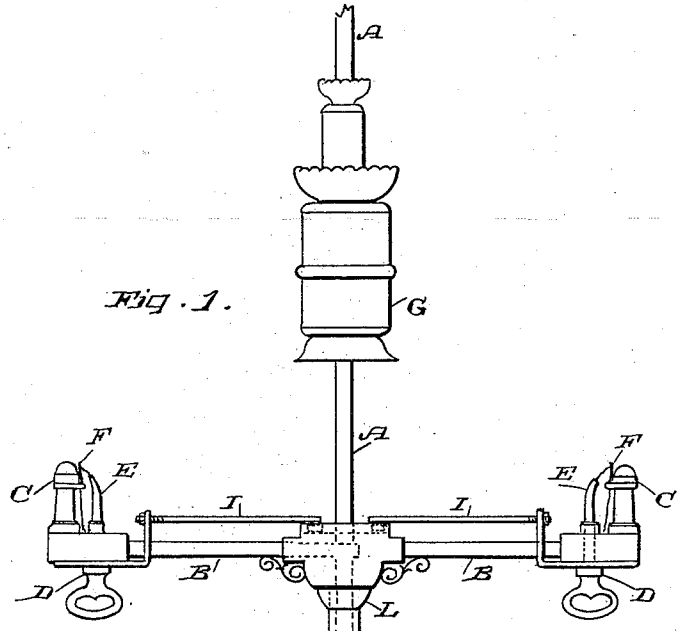
(No Model.)

R. F. BRIDEWELL.

DEVICE FOR OPERATING KEYS OF GAS CHANDELIERS.

No. 439,832. Patented Nov. 4, 1890.

Fig. 1.



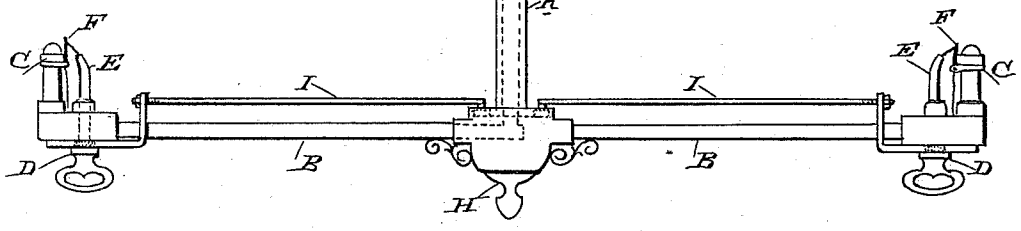


Fig. 2.

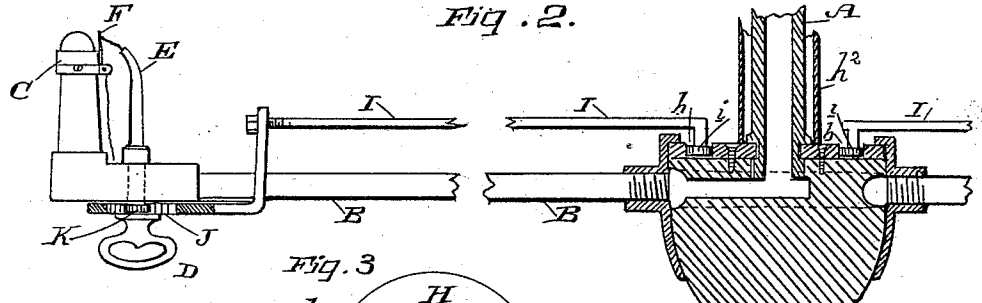


Fig. 3

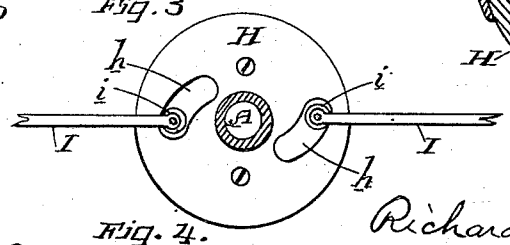
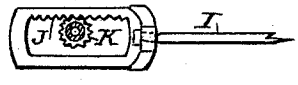


Fig. 4.



Witnesses,
Geo. H. Strong.
J. L. Wood

Inventor,
Richard F. Bridewell
By Dewey & Co.
Attys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

RICHARD F. BRIDEWELL, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO DAVID McKAY, E. F. BADGLEY, AND MARY B. BRIDEWELL, ALL OF SAME PLACE.

DEVICE FOR OPERATING KEYS OF GAS-CHANDELIERS.

SPECIFICATION forming part of Letters Patent No. 439,832, dated November 4, 1890.

Application filed April 15, 1890. Serial No. 348,054. (No model.)

To all whom it may concern:

Be it known that I, RICHARD F. BRIDEWELL, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Devices for Operating Keys of Gas-Chandeliers; and I hereby declare the following to be a full, clear, and exact description of the same,

My invention relates to the class of gas-chandeliers and especially to those which are provided with electrical lighters and extinguishers.

My invention consists in the hereinafter-described novel means or mechanism for operating all the keys of the chandelier simultaneously, whereby the gas at all the burners may be lighted at once.

The object of my invention is to provide a simple and effective device for lighting up the gas of the whole chandelier by a single movement and at once.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a side view of my device. Fig. 2 is a view showing the connections of one arm. Fig. 3 is a plan of the slotted top of key H and connections. Fig. 4 is a plan of rack and pinion.

A is the stem or pipe of the chandelier having any suitable number of arms B provided with burners C. These arms are controlled by axially-rotary keys D, with the upper portions of each of which is connected a sparking-electrode E, which operates in connection with the opposing electrode F on the gas-burner, whereby, upon turning the key, the gas is admitted to the burner, and at the same time the spark is effected whereby it is lighted. Upon the stem A of the chandelier is carried the battery G.

The parts thus far described form the subject-matter of a previous application made by me and filed January 14, 1890, Serial No. 336,956.

My present invention has to do with the means by which the burner-keys are turned to effect the lighting and extinguishing of the gas. At the lower center or base of the chandelier is mounted an axially-rotary key H, having its top provided with cam-slots *h*. Extending out along each arm of the chandelier is a pull-rod I, the inner end of which is provided with an anti-friction roller or stud *i*, which fits in the cam-slot of the rotary central key. The outer end of this rod is slotted and provided with a rack J. This slotted end fits over and its rack-teeth engage a pinion K on the burner-key. Now by turning the central key H it pulls on all of the rods of the chandelier-arms, and through their racks and the pinions the burner-keys are turned, so as to light the gas. By turning the central key in a reverse direction these parts are operated to extinguish the gas. It will therefore be seen that the gas at all the burners may be lighted simultaneously by the single movement of the central key. In case the chandelier has more than one tier of arms and burners I would connect the key H by means of a sleeve h^2 with a similar key L for each tier of arms.

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

1. A device for operating the burner-keys of a gas-chandelier, consisting of the central axially-movable key, the slide-rods connected therewith and operated thereby, and a connection between the outer ends of said rods and the burner-keys, whereby the latter are operated, substantially as herein described.

2. A device for operating the burner-keys of a gas-chandelier, consisting of a central axially-movable key, slide-rods connected therewith and operated thereby, a rack at the outer end of the rods, and a pinion on the burner-keys with which the rack engages, whereby said keys are turned, substantially as herein described.

3. A device for operating the burner-keys of a gas-chandelier, consisting of the combination of the central axially-rotary key H, having the slots *h* in its top, the slide-rods having their inner ends engaged by said slots, whereby they are operated, the racks at the outer ends of the rods, and the pinions on the burner-keys with which the racks engage, substantially as herein described.

In witness whereof I have hereunto set my hand.

RICHARD F. BRIDEWELL.

Witnesses:
NELLIE I. BRIDEWELL,
A. O. COLTON.