

(Model.)

J. BRODRICK.

PLATE FOR PREPARING PRINTING STENCILS.

No. 424,090.

Patented Mar. 25, 1890.

Fig. 1.

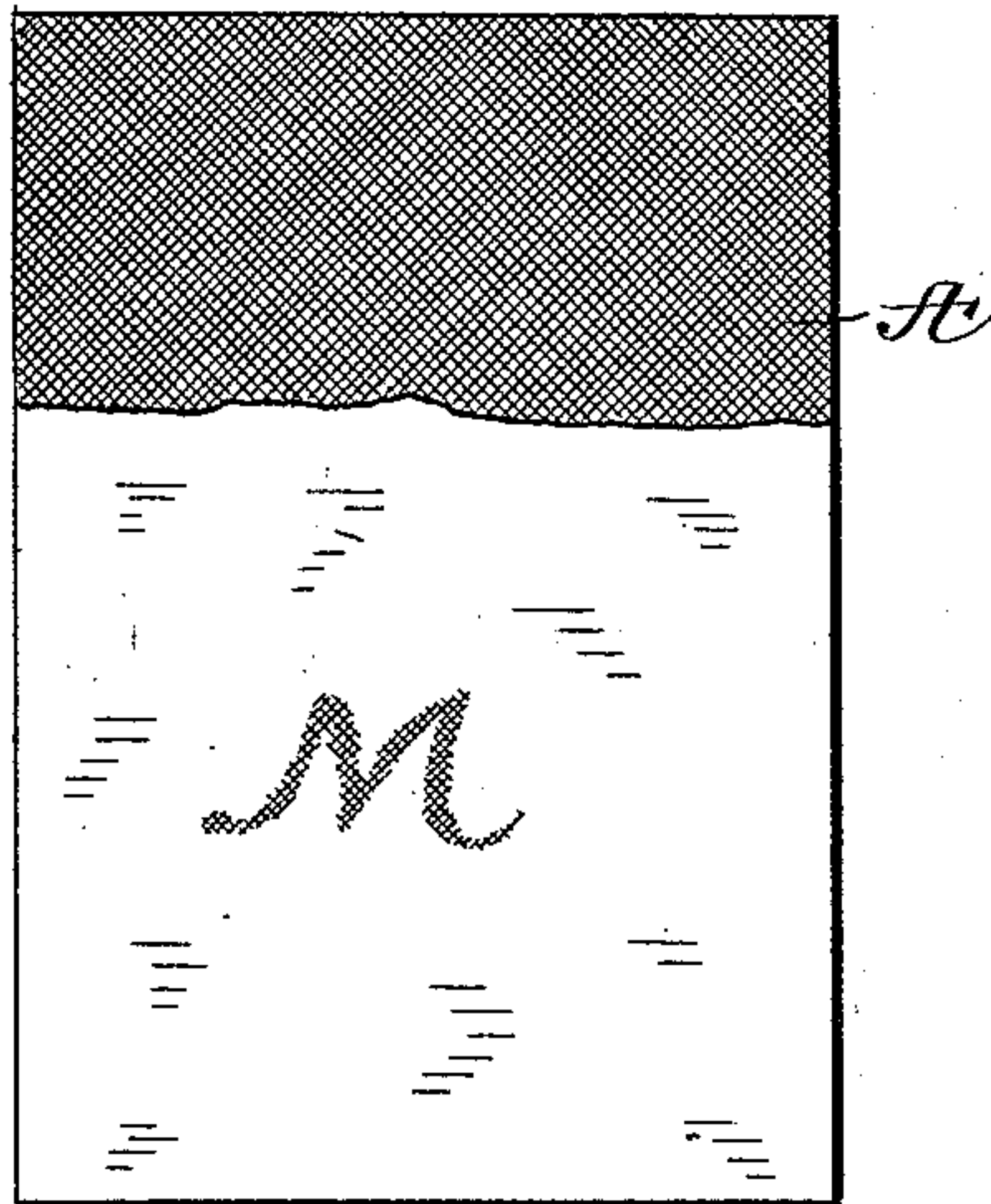


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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PLATE FOR PREPARING PRINTING-STENCILS.

SPECIFICATION forming part of Letters Patent No. 424,090, dated March 25, 1890.

Application filed December 8, 1885. Serial No. 185,044. (Model.)

To all whom it may concern:

Be it known that I, JOHN BRODRICK, a citizen of the United States, and a resident of New York, in the county and State of New York, have invented a new and useful Improvement in Preparing-Plates for Stencil-Sheets, of which the following is a specification.

In a patent granted to me July 6, 1886, No. 345,109, I have described and claimed a novel method of producing a stencil, consisting in placing the sheet to be stenciled upon a suitable preparing-plate and abrading characters on said sheet with a stylus or other suitable implement.

My present invention consists of a novel preparing-plate to be used in the production of stencils substantially of the character of those described in said patent. As is now well known in the arts, such stencils may be made from a sheet of thin and strong paper impregnated or coated with an ink-proof substance, such as paraffine. Although such paper is very thin, still its pores are not open to the free transmission of ink, so as to produce a stencil by merely removing the ink-proof coating until the sheet is punctured or abraded, so as to form minute and suitable perforations or openings through which the ink can pass.

The preparing-plate which is the subject of this patent is especially designed for use with paper of the character above described and enables the stylus passing over the upper surface of the sheet to displace, cut, or tear the fibers thereof and remove the wax or paraffine with which the sheet is coated, so that it shall be by reason of such abrasion open to the free transmission of ink through such cuts or openings.

The elements of novelty which I desire to secure by these Letters Patent will be fully pointed out in the claims concluding this specification.

The following is a description of the accompanying drawings:

Figure 1 is a plan view of my improved preparing-plate somewhat exaggerated, and Fig. 2 is a detail section of a portion of said plate on a very much enlarged scale.

A is a preparing-plate, and B a sheet of

suitable paraffined paper placed thereon. I have found a very fine double-cut file—such as is known to the trade as a “double dead smooth file”—well adapted for the purposes of a preparing-plate after its cutting-face has been ground or polished off, so that to the naked eye it appears almost smooth and has to the touch a soft velvety feeling. Under a powerful glass the surface of the file so prepared shows very fine grooves cutting its face into rows of truncated cones and having between said grooves smooth flat surfaces. If a single-cut file be used, the surface appears in the form of truncated wedges standing closely together in parallel rows. The surface thus prepared forms an admirable and superior preparing-plate for producing a clean and beautiful stencil.

The paper employed for the stencil-sheet is laid on the face of the preparing-plate and then written upon by a stylus, preferably having a blunt end—as a small truncated cone, for example—or other suitable implement, by means of which the substance of the paper is abraded, cut, or rubbed off on those portions of the sheet which lie on top of the flat surfaces between the grooves of the preparing-plate, while those portions of the sheet which are over the grooves in the plate apparently yield under the action of the stylus and are more or less protected from the abrading or cutting action thereof and serve to maintain the continuity of the stencil-sheet by preventing the stylus abrading the sheet to an equal degree over the entire length of the line and thereby slitting or completely severing the material of the sheet.

Through the perforations made in the stencil-sheet, as above described, the printing-ink is transmitted when the sheet is laid on a smooth and level surface and an inked roller passed over the superimposed stencil-sheet, the points of transmission for the ink being near enough together to produce a continuous or apparently continuous line.

As the flat surfaces of the truncated cones are separated only by minute grooves, the line formed in writing upon the paraffine sheet will appear to be almost continuous when printed, although, as a matter of fact, it is broken.

An efficient preparing-plate is made by a blunted file-surface having about two hundred grooves to the square inch. The stencil-sheet has the characters made by the abrading action of the stylus passing along the surface of the sheet as distinguished from perforating by means of needle-points on the preparing-plate when the paper is pressed upon them.

10 Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A stencil preparing-sheet having a sur-

face composed of truncated cones or wedges, substantially as described. 15

2. A stencil preparing-sheet having a surface composed of minute flat surfaces separated by depressions, substantially as described.

In witness whereof I hereunto set my hand 20 in presence of two witnesses.

JOHN BRODRICK.

Witnesses:

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