P. MARTUCCI.

MEANS OF REMOVING ELECTRICITY FROM PAPER.

APPLICATION FILED AUG. 16, 1915.

1,203,030.

Patented Oct. 31, 1916.

2 SHEETS—SHEET 1.

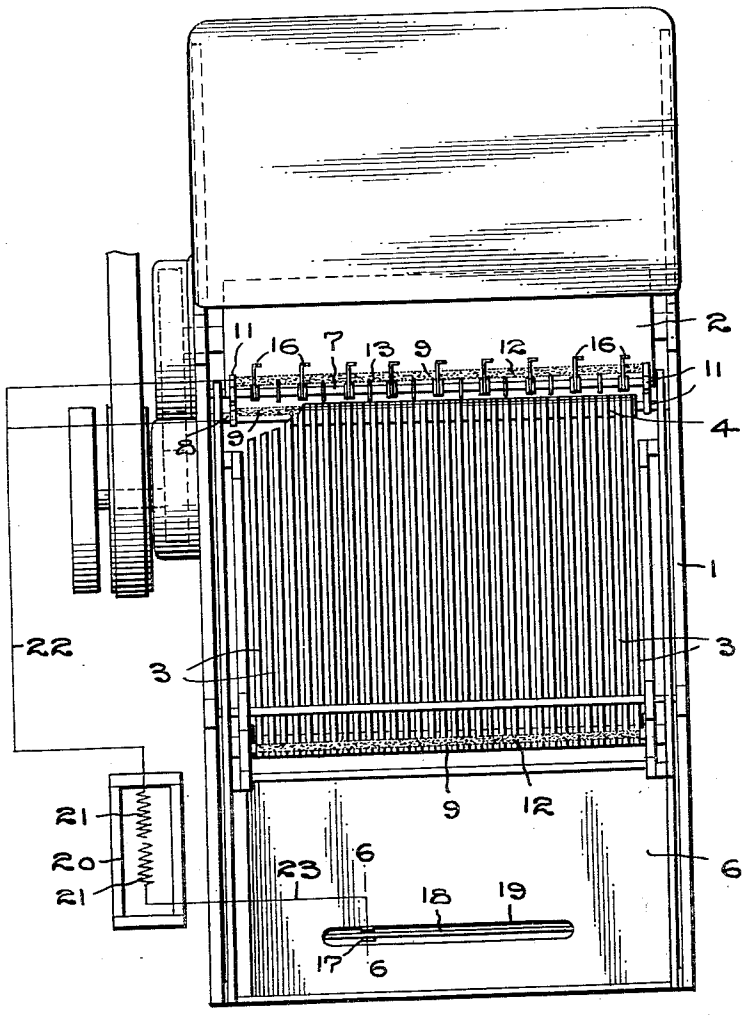


FIG. 1.

Inventor

Pietro Martucci,

Witnesses

C. R. Ziegler.

By Joshua R. H. Potts.

His Attorney

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2 SHEETS—SHEET 2.

FIG. 2.

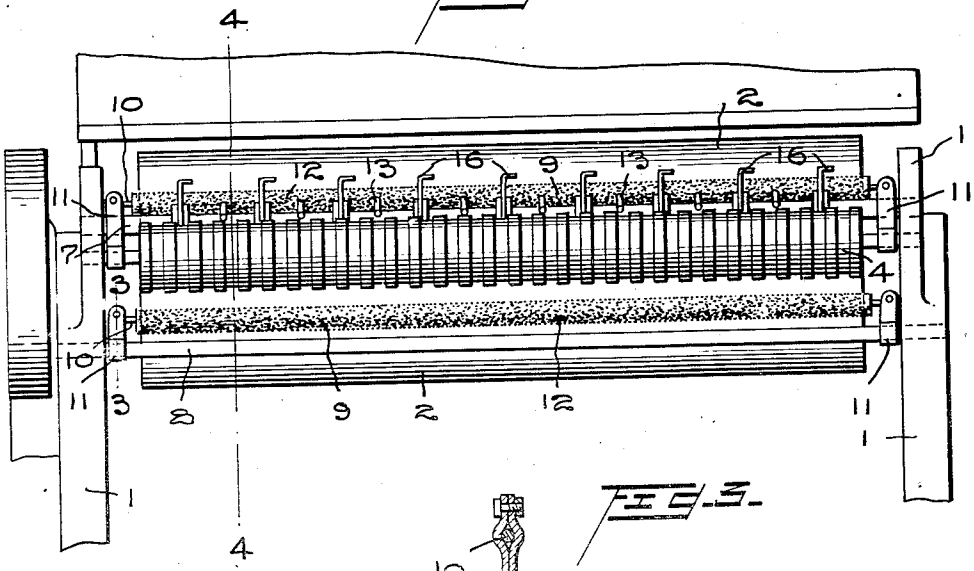


FIG. 3.

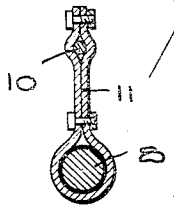
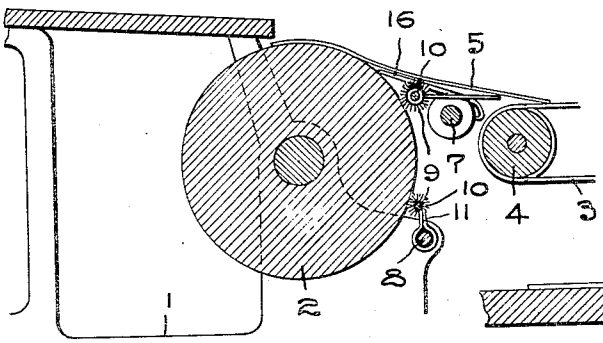


FIG. 4.



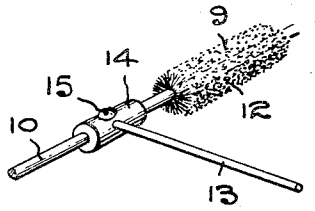


FIG. 5.

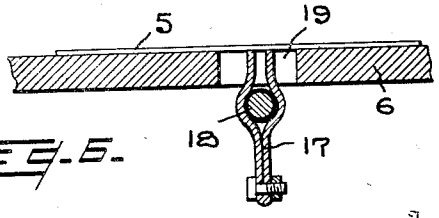


FIG. 6.

Inventor

Pietro Martucci,

Witnesses

L. Ruoff

C. R. Ziegler.

By Joshua R. H. Potts.

His Attorney

UNITED STATES PATENT OFFICE.

PIETRO MARTUCCI, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO ANTHONY J. FRANK, OF PHILADELPHIA, PENNSYLVANIA.

MEANS FOR REMOVING ELECTRICITY FROM PAPER.

1,203,030. Specification of Letters Patent. **Patented Oct. 31, 1916.**

Application filed August 16, 1915. Serial No. 45,694.

To all whom it may concern:

Be it known that I, PIETRO MARTUCCI, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Means for Removing Electricity from Paper, of which the following is a specification.

My invention relates to improvements in means for removing electricity from paper, and more particularly to an improved attachment for printing presses which is adapted to collect static electricity in the paper, freeing the paper of the same, so that the paper will properly feed sheet upon sheet without sticking either to adjacent sheets or to any part of the press.

It is a well known fact that sheets of paper under certain conditions contain more or less static electricity, and this interferes with the operation of the printing press and the proper manipulation of the sheets, and it is the purpose of my invention to so equip a printing press that such electricity will be removed from the paper, and the printing operation greatly facilitated.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claim.

In the accompanying drawings: Figure 1 is a plan view partly broken away and partly diagrammatic illustrating my improvements in connection with an ordinary type of printing press. Fig. 2 is a fragmentary view in section, the feeding tapes being removed. Fig. 3 is an enlarged view in section on the line 3—3 of Fig. 2. Fig. 4 is a view in section on the line 4—4 of Fig. 2. Fig. 5 is a fragmentary perspective view illustrating one of my improved collectors showing the same partly covered with tinsel, and Fig. 6 is a fragmentary view in section on an enlarged scale on the line 6—6 of Fig. 1.

I have illustrated my invention in connection with an ordinary type of cylinder printing press, in which 1 is the frame of the press, 2 the cylinder, 3 the feed tapes turning around a feed roll 4 adjacent cylinder 2, and depositing the sheets 5 onto the table 6.

7 and 8 are transverse rods adjacent the cylinder 2, and on both of these rods 7 and 8, I locate my improved collectors 9. The collectors 9 consist of transverse wires 10 which are supported in clamps 11 secured to but insulated from the rods 7 and 8 respectively. The wires 10 are covered with tinsel 12, which may be wrapped or otherwise formed around the wires, and the tinsel 12 bears against the cylinder 3 and also against the paper 5, which moves on the cylinder in the ordinary operation of printing. The paper collector 9 is provided with a plurality of rearwardly projecting contact fingers 13 which preferably are of copper wire secured to sleeves 14, the latter located on the wire 10 and secured in position by jam screws 15. These sleeves 14 and their jam screws are covered by the tinsel 12, but in Fig. 5 I have illustrated some of the tinsel broken away to indicate the construction above described.

It is to be understood that the contact fingers 13 are entirely separate and independent of the ordinary feeding fingers 16, so that the fingers 13 operate to engage the paper as it is moving from the cylinder 2 onto the tapes 3.

A clamp 17 is secured to but insulated from a rod 18 below the table 6, and extends up through a slot 19 in the table in position to contact with a paper sheet 5 on the table.

20 represents a box which is located at any convenient point, and which contains resistance 21 preferably spaced apart. This resistance is indicated diagrammatically as coils, but of course, may take any other form, and one resistance coil 21 is connected by a wire 22 with both collectors 9 adjacent cylinder 2, the wire 22 being secured to the clamps 11 at one side of the printing press. The other resistance 21 is connected by a wire 23 with the clamp 17, as shown in Fig. 1.

In operation, the sheet of paper as it passes around with the cylinder 2, rubs against the collectors 9 in succession, and the electricity in the paper flows through the wire 22, and in jumping the gap between the resistance coils 21, causes a spark and thereby consumes the electric current. Any electricity in the paper sheets 16 on table 6 will also find an outlet through the wire 23.

By providing the collectors as above described, the tinsel covering 12 readily acts as a continuous contact throughout the sur-

face of the paper, and insures a perfect electric contact throughout without in any way scratching the paper or interfering with the printing operation. The fingers 11 operate as contacts, and also assist in supporting the paper, so that the weight of the paper is utilized to insure a perfect contact with the fingers 13.

A third collector 9 is also preferably located across the frame 1 near the table 6, and the ends of said last-mentioned collector 9 are insulated from the frame.

Various slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claim.

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

The combination with a cylinder printing press having rods thereon adjacent the cylinder, of clamps secured to the rod, wires supported by the clamps adjacent the cylinder, tinsel wrapped around the rods and engaging the cylinder, one of said collectors having laterally projecting fingers thereon in position to support and engage paper sheets fed from the cylinder, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PIETRO MARTUCCI.

Witnesses:
ANTHONY J. FRANK,
MARIE JACKSON.