(No Model.)

M. M. M. SLATTERY.

APPARATUS FOR MANUFACTURING CARBON FILAMENTS FOR INCANDESCENT LAMPS.

No. 260,247. Patented June 27, 1882.

Fig. 1.

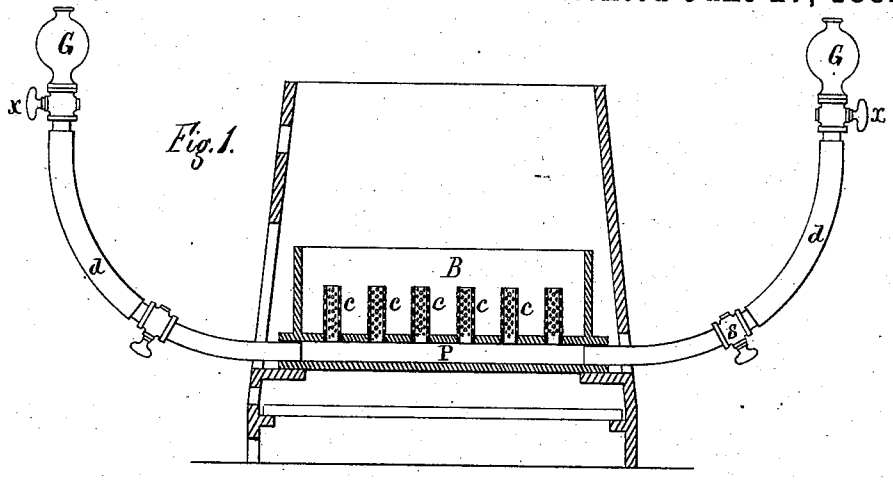


Fig. 2.

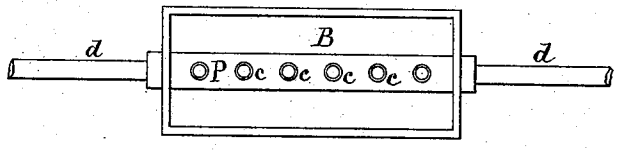


Fig. 3.

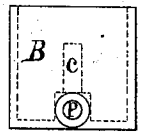
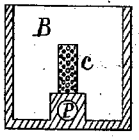


Fig. 4.



Witnesses:-
Chas. H. Hallock
Boston D. Harris

Inventor:-
Marmaduke M. M. Slattery
by Hubert A. Banning
his attorney

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

MARMADUKE M. M. SLATTERY, OF NEW YORK, N. Y.

APPARATUS FOR MANUFACTURING CARBON FILAMENTS FOR INCANDESCENT LAMPS.

SPECIFICATION forming part of Letters Patent No. 260,247, dated June 27, 1882.

Application filed November 1, 1881. (No model.)

To all whom it may concern:

Be it known that I, MARMADUKE M. M. SLATTERY, of the city of New York, in the county and State of New York, have invented a new and useful Improvement in Apparatus for Manufacturing Carbon Filaments for Incandescent Lamps, of which the following is a full, clear, concise, and exact description, such as will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings.

Figure 1 is a sectional side view of my improved carbonizing apparatus. Fig. 2 is a bottom view of the box which is to contain the material to be carbonized. Fig. 3 is an end view of the same, and Fig. 4 is a sectional view of Fig. 3.

The object of my invention is to provide a suitable apparatus for carbonizing and hydrocarbonizing carbon filaments for incandescent lamps. For this purpose I employ a box, B, as shown in Figs. 1 and 2, which may be of any desirable size. This box has a passage-way, P, running through it along the middle of the bottom. This passage-way is open at each end of the box B, and is connected by the pipes *d d* with the bulbs G G, as shown in Fig. 1.

I have shown two bulbs in connection with the carbon-box because I prefer to use this form; but good results may be obtained with one when the passage-way P is closed at the end where the bulb is dispensed with.

The bulb or bulbs contain the hydrocarbon oil used in process of carbonizing and hydrocarbonizing the filaments. The pipes *d d* have stop-cocks *s s* for regulating the feed of the oil to the carbon-box.

Inside of the box B and along the passage-way P small nipples or tubes *c c* are screwed or secured above the same at suitable intervals, making communication with the passage-way. These nipples or tubes *c c* are closed at the upper ends and open at the lower, and are perforated all round so as to communicate with the hollow parts of the same, for the purpose of evenly charging the box with hydrocarbon.

The material to be carbonized, which is packed or enveloped in paper surfaced with plumbago, is placed in the box B at each side and above the perforated nipples *c c*. By this means the process of hydrocarbonizing carbon filaments as they are being carbonized may be carried on with better results than have heretofore been produced with any other apparatus employed for that purpose.

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

1. A carbonizing apparatus consisting of the box B, having the passage P, in combination with the perforated nipples *c c*, substantially as described.

2. The combination of the bulb G with the box B, it being connected therewith by the pipe *d*, one end of which is secured in the passage P, substantially as described.

MARMADUKE M. M. SLATTERY.

Witnesses:
HUBERT A. BANNING,
CHAS. H. HALLOCK.