

(No Model.)

W. J. JOHNSON.  
PRESS FOR DRYING MATRICES.

No. 271,858.

Patented Feb. 6, 1883.

Fig. 1.

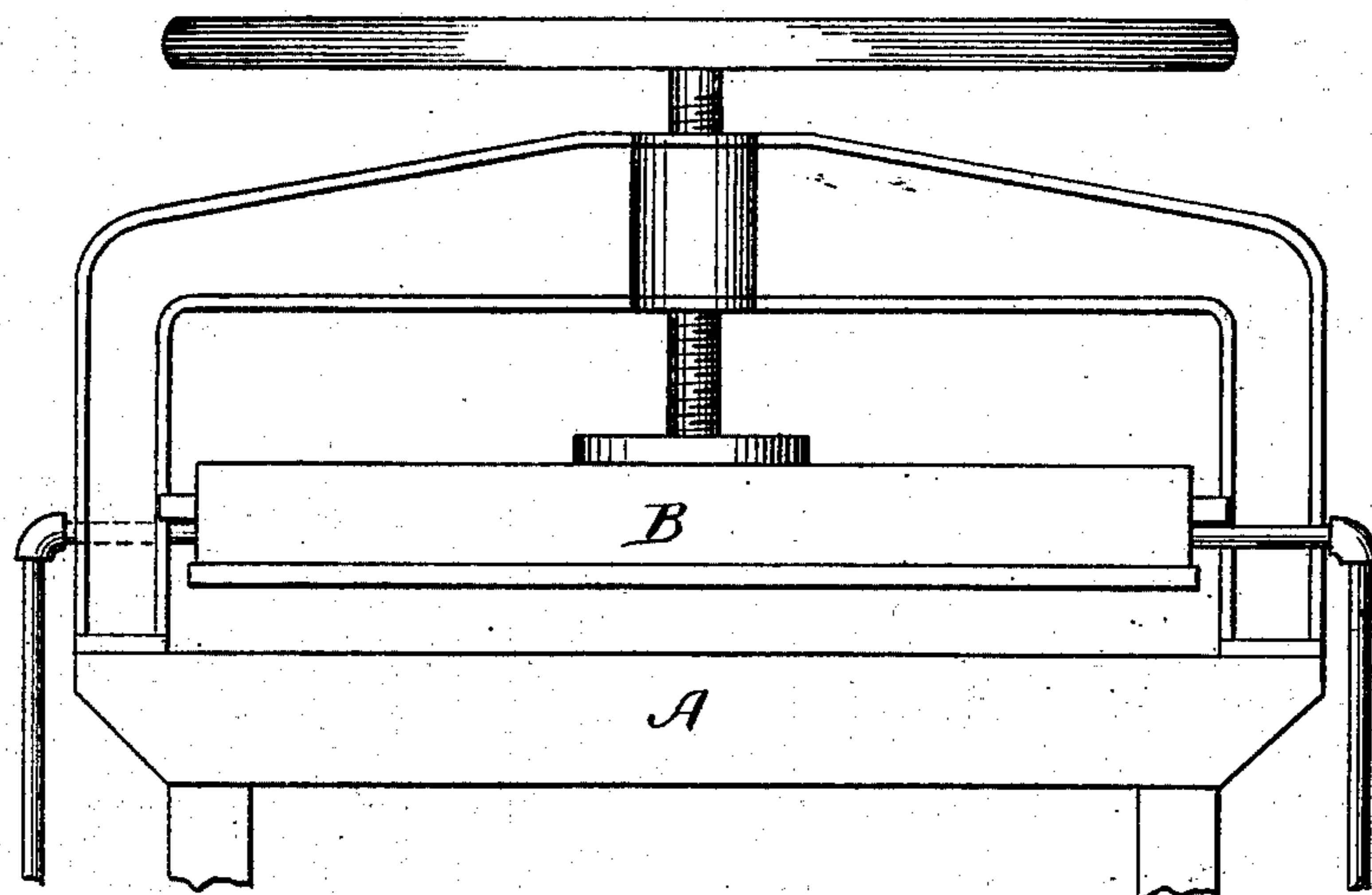


Fig. 2.

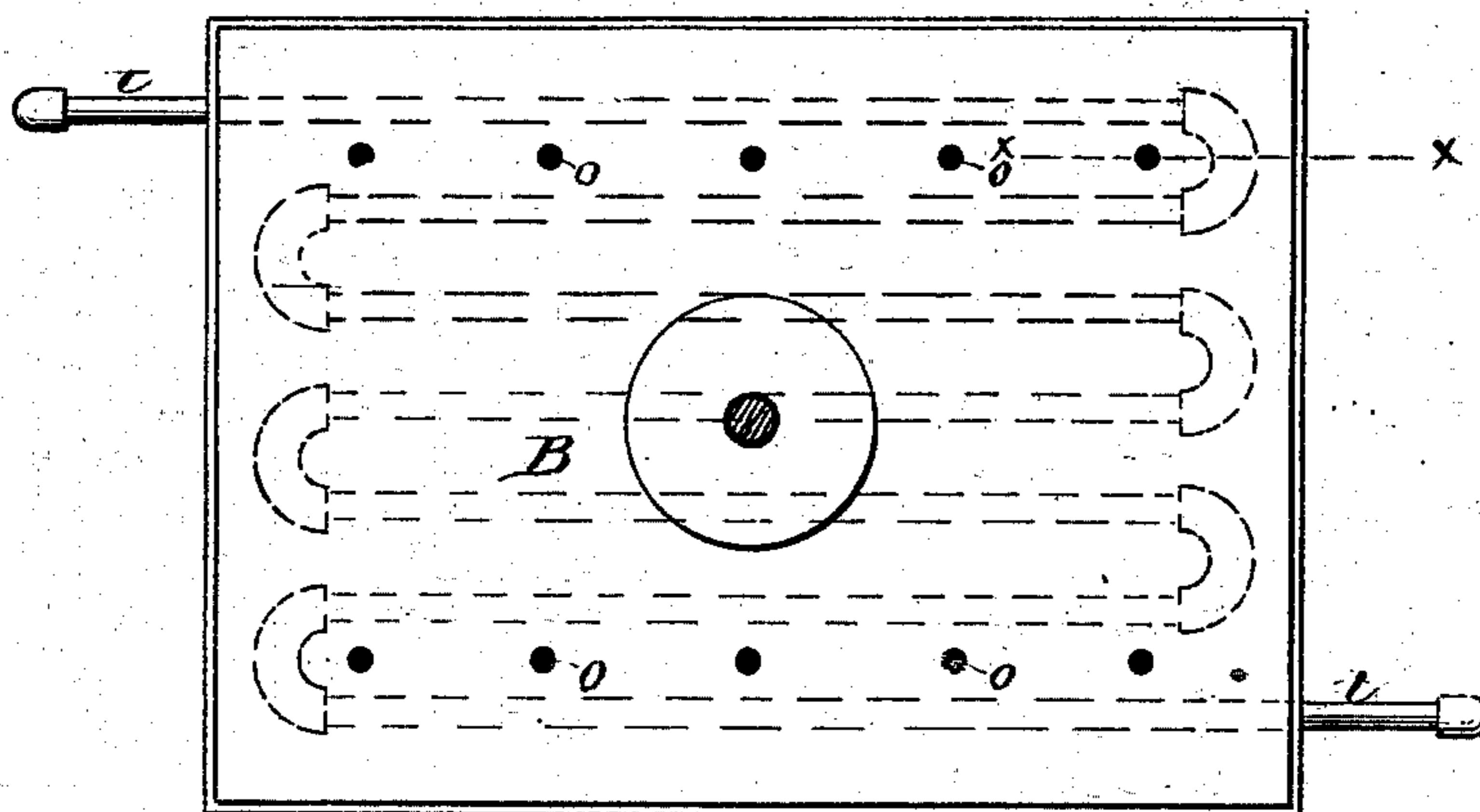


Fig. 3.

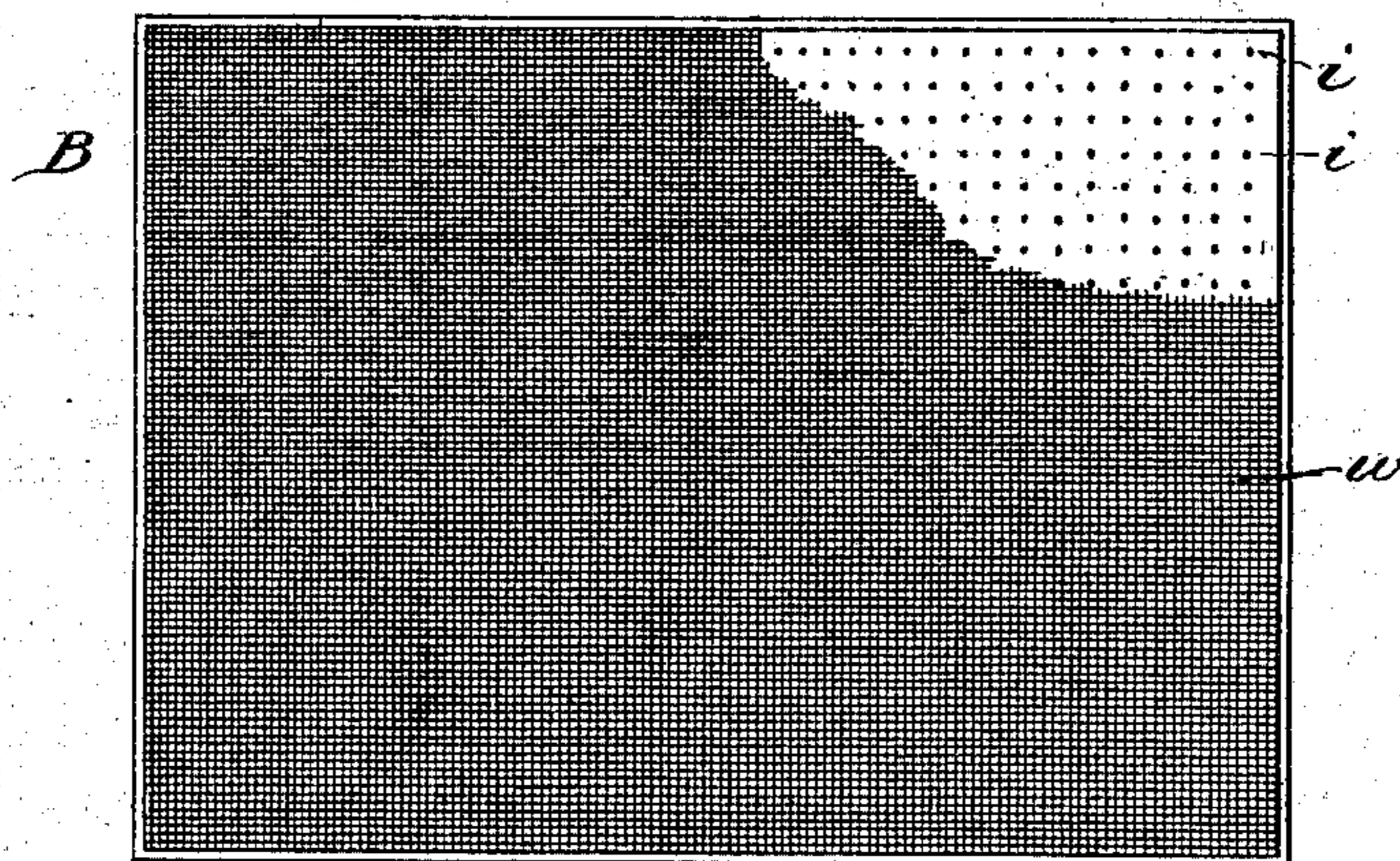
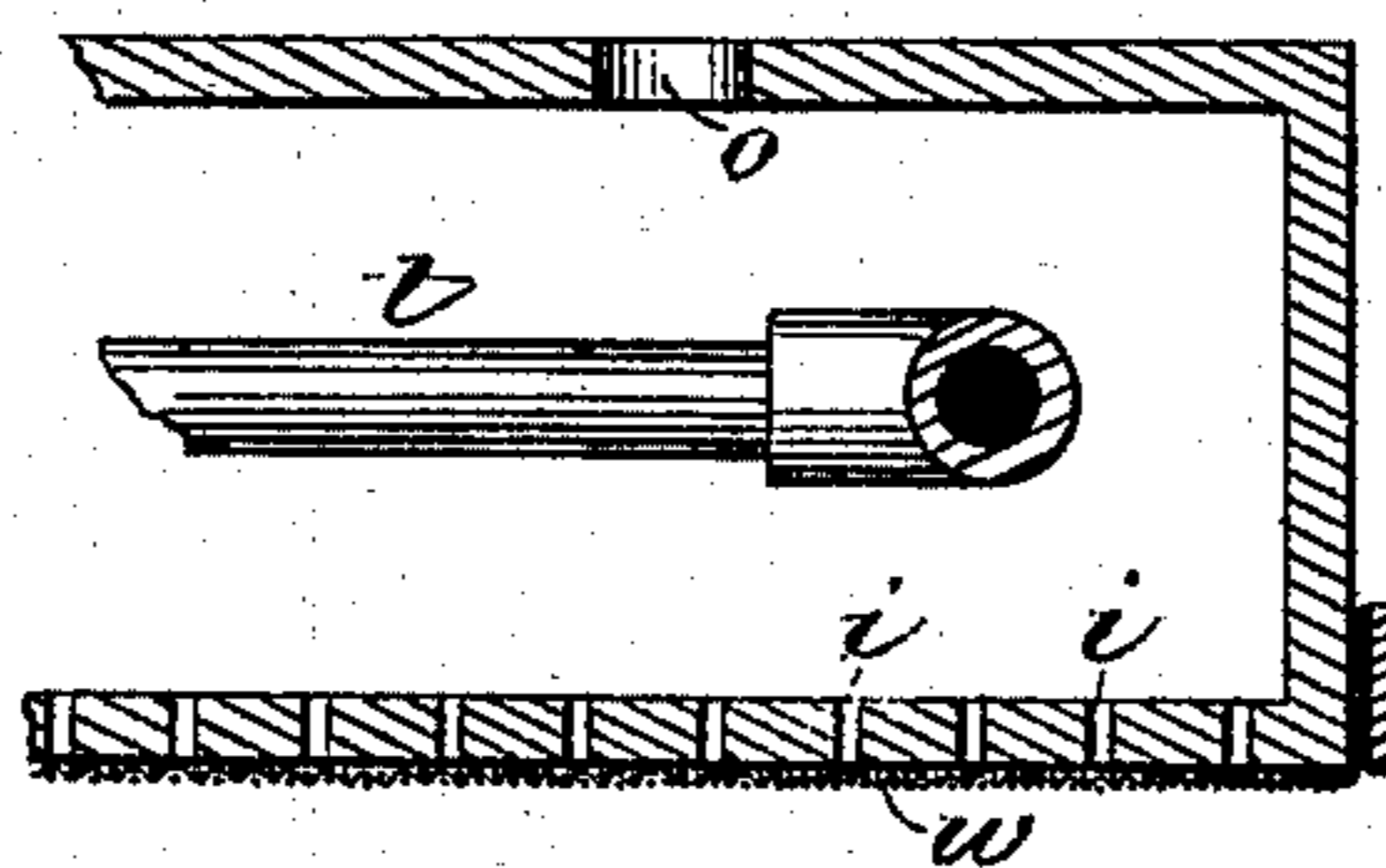


Fig. 4.



Witnesses:  
N. F. Curtis.  
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Inventor:  
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Atty.

# UNITED STATES PATENT OFFICE.

WILLIAM J. JOHNSON, OF BOSTON, MASSACHUSETTS.

## PRESS FOR DRYING MATRICES.

SPECIFICATION forming part of Letters Patent No. 271,858, dated February 6, 1883.

Application filed October 14, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM J. JOHNSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Presses for Drying Matrices, of which the following is a specification.

This invention relates to a heated press for drying stereotype-matrices.

It is customary to place the form of type on which the matrix rests face uppermost on the heated bed of the press, and to place a number of layers of cloth or blankets between the matrix and the platen of the press. The moisture evaporates from the matrix and escapes through the blankets.

My invention consists in covering the face of the platen with wire-gauze, constituting a yielding frame-work, which prevents the blankets from bearing against the platen and forms numerous small connected air-spaces between the platen and blanket, whereby the moisture is readily conducted away from the blanket, as I will now proceed to describe.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side elevation of a drying-press embodying my improvements. Fig. 2 represents a top view of the platen removed from the press. Fig. 3 represents a bottom view of the same, showing a part of the wire-cloth covering removed. Fig. 4 represents an enlarged section on line *x x*, Fig. 2.

The same letters of reference indicate the same parts in all the figures.

In the drawings, A represents the bed of a drying-press, said bed being adapted to be heated in the usual manner.

B represents the platen, which is raised and lowered in guides by an adjusting-screw, as usual. The platen is preferably composed of a hollow box or chamber, the bottom or pressing-surface of which is provided with a large number of perforations, *i*, as shown in Fig. 3. The top of the platen is provided with a series of orifices, *o*, for the escape of air and moisture from the interior of the platen. Within the platen is a series of steam-pipes, *t*, connected to steam supply and exhaust pipes in such

manner as to permit the required vertical movement of the platen.

In carrying out my invention I apply to the face or pressing-surface of the platen a covering, *w*, of wire-cloth, which constitutes a yielding open-work support or bearing for the blanket, prevents the same from bearing directly against the platen, and forms numerous connected air cells or ducts, which conduct the moisture rapidly away from the blanket to the perforations *i*, or to the margins of the platen. The yielding nature of the wire-cloth covering makes it act as a cushion for the blanket, the wire-cloth and blanket together forming a yielding cushion for the matrix. I have found that by the employment of the wire-cloth covering I am enabled to dry a matrix by the use of a single blanket, instead of several, as heretofore, thus effecting a saving in the cost of material and in length of time required for the drying operation, the moisture from the matrix escaping much more quickly through a single blanket and the wire-cloth covering than through the number of blankets usually employed when the same bear directly against the platen. The wire-cloth covering also prevents the blanket from obstructing the perforations in the platen.

I claim—

1. In a press for drying matrices, a platen having on its face a wire-cloth covering, whereby the blanket on the matrix is cushioned and prevented from bearing directly against the platen, and a single blanket is enabled to absorb and carry off the moisture from the matrix, as set forth.

2. In a press for drying matrices, a platen having a perforated bottom covered with wire-cloth, whereby obstruction of said perforations is prevented, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 10th day of October, 1882.

WILLIAM J. JOHNSON.

Witnesses:

C. F. BROWN,  
A. L. WHITE.