

(No Model.)

H. SCHRADER.
GAS GOVERNOR AND BURNER.

No. 481,771.

Patented Aug. 30, 1892.

Fig. 1.

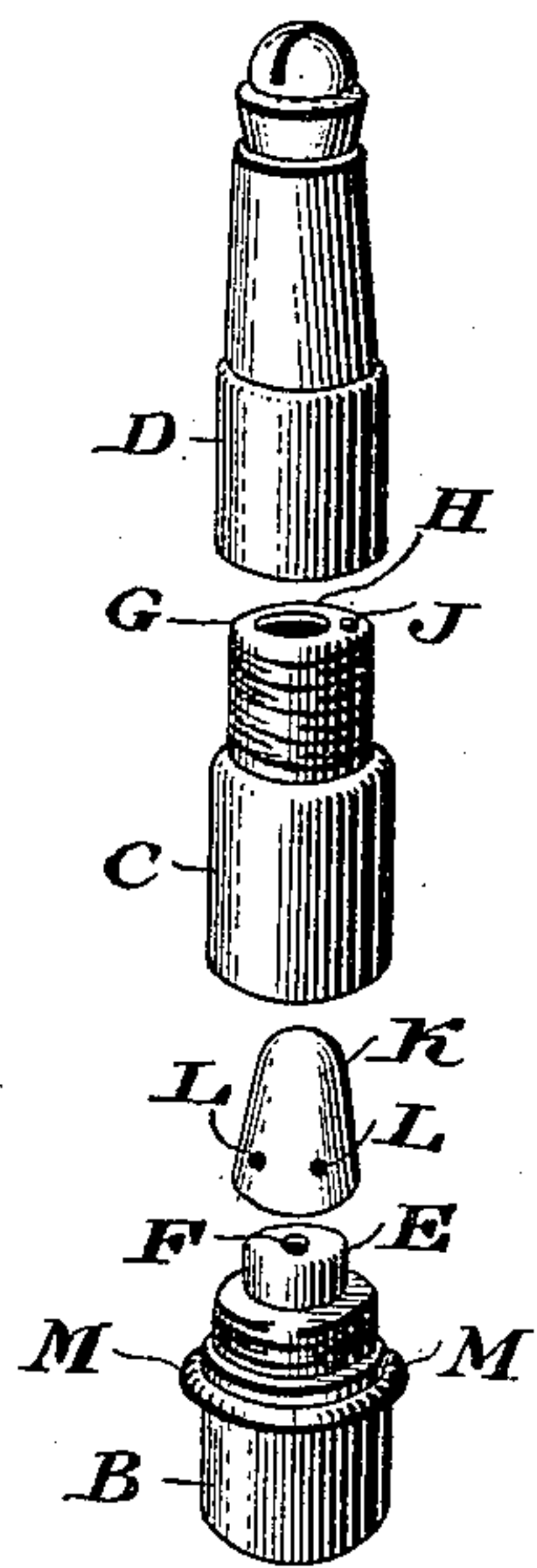
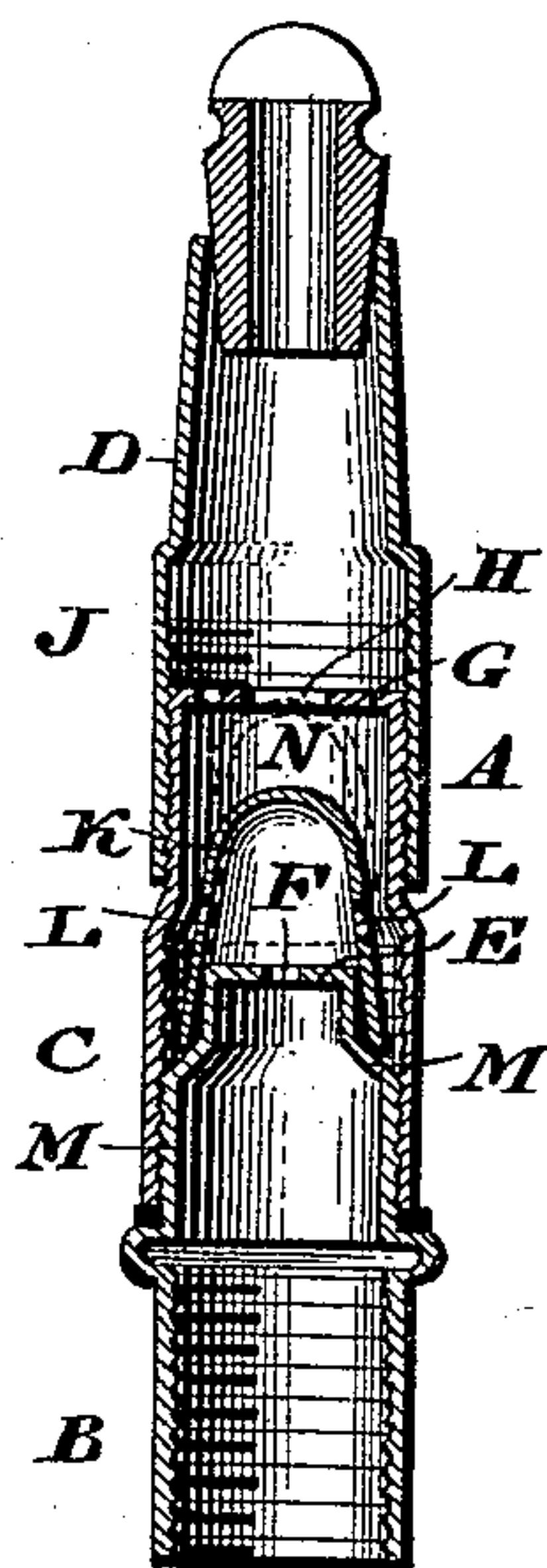


Fig. 2.



WITNESSES:

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GAS GOVERNOR AND BURNER.

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Application filed December 30, 1891. Serial No. 416,587. (No model.)

To all whom it may concern:

Be it known that I, HENRY SCHRADER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Gas Governors and Burners, which improvement is fully set forth in the following specification and accompanying drawings.

10 My invention consists of a gas governor and burner of novel construction, as will be hereinafter fully described and claimed.

15 Figure 1 represents a perspective view of a gas governor and burner embodying my invention, the parts thereof being separated. Fig. 2 represents a vertical section thereof on an enlarged scale.

Similar letters of reference indicate corresponding parts in the two figures.

20 Referring to the drawings, A designates a gas-burner formed of the parts or sections B, C, and D. At the top of the section B is a diaphragm E, in which is a vent F for the passage of gas therethrough. At the top of the section C is a diaphragm G, in which is a central opening H and a small vent J aside of the same. Between the diaphragms E and G is a valve K of inverted-cup shape, the base portion of which freely embraces the upper 30 portion of the section B and the crown of which is beneath the opening H of the diaphragm G. In the side of the valve are vents L, which when the valve is in its normal position are above the diaphragm E, it being noticed that the base of said valve rests on the shoulder M, which is formed on the upper portion of the section B below said diaphragm E. The section D is provided with a tip and the section B adapted to be connected with a 40 gas-pipe, as usual in such cases.

45 The operation is as follows, the pressure being normal: The gas enters the section B and passes through the vent F of the diaphragm E and vents L of the valve K, and so enters the chamber N of the top of the section C, where it may expand and escape through the opening H and vent J of the diaphragm G into

the section D, and so reach the tip. Should the pressure increase to any material extent, the valve is lifted from its seat, thus uncovering the diaphragm E, and the crown of the valve enters the opening H at its upper seat, thus closing the same. The gas can now escape from the chamber only through the small vent J, thus preventing an increase of the 55 quantity of gas fed to the flame. When the pressure is reduced, the valve falls, thus again uncovering the opening H and permitting the gas at the normal pressure to flow through the same to the tip of the burner. 60

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

1. A gas-burner consisting of three sections adapted to be fitted together and a valve between two of said sections, one of said two sections having a diaphragm at its upper end with opening therein and provided with a shoulder below said diaphragm and the other section being provided with a diaphragm at its upper end with central opening and a smaller vent aside of said opening, said valve being of inverted-cup shape, having vents in its sides and adapted to rest on said shoulders, said parts being combined substantially 75 as described.

2. A gas-burner consisting of the sections B, C, and D, fitting together, and the inverted-cup-shape valve K, with vents L in its sides, the section B having the shoulder M and the diaphragm E, with a vent F thereon, and the section C having a diaphragm G, with a central opening and a smaller vent aside of said opening, the said valve being adapted to normally rest on the said shoulder M and its crown when raised to close said central opening, leaving said smaller vent opened, said parts being combined substantially as described. 85

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Witnesses:

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