

SIEBERT & LILLEY.

Paper Dryer.

No. 111,390.

Patented Jan. 31, 1871.

Fig. 1.

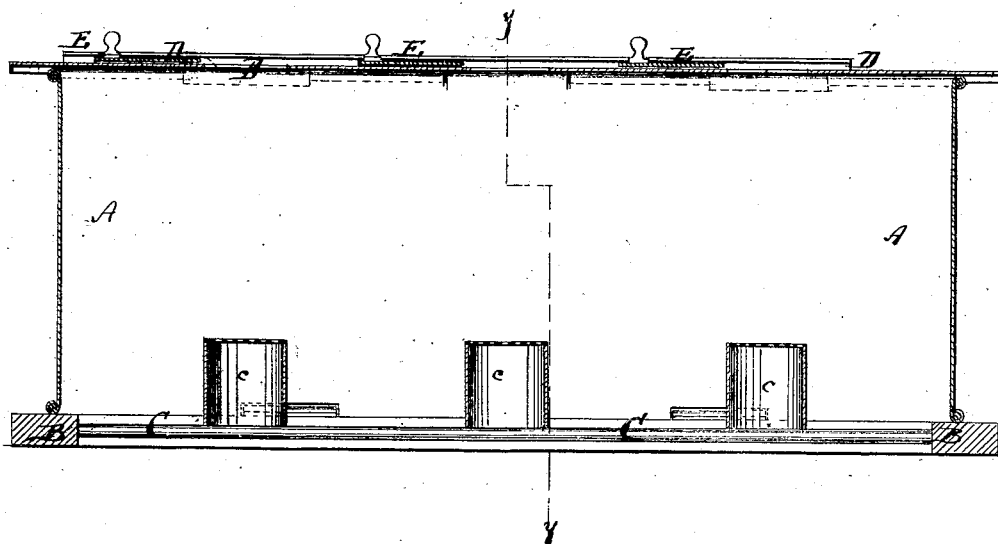
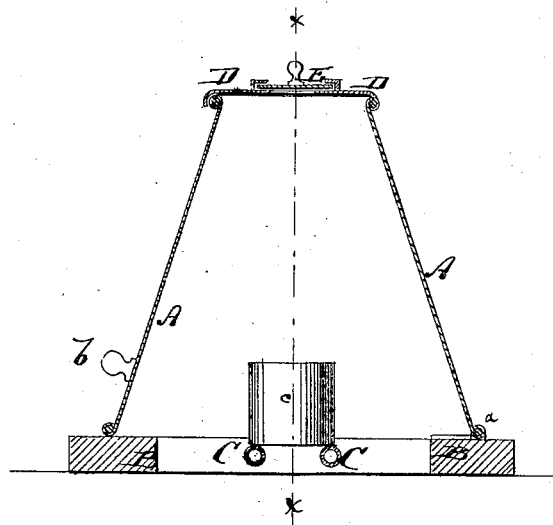


Fig. 2.



Witnesses:

E. Hoff.
L. S. Hooper

Inventors:

L. Siebert
J. W. Lilley
per *[Signature]*
Attorneys.

United States Patent Office.

LOUIS SIEBERT AND JOHN WILSON LILLEY, OF COLUMBUS, OHIO, ASSIGNORS TO JOHN R. HOOL & SON, OF NEW YORK CITY.

Letters Patent No. 111,390, dated January 31, 1871.

IMPROVEMENT IN HEATERS FOR PAPER-RULING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, LOUIS SIEBERT and JOHN WILSON LILLEY, of Columbus, in the county of Franklin and State of Ohio, have invented a new and improved Heater for Paper-Ruling Machine; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents a longitudinal vertical section of our improved heater for ruling-machines, *x x*, fig. 2, being the section line.

Figure 2 is a vertical transverse section of the same, *y y*, fig. 1, being the section line.

Similar letters of reference indicate corresponding parts.

This invention relates to a new heater, which is to be applied to the paper-ruling machines for the purpose of rapidly drying the ink on the paper.

The invention consists in providing the heater with a sliding slotted lid, which is arranged in a hinged cover, and supplied with adjustable slides, so that the degree of heat admitted to the paper can be regulated at will, in accordance with the kind of ruling to be dried.

The heater A is made in form of an inverted trough, and is hinged, at *a*, to a supporting-frame, B, of wood or other material. This frame is placed at the back end of the ruling-machine, so that its ends rest on the lower side rails, about one foot from the rear posts of the machine. The hinged side of the heater is in front, so that it can be readily swung up or down by means of a knob, *b*, on its back.

O C are gas-pipes, extending longitudinally through

the frame B, and provided with suitable burners *c c*, which are disposed at suitable intervals apart.

In the top of the heater A is a longitudinal adjustable slide, D, which has slots or apertures for the escape of the heat, small slides or plates E being arranged to cover said slots or apertures wholly or in part.

The machine, when provided with our improved heater, should be used without an apron, carrying the paper on cords from the cloth to the receiving-box, so that the full amount of heat will be utilized, while, at the same time, the expensive apron is dispensed with, and the loss of power, caused by its weight, prevented.

By means of the adjustable slide D the heat can be thrown upon the head, foot, or border lines, as may be desired.

When the full speed of the machine is required, the entire cover A is thrown over, so as to permit a full escape of heat and a rapid drying of the ink.

By means of the slides E the apertures can be enlarged or reduced in size at will, and by means of the slide D they can be brought under any desired part of the paper.

Having thus described our invention,

We claim as new and desire to secure by Letters Patent—

The heater, composed of the frame B, hinged cover A, perforated slide D, and small slides E, all arranged to operate substantially as herein shown and described.

LOUIS SIEBERT.

JOHN WILSON LILLEY.

Witnesses:

CHRISTIAN BENNINGHAFF,
WM. L. HEYL.