

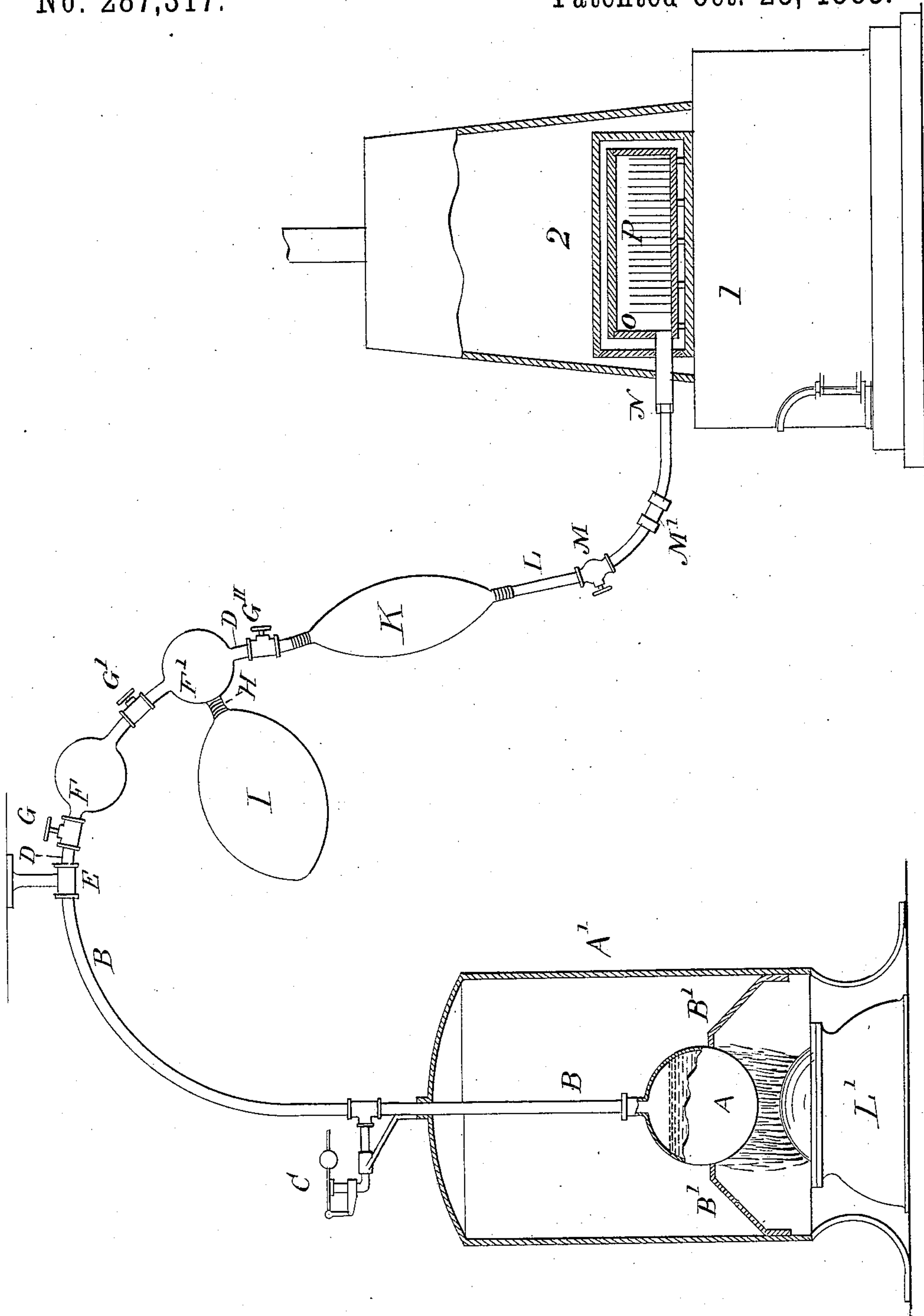
(No Model.)

C. G. PERKINS.

APPARATUS FOR TREATING INCANDESCENTS.

No. 287,317.

Patented Oct. 23, 1883.



ATTEST:

George Becker

A. E. Firmin

INVENTOR:

Charles G. Perkins

UNITED STATES PATENT OFFICE.

CHARLES G. PERKINS, OF NEW YORK, N. Y., ASSIGNOR TO THE IMPERIAL
ELECTRIC LIGHT COMPANY, OF SAME PLACE.

APPARATUS FOR TREATING INCANDESCENTS.

SPECIFICATION forming part of Letters Patent No. 287,317, dated October 23, 1883.

Application filed November 1, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. PERKINS, a citizen of the United States, residing at the city of New York, in the county and State of New York, have invented a certain new and useful Improvement in Apparatus for Treating Incandescents, of which the following is a specification.

My invention relates to a device for vaporizing heavy oils, and discharging the same into a chamber within a muffle-box, where carbons are placed for final treatment.

My invention consists of the production of hydrocarbon vapors from heavy oils and fatty substances, and storing the same in suitable vessels before discharging them into a chamber adapted to be heated, wherein carbon filaments are placed for final treatment.

The drawing represents a part section and elevation of my invention.

In the drawing, A is the oil-reservoir, with the extending metallic pipe B, provided with a safety-valve, C.

D is the glass tube, connected with the metallic pipe B at E. F and F' are the globular enlargements of the glass tube D, having thereon stop-cocks G G' G''.

H is the hollow projection of the globular enlargement F', and I is the soft-rubber pouch mounted on the said projection H.

K is the second soft-rubber pouch, having one of its ends connected with the foremost end of the glass tube D. The other end is connected with a metallic pipe, L, having thereon a stop-cock, M. The said pipe L is connected with the pipe N, leading into the chamber O, wherein the carbon filaments are placed for final treatment.

A' is the metallic drum, provided with an oil-reservoir support, B', under which is placed an oil-lamp, L', or other suitable device, for heating the oil-reservoir to a very high temperature.

Modus operandi.—The carbon filaments P are first placed in an upright position within the chamber O. The pipe N is then connected with L by the union-joint M', after which the stop-cocks G, G', G'', and M are turned off. When the fire of the chambers 1 and 2 shall have heated the muffled chamber O to a suitable heat, the vapor of heavy oils is then

forced therein. L' is the lamp placed beneath the oil-reservoir A, keeping it at a very high temperature, which causes a vapor to arise therefrom, which forces its way through the pipe B until it shall have reached the globe F, after which the stop-cock G' is turned on and allows the vapor to pass into the globe F', from thence through the hollow projection H into the soft-rubber pouch I. The stop-cock G' is then turned off and G'' turned on, and a pressure is brought to bear on the pouch I, which enables the vapor to enter the second soft-rubber pouch, K. When the pouch K shall have been properly filled, the stop-cock G'' is then turned off and M is turned on, at which time the pouch K contracts and forces the vapor into the chamber O, which has reached to a suitable heat, thereby producing hydrocarbon, which is deposited upon the exposed body of the carbon filaments, and equalizes the same, thus giving their entire surfaces the same electrical conductivity. Whenever the vapor in the pouch K shall have become exhausted, the same operation is repeated, after which the desired result is perfected.

Heretofore carbon filaments were laid between thin carbonized paper, and then placed within a carbonizing-chamber and heated to a high temperature, after which heavy oils were forced into the said chamber and would partly deposit hydrocarbon on the carbon filaments. This process, however, did not equalize the body of the carbon filaments as required, from the fact that the constant forcing of the oil into the heated chamber would cause hydrocarbon to form at the opening, thereby clogging and finally closing it. Another objection is that of having the carbon filaments placed between carbonized paper, which prevents an immediate deposit of hydrocarbon on the body thereof. These objections are obviated by my invention, which I have fully described herein.

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

1. In a device for producing hydrocarbon vapors from heavy oils, an oil-reservoir, A, with an extending pipe, B, in combination with a glass tube, D, having thereon the enlargements F and F', soft-rubber pouches I K, and the pipe L, connected with a pipe leading

into a chamber adapted to be heated, wherein carbon filaments are placed for final treatment, substantially as shown and described.

2. In a device for treating carbon filaments, an
5 oil-reservoir provided with an extending pipe, in combination with a tube having globular enlargements connected with elastic pouches, and a pipe leading from one of the pouches and connected with a second pipe leading into a cham-

ber adapted to be heated, wherein carbon filaments are placed for final treatment.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of October, A. D. 1882.

CHARLES G. PERKINS.

Witnesses:

GEO. BECKER,
WM. ANDERSON.