

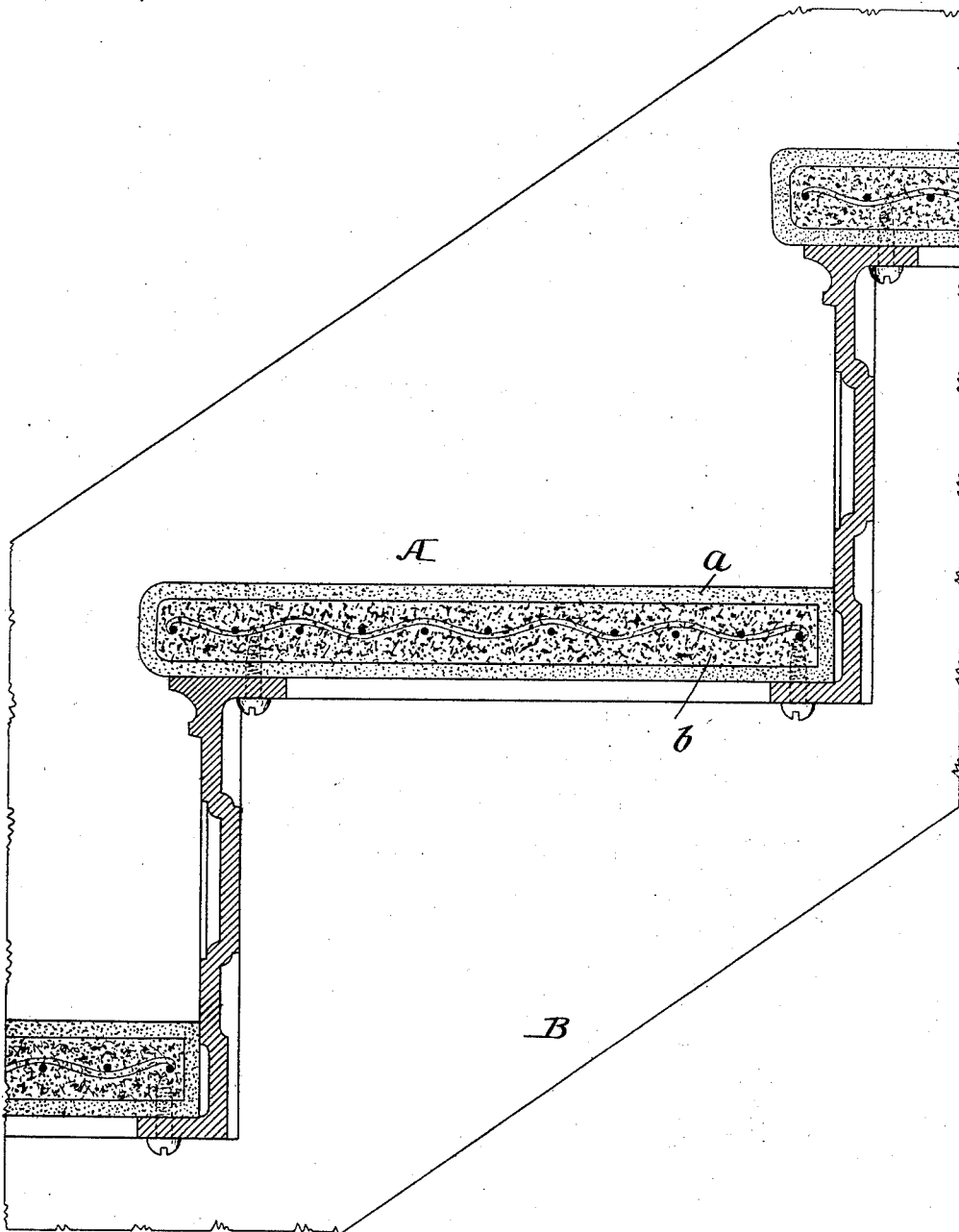
No. 707,635.

Patented Aug. 26, 1902.

N. POULSON.
SLAB OR TILE FOR BUILDING PURPOSES.

(Application filed Jan. 10, 1902.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

NIELS POULSON, OF BROOKLYN, NEW YORK.

SLAB OR TILE FOR BUILDING PURPOSES.

SPECIFICATION forming part of Letters Patent No. 707,635, dated August 23, 1902.

Application filed January 10, 1902. Serial No. 89,194. (No model.)

To all whom it may concern:

Be it known that I, NIELS POULSON, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Slabs or Tiles for Building Purposes, of which the following is a specification.

My invention relates to slabs or tiles for building purposes; and it consists of a slab or tile having a core and a coating of composition containing earthy materials, as earthy oxids, and with fibrous material in the core and comminuted vegetable material in the surface coating, as fully set forth hereinafter and shown in the accompanying drawings, in which is illustrated in section part of a stairway embodying my invention.

The title A is composite in character, consisting of a core *b* and outer coating *a* and in some instances of a strengthening grid or spider *c*. The outer coating *a* is necessarily hard in order to resist wear and acquire a suitable finish, while the core should be of tougher and preferably less expensive material. In practice the core has been formed of a mixture one element of which is fibrous material, as excelsior, although asbestos, mineral wool, cocoanut fiber, and other fibrous materials may be employed. With this element are combined oxid of manganese and chlorid of manganese in desired proportions to make a paste with water which will set and harden. To the core is applied a mixture containing oxid and chlorid of magnesium and finely-comminuted vegetable material, as sawdust or pulp, which when set is harder and denser than a mixture containing the fibrous material. When desired, the grid *c*, of wire cloth, expanded metal, or other open metallic structure, is embedded in the core in the process of forming the latter. While dif-

ferent mixtures or compositions may be employed, I have found that those containing the oxid and chlorid of magnesium are peculiarly serviceable, as they afford the requisite body and stiffness and when combined with finely-pulverized material secure a surface which is hard and durable, will take sufficient polish, and yet will prevent slipping. By using sawdust of different-colored woods, as well as the addition of different earthy materials in small proportions, any desired color may be imparted to the surface coating. The slabs or tiles thus produced are adapted for many purposes and have been found to be specially serviceable for steps, and I have shown the same combined with metallic stringers B, to which they may be secured by screws, owing to the character of the material, which affords as good a hold for the screw-threads as ordinary wood.

Without limiting myself to the precise combinations or materials set forth, I claim—

1. A slab or tile consisting of a core of a composition of earthy and fibrous materials, and a surface coating consisting of a composition of earthy material and finely-comminuted vegetable matter, substantially as set forth.

2. A slab or tile consisting of a core of a composition of earthy and fibrous materials, a grid embedded therein, and a surface coating consisting of a composition of earthy material and finely-comminuted vegetable matter, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NIELS POULSON.

Witnesses:

CHARLES S. COOKE,
ROBERT A. MCCORD.