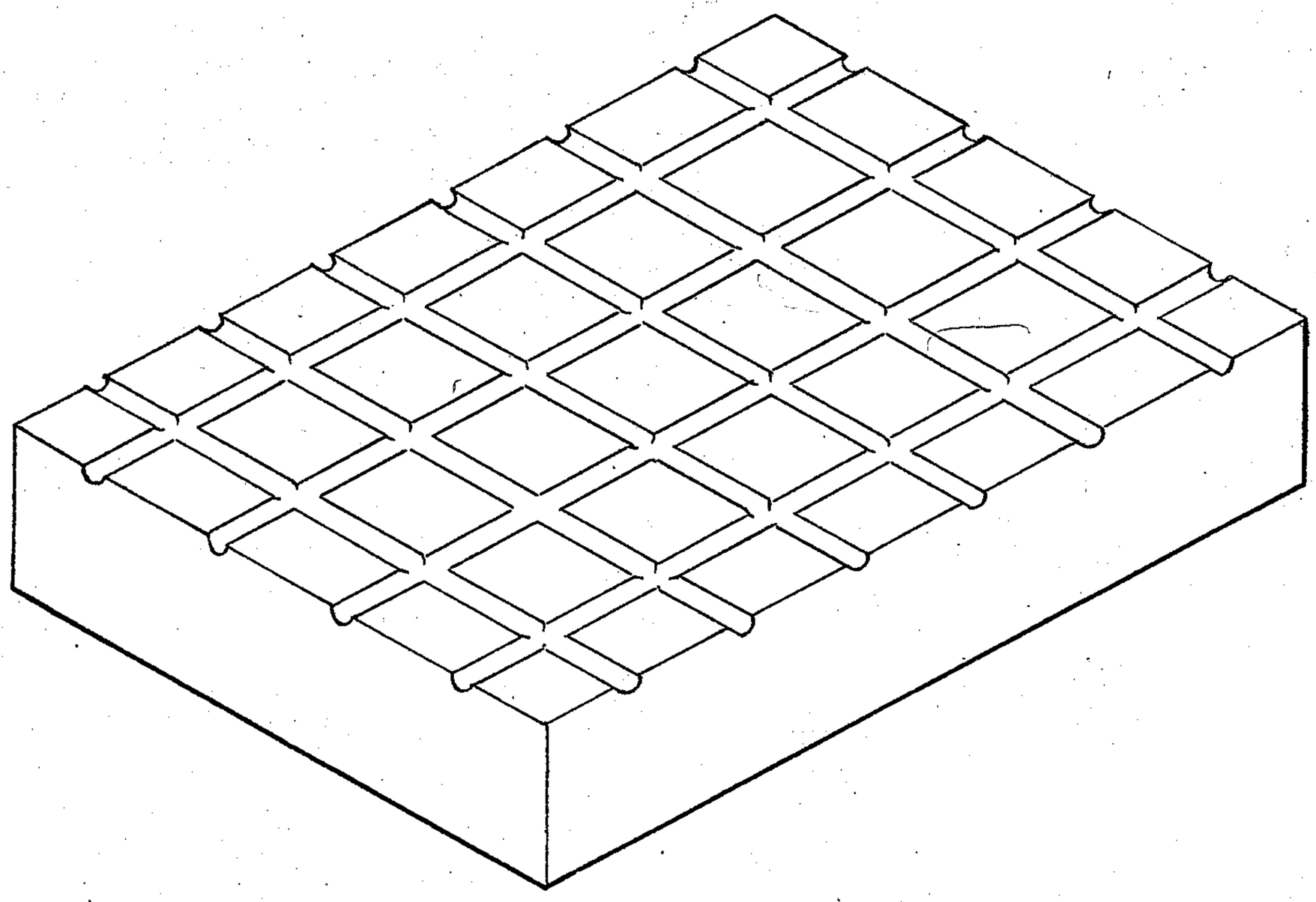
D. R. PRINDLE.

Manufacture of Artificial Stone.

No. 150,710. Patented May 12, 1874.



Witnesses.
Archie Baine.
William C Baine

Inventor.
Daniel R Prindle.
per R. F. Osgood atty.

UNITED STATES PATENT OFFICE.

DANIEL R. PRINDLE, OF EAST BETHANY, NEW YORK.

IMPROVEMENT IN THE MANUFACTURE OF ARTIFICIAL STONE.

Specification forming part of Letters Patent No. **150,710**, dated May 12, 1874; application filed April 20, 1872.

To all whom it may concern:

Be it known that I, DANIEL R. PRINDLE, of East Bethany, in the county of Genesee and State of New York, have invented a certain Improvement in Tiles, Bricks, and similar Blocks, of which the following is a specification:

My invention consists of a tile, brick, slab, or similar block, composed of concrete or cement of two or more grades or qualities formed as herein described, and producing a durable and practical face for its use, combined with a cheap and easily constructed back or filling.

In the drawings the figure represents a perspective view of my improvement.

These tiles, bricks, or slabs are formed in molds in the manner following, which molds may be of any desired size, shape, or construction: I prepare the material in two or more grades or qualities, one grade being hard or fine to produce the outer or finished and durable surface exposed to wear, while the other or others are coarse and cheap in their nature to form the foundation or bed—each grade to be kept ready for molding by two or more men. It is the object to so combine the materials in the process of making that the separation of the different layings shall be impracticable, the several qualities blending or uniting, so that a gradual building up is made, that shall insure the proper hardness, strength, and texture throughout, and adapt the two opposite sides to the uses and conditions to which they are subject. The mold being prepared, the fine, durable, or best quality is then applied first, and the mold partially filled—say, one-half inch or over—and the contents leveled off and pressed down. The second quality is then applied in the same manner on top the other, and the succeeding ones following, (if more than two are used.) The whole is then properly pressed in the mold, when it is left to set a few minutes, and removed in a finished state.

I design these articles for the various uses to which tiles, bricks, and similar blocks are applied—such as hog-pen floors, cellar-bottoms, pavements, building blocks, &c. For hog-pen floors and analogous uses, where slipping of animals is to be obviated or drainage secured, I prefer to form grooves in the upper or wearing surface. These grooves may be arranged as desired, but preferably checkwise, as shown in the drawing. In order to produce these the floor or bottom of the mold must be provided with corresponding ribs.

These articles, made in the manner above described, present the same hardened, fine, and finished exterior surface that is ordinarily produced from a single fine and costly grade of material, while the ground work or foundation is made of any cheap, coarse material—such as broken bricks, stone, gravel, sand, &c. This is not only desirable on account of cheapness, but it is of importance in many cases in furnishing a coarser texture at the base, which better resists the action upon it—for instance, when resting in water.

I claim a special novelty in the grooving or indenting of the exterior or finished surface, as thereby the tiles are particularly adapted to hog-pen floors and analogous uses, to prevent slipping of the animals, now so common. In this form the floor can be easily cleaned, as a shovel or hoe will easily pass over the surface, which would not be the case if projecting ribs were formed. There is also less liability of breakage or wear. Such a floor is very durable, and may be made water-proof by filling the joints with cement in laying.

For such a use as this, the articles, with the grooves or indentations in the surface, and made up of different grades and of any convenient material, constitute a new article of manufacture never before known, so far as I am aware.

In laying of pavements or walks, the grooves may be made effective in draining off water by simply laying the tiles or slabs so that the grooves come in line. This would be useful in street-walks, where it is desirable to avoid standing water.

These blocks may be made of any desired color by the admixture of the proper color-

ing ingredients. This may be desirable in building, thus giving beauty and ornament, as well as durability, to the outer or front layer only.

What I claim, and desire to secure by Letters Patent, is—

An artificial block, such as described, formed by molding together concrete or cement of different grades, as set forth, the finer grade forming the finished face, which is recessed or grooved in the manner substantially as shown and specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

D. R. PRINDLE.

Witnesses:
R. F. OSGOOD,
ARCHIE BAINE.