

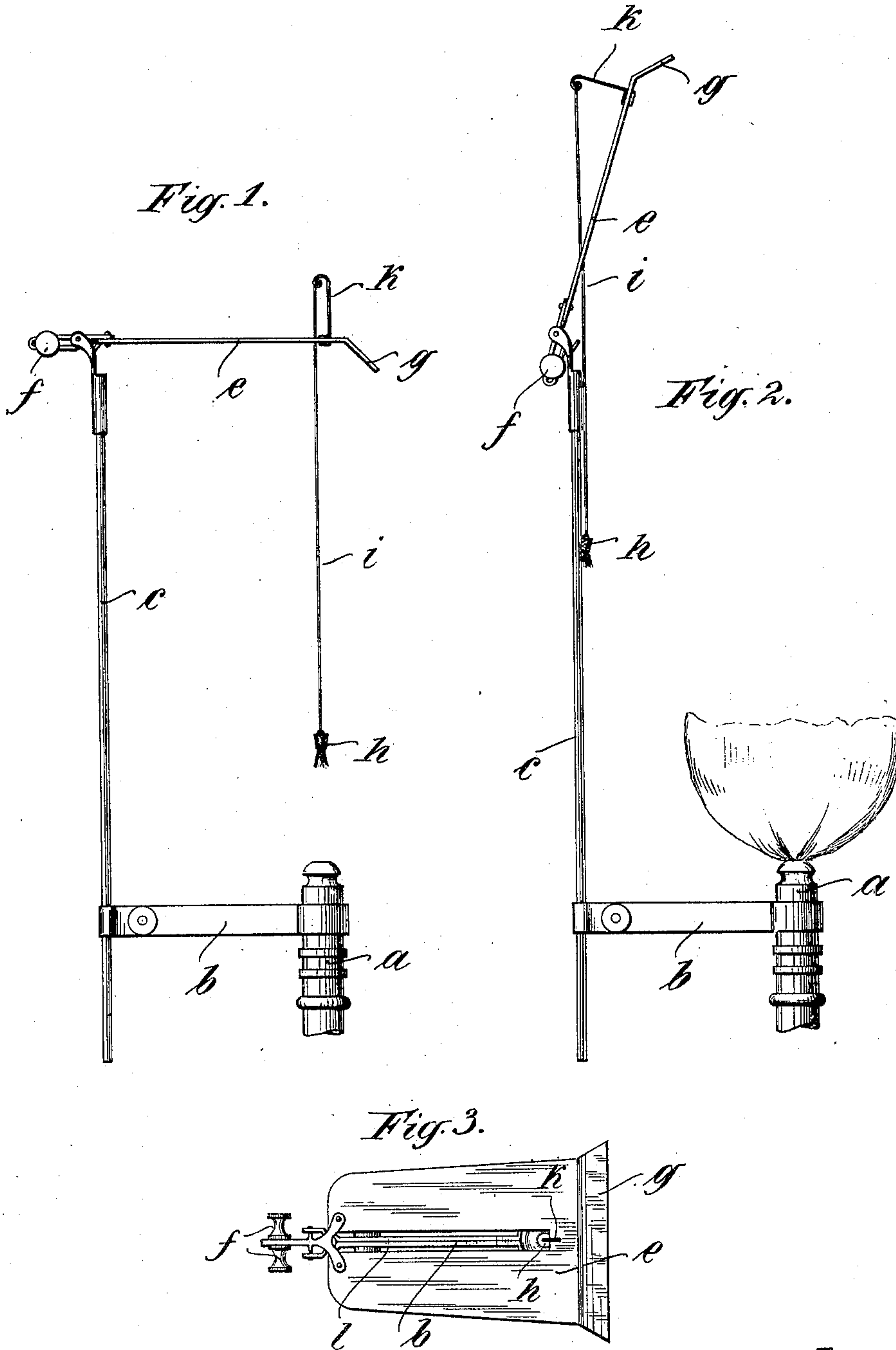
No. 689,102.

Patented Dec. 17, 1901.

A. MARTINI.  
AUTOMATIC GAS IGNITING DEVICE.

(Application filed Aug. 30, 1900.)

(No Model.)



Witnesses:

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# UNITED STATES PATENT OFFICE.

ADOLF MARTINI, OF BERLIN, GERMANY.

## AUTOMATIC GAS-IGNITING DEVICE.

SPECIFICATION forming part of Letters Patent No. 689,102, dated December 17, 1901.

Application filed August 30, 1900. Serial No. 28,556. (No model.)

*To all whom it may concern:*

Be it known that I, ADOLF MARTINI, chemist, a citizen of the Kingdom of Prussia, and a resident of Berlin, Germany, (whose post-office address is Leipzigerstrasse 111,) have invented certain new and useful Improvements in Automatic Gas-Igniting Devices, of which the following is a specification.

The object of the present invention is an igniting device for such gas-burners which have no chimney or similar device from which the jet of gas sallying forth from the orifice of the burner takes a certain ply. The form of the igniter generally in use for burners provided with chimneys cannot be utilized for that purpose, for the pill ought to be brought next to the orifice from which the gas is delivered in order to bring the jet of gas to impinge on it. The movable cover would be, consequently, also arranged next to the orifice and the flame and is then exposed to a very intense heat, which deteriorates and spoils it in a short time. The gathering of soot on the cover could not be avoided in a device of this description. If, on the other hand, the cover were arranged so much to one side or the other of the orifice as to be not directly struck by the flame, it would not be moved by the dynamic force of the gases, these escaping in a straight line upward without striking the cover. The pill would therefore remain in the flame. The cover could also be arranged such a distance above the flame that it would not be deteriorated or that no deposits of soot would form on it; but in this case the jet of gas would not strike the pill with sufficient pressure, and therefore would not cause its glowing.

The present invention unites all the features of the known igniter, but arranged in such a way as to obviate all the difficulties cited above. The cover is arranged at a considerable distance above the burner, so that it cannot be destroyed by the heat of the flame and that no soot can be deposited on it, whereas the pill has its place immediately above the orifice of the burner. Cover and pill are connected in such a way that the latter is removed from the flame whenever the cover is removed by the dynamic force of the gas-jet.

In order to adapt the apparatus to differ-

ent conditions—for example, varying pressures of gas, &c.—all parts of it are adjustable.

The accompanying drawings show the apparatus in two different positions—namely, Figure 1 at rest, and Fig. 2 after the ignition of the flame has taken place and the cover has been removed from over the flame. Fig. 3 shows the cover seen from above.

To the burner *a* is fixed a horizontal arm *b*, which at its end bears a vertical bracket *c*, the height of which may be adjusted by suitable means. To the end of said bracket, which is preferably forked, is hinged a cover *e*, consisting of a plate of mica. Said cover is nearly counterbalanced by adjustable counterpoises *f*. If left to itself, it takes the horizontal position; but the current of hot air ascending from the flame suffices to bring the cover into the position shown in Fig. 2 and hold it therein. In order to offer more resistance to the ascending current, the free end *g* of the cover is bent downward in an obtuse angle.

As is already told, the ignition-pill *h* cannot be immediately fixed to the cover, but must be brought nearer to the orifice of the burner. It is therefore suspended from the cover by means of a thin wire *i*, tied to a bracket *k* on the cover and extending through a longitudinal slot *l* in the same. By means of this arrangement the pill is completely removed from the proximity of the flame whenever the cover is raised, Fig. 2.

The same result as with the hereinbefore-described device would be obtained by employing a cover without a slot, arranging the bracket with the wire and the pill on the side of the former or in any other way.

What I claim is—

1. An ignition device for chimneyless gas-burners, comprising a plate of non-combustible material arranged above the orifice of the burner and bearing on its upper side a bracket, having suspended therefrom by means of a wire an ignition-pill, which ordinarily hangs just over the orifice of said burner; an adjustable bracket fixed to said burner; said plate pivoting on a horizontal axis journaled to said bracket; substantially as hereinbefore described.

2. An ignition device for chimneyless gas-



burners comprising a plate of fireproof material pivoting on a horizontal axis arranged at a considerable distance above the orifice of said burner, said plate bearing on its upper  
5 side a bracket, a long wire suspended from said bracket and having attached to its lower end an ignition-pill so as to be next to the orifice of said burner, said plate of fireproof material being bent downward in an obtuse an-

gle near its end, substantially as hereinbefore shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

ADOLF MARTINI.

Witnesses:

HENRY HASPER,  
WILLIAM MAYNER.