

No. 687,932.

Patented Dec. 3, 1901.

C. H. COLBY.

ELECTRIC CONDUCTOR AND ATTACHMENT FOR PRINTING PRESSES.

(Application filed Apr. 20, 1901.)

(No Model.)

Fig. 1

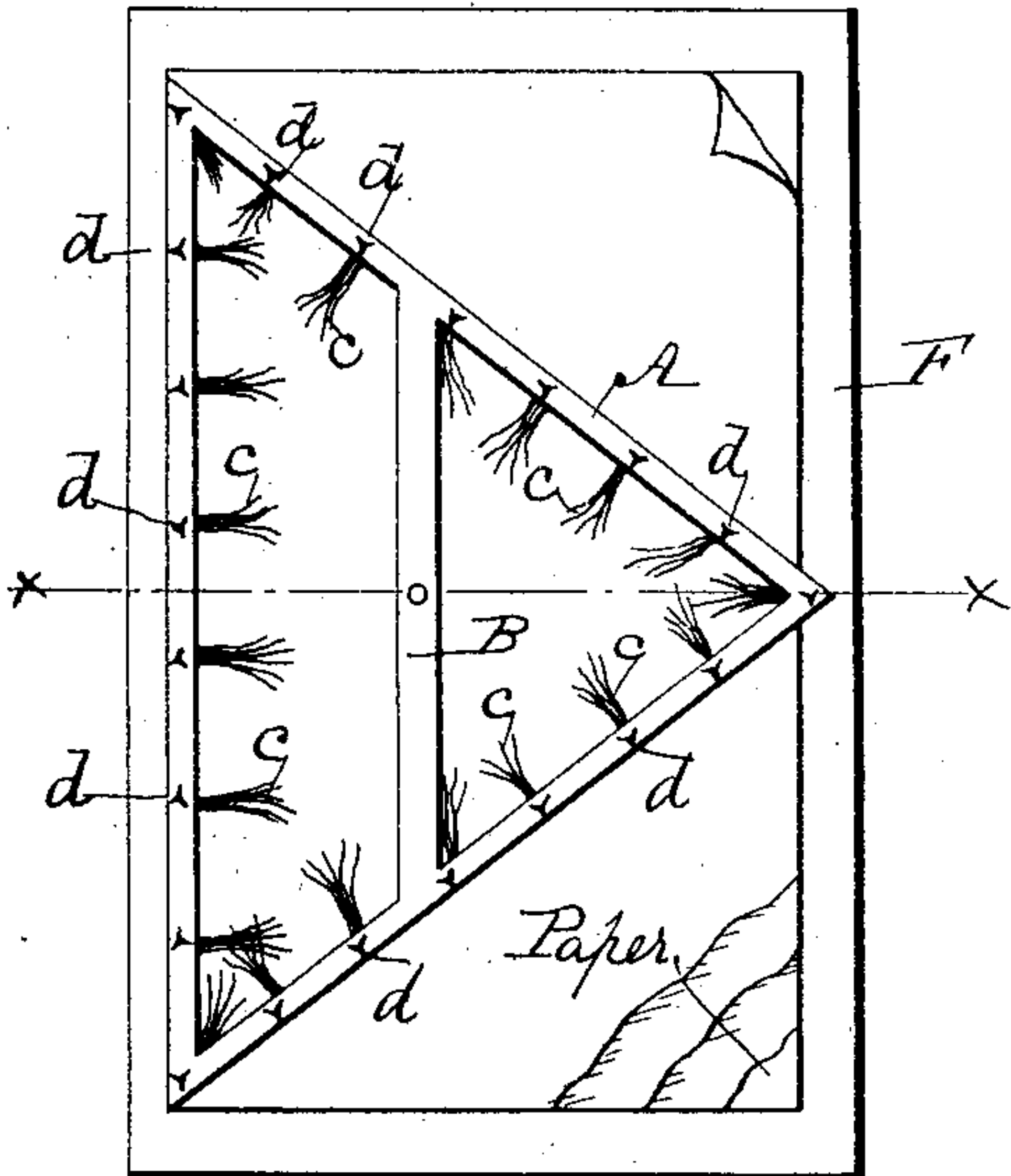


Fig. 2

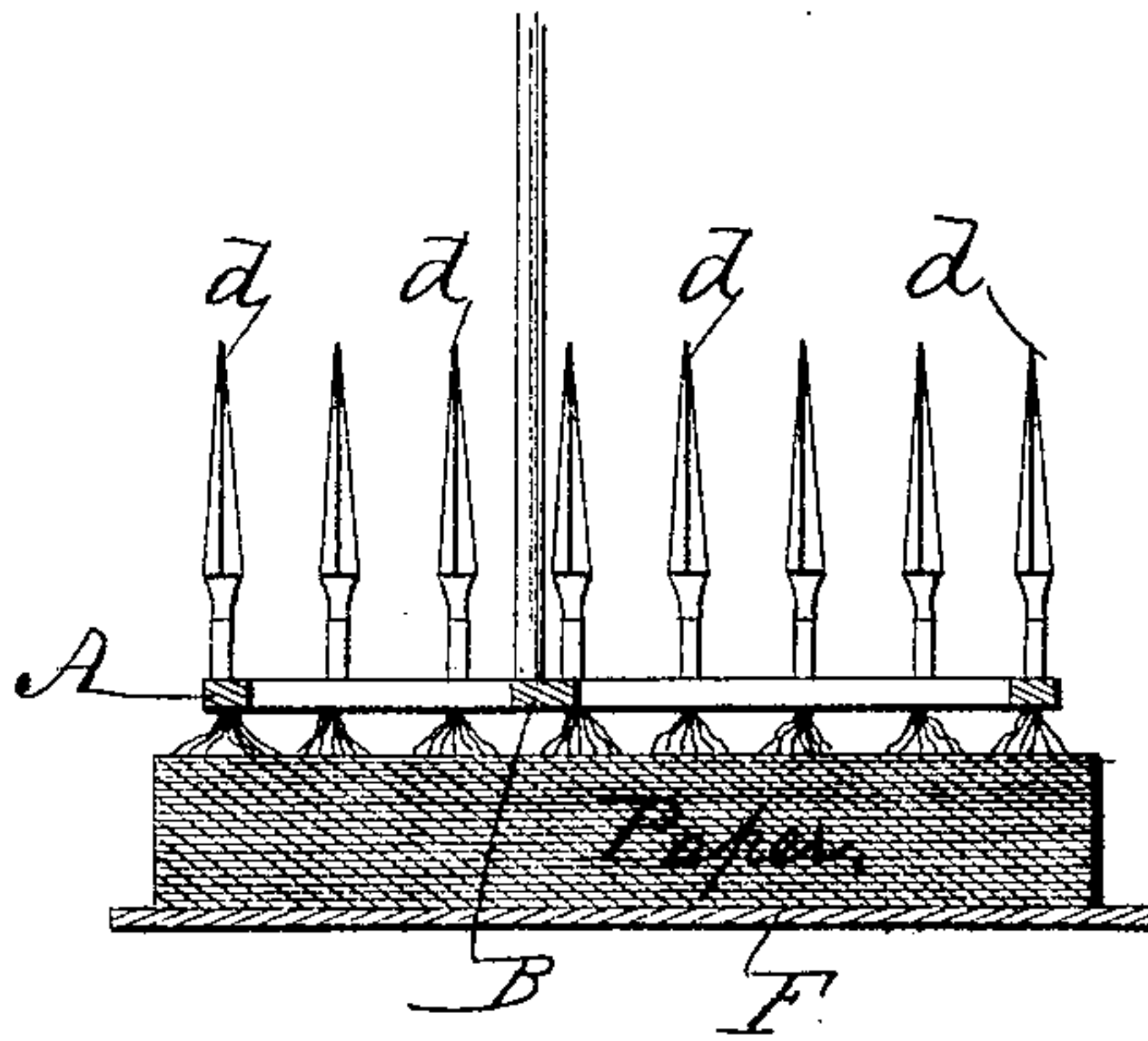
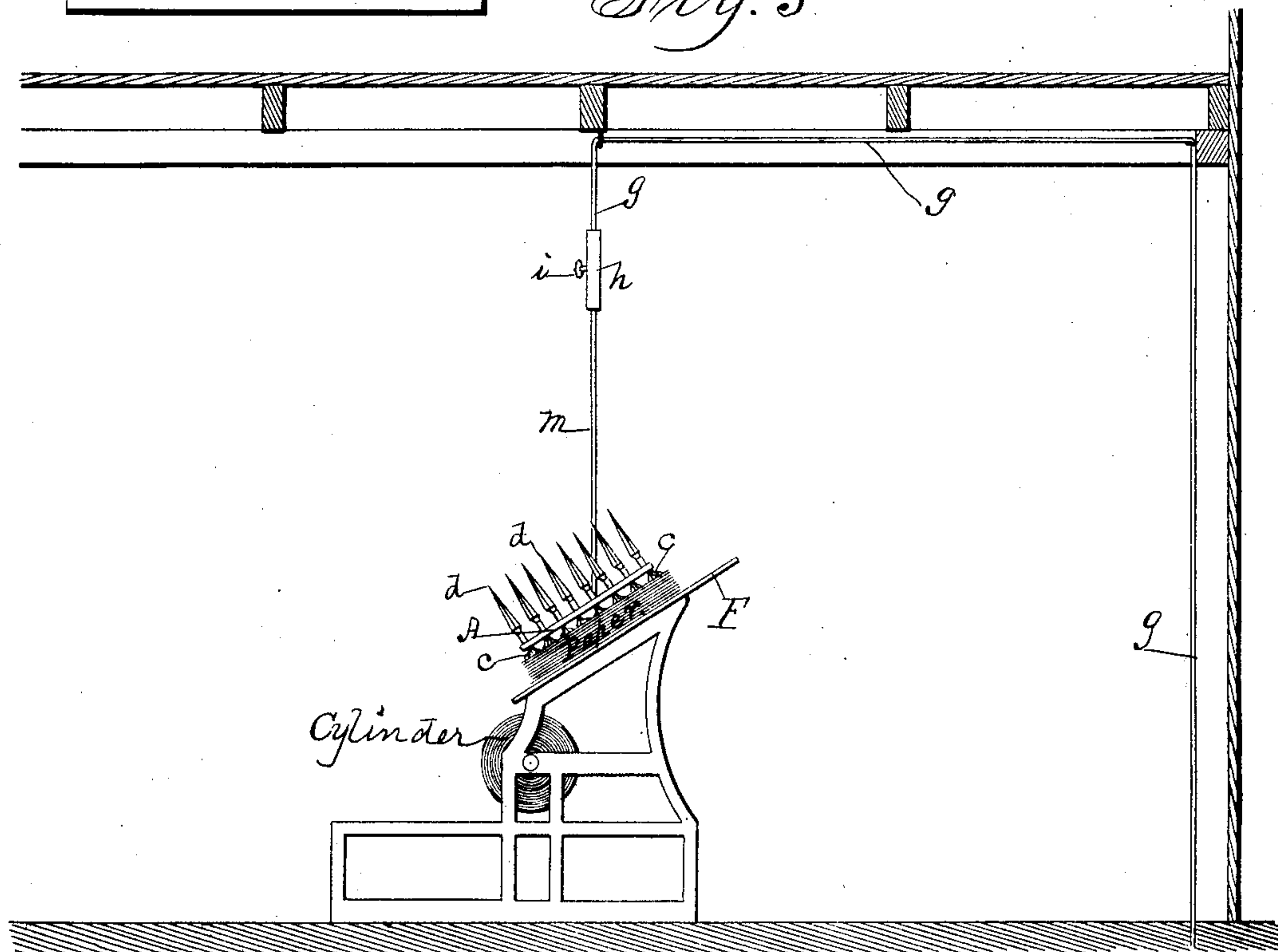


Fig. 3



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES H. COLBY, OF MOUNT PLEASANT, IOWA, ASSIGNOR OF ONE-HALF
TO R. F. STRUTHERS, OF DES MOINES, IOWA.

ELECTRIC CONDUCTOR AND ATTACHMENT FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 687,932, dated December 3, 1901.

Application filed April 20, 1901. Serial No. 56,746. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. COLBY, a citizen of the United States, residing at Mount Pleasant, in the county of Henry and State of Iowa, have invented a new and useful Electric Conductor and Attachment for Printing-Presses, of which the following is a specification.

My object is to prevent the annoyances and damaging of paper in the movements, or the fluttering, doubling, and creasing incident to feeding sheets of paper from a pile on a printing-press to be successively advanced for receiving impressions upon the forms in the press. Such annoyances are occasioned by the electric charge inherent in a pile of overlying sheets of paper when in position on a press as required to be printed and the sticking of paper to various parts of the press; and my invention consists in the mechanism adapted to collect and carry off such electric charge and to be applied and operated in combination with a printing-press, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a top view of my device placed over a pile of paper on a table. Fig. 2 is a transverse sectional view on the line xx of Fig. 1. Fig. 3 shows my invention suspended over a pile of paper on the feed-table of a press as required for practical use.

The letter A represents a frame made of copper, preferably triangular in shape, as shown.

B is a cross-bar in the frame, also made of copper.

On the under side of the frame are fixed delicate wire brushes c , adapted for collecting electricity from the pile of paper, and on the top are fixed electrodes d , adapted for conveying and distributing electricity from the plane below into the atmosphere above as required to relieve the paper from the disturbing influence of such electric force as is in it and the atmosphere closest to it.

F is the feed-board of a printing-press, and g is a copper wire fixed to the ceiling in the press-room and from thence extended into the ground. The end of the wire above the press

is bent downward and has a copper tube h fixed thereto and a set-screw i seated in the tube and adapted for clamping fast therein the end of a copper wire m , fixed to the center of the cross-bar B of the frame A in such a manner that the wire m can be adjustably and detachably connected with the tube h and wire g and suspended over the pile of paper on the feed-board F in such a manner that the plurality of delicate brushes c will contact with the sheets of paper as they successively become the uppermost in the pile. As the sheets of paper are removed by feeding them to the press and the pile lowered it is obvious the frame A can also be lowered as required to allow the brushes C to contact with the paper. It is also obvious that electricity collected from the paper into the suspended frame by means of the brushes will be conveyed, by means of the wire that extends from the frame, to the ground and carried off and grounded, so that the sheets of paper under the brushes can be readily fed successively to the cylinder of a press without fluttering and doubling and becoming folded and damaged. It is also obvious that the triangular-shaped frame is advantageous in that the corner portions of the sheets of paper are readily accessible to the operator as required to advance them successively from the feed-board to the cylinder.

Having described the purpose, construction, application, and operation of my invention, its practical utility will be obvious to persons familiar with the art to which it pertains.

What I claim as new, and desire to secure by Letters Patent therefor, is—

1. In a device for collecting and conveying electricity from paper on the feed-board of a printing-press, a rigid skeleton metal frame of triangular shape having conducting-brushes on its under side and means for suspending the frame in a plane above the feed-board, to operate in the manner set forth for the purposes stated.

2. In a device for collecting and conveying electricity from paper on the feed-board of a printing-press, a rigid metal frame having conducting-brushes on its under side, electrodes projecting upward from the frame and

means for suspending the frame in a plane above the feed-board, to operate in the manner set forth for the purposes stated.

3. In a device for relieving paper on the
5 feed-board of a printing-press from its disturbing inherent electricity, a metal frame of triangular shape having a plurality of conducting-brushes on its under side adapted to contact with sheets of paper and a plurality
10 of electrodes on its top side, an electric conductor fixed to the frame and connected with a fixed conductor above the frame and feed-board of a printing-press and extended into the ground, arranged and combined to operate
15 in the manner set forth for the purposes stated.

4. A device for collecting and conveying electricity from paper on the feed-board of a

printing-press, a metal frame, a plurality of
conducting-brushes fixed to the under side 20
of the frame, a plurality of pointed electrodes fixed to the top of the frame to project upward, an electric conductor fixed to the frame, an electric conductor fixed to a support above
a printing-press and extended to the ground 25
and means for detachably and adjustably connecting the conductor fixed to the frame to the conductor fixed to a support above the frame and feed-board of a printing-press, all
arranged and combined to operate in the 30
manner set forth for the purposes stated.

CHARLES H. COLBY.

Witnesses:

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