

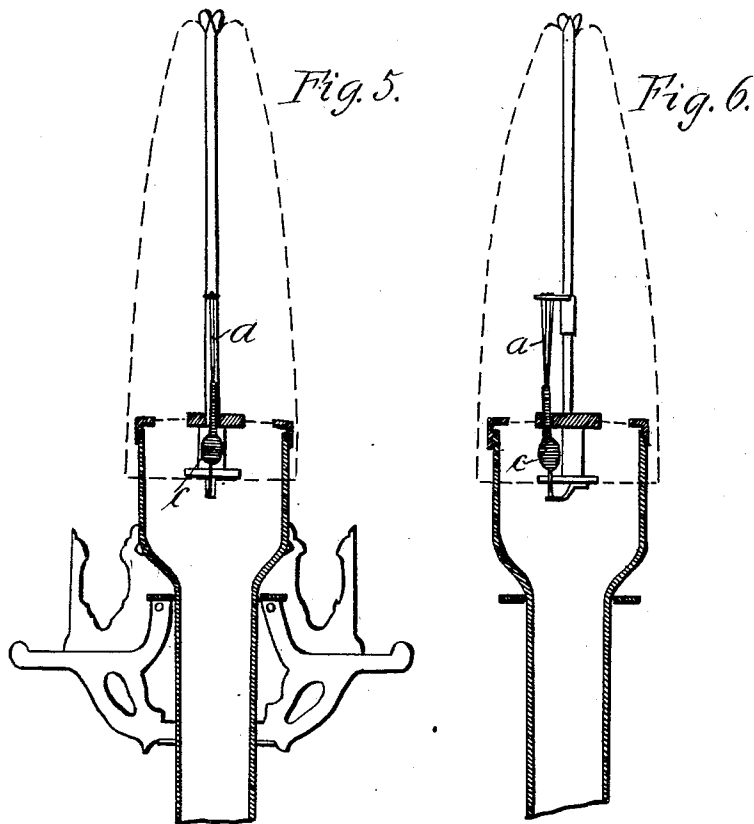
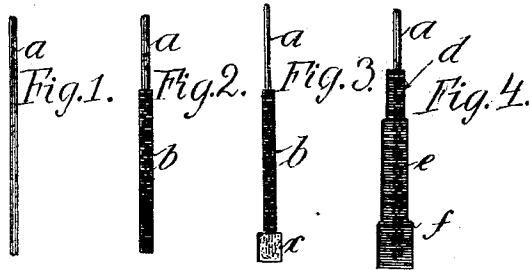
No. 677,326.

Patented June 25, 1901.

A. RAMMOSER.
SELF IGNITING INCANDESCENT LAMP.

(Application filed July 5, 1900.)

(No Model.)



Witnesses:

1. Richard Latzel
2. Arthur Richardson.

Inventor: Albert Rammoser
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UNITED STATES PATENT OFFICE.

ALBERT RAMMOSER, OF BERLIN, GERMANY.

SELF-IGNITING INCANDESCENT LAMP.

SPECIFICATION forming part of Letters Patent No. 677,326, dated June 25, 1901.

Application filed July 5, 1900. Serial No. 22,611. (No model.)

To all whom it may concern:

Be it known that I, ALBERT RAMMOSER, a subject of the Emperor of Germany, residing at Berlin, Germany, have invented certain new and useful Improvements in Self-Igniting Incandescent Lamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to self-igniting incandescent lamps, and has for its object to produce a lamp of this class in which certain objections to such lamps as heretofore made are overcome. In a certain class of such lamps if the lamp were continuously burned for any considerable length of time a regular conduction of the heat from the priming composition in the interior of the mixing-tube to the primers situated above the tube could not be effected, but the primers would be expanded into contact with the surrounding metal parts and would sometimes fuse or melt with these parts into an integral mass, thus ruining the structure. To cover these primers with asbestos or other non-conductors of heat has proved insufficient to remove this difficulty, as has also the inclosure of such primers in pipes. With the last-named expedient the heating of the wires to incandescence was so retarded as to render the device practically useless on account of the waste. My invention is intended to overcome all of these difficulties; and the invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described and afterward specifically claimed.

In the accompanying drawings, Figure 1 is a view of the parallel vertical loops of platinum wire used in my lamp. Fig. 2 is a view of the loops wrapped with a platinum wire in spiral form. Fig. 3 is a view of the structure of Fig. 2 with the priming composition secured thereto. Fig. 4 is a view of the structure of Fig. 3 wrapped with several layers of spun cotton. Fig. 5 is a vertical sectional view of a lamp with the completed igniter attached. Fig. 6 is a similar view on a plane at right angles to that of Fig. 5.

In carrying out the invention one or sev-

eral loops of small platinum wire are formed, as at *a*, care being taken that the single wire shall lie in straight lines in parallel positions for the reason that then all of the wires will be heated to incandescence throughout their whole extent. These wires are next wrapped in a platinum-wire coil, as at *b* in Fig. 2, from the bottom upward through a portion of their length, and on these wrapped wires is secured the priming composition, as at *c* in Fig. 3. Instead of the platinum coil *b* a small tube of platinum might be used.

A thin fabric is formed of cotton mixed with a small portion of asbestos and first impregnated with a solution of salt of thorium or cerite and afterward impregnated with a solution of a salt of platinum and then dried. The structure of Fig. 3 is now wound with this fabric in layers, as at *d e f* in Fig. 4, and the igniter so complete is placed in the lamp in lines parallel with the gas flow, as shown in Figs. 5 and 6, so that the several parts of the igniter are in contact with the gas flow for its entire length. This raw primer is now burned by a spirit-flame until its cover is reduced to ashes, whereby is left a porous and heat-resisting skeleton, which not only permits of the passage of the flowing gas, but is also an isolator for preventing the transmission of the heat of the incandescent wires to the adjoining metal parts. This isolation can be improved by coating the parts adjacent to the incandescent wires with a solution of platinum.

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

A self-igniting burner comprising parallel wires, an inclosing wrapper of platinum wire, and an outer wrapper of several layers of textile fabric impregnated with a solution of the salts of thorium or cerite and with a solution of salts of platinum, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ALBERT RAMMOSER.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.