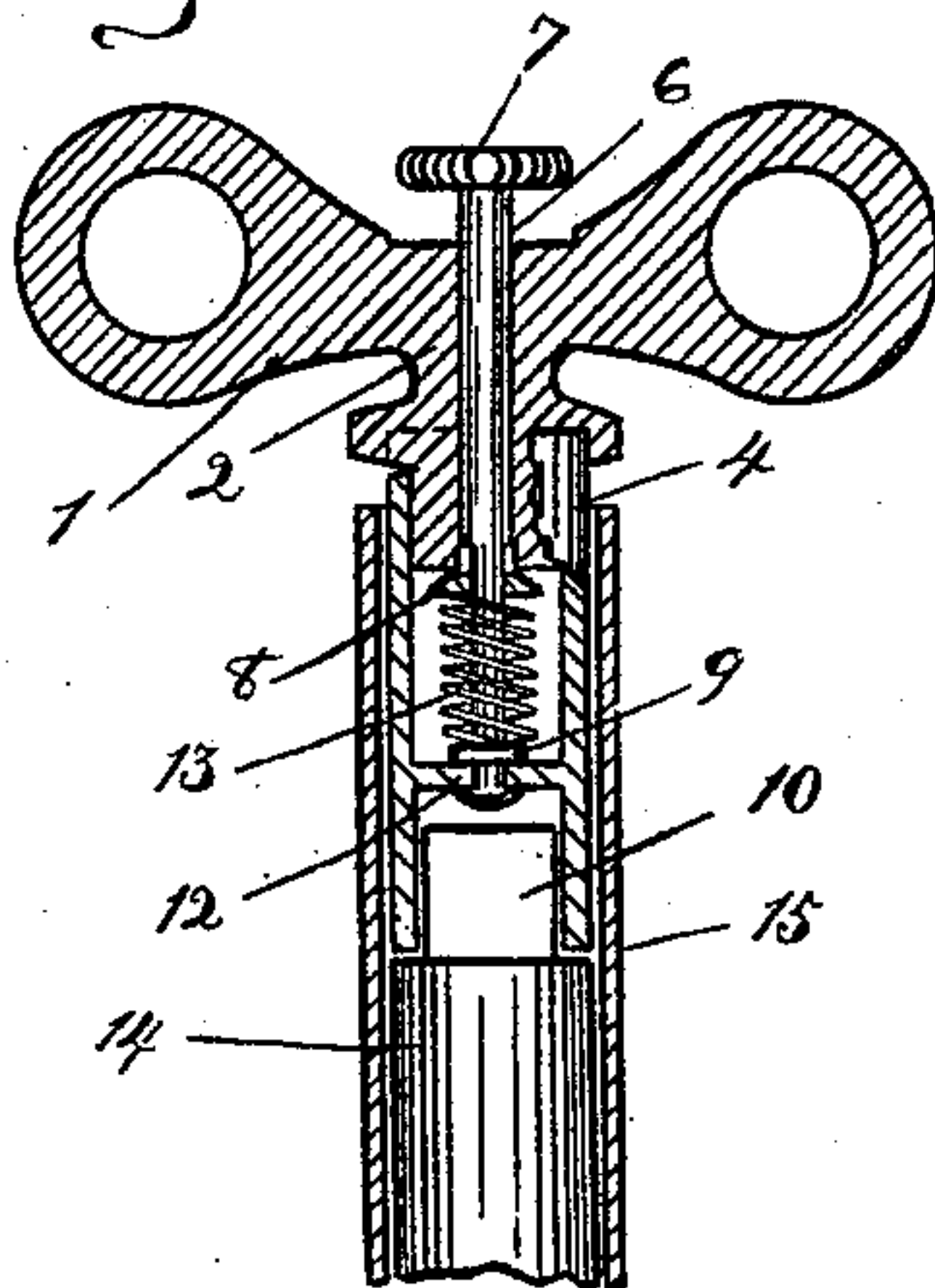


Fig. 2.



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# UNITED STATES PATENT OFFICE.

GEORGE E. WEMHOFF, OF DECATUR, INDIANA, ASSIGNOR OF ONE-HALF TO  
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## GAS-KEY.

SPECIFICATION forming part of Letters Patent No. 614,152, dated November 15, 1898.

Application filed December 29, 1897. Serial No. 664,422. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE E. WEMHOFF, a citizen of the United States, residing at Decatur, in the county of Adams, in the State of Indiana, have invented certain new and useful Improvements in Gas-Keys; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in keys for operating supply-valves for natural or artificial gas used for fuel or illuminating purposes.

The increasing extensive use of both natural and artificial gas for fuel has created a general demand for a key by which the supply to the burner can be safely and conveniently regulated. In dwellings and offices, especially where natural gas is used, the valve for supplying the gas to the mixers is usually upon or near the floor, where it is readily accessible, and the key mounted upon the valve-stem is exposed to displacement from accidental causes, as the meddling of children or catching of a woman's dress upon the key while at work, and thus the gas may be turned on without its being noticed and escape into the stove or grate and cause a dangerous explosion from a lighted match or lamp. Some burning gases are so nearly odorless that the escape of gas is not detected, and cases have occurred in the natural-gas territories both of explosions and fatal asphyxiation resulting from the displacement of the keys.

The object of my invention is to provide a key which will obviate these dangers. I attain this object by the device described in the following specification and illustrated by the accompanying drawings, in which—

Figure 1 is a side view of the key ready for use. Fig. 2 is a side view, partly in section, to show the internal construction of the key and its position when seated upon the supply-valve. Fig. 3 is a perspective detail of the socket-stem of the key, and Fig. 4 is a plan view of the lower end of the stem shown in Fig. 1.

Similar reference-numerals indicate like parts throughout the several views.

1 is a winged thumb-piece having a central cylindrical tubular stem 2, with integral external lugs 3, and 4 is also a cylindrical hollow stem, the upper part of which is a cylindrical tube, with slots 5 upon the upper end adapted to receive the lugs 3, as hereinafter described. This stem 4 has at its lower end a socket 11, adapted to fit upon the end 10 of the valve-stem 14, which is revolubly mounted in a tube 15 in the usual manner. The upper tubular part and the polygonal socket 11 are separated midway the stem 4 by a partition 12, which is integral with the inner wall of the stem and has a central perforation. A round bolt 6, provided with a head 7, is inserted in the stem 2, which revolubly fits into the stem 4 above the said partition 12. The lower part of the bolt 6 is diametrically less than its upper part, thus making a shoulder, as shown in Fig. 2, and a collar or washer 8 is mounted upon the smaller part, against which the lower end of the stem 2 engages when it is pressed downward. A collar or lug 9 is soldered or otherwise secured to the bolt near its lower end, and between which and the collar 8 is mounted a spiral spring 13. The lower end of the bolt 6 is inserted in the perforation in the said partition, with the collar or lug 9 seated upon it, and the projecting end is riveted or battered to secure the bolt to the partition.

When the different parts of the key are arranged as shown in Fig. 2, the recoil of the spring compressed between the washer 8 and the partition 12 elevates the stem 2, so that in its normal position the lugs 3 are out of engagement with the slots 5, and the thumb-piece 1 will freely revolve in the socket-stem 4; but when the thumb-piece is pressed down the lugs enter the slots, and by turning the thumb-piece the stem 4 is also turned, and by its engagement with the valve-stem 14 the valve is operated to either turn on or off the gas-supply to the burner. By this construction it is obvious that no matter how much the thumb-piece is turned while in its normal position it will not affect the supply-valve and that it is only by forcing it downward that the valve can be operated.



While my invention is especially applicable to gas-valves, it is evident that it may be used for many other purposes, and I do not therefore limit its use to gas-valves alone.

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

1. A detachable key for gas-valves comprising a tubular stem 2, revolvably mounted in a  
10 socket-stem and provided with means for engaging with said socket-stem when vertically depressed; a vertical tubular socket-stem adapted to receive said stem 2 and to operatively engage with it when the stem 2 is ver-  
15 tically depressed and provided with the partition 12; the spring-pressed bolt 6; the washer

8; and the spring 13; all substantially as described and shown.

2. A detachable key for gas-valves and other purposes having the thumb-piece 1, provided with the cylindrical tubular stem 2 and the lugs 3; the socket-stem 4 provided with the slots 5 and the partition 12; the bolt 6; the washer 8; and the spring 13, all arranged  
25 substantially as described and shown.

Dated and signed this 24th day of December, 1897.

GEORGE E. WEMHOFF.

Witnesses:

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JESSE C. SUTTON.