

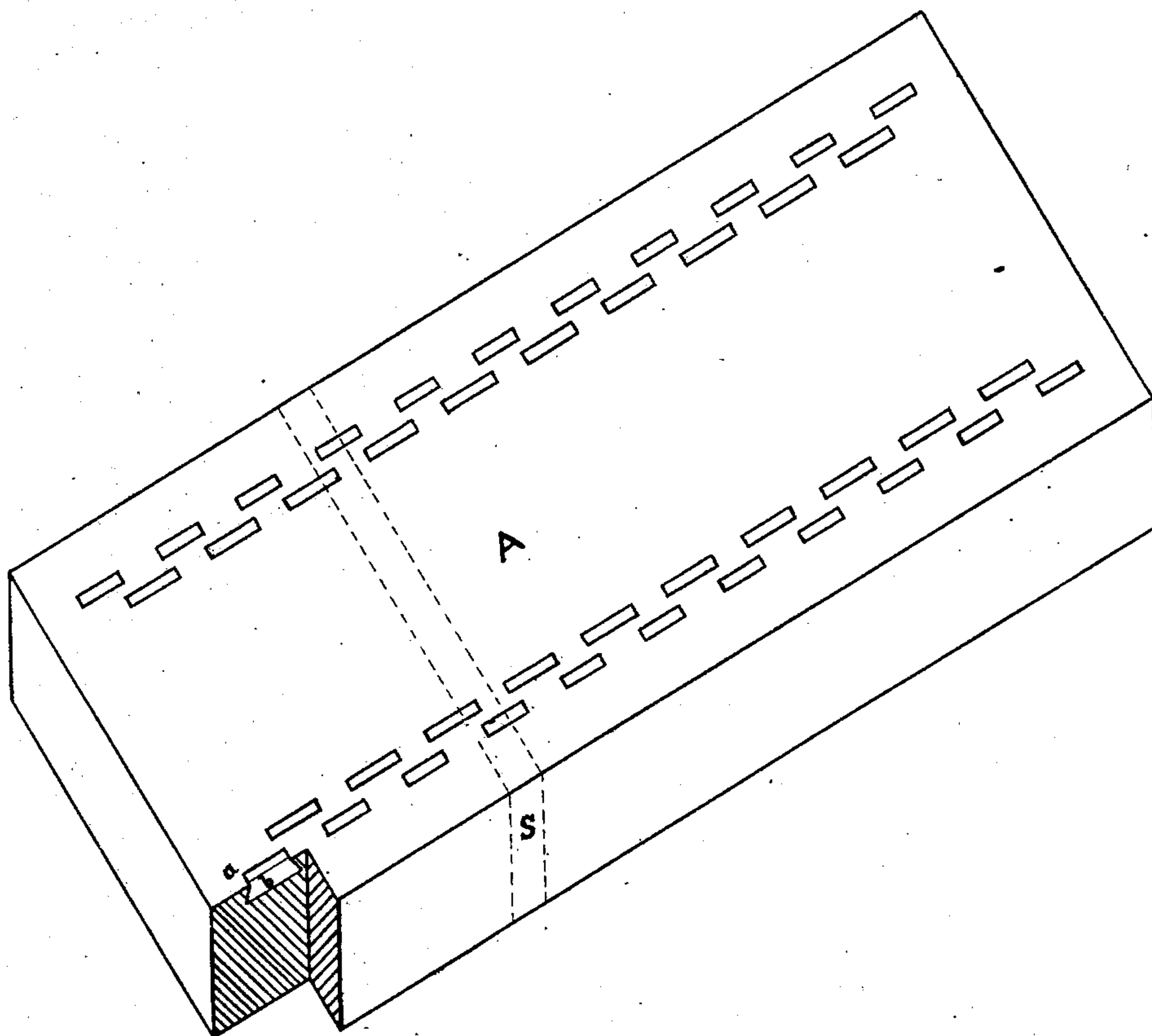
(No Model.)

J. P. ELLACOTT & F. K. TRACY.

STEREOTYPE BLOCK.

No. 245,064.

Patented Aug. 2, 1881.



Witnesses.

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UNITED STATES PATENT OFFICE.

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STEREOTYPE-BLOCK.

SPECIFICATION forming part of Letters Patent No. 245,064, dated August 2, 1881.

Application filed February 15, 1881. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH P. ELLACOTT and FREDERICK K. TRACY, of the city of Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Stereotype Blocks or Bases, of which the following is a specification.

Heretofore many devices have been employed for the purpose of attaching stereotype printing-plates to wooden blocks or bases. Grooves of different sizes and shapes and of various arrangement with reference to each other—sometimes being parallel, again at right angles, and sometimes oblique to each other—have been cut in the surfaces of blocks so to be used, so that when the metal was cast immediately on the surfaces of such blocks the said grooves would receive similarly-shaped tongues of metal formed on the back of the plate so cast, and thus the plate would be firmly attached to the blocks so used as bases. Punctured holes and incisions seem also to have been made in the surfaces of such blocks—intended to have been used as fillings—for similarly receiving metal tongues when the plates are cast about such blocks, and thus preventing any lateral motion of such metal casing on its filling.

The peculiar and especial object of our invention is therefore to so secure stereotype or other printing plates to wooden blocks or bases as that the plates will be equally secure whether the portions used are large or small. The manner in which we accomplish this result will be observed from the following, reference being first had to the accompanying drawing, which is a perspective of a stereotype-block.

A shows a series of rectangular cavities in double rows, so arranged that each cavity is overreached by or breaks joints with similar cavities in the other row at both its ends. At *a* and *b* is shown an interior section of one of such cavities, with its sides so inclined as to make the said cavity greater in any line of measurement at its base than at its surface; and *S* represents, by dotted lines, a section taken through a stereotype-block so prepared of no greater length than would be necessary to support one line of stereotype-plate.

A block to be used for the purpose above set forth has formed in its surface a series of double rows of rectangular cavities, as seen in the drawing. Such double rows of cavities are so arranged that each cavity in one row will be overreached or overlapped at both its ends by similar cavities in the other row. The cavities so arranged in such rows are made with sides inclining away from the perpendicular in such a manner as to make the base of the cavity as measured in either direction larger than the surface of such cavity. The angle measured between the base and any side of such cavity will be acute. On the surface of such block so made the metal plate is then cast, and the metal tongues formed on the back of such plate will be similar in size, shape, and arrangement to the cavities in the block, and such tongues, being embedded in such block, will securely attach the plate to the block. The plate so attached to the block will be found equally secure whether the portion of plate so attached to be used be large or small, for if a section of such block, as indicated by dotted lines at *S*, be taken, being no longer than would be necessary to support one line of matter, the metal tongues or portions of tongues, similar in size and shape to the cavities in the block and fitting therein, will afford an effectual brace against motion of the plate on the block, while the peculiar shape of the tongues, as above described, will prevent movement of the plate away from the block. Such cavities may be made by a series of blunt punches properly arranged on rollers, or by other suitable mechanism.

The novelty of our invention consists in the peculiar arrangement of the detached cavities in double rows, as above described, said cavities having the peculiar shape specified, so that the tongues formed therein in casting the plate on the block secure the two together in such a way as to make it equally secure whether used in large or small pieces.

The utility and superior value of our invention consist in its cheapness, for the blocks so used can be more cheaply and expeditiously prepared than those used in any other method, and when so prepared the fastening employs less metal than any other device hitherto em-

ployed. The peculiar shape of the cavities, as described, attaches the plate more firmly to the block than is done by any other method, and the peculiar shape and arrangement of the
5 cavities, as described, secure the plate to the block with equal firmness whether used in large or small pieces.

We are aware that in a patent granted to F. H. Aiken, November 21, A. D. 1871, numbered
10 121,036, it was proposed to use grooves of certain shape for receiving metal tongues of similar shape for attaching the plates, when cast, to the blocks; but we do not understand that detached cavities having all four sides shelving, or such cavities arranged, as above described, in double rows, were ever used for the
15 purpose above set forth.

We are also aware that in a patent granted to M. J. Hughes, dated December 2, A. D.
20 1873, and numbered 145,179, it was proposed to use "punctured holes and incisions" for the purpose of receiving metal tongues, and thus preventing lateral motion of the metal casing

on its wooden filling; but we do not understand that cavities of the peculiar shape described above or arranged in the manner above
25 set forth were contemplated in that or any other patent.

We do not claim, broadly, the use of grooves or holes in stereotype-blocks for the purpose
30 of receiving metal tongues when the plates are cast on such blocks, and thereby fastening such plates upon the blocks; but

We do claim—

An improved stereotype-block having the
35 double rows of cavities, shaped as described, and arranged, substantially as specified, so that the ends of the cavities in one row will overreach or break joints with the ends of the cavities in the other row, as and for the pur-
40 pose set forth.

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Witnesses:

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