

T. JACKSON.
 INTERMITTENT GAS LIGHT.
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1,042,117.

Patented Oct. 22, 1912.

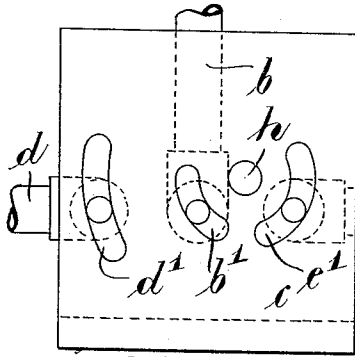


Fig. 4.

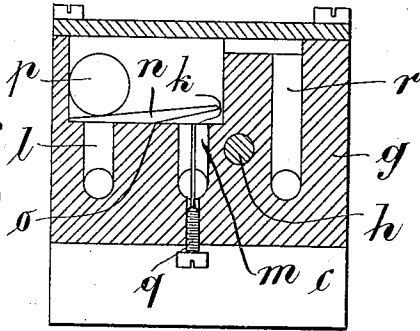


Fig. 2.

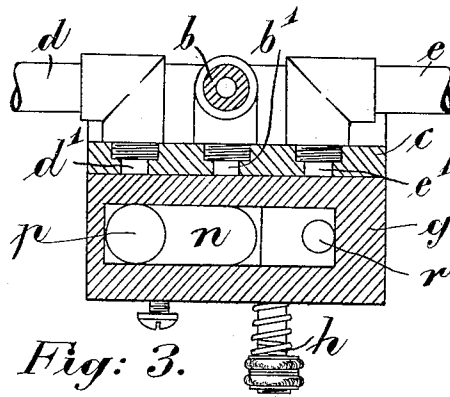


Fig. 3.

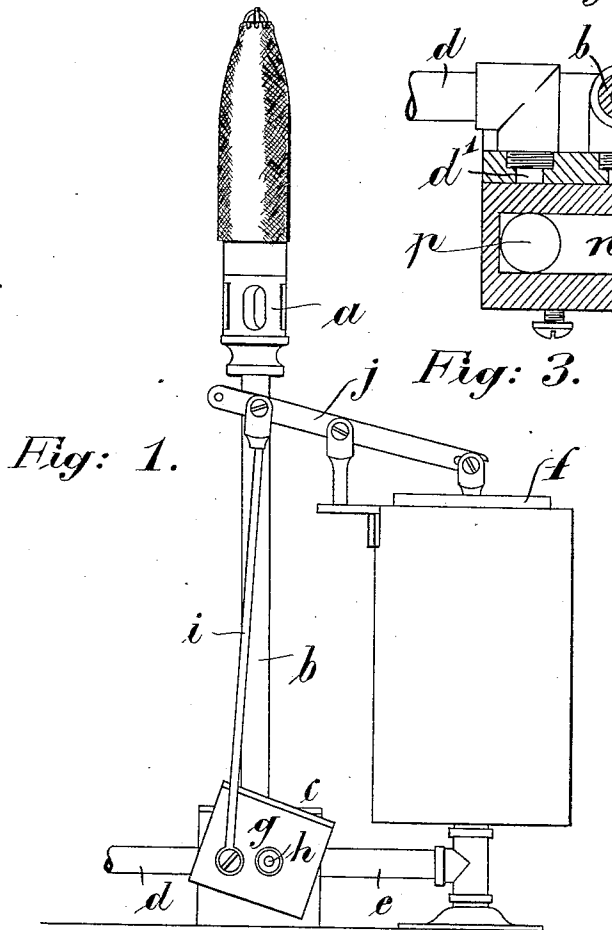


Fig. 1.

WITNESSES:

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INTERMITTENT GAS-LIGHT.

1,042,117.

Specification of Letters Patent.

Patented Oct. 22, 1912.

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To all whom it may concern:

Be it known that I, THOMAS JACKSON, subject of the King of Great Britain and Ireland, residing at 7 Milton Court road, New Cross, London, S. E., England, have invented new and useful Improvements in Intermittent Gas-Lights, of which the following is a specification.

This invention relates to improvements in mechanism for the production of flash signs for advertising purposes and the like and is in itself an improvement in the mechanism described in the specification of U. S. A. Letters Patent No. 1,009,313.

The object of this invention is the provision of more reliable means for controlling the distribution of gas by means of the tiltable controlling device so that the control can be effected by a less angular movement than is necessary in the device described in the before mentioned specification.

To carry the invention into effect, in the tiltable controlling device I arrange a seating preferably in a plane having two orifices one leading to the gas supply and the other leading to the burner. Upon this seating at some position intermediate of the two orifices I mount the knife edge or bearing part of a double valve, the facets of the valve being at an angle to one another so that by rocking the valve about the axis of the knife edge or the like, one orifice is closed and the other orifice is opened. Upon the upper surface of the valve I mount a rolling element such as a ball and as the said surface lies in a single plane the pathway along which the rolling element can run is substantially straight from end to end. When the tiltable controlling device is tilted about its axis the rolling element which was situated at one end of the valve which was in a closed condition rolls toward the other end of the valve, tilts the valve about its knife edge, opens the closed orifice and closes the open orifice. It will be seen that as the rolling element does not drop into the orifice as in the arrangement described in the before-mentioned specification a very small angular movement is required in order to start the ball rolling from one end to the other, and consequently any risk of the ball remaining stationary and causing a stoppage of the apparatus is entirely avoided.

In order that the invention may be the better understood I will now proceed to describe the same in relation to the accompanying drawings, reference being had to the letters and figures marked thereon.

Like letters refer to like parts in the various figures, in which:—

Figure 1 is a front elevation of the flash light apparatus with my invention applied thereto. Fig. 2 is a vertical sectional view of the valve box. Fig. 3 is a horizontal section of same. Fig. 4 is a front view of the valve seating on which the valve box slides with an oscillating movement.

In Fig. 1 the burner *a* is mounted on a pipe *b* attached to the valve seating *c* from which another pipe *d* leads to the gas supply and the pipe *e* to the reciprocating bell *f*. On the face of the seating *c* is arranged the valve box *g* pivoted on a stem *h* and connected by a rod *i* with a pivoted lever *j* connected to the bell *f*. In the box *g* is a flat seating *k* in which orifices *l* and *m* are arranged. The orifice *l* leads to the gas supply port *d* in valve seating and the orifice *m* to the port *b* leading to the burner. Upon the seating *k* is arranged a double valve *n* having facets at an angle to one another and a knife edge *o* about which the valve *n* can rock so as to close and open the orifices *l* or *m* alternately. On the valve *n* is mounted a ball *p* which is constrained by the walls of the valve box to roll only in a straight line along the valve *n* so that as the valve box *g* is tilted from side to side by the bell *f* the ball *p* operates the valve *n* to open and close the orifices *l* and *m* alternately. A by pass of adjustable area is provided by a screw *q* in the box *g* which prevents the valve *n* from completely closing the orifice *m*. A third orifice *r* communicates with the port *e* for connecting the space above the valve *n* with the bell *f*.

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

Control apparatus for gas self operated flash lighting devices consisting of a tiltable valve box, a seating in said box, two gas orifices in said seating, a valve device pivotally mounted in said box, two valve faces on said device adapted to co-act alternately with one or other of said orifices when the said

device is rocked from side to side and a rolling element adapted to run from one side of the axis of said valve device to the other side thereof so as to overbalance same at
5 each tilting movement of the said valve, substantially as described.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

THOMAS JACKSON.

Witnesses:

RICHARD A. HOFFMANN,
WALTER CARVEL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."