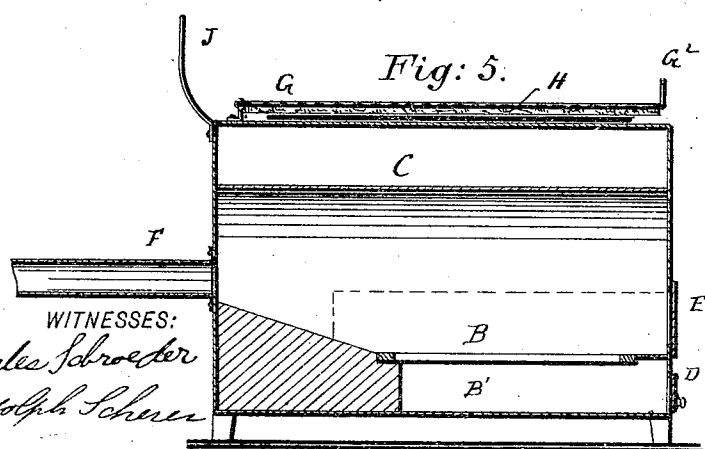
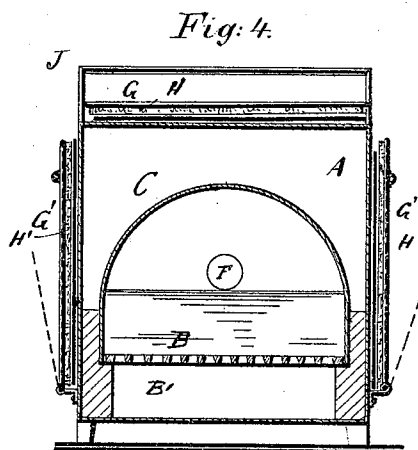
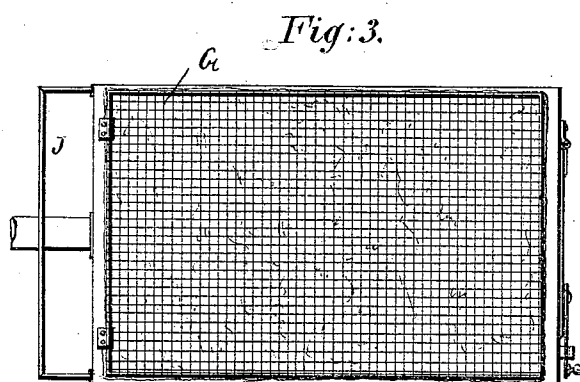
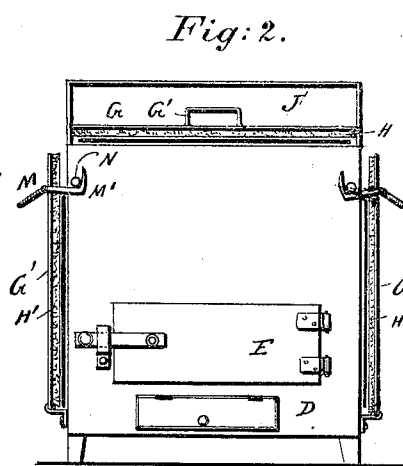
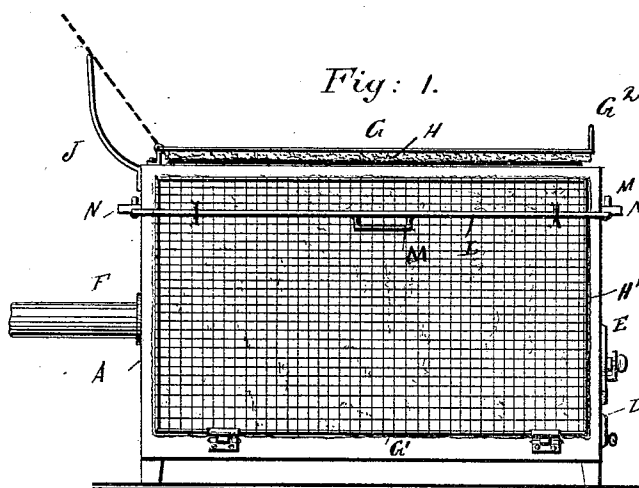


(No Model.)

F. SCHREINER.
STOVE FOR DRYING MATRICES.

No. 520,578.

Patented May 29, 1894.



WITNESSES:
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UNITED STATES PATENT OFFICE.

FRIEDRICH SCHREINER, OF PLAINFIELD, NEW JERSEY.

STOVE FOR DRYING MATRICES.

SPECIFICATION forming part of Letters Patent No. 520,578, dated May 29, 1894.

Application filed May 19, 1893. Serial No. 474,802. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH SCHREINER, a citizen of the United States, and a resident of Plainfield, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Matrix-Drying Stoves, of which the following is a specification.

Heretofore stereotype matrices have been dried in different manners; for example, matrices molded by machine or brush are dried with the type forms together in a steam-chest, or the matrices after having been molded are taken from a cold type form and dried in a frame over a hot metal pot or in an oven or in a hot sand-pit, or in a revolving drum.

The object of my invention is to provide a new and improved stove for drying stereotype matrices in such a manner that a number of them can be dried at a time, very rapidly, at less expense and in a smaller space than heretofore.

The invention consists in the construction and combination of parts and details, which will be fully described hereinafter and finally pointed out in the claim.

In the accompanying drawings, Figure 1 is a side-view of my improved furnace for drying matrices. Fig. 2 is a front end view of the same. Fig. 3 is a plan-view. Fig. 4 is a vertical transversesectional view of the same, and Fig. 5 is a vertical longitudinal sectional view.

Similar letters of reference indicate corresponding parts.

The stove A is made of sheet or cast metal and has the shape of a rectangular box provided with suitable legs. A grate B is arranged a greater or less distance above the bottom of the stove so as to form an ash-pit B' between said grate and the bottom of the stove, and over said grate a semi-circular deflecting or protecting plate C is arranged extending from the front to the rear of the stove. The ash-pan can be closed by a hinged door D and the fire-box by the door E. The smoke and other products of combustion pass off through the smoke-pipe F at the rear end of the stove, but below the protecting plate C, as shown in Fig. 5. A wood, coal or coke fire is kindled on the grate B, or any other suitable fuel may be used, and thereby the

air between the top and sides of the stove and the plate C is heated to a high degree and in turn heats said sides and top of the stove. On the top of the stove a piece of heavy wire netting G is hinged at the rear end of the stove, which wire netting is provided at the front with a handle G². A piece H of flannel or woolen blanket or other fibrous material is securely fastened to the underside of the netting. A stop J projects from the rear end of the box and serves to support the wire netting G when the same is thrown up into the position shown in dotted lines in Fig. 1. To each side of the stove a piece of wire netting G' is hinged near the bottom, and to the inner side of each piece of wire netting G' a piece of flannel or blanket H' is fastened. A rod L is mounted on the outer surface of each wire netting G' near the top of the same, so as to turn on its longitudinal axis, and is provided with a handle M. The ends of the rod L are shaped to form hooks M', which can engage pins N projecting from the front and rear end of the stove, so that by engaging the said hooks M' with said pins N the wire netting G' is held against the side of the stove. To dry a matrix on the stove the top netting G is raised, the matrix placed on the top of the stove, the netting lowered, so that its blanket lining rests on the top of the matrix. In a similar way the side nettings G' are swung from the side of the stove, the matrices are placed against the sides of the stove and then the nettings G' are swung up against the sides of the stove and locked in place by engaging the hooks M' on the ends of the rod L with the pins N on the front and rear ends of the stove.

The matrices dry in a very few moments, the several nettings are elevated or swung from the stove, fresh matrices placed between them and the stove, and said nettings are swung back, and so on. The moisture expelled from the matrices by the heat is absorbed by the blanket lining of the nettings and passes up through the same and escapes as steam. The said flannel or blanket linings materially assist in the rapid drying of the matrices. As the two sides and the top of the stove are utilized for drying at the same time, a very great number of matrices can be dried thoroughly in a very short time

and without in any way injuriously affecting the matrices and without requiring any undue amount of fuel. As the flames cannot impinge on those walls of the stove with
5 which the matrices come in contact, there is no danger of overheating or burning the matrices or injuring them by heating them in any way. The top-plate and side-plates may be made of sheet iron, cast iron, soap-stone
10 or any other suitable fire-proof material. By this method of drying the type is not subjected to any heat and is not affected injuriously.

The apparatus can also be used for hot-type
15 stereotyping as a finisher to remove the rest of the moisture from the matrices after they come from the steam-chest, or for semi-hot-type stereotyping where the matrices are half dried in the steam-chest and then finished on my apparatus, and in all cases time
20 is saved.

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

In an apparatus for drying stereotype matrices the combination with a stove, of a netting hinged to the top of the same, and netting hinged to the sides of the stove at the bottom thereof, to permit swinging the upper edges of the side nettings against the sides of
25 the stove at the top thereof, linings of fibrous material permanently secured to the inner faces of the netting, and means for locking the upper edges of said netting against the sides of the stove, substantially as set forth.
30 35

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

FRIEDRICH SCHREINER.

Witnesses:

JOHN BECKER, Jr.,
THOS. J. HUGHES.