

UNITED STATES PATENT OFFICE.

GEORGE H. MOORE, OF NORWICH, CONNECTICUT.

IMPROVEMENT IN CONCRETE PAVEMENTS.

Specification forming part of Letters Patent No. 121,294, dated November 28, 1871.

To all whom it may concern:

Be it known that I, GEORGE H. MOORE, of the city of Norwich, county of New London and State of Connecticut, have invented a new and improved process of making separable joints between the blocks of a pavement or surface of concrete or other plastic material, of which the following is a specification:

This invention relates to certain improvements in pavements formed in sections from cement, concrete, or other plastic composition; and it consists in interposing between the sections composing such pavement powdered steatite or its equivalent to form a separable joint.

In the use of my invention the concrete or plastic material of which the blocks are to be formed may be prepared by mixing cement, sand, and gravel in the usual manner and proportions, and the blocks may be molded in the usual manner. If, when one or more of the blocks has been laid, I wish to form another block adjacent thereto with a separable joint between them, I sprinkle the edge of the block formed with powdered steatite or other equivalent powder, capable of preventing perfect adhesion between the blocks, and then mold the adjoining block, and compress both so that their edges shall be brought into close contact.

To form a joint when part of its depth is perfectly united and water-proof and a part readily separable, so that the pavement will be separable at the joint more readily than elsewhere, I lay the plastic material up against that part of the plastic edge of the block that it is desired to unite and sprinkle the remainder of the joint with powdered steatite or an equivalent powdered substance.

Any block in a pavement formed with joints as above described may be readily removed without affecting injuriously the blocks adjacent thereto.

I do not herein claim any composition for a concrete pavement, or any method of molding blocks in a concrete pavement aside from the joints.

I am aware of the patent granted to J. J. Schillinger July 19, 1870, and reissued May 2, 1871, in which the sections of concrete pavement are separated by the employment of tarred paper; such I do not claim. I use powdered steatite or its equivalent, which is about one hundred

per cent. cheaper than tar-paper, and when interposed between the sections of a concrete pavement it allows the sections to be adjusted nearer together than can be effected by the use of tar-paper; and if the concrete is properly mixed the checking or cracking of the surface incident in such pavements is avoided. It will also be seen that by the employment of powdered steatite or its equivalent I can form a separate joint between blocks of irregular shapes.

When powdered steatite is used the edges of surfaces of the plastic material to which it is applied constitutes a part of the mold used in forming a section, block, or design; whereas, where tar-paper is used, such paper constitutes a part of the mold itself. By using powdered steatite blocks may be completely or only partially isolated—in both cases readily separable. When the blocks are from one to two inches thick I only partially isolate them, for the reason that a pavement so formed is more firm and rigid than if the joints were free.

The blocks being formed in position will have a perfect bearing, and will not be disunited by the service required of such a pavement, which is more particularly intended for floors, &c., when it is desired to imitate in shape, size, &c., the "Minton tile." The edges of the blocks are formed at right angles to the surfaces, are brought into close contact and mutually support each other, being only partially isolated, and, having a perfect bearing upon the under side, they will not become separated by pressure upon their surfaces, but will always retain an even surface. They are not as liable to become loose as are the Minton tile, which are laid in cement, but can readily be removed. Any block forming a part of a pavement may be easily taken up and readily replaced, as follows:

In replacing a block, first spread a thin layer of the plastic concrete upon the bed of the block to be replaced to give a perfect bearing to such block; sprinkle the surface of said layer of concrete with powdered steatite or its equivalent to isolate the under surface of the block; cover the edges of any blocks that will be adjacent to the block that has been removed, when it is placed in position, with a thin coating of the plastic concrete; wet with water and sprinkle with powdered steatite the edges of the block to be replaced, then place the block in position, and

it will be in the condition as before it was taken up—*i. e.*, it will have a firm, perfect bearing, and be partially isolated from the adjacent blocks—the joints will be tight, and the surface smooth and continuous, for the reason that a thin layer of the plastic concrete is interposed between the blocks, any superfluous material being pushed down upon its bed by the under edges of the block when it is placed in position. Any part of a pavement like the one described may be taken up and replaced in like manner. It is not a wa-

ter-repellant substance, as it can be made into a paste with water.

I claim—

In a pavement formed of sections of plastic material, powdered steatite interposed between the sections for forming a separable joint.

GEORGE H. MOORE.

Witnesses:

GEORGE C. RIPLEY,
JEREMIAH HALSY.

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