No. 699,160. Patented May 6, 1902.

F. A. EYLER.

APPARATUS FOR DISPELLING ELECTRICITY IN DELIVERING SHEETS INTO AND FROM PRINTING PRESSES.

(Application filed Feb. 2, 1901.)

(No Model.) 2 Sheets—Sheet 1.

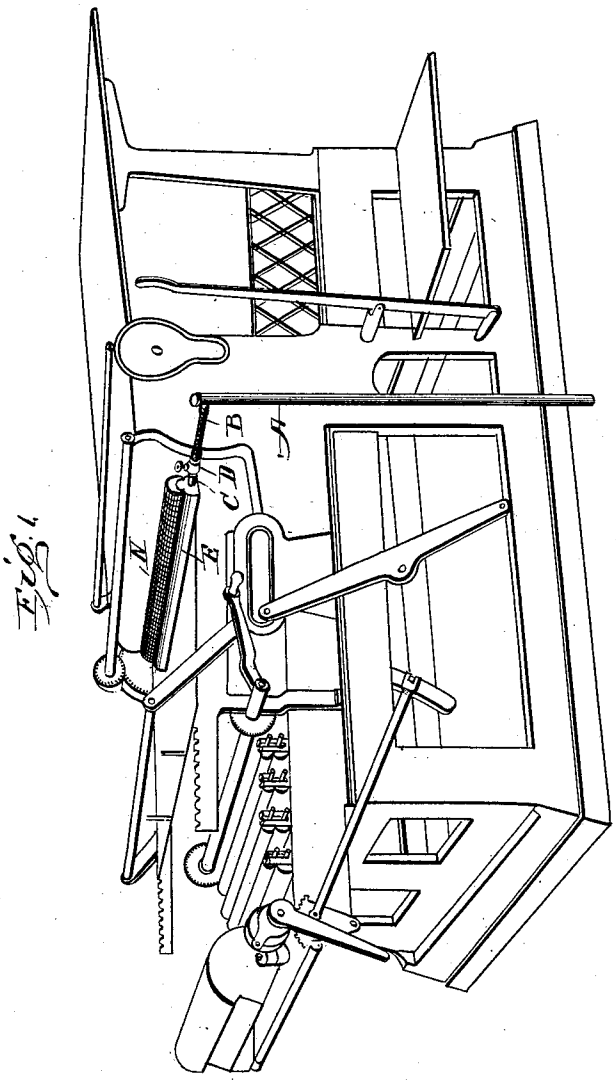


Fig. 1.

Witnesses
Philip Tindall
Harry A. Holland

Inventor
Frank A. Eyler
By Owen H. Fowler
Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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(No Model.) 2 Sheets—Sheet 2.

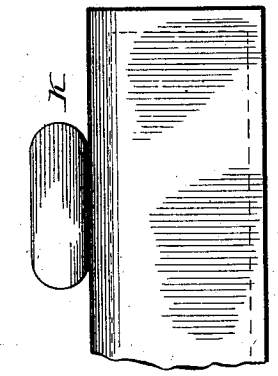


Fig. 4.

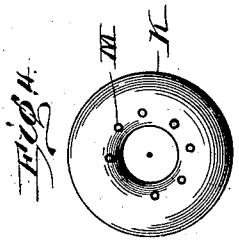


Fig. 2.

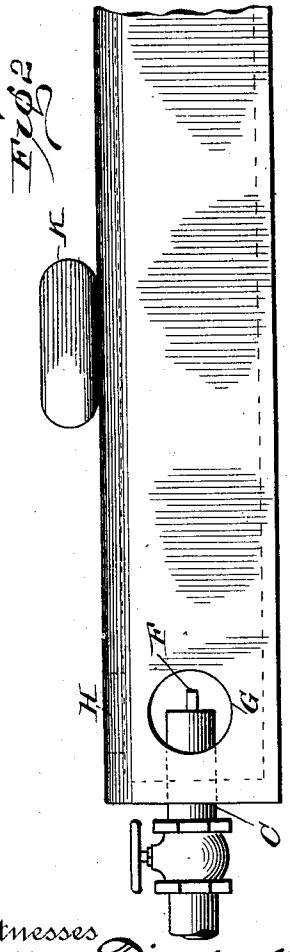
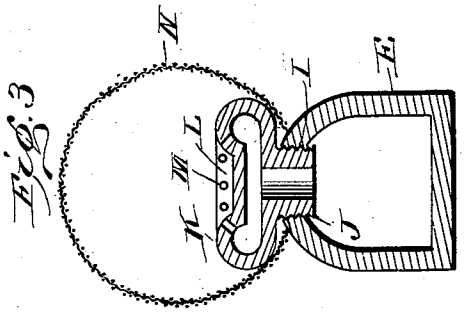


Fig. 3.



Witnesses
Philip Tindall
Harry Hollands

Inventor
Frank A. Eyler
By Owen H. Fowler
Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRANK ALBUS EYLER, OF HARRISBURG, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO INNES HENRY, OF HARRISBURG, PENNSYLVANIA.

APPARATUS FOR DISPELLING ELECTRICITY IN DELIVERING SHEETS INTO OR FROM PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 699,160, dated May 6, 1902.

Application filed February 2, 1901. Serial No. 45,730. (No model.)

To all whom it may concern:

Be it known that I, FRANK ALBUS EYLER, a citizen of the United States of America, residing at Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Apparatus for Dispelling Electricity in Delivering Sheets into or from Printing-Presses, of which the following is a specification.

In the art of printing it is a well-known and established fact that paper when subjected to certain atmospheric conditions contains more or less electricity and that the press during the operation of printing generates a greater or less amount, according to the condition of the atmosphere and the speed of the press. It is also well known to nearly all practical printers that the electrical element which is present during the process of printing will cause the printed or partially-printed sheets to adhere to the delivering mechanism and will prevent them from being properly delivered and will also cause the sheets to adhere to each other when in a pile on the delivery-table. My invention is designed to obviate these difficulties and objections. To this end I make use of certain details of construction, arrangement, and combination of parts, all of which will be more fully described hereinafter, and the specific points of novelty in which will be designated in the appended claims, which are intended to accord in their terms, spirit, and meaning with the prior state of the art and the existing law.

Before proceeding further with a detailed description of the several auxiliary features of my invention I desire to distinctly state and emphasize the fact that although I have shown in the accompanying drawings and described in the following specific description certain component and coöperative parts which I deem sufficiently improved and operative to carry out the fundamental principles herein incorporated I do not confine myself to the exact details of construction so illustrated and described, since obvious departures may be made without deviation from the inherent and generic features constituting the gist hereof.

In the drawings forming a part of this specification, Figure 1 is a view illustrating the device as applied to a printing-press, certain parts of the press not deemed essential to show the invention being omitted. Fig. 2 is a side elevation of the device as detached. Fig. 3 is a cross-sectional view. Fig. 4 is a top plan view of one of the burners.

Referring by letters to the drawings, A represents a supply-pipe secured to the side of the press and connected at any suitable point beneath the floor to a gas-main, (which it is not deemed essential to show.) The pipe should be insulated from the press, or, if found more desirable, a flexible insulated tube may be employed in lieu thereof.

Connected to the upper end of the supply-pipe by a rigid or flexible joint B is the device proper, which consists of a small tube C, provided with a stop-cock D and set into the end of a larger tube E, which may be of any shape, material, and dimensions found most desirable. The free end of the tube C projects into the tube E and is provided with a small jet F, which is in a line with the center of two oppositely-disposed apertures G in the respective sides of the tube E and an aperture H in the top thereof, thus forming an atmospheric inlet.

Arranged in a line upon the top of the tube E is a series of screw-threaded apertures I, adapted to engage the threads J upon the burners K, which are similar to a hollow disk, having its upper surface concaved, as plainly shown at L, and provided with a series of apertures M, thus forming a burner which will give a low but hot flame.

Clamped over the burners is a split cylindrical wire-gauze tube N, adapted to prevent the sheets from coming in contact with the flames. While I have shown this manner of attaching the screen, it is obvious that other forms of screens and a different manner of attachment may be employed.

Although I have shown the invention as attached to one style of printing-presses, it is obvious that it may be attached to almost any style of press now in use and also to any style of folding-machines. In some presses where two or more cylinders are employed—for instance, the web-press—it will be necessary to provide the machine with as many

dispellers as there are cylinders in order that each impression shall pass over a dispeller before the sheet is finally delivered. When the sheets are automatically fed into a press, electricity is generated in the paper while going through the rolls and tapes of the feeder. Accordingly I provide a dispeller which is arranged in juxtaposition to the entering sheets approximately near the first cylinder.

It will be readily understood that as the sheet passes over the dispeller the electric element is attracted by the heat and is passed off or grounded through the supply-pipe. It will also be readily seen that I provide a device for dispelling electricity which is exceedingly cheap and simple in its construction, one which is adapted to consume gas, vapor, or fluid and will efficiently perform all of its intended functions.

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

1. In a device for dispelling electricity from printing-presses, a half-oval or other shaped tube having a series of burners arranged in a line upon the top thereof, atmospheric inlets in one end of the said tube, a detachable wire-gauze screen over the said burners and a connection to a supply-pipe, substantially as shown and described.

2. A device for dispelling electricity from paper, in combination with a printing-press, a half-oval or other shaped tube closed at both ends, a series of burners arranged upon the tube, a detachable wire-gauze screen over the said burners, atmospheric inlets in one end of the tube and a connection to a supply-pipe, substantially as shown and described.

In testimony whereof I hereto set my hand in the presence of two witnesses.

FRANK ALBUS EYLER.

Witnesses:
CLARA M. SCHMIDT,
FRANK D. STICKNEY.