C. SCHLÖSSER & S. KNAUSS.

MEANS FOR ILLUMINATING ADVERTISEMENTS AND THE LIKE.

APPLICATION FILED AUG. 14, 1906.

908,038. **Patented Dec. 29, 1908.**

2 SHEETS—SHEET 1.

Fig. 1.

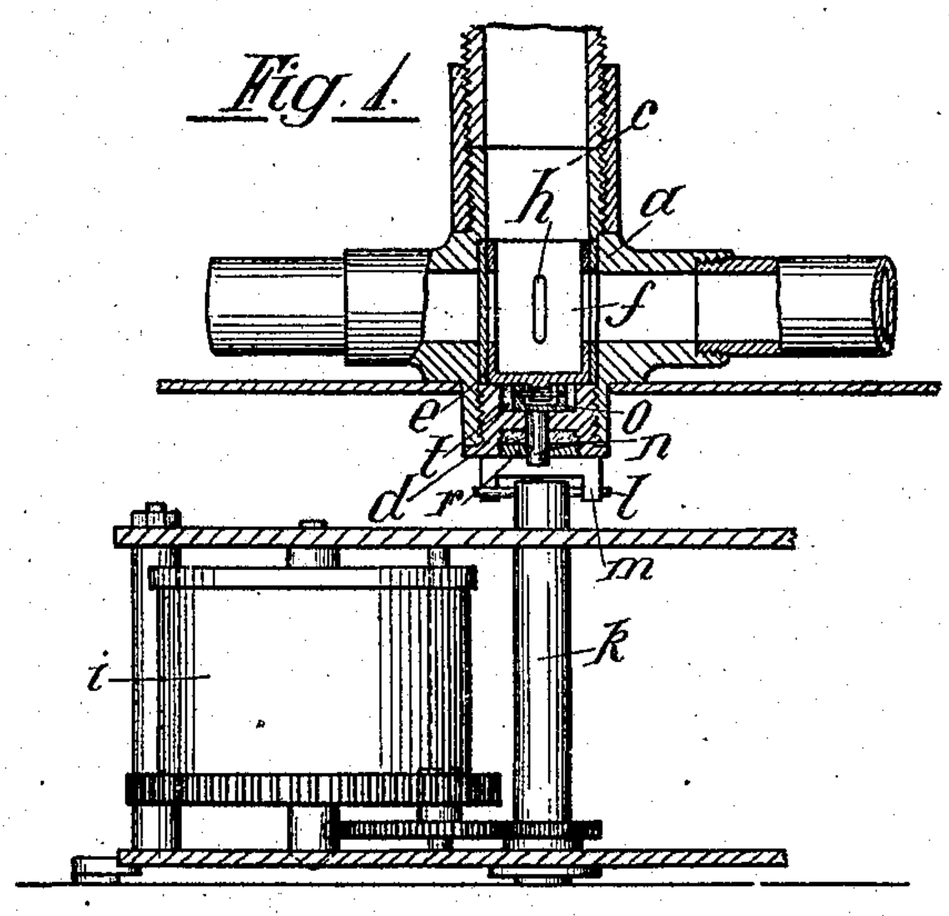


Fig. 2.

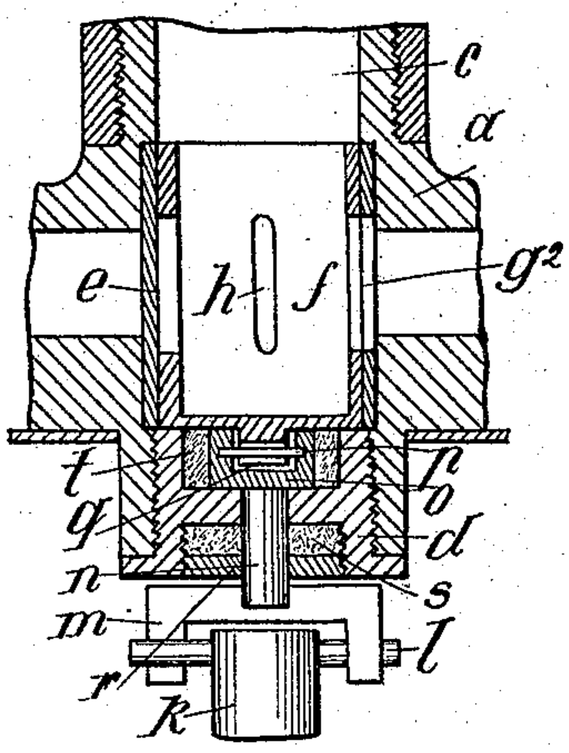
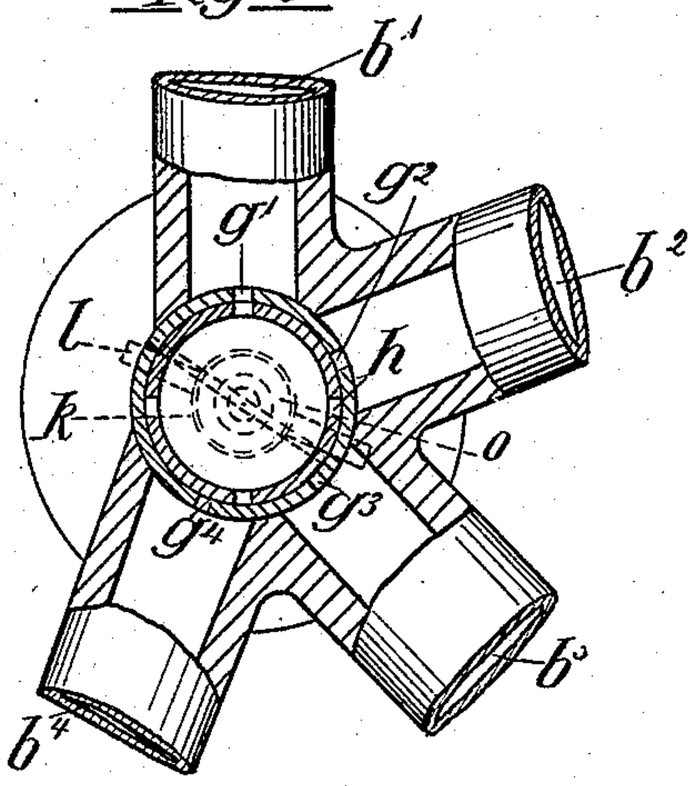


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

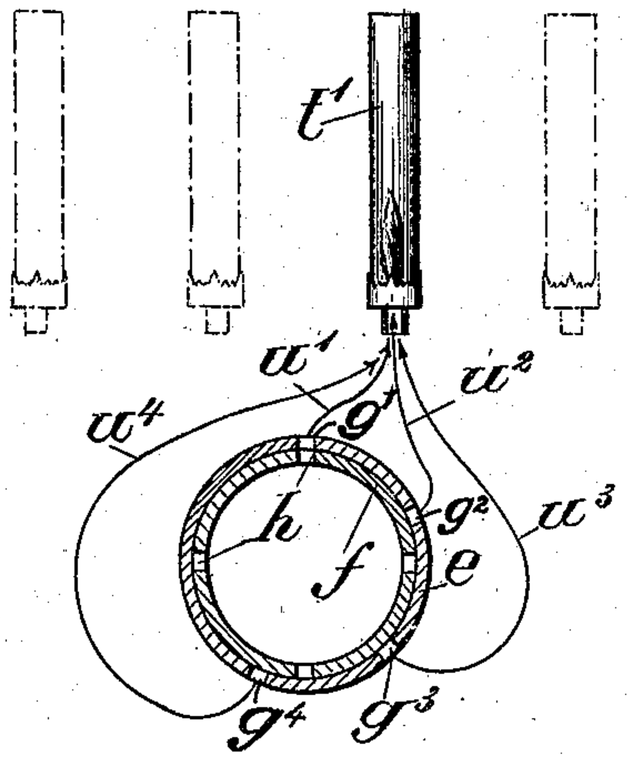


Fig. 5.

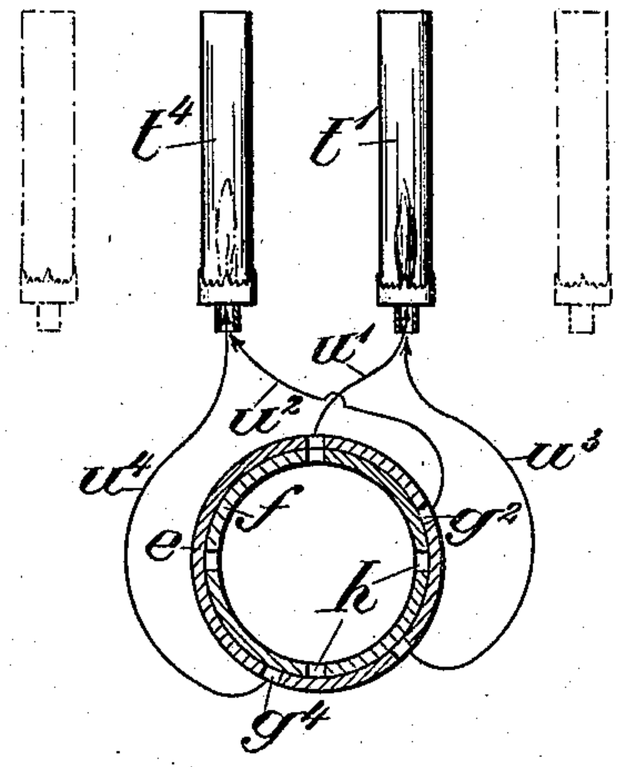


Fig. 6.

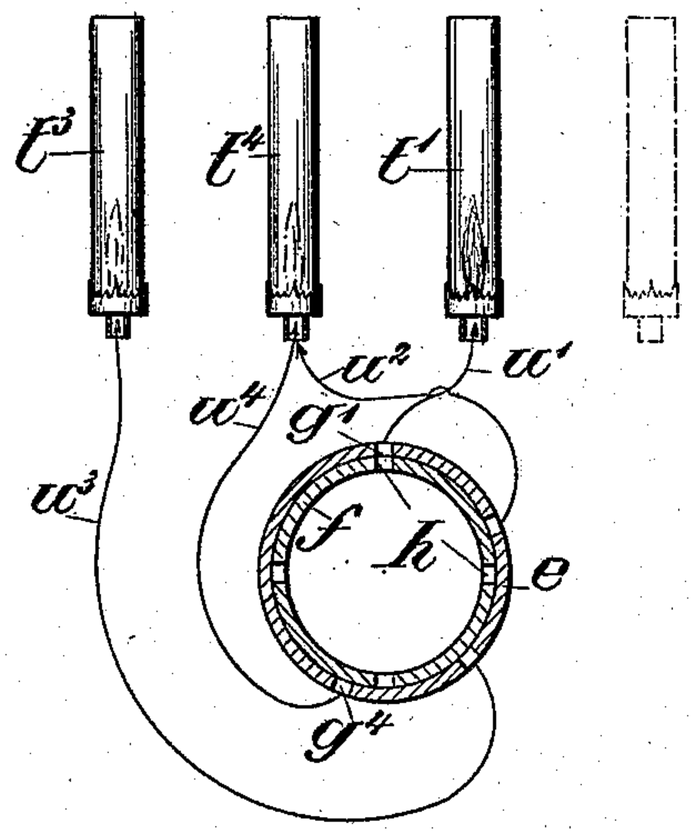
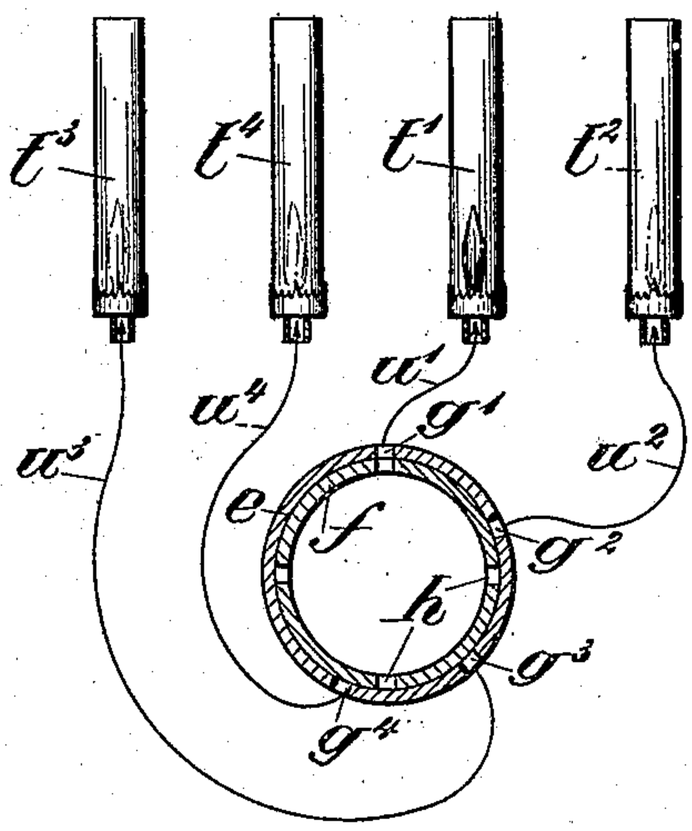


Fig. 7.



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UNITED STATES PATENT OFFICE.

CARL SCHLÖSSER AND SAMUEL KNAUSS, OF STUTTGART, GERMANY.

MEANS FOR ILLUMINATING ADVERTISEMENTS AND THE LIKE.

No. 908,038. Specification of Letters Patent. Patented Dec. 29, 1908.

Application filed August 14, 1906. Serial No. 330,604.

To all whom it may concern:

Be it known that we, CARL SCHLÖSSER and SAMUEL KNAUSS, citizens of the German Empire, residing at Stuttgart, Kingdom of Würtemberg, Germany, have invented new and useful Improvements in and connected with Means for Illuminating Advertisements and the Like; and we do hereby declare the following to be a full, clear, and exact description of the same.

This invention relates to an apparatus, for advertising purposes, which allows of the extinguishing and re-lighting, in brief uniform succession, with marked alternate intervals of darkness, of the gas lamps illuminating a shop window, an advertising transparency, or the like.

As compared with other devices for using gas lamps for advertising purposes, the present invention is characterized by its great simplicity which in spite of the use of the same apparatus by an alteration in the communication with the outlet apertures, allows of the illuminating being effected with a different number of jets. The admission of the gas to the separate branch pipes according to the present invention is regulated by a holder or socket provided with a suitable number of slots which rotates continuously in the gas distributing chamber and always exposes, at equal intervals of time, one aperture of the gas outlets, and closes the others. This regulating socket is operated by a clockwork and suitable gearing, the arbor of which passing through a kind of stuffing box forms the connection of the distributing chamber with the clockwork.

In the apparatus according to the present invention not only may the jets be separately and alternately ignited and extinguished but also a number of variations are possible, thus, for instance, all the jets may be arranged for permanent burning and for alternate burning and extinguishing, or the jets may also be caused to burn in pairs or in groups.

One example of utilization of the object of the present invention, is shown in the accompanying drawings, in which

Figure 1 is an elevation of the device in partial axial vertical section, and in combination with a spring mechanism serving as a driving gear; Fig. 2 is an enlarged view, in axial vertical section, of the device; Fig. 3 is a partial horizontal section through Fig. 1, and showing the several gas-distributing pipes. Figs. 4, 5, 6 and 7, illustrate the device in vertical section, and (diagrammatically) the pipes leading therefrom; also the lamp or lamps to be lighted and extinguished.

Pipes b^1, b^2, b^3, b^4, for leading gas to lamps, are arranged (for instance, in the manner shown in Fig. 3) on a distributing body a, the gas being supplied through a pipe c from above. In the distributing body a, a socket e is inserted and fixed, and is provided with slots g^1, g^2, g^3, g^4, each of which connects the interior of the distributing body with the pipes b^1, b^2, b^3 and b^4. Within said socket e, there is another rotatable socket f, having slots h therein, and so disposed that but one of said slots registers or communicates with one of the slots g^1, g^2, g^3, g^4, at any given moment. A clockwork is provided for operating socket f, and comprises a transmission arbor, k, having a catch pin l which engages behind a catch or fork m. The latter is mounted on a spindle n the head o of which is tightly packed in a groove or recess, filled with grease or the like, in the bottom part d which closes the gas distributing body a from beneath. The head o has a recess into which fits a projection of the socket f, which latter is secured to the head o, by means of a pin p which passes through said head and through a slot q of the projection. In order to insure a sure gas-tight closing, the bottom d is formed as a stuffing box and has a grease box s, the grease of which may be forced by means of a regulatable nut r as required, with more or less pressure, against the spindle n. When the socket f is rotated, the exits b^1, b^2, b^3 and b^4, and the slots g^1, g^2, g^3 and g^4, are alternately exposed and closed at equal intervals. If, in the use of the device, only one small jet (Fig. 4) is to be ignited and extinguished alternately, for instance at equal periods alternating with marked periods of darkness, all the outlets or conduits u^1, u^2, u^3 and u^4 (which may be said to correspond to the pipes b^1, b^2, b^3, b^4) lead from the slots g^1, g^2, g^3, g^4 and are connected with a single lamp t^1 which may be one of a series. Thus, as the socket f is revolved, the successive slots h thereof are brought into register successively with but one of the slots g^1, g^2, g^3, g^4, and the lamp t^1 is repeatedly lighted and extinguished. The same device may be successfully employed for successively and alternatingly lighting and extinguishing two lamps

t^1 and t^4 (Fig. 5), with marked periods of darkness between the lighting of either. For this purpose, alternate conduits are both connected with the same lamp,—thus conduits u^1 and u^3 are connected with lamp t^1, and conduits u^2 and u^4 are connected with lamp t^4—and each lamp will be ignited whenever, during the rotation of the socket f, either conduit of the pair is supplied with gas, and will be extinguished whenever both conduits of said pair are shut off, by socket f, from the distributing body. When connected as shown in Fig. 5, the lamp t^1 is first ignited, is then extinguished, the lamp t^4 is next ignited, and then extinguished, and this cycle is repeated as often as desired.

In order to successively and alternately light three lamps, t^1, t^3 and t^4, (Fig. 6), with marked periods of darkness between the lighting of any lamp, the device may be usefully employed. Thus lamp t^1 may be connected, by a single conduit u^1, with the distributing device, lamp t^3 may be connected, by a single conduit u^3 with said distributing device, and the lamp t^4 may be connected, by two separate conduits, with the distributing device. When thus connected, the lamp t^1 is first ignited, and then extinguished, the lamp t^4 is next ignited and then extinguished, the lamp t^3 is next ignited and then extinguished, and the lamp t^4 is again lighted and then extinguished; and this cycle—including a lighting of lamp t^4 after a lighting of either lamp t^1 or t^3, and a marked interval of darkness after lighting of any lamp—is repeated as often as desired.

For the successive lighting, singly, of lamps of a series—with marked intervals of darkness—the distributing device may be used as shown in Fig. 6, which illustrates means for lighting first lamp t^1, extinguishing the same, then lighting lamp t^2 and extinguishing the same, then lighting lamp t^3 and extinguishing the same, and then lighting lamp t^4 and extinguishing the same—repeating this cycle (including lighting only one lamp at any time, with a marked interval of darkness between every lighting) as often as desired. For the ignition of any of the lamps (t^1, t^2, t^3, t^4) any suitable means—such as a pilot burner—may be used.

What I claim is:—

1. The improvement in apparatus for illuminating advertisements and the like, comprising a gas-distributing chamber, distributing pipes leading therefrom, and a fixed perforated socket for connecting each of the distributing pipes with said chamber, in combination with a rotatable distributing socket having openings disposed to successively register with one only at a time of the perforations of the fixed socket and to successively close communication with all such perforations, and with means for rotating said distributing socket.

2. The improvement in apparatus for illuminating advertisements and the like, comprising a gas-distributing chamber, distributing pipes leading therefrom and a tubular socket fixed within said chamber and provided with perforations one for each distributing pipe, in combination with a rotatable tubular distributing socket also within said chamber and having openings disposed to successively register with one only at a time of the perforations of the first-named socket and to successively close communication with all such perforations, one of said sockets closely surrounding the other.

3. The improvement in apparatus for illuminating advertisements and the like, comprising a gas-distributing chamber, distributing pipes leading therefrom, and means for establishing communication between said chamber and said pipes successively one only at a time and at equal intervals of time and for successively cutting off such communication with all pipes other than the one desired.

In testimony whereof, we have signed our names to this specification in the presence of two subscribing witnesses.

CARL SCHLÖSSER.
SAMUEL KNAUSS.

Witnesses:
AUGUST DRAUTZ,
RUDOLF BRECHT.