

P. J. CRONIN & E. HARRINGTON.
 COOLING DEVICE FOR ELECTROTYPE PLATES.
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1,014,641.

Patented Jan. 16, 1912.

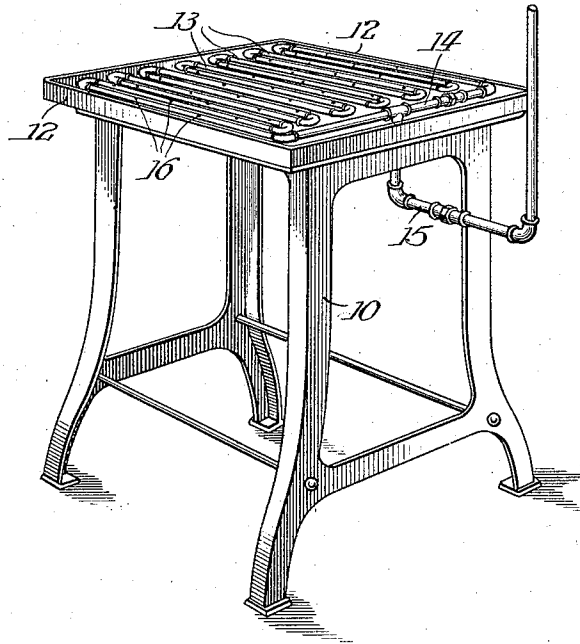


Fig. 1

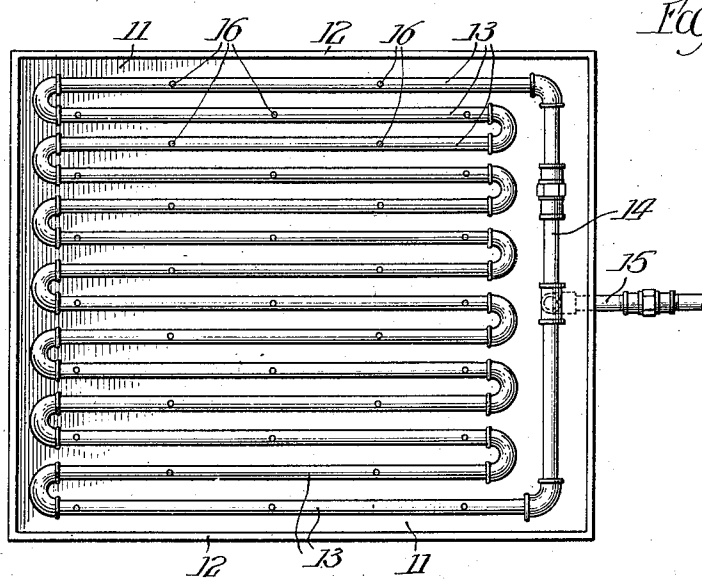


Fig. 2

Witnesses:

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UNITED STATES PATENT OFFICE.

PATRICK J. CRONIN AND EDWARD HARRINGTON, OF CHICAGO, ILLINOIS.

COOLING DEVICE FOR ELECTROTYPE-PLATES.

1,014,641.

Specification of Letters Patent.

Patented Jan. 16, 1912.

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To all whom it may concern:

Be it known that we, PATRICK J. CRONIN and EDWARD HARRINGTON, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cooling Devices for Electrotypes-Plates, of which the following is a specification.

Our invention relates to devices for cooling electrotypes plates and has particular reference to a cooling device of this character which shall be simple and economical in operation and which shall serve to secure the desired result in a more efficient manner than has heretofore been possible.

In the manufacture of electrotypes plates for use in printing, the plates are cast and unless they are cooled quickly and evenly will buckle and cause distortion in the printing surface when applied to the printing press.

We are aware that cooling devices have heretofore been devised but none heretofore produced operate to secure a perfect result; that is, a uniform cooling which will obviate the usual warping. In many of the forms of cooling the action is uneven, that is, a stronger blast of air being applied to one spot than to another tends to cool that spot quicker and therefore causes a distortion which precludes the possibility of a perfect register in printing plates used for multi-color work. We have therefore devised and shown in the accompanying drawings a form of cooling device which in service is perfect in operation and cools the plates evenly at all points.

The invention will be more readily understood by reference to the accompanying drawings wherein—

Figure 1 is a perspective view of a device constructed in accordance with our invention; and Fig. 2 is a plan view thereof.

Referring more particularly to the drawings it will be seen that we provide a stand 10 having a top 11 with upstanding flanges 12 forming in effect a shallow tray. Within

this tray we place a plurality of loops 13 of ordinary pipe, these loops being connected at opposite extremities with a header 14 which is fed by supply pipe 15 connected with a suitable source of air under pressure. The loops 13 are provided on their upper surfaces with a plurality of minute perforations 16 arranged at regular intervals throughout the length of pipe.

While we have shown a certain number of openings, and the number which we have found to be most satisfactory, it will be understood that this number may be increased or diminished as desired; also that certain modifications may be made in the structure shown without departing from the spirit of our invention.

We claim:

1. A device of the class described comprising, in combination, a support, a plurality of looped air conduits carried by said support, said conduits having a plurality of equally spaced perforations in their upper walls, and means for supplying air under pressure to said looped conduits, substantially as described.

2. A device of the class described comprising, in combination, a support, a plurality of united loops of perforated pipes carried by said support and having equally spaced perforations in their upper walls, and connections to the extreme ends of the united loops whereby air is supplied under pressure thereto, substantially as described.

3. A device of the class described, comprising, in combination, a support, a plurality of looped air conduits carried by said support, said conduits having a plurality of perforations in their upper walls, the perforations in each conduit being staggered with relation to the perforations in the adjoining conduits, and means for supplying air under pressure to said looped conduits.

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