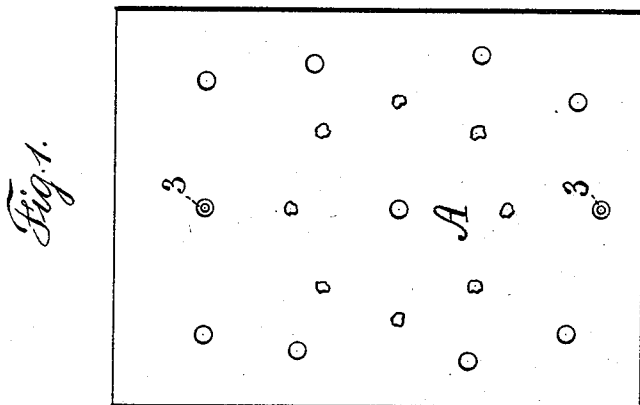
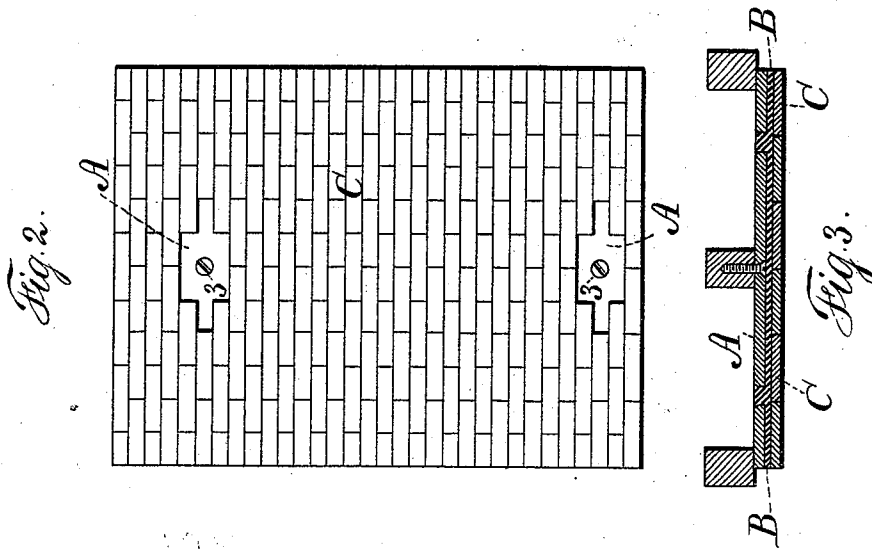


(No Model.)

A. S. NICHOLS.
TILE WORK.

No. 558,300.

Patented Apr. 14, 1896.



Witnesses:
J. Stair
Chas. A. Smith

Inventor.
Adelbert S. Nichols
per *L. M. Terrell* x *Pow*
Atty

UNITED STATES PATENT OFFICE.

ADELBERT S. NICHOLS, OF NEW YORK, N. Y.

TILEWORK.

SPECIFICATION forming part of Letters Patent No. 558,300, dated April 14, 1896.

Application filed February 12, 1896. Serial No. 579,028. (No model.)

To all whom it may concern:

Be it known that I, ADELBERT S. NICHOLS, a citizen of the United States, residing at the city of New York, in the county and State of New York, have invented an Improvement in Tilework, of which the following is a specification.

Tiles are extensively made use of both upon floors and for wainscoting, ceilings, &c., and it has been found, especially in buildings where there are wooden studs or wooden floor-beams, that the contraction or expansion of the wood under changes of atmosphere, and also the settling of the building, cause injury to the tiling, and often the tiles, or some of them, become loose or fall off, and in addition to this when tiles are set against a wall in wainscoting the weight of the tile is liable to cause a partial separation of the tile from the soft plaster or mortar, so that the adhesion is not perfect, and where the tiles are laid upon floor-boards or against wooden partitions the moisture of the plaster causes the wood to expand, and when the plaster and wood dry the latter shrinks and often becomes detached to a greater or less extent from the plaster.

The present invention relates to an improvement in tilework whereby the aforesaid difficulties are entirely avoided. I make use of a slab or backing of slate or similar stone as thin as is consistent with the proper strength, and this is perforated at intervals to insure a perfect holding between the cement or plaster and the slab, and the tiling is attached to the slate or slab in the factory and while the slab is lying horizontal, whereby the tiles can be placed much more accurately and perfectly than it is possible when the tiles are being laid against a vertical wall, and the slab, with its tiles attached, is allowed to remain horizontal until the cement has set and properly hardened. At proper places pieces of the tile are left off where there are perforations for screwing or otherwise securing the slab to the studs, beams, floor, or partition, so that the slabs with the tile-surfaces already completely prepared are set up in place and attached permanently and the missing pieces of the tile set in place for completing the work. This effects a great saving in labor, insures better work and smoother surfaces in the tile-

work, prevents the tiles becoming partially detached as the cement hardens and sets, and it entirely avoids the evil consequences heretofore resulting from the action of moisture upon the woodwork adjacent to the tiling.

In the drawings, Figure 1 is an elevation showing the slab of backing-slate or similar material ready for receiving upon it the cement and the tile-surfacing. Fig. 2 shows the tiles in place, except some of them being left off where the attaching-screws are to be employed; and Fig. 3 is a sectional plan view showing the slab, the tiling, and the mode of fastening.

The slab A is preferably of slate, because the same possesses great strength in proportion to its weight and thickness, and it is comparatively easily worked, and into this slab A holes are drilled or otherwise formed at proper distances apart for the cement or plaster to pass into or through such holes and be firmly and reliably connected when dry, so that scaling or separation from the slab is prevented. If desired, the surface of the slate may be more or less roughened.

The tiles are represented at C and the plaster at B, and I remark that the tiles may be of any desired character and either plain or ornamental, and the slab is to be prepared with a surface of tiles in the manufactory while lying in a substantially horizontal position, so that there will be no risk of the tiles becoming disturbed or partially disconnected from the cement or plaster during the drying or setting of such plaster, and the tiles are applied to one surface of the slab and caused to adhere by the cement, and in making up the slab of tiles any desired pattern, color, or character of tiles may be made use of, so that the slab with the tile-surface will be ready for putting into position.

One or more of the tiles should be left off at convenient places where the slab is perforated for the passage of screws or attaching-bolts by which the slab is to be fastened to the wall, floor, or other structure, so as not to depend upon the adhesion of plaster or cement, and in cases where the slab is to be attached to a brick wall expansible nuts or similar devices may be introduced into holes bored in the wall or brickwork at the proper places to correspond to the holes in the slab

A, so that screws or equivalent attaching devices may be employed to fasten the slab with the tiling-surface in position at any stage in the progress of the building.

5 I claim as my invention—

1. As a new article of manufacture, a slab of slate or similar material perforated and having a surface of tile attached thereto by cement or plaster that passes into the holes
10 in the slab, substantially as set forth.

2. As a new article of manufacture, a slab of slate or similar material perforated and having a surface of tile attached thereto by

cement or plaster that passes into the holes in the slab, there being pieces of tiling that 15 are left off at places where there are holes for attaching-screws so as to allow for the slab being set up and attached in place, and the missing tiling afterward secured in place by plaster or cement, substantially as set forth. 20

Signed by me this 8th day of February, 1896.

ADELBERT S. NICHOLS.

Witnesses:

C. J. SHELDON,
WILLIAM SOUTAR.