

(No Model.)

W. TAG & S. C. SMITH.
ELECTRIC GAS LIGHTING DEVICE.

No. 389,421.

Patented Sept. 11, 1888.

Fig. 1.

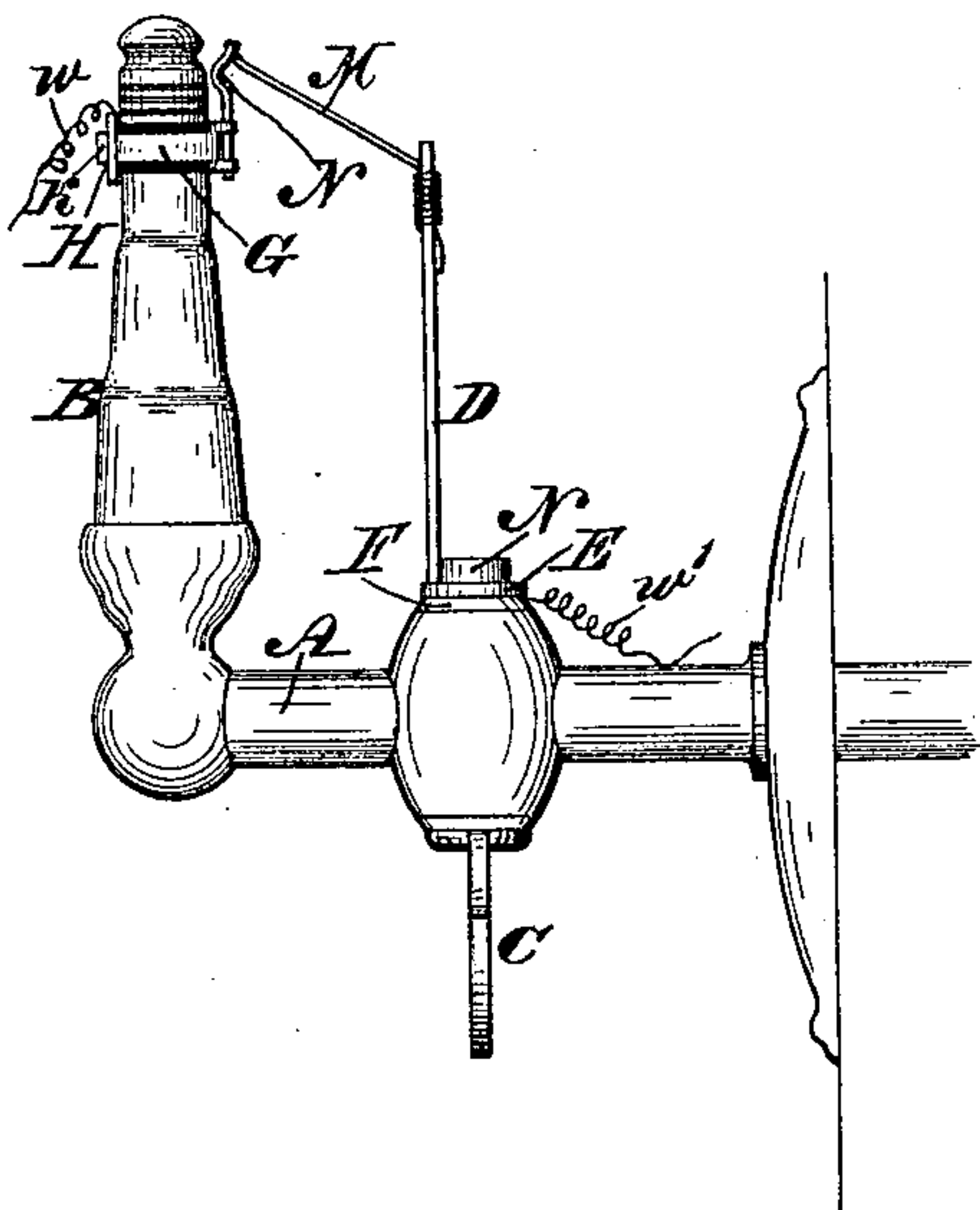


Fig. 2.

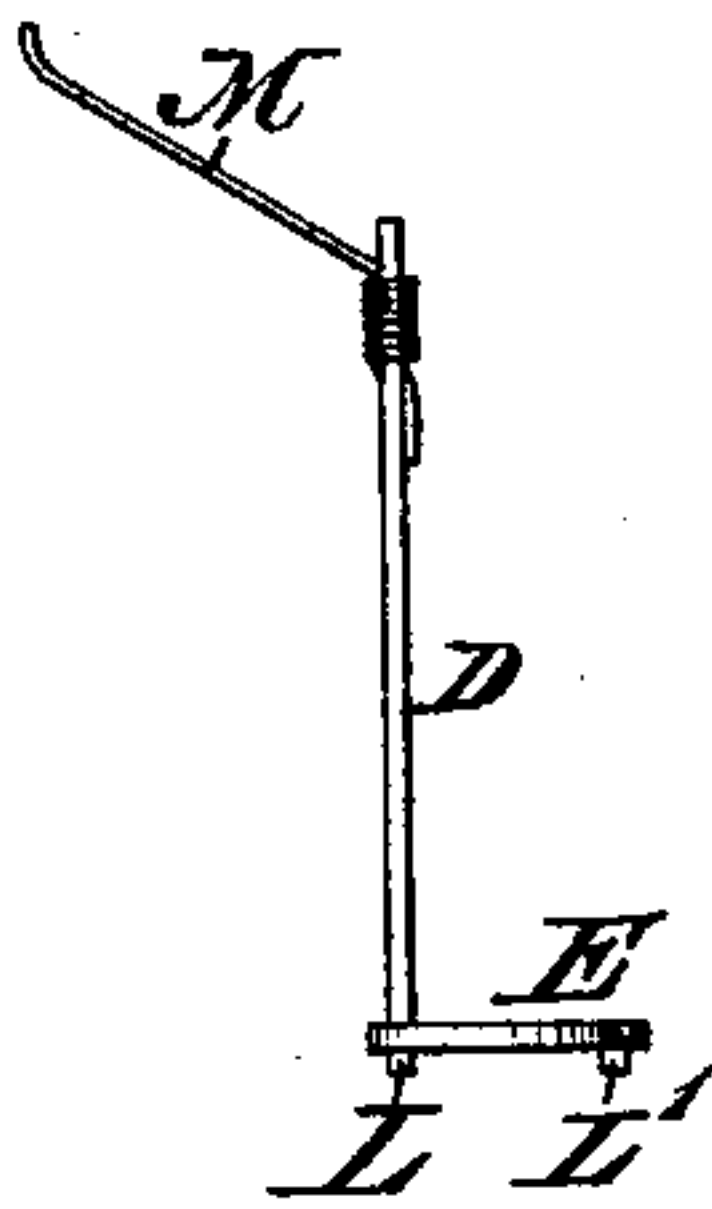


Fig. 3.

Fig. 4.

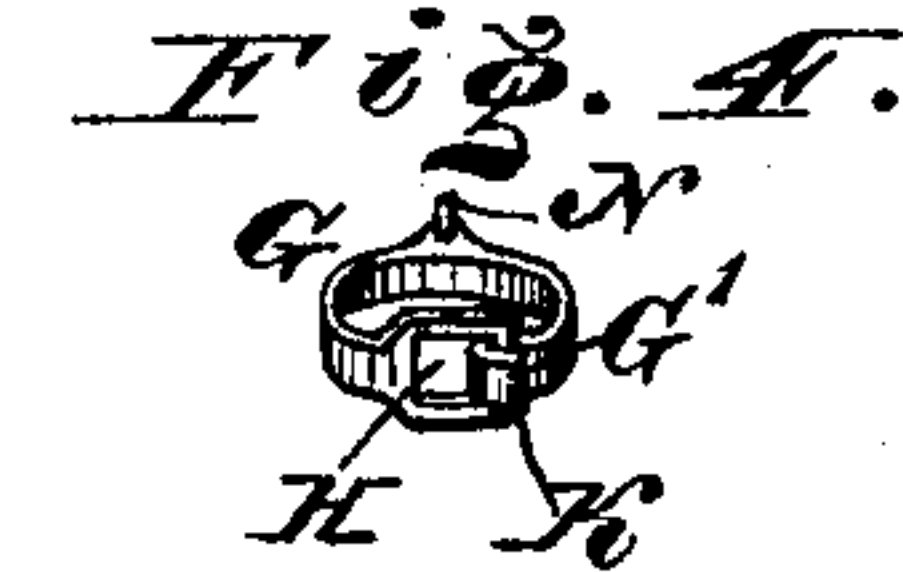
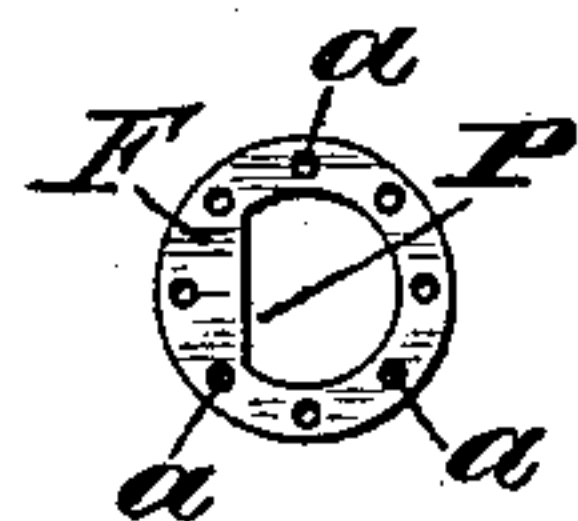


Fig. 5.



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WILLIAM TAG AND SANFORD C. SMITH, OF PHILADELPHIA, PENNSYLVANIA.

ELECTRIC GAS-LIGHTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 389,421, dated September 11, 1888.

Application filed September 22, 1887. Serial No. 250,392. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM TAG and SANFORD C. SMITH, citizens of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Electric Gas-Lighting Devices, which improvement is fully set forth in the following specification and accompanying drawings.

Our invention relates to electric gas-lighting devices; and it consists in an improved set of electrodes attachable to existing gas-fixtures without any change or rearrangement of such fixtures. It will be better understood by referring to the accompanying drawings, in which—

Figure 1 represents a side elevation of a gas-burner with our improvement attached. Figs. 2, 3, and 4 are detail views of separate parts of our invention. Fig. 5 is a detail view of a modified form of expansible collar with nut and bolt.

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

A is the gas-pipe, having a burner, B, secured thereto.

C is the cock, having the usual screw-nut, N, for holding it in place.

D is a stiff wire affixed to a disk, E, having a hole in its center the same shape as the small end of the cock, said wire being intermediate of said end of the cock and the burner, and projects from the disk E in the plane of the cock or burner, so as to be between said cock and burner. This wire carries at its upper end a wire electrode, M, adapted to contact against a fixed electrode, N, held on the burner-tip by a band, G, more clearly shown in Fig. 4, where it is seen that said collar has an eye, H, and looped end K, to adapt it to any-sized tip. The disk E has two or more lugs, L L', adapted to take in any two of the diametrically-opposite holes *a a* of the washer F, Fig. 3.

w w' are the wires running to the battery. (Not shown.)

To apply these parts to an existing burner we simply spring the band G, carrying the

fixed electrode, around a piece of insulating material about the tip or upper end of the burner and pass the free end G' of the yoke through the eye H and clasp it, being careful to have the fixed electrode N on the side of the burner next the cock. We now remove the screw-nut N from the cock C and place the washer F, Fig. 3, on the tip of the cock, and then place the disk E over this with the movable electrode in a position to be free from the fixed electrode when the gas is turned on or off. Then the nut or screw N is forced down in place, as shown, when the device is ready for use. Its operation is obvious and need not be described.

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

1. A movable or wiping contact for electric gas-lighters, attached to the gas-cock by a rod or bar which is substantially parallel with the axis of the cock, substantially as described.

2. A movable or wiping contact for electric lighters, attached to the gas-cock by an upright rod or bar lying always in a plane substantially parallel to the cock and the burner, substantially as described.

3. A movable or wiping contact for electric gas-lighting devices, attached to a collar adapted to fit over the small end of the gas-cock, said collar having a lug or lugs, in combination with a loose perforated washer to give the electrode the proper angular adjustment, substantially as described.

4. A movable or wiping electrode for electric gas-lighting devices, consisting of a spring attached by a rod to the small end of the gas-cock, and which rod is substantially parallel to the axis of the cock, and provided with means for adjusting its angular position with relation to the fixed electrode, substantially as described.

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Witnesses:

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