C. F. JACOBSEN & G. M. MURPHY.

APPARATUS FOR REGULATING THE FLOW OF GAS TO BURNERS.

No. 169,549. Patented Nov. 2, 1875.

Fig. 1.

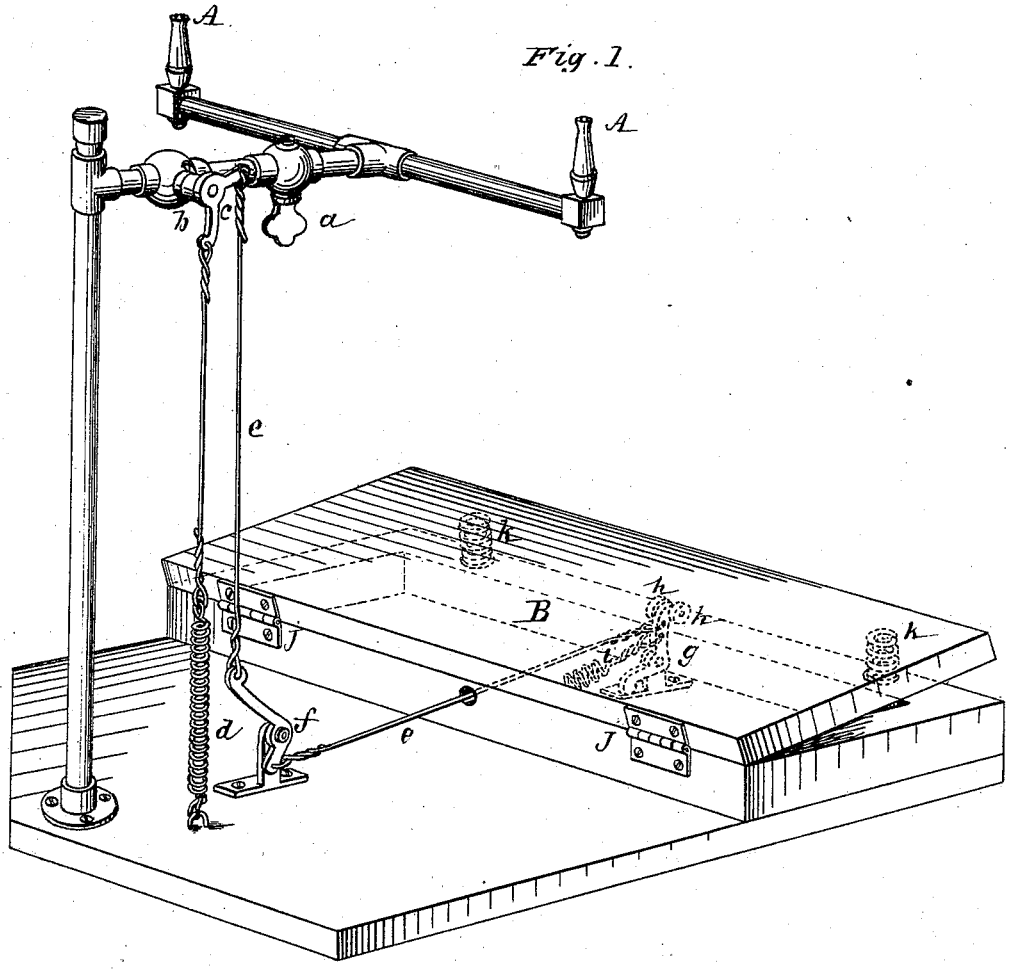
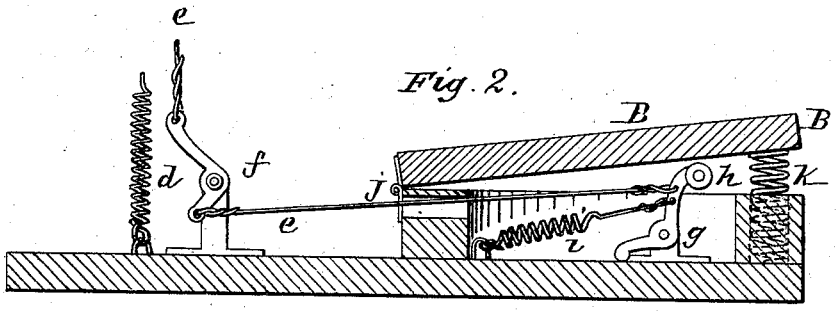


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES F. JACOBSEN AND GEORGE M. MURPHY, OF NEW YORK, N. Y.

IMPROVEMENT IN APPARATUS FOR REGULATING THE FLOW OF GAS TO BURNERS.

Specification forming part of Letters Patent No. **169,549**, dated November 2, 1875; application filed September 22, 1875.

To all whom it may concern:

Be it known that we, CHARLES F. JACOBSEN and GEORGE M. MURPHY, both of the city, county, and State of New York, have invented certain new and useful Improvements in Devices or Apparatus for Regulating the Flow of Gas to Gas-Burners, of which the following is a specification:

The invention has been designed with more particular reference to desk and counting-house use. Where gas-light is required only intermittently at a desk—for instance, if the occupant of the desk during the evening is frequently called away by other duties—the gas must either be turned down or out by hand each time the desk is vacated, or gas will be wasted. To turn down or out the gas is troublesome, especially if required to be done repeatedly; and, besides, the clerk is very apt to forget or omit to do so, while, if the gas be allowed to burn with its full flame, the expense is considerable, if, as is the case in many establishments, numerous lights are used.

We propose to remedy this by means of devices connected with a cock or other regulator for determining the flow of gas to the burner, and arranged to be operated, substantially in the manner hereinafter described, by the occupant of the desk, who becomes an involuntary instrument to cause the turning down of the light when the desk is vacated, and the turning up of the light when the desk is occupied.

The nature of our invention will be readily understood by reference to the accompanying drawing, in which Figure 1 is perspective view of an apparatus embodying our invention, and Fig. 2 is a vertical section of the lower part of the same.

A are the gas-burners, supported and arranged in any suitable way, the pipe or bracket being provided with the usual cock *a*, operated by hand to turn on and off the gas. On the pipe is a second cock, *b*, provided with a lever-handle, *c*. One arm of the lever is connected to a spring, *d*, which acts to draw the arm of the lever toward it, and so turn the cock. The other arm of the lever is connected by wires *e* to bell-cranks *f g*, the latter of which is arranged under the movable platform B, which may be either a part of the floor, or of a structure erected on the floor. The lever *g* is provided at its upper free end with a friction-roller, *h*, and it is normally kept in an elevated position by spring *i*. The platform, in this instance, is hinged at *j*, and normally kept up at its free end by light springs *k*. The range of movement of the cock *b* is such that, when turned to the full extent in the one direction, (in which it is moved by the action of spring *d*,) the flow of gas will be checked so far as to leave only a very low light at the burner, and when turned in the opposite direction (by a superior force acting against spring *d*) it will let on the full head of the gas.

When, therefore, the parts are in the position shown in the drawing, the light will be turned down low; but if any one should step on the platform B, this would have the effect of operating the cock, through the medium of the bell-cranks and wires, to move in the opposite direction, and to turn on the light full. When the platform is quitted the parts at once return to their normal position, and the light is again turned down.

The platform is designed to be placed at the spot usually occupied by the person standing or sitting at the desk or other place where the light is used, and it will be seen that in this way the object we have in view is effectively carried out. We have indicated one simple arrangement for carrying our invention into effect. It is, however, manifest that the details may be varied without departure from the principle of our invention. For instance, the platform may move vertically bodily, instead of vibrating on a hinge, and the mechanism intermediate between the gas-cock and the platform can be of any suitable kind and structure that will cause the cock to respond to the movement of the platform.

Having now described our invention, what we claim is as follows:

1. The depressible platform, located at that point on or in the floor where the occupant of the desk stands or sits when at his desk, in combination with the gas-flow-regulating cock of one or more gas-burners, and mechanism intermediate between the cock and the platform, actuated by the movement of said platform to operate the cock, in the manner set forth.

2. The combination, with a gas fixture or

burner, of a main cock, adapted to be operated, in the usual way, by hand, to turn on and off the gas, and an auxiliary cock or gas-flow regulator, combined with a depressible platform, and operated to regulate the flow of gas to the burner, (when the main cock is turned on,) at times and in the manner set forth.

In testimony whereof we have hereunto signed our names.

C. F. JACOBSEN.
GEO. M. MURPHY.

Witnesses:
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