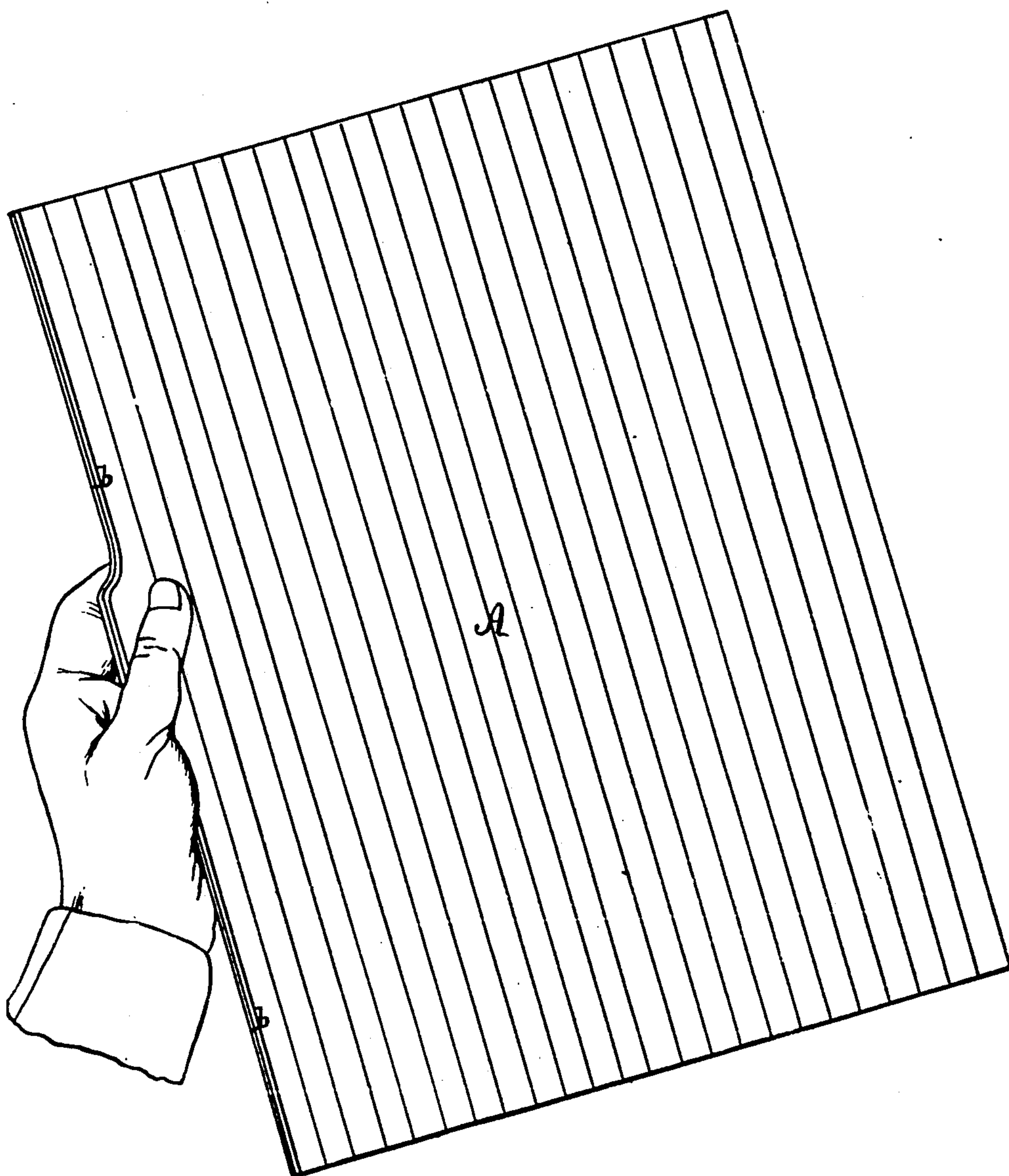


G. Burnham
Dampening Tablet.

Nº 7851.

Patented Dec 24. 1850.



UNITED STATES PATENT OFFICE.

GEO. BURNHAM, OF PHILADELPHIA, PENNSYLVANIA.

DAMPING PAPER FOR COPYING-PRESSES.

Specification of Letters Patent No. 7,851, dated December 24, 1850.

To all whom it may concern:

Be it known that I, GEORGE BURNHAM, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in the Mode of Dampening Paper for Copying-Presses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, which forms part of this specification and represents a view in perspective of my dampening tablet.

Paper for copying letters by means of a copying press has heretofore been dampened either by drawing over it a brush moistened with water, by laying upon it a cloth which has previously been dipped in water, or in some other analogous manner. These methods are all objectionable for the reason that it requires a very nice graduation of the water to dampen the paper to the requisite degree, and as the water is generally applied in excess it is necessary to imbibe the superfluous moisture by bibulous paper. These methods therefore are not only objectionable on account of the time required but are so also for the reason that it is extremely difficult to dampen the paper to the proper point, and hence it is difficult to produce good copies.

The object of my invention is to obviate these objections and it consists in a tablet of some substance which is impermeable to moisture and whose surface is roughened or burred up evenly throughout its whole extent in such manner that the inequalities thereon will retain a sufficient amount of moisture to dampen a sheet of paper to the requisite degree.

In order to prepare such tablets I take a thin sheet of metal (A) a little larger than the sheet which it is intended to dampen and form a crease in one of its edges (as at *b*) in order to stiffen it, I then subject it to the action of a machine simi-

lar to that employed for burring-up the surface of plates for mezzotint engravings, by means of which its surface is roughened in an equable manner. When the tablet thus made is to be used, it is held by the left hand in the position represented in the accompanying drawing and a sponge previously dipped in water is passed by the right hand over its roughened surface. In this operation the inequalities in the surface of the tablet receive and retain a certain amount of water which as the plate is roughened in an equable manner is evenly distributed over its whole surface. The tablet thus moistened is laid upon the sheet to be dampened and pressure is applied to bring the two in contact with each other as the copying paper is bibulous it immediately absorbs the moisture from the tablet and is consequently dampened in an equable manner throughout its whole extent. As the tablet is of itself impremeable to moisture no more water can be applied to it in this manner than can be retained by the inequalities of its roughened surface, hence, with ordinary care on the part of the operator, the quantity of moisture transferred to the paper is regulated almost as exactly as if it was weighed out at each operation.

I do not confine myself to the employment of sheet metal as a material for my dampening tablets as many other impermeable materials are well suited to the purpose, but

What I claim as my invention and desire to secure by Letters Patent is—

A dampening tablet constructed substantially as herein described of some impermeable material.

GEO. BURNHAM.

Witnesses:

W. R. SMITH,
GEORGE W. HURTY.