

(No Model.)

2 Sheets—Sheet 1.

J. PINTSCH, Jr.
SIGNAL LIGHT.

No. 269,505.

Patented Dec. 19, 1882.

Fig: 1

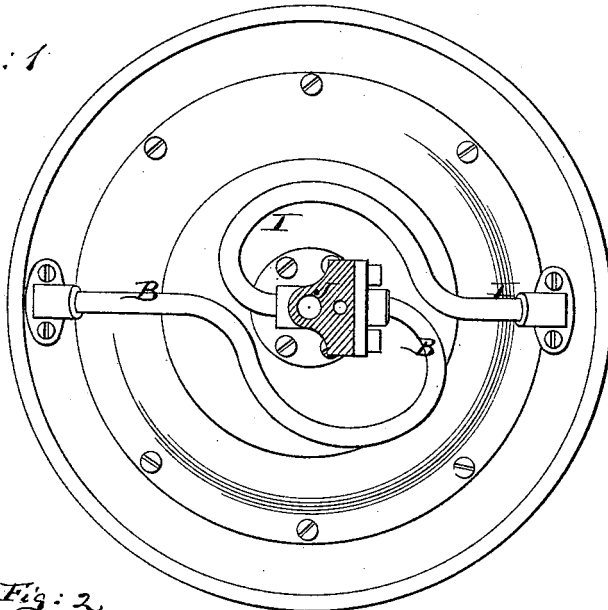
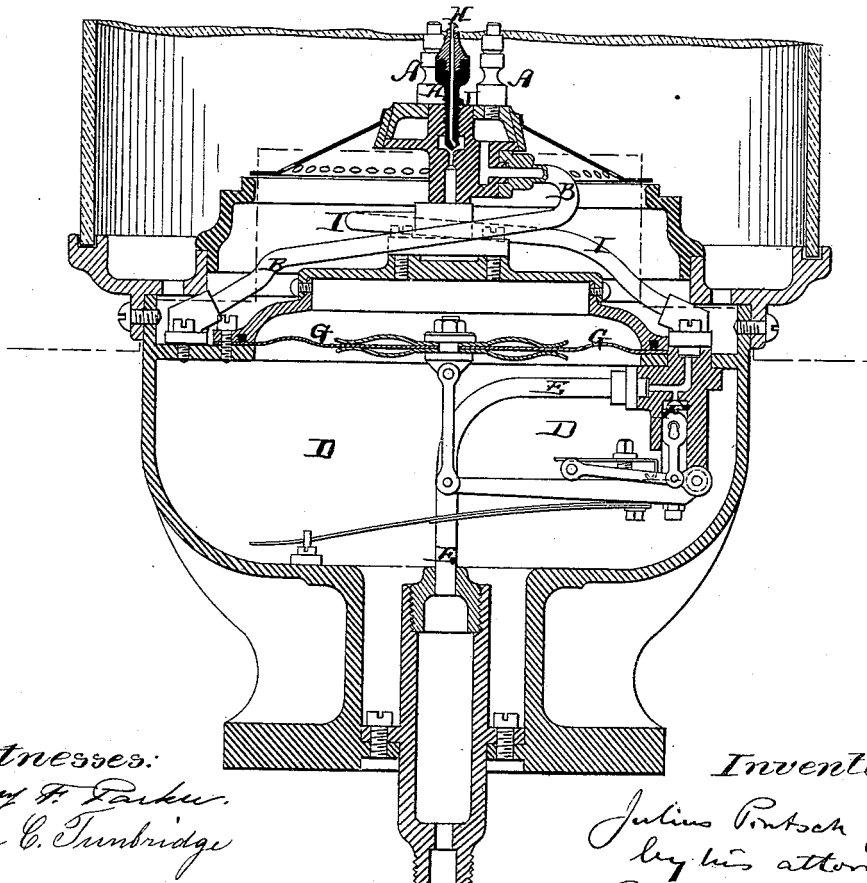


Fig: 2



Witnesses:

Henry F. Parker.
John C. Turnbridge

Inventor:

Julius Pintsch Jr.
by his attorneys
Briesen & Betts

(No Model.)

2 Sheets—Sheet 2.

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Fig: 3

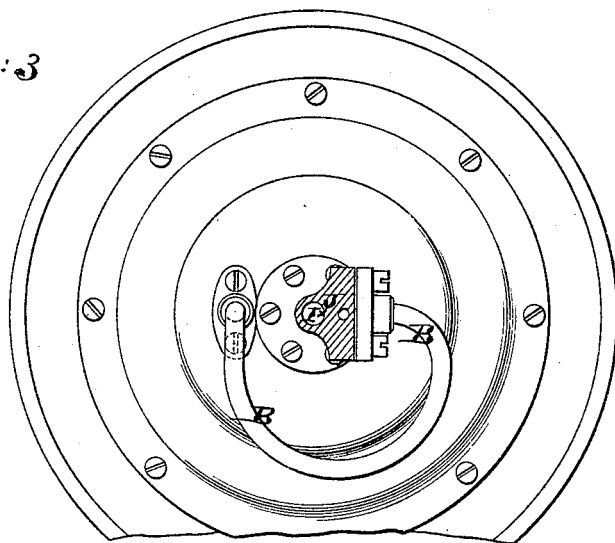
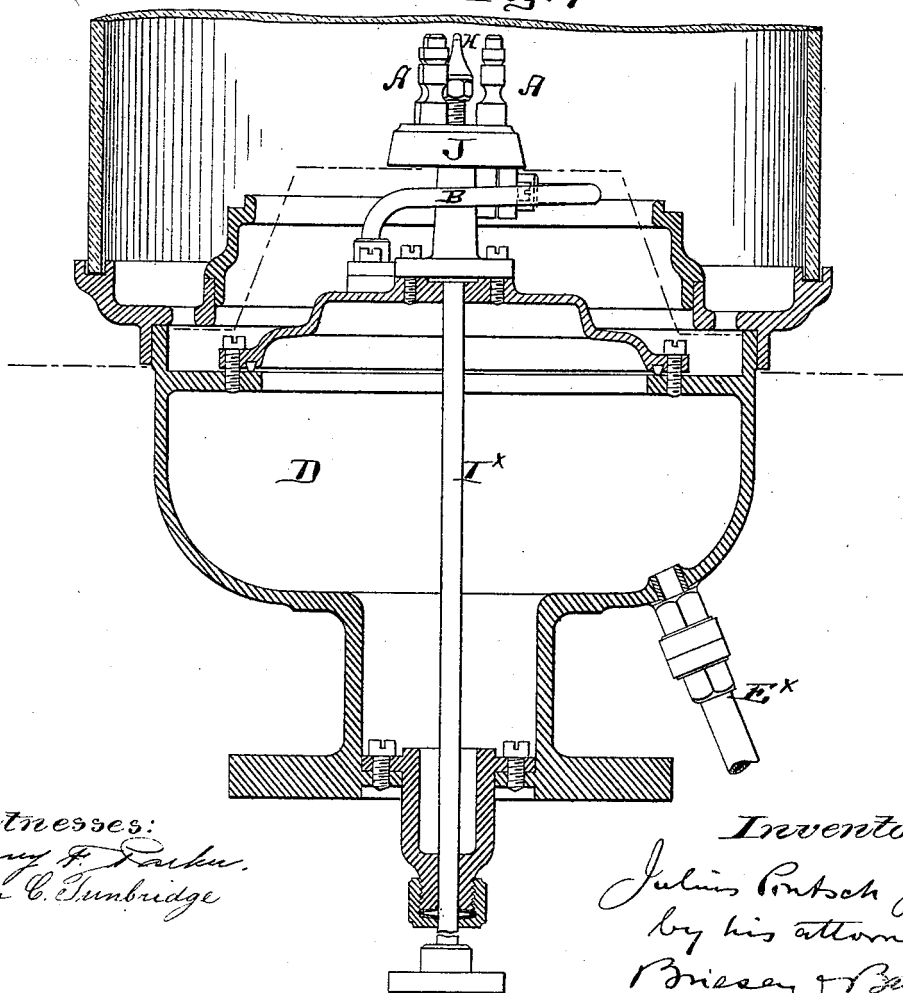


Fig: 4



Witnesses:
Henry F. Parker.
John C. Dunbridge

Inventor:
Julius Pintsch Jr
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Brissan & Batts

UNITED STATES PATENT OFFICE.

JULIUS PINTSCH, JR., OF BERLIN, GERMANY.

SIGNAL-LIGHT.

SPECIFICATION forming part of Letters Patent No. 269,505, dated December 19, 1882.

Application filed April 14, 1882. (No model.)

To all whom it may concern:

Be it known that I, JULIUS PINTSCH, JR., (of the firm of Julius Pintsch,) a subject of the King of Prussia, residing at Berlin, Prussia, German Empire, have invented certain new and useful Improvements in Signal-Lights; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a top view, partly in section, showing my improvement in signal-lights. Fig. 2 is a vertical central section of said signal-light. Fig. 3 is a top view, partly in section, of a modification thereof; and Fig. 4 is a side view, partly in section, of said modification.

The object of this invention is to produce a lantern for use on buoys, light-houses, or the like, which lantern shall be so constructed that, if the wind or the motion of the buoy should extinguish the illuminating flames, said flames will be promptly reproduced by a special provision, which is the main feature of this invention, and which consists in a separate burner, so placed with reference to the illuminating-burners as to reach each of the latter with a flame produced from gas that is fed to this extra burner under extra pressure.

Referring to Figs. 1 and 2, the letters A A represent the main burners of a signal-light, such as a light used on a buoy, on a light-house, railway-car, or the like. These burners A are supplied with gas by a pipe, B, which receives its charge from a chamber, D, to which the gas is supplied by a pipe, E, there being a valve, F, between the pipe E and chamber D, the position of which valve is regulated by a diaphragm, G, so that the pressure in the chamber D and the size of the flame of the burners A will always be practically uniform.

So far as described, the parts are not of the present invention; but between the burners A, I place the igniting-burner H, which receives the gas from a pipe, I, that communicates directly with the pipe E, as shown in Fig. 2. The burner H is screwed into its supporting-

socket J, and has a conical perforated lower end, which regulates by its adjustment the amount of gas admitted to it, and at the upper part the burner H has one or more minute openings, which have the object of carrying a sharp flame to the gas that escapes from the burners A, so that thus the burner H will always keep the burners A ignited, or rather the gas that escapes from the latter; and should the wind or the motion of the buoy ever cause the flames on the burners A to be extinguished, they will be at once relighted by the gas escaping from the burner H.

It will be noticed that the pipe I, leading to the burner H, is not regulated by the diaphragm G, but receives the gas, under pressure, without modification, whereas the gas that is admitted to the burners A is regulated to a certain uniform pressure less than the main pressure under which the pipe E admits it, and that therefore the gas escaping from the burner H is under greater pressure than that which escapes from the burners A. The igniting-flame escaping from the burner H has the further advantage of at least partly illuminating the space between the burners A, and thus intensifying the light that is produced by the apparatus.

The modification shown in Figs. 3 and 4 consists simply in illustrating that the burner H is supplied with gas from a pipe, I*, while the burners A are supplied with gas from a pipe, E*, it being understood that the pipe E* receives the gas under lower pressure than does the pipe I*.

It is not necessary that the burner H should have lateral openings to produce fine separate flames, as it might as well have a slit on top, or the usual aperture on top, sufficient to spread its flames into contact at all times with the gas that escapes from the burners A.

I claim—

1. The combination, in a lamp, of the burner or burners A with the pipe B and with the burner H, and pipe I, and with a reservoir, D, and single gas-supply pipe E, supplying the gas to both sets of burners H and A, but at all times under greater pressure to the burner H than to the burner or burners A, substantially as herein shown and described.

2. The burner or burners A, pipe B, chamber D, diaphragm G, valve F, and pipe E, in combination with the pipe I and burner H, the pipe I receiving gas directly from the pipe
5 E, and the pipe B from the chamber D, which communicates also with the pipe E, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

JULIUS PINTSCH, JUNIOR.

Witnesses:

GEORGE LOUBIER,
B. ROY.