

J. H. THORMANN & F. BRUMSHAGEN.
Concrete-Pavement.

No. 166,486.

Patented Aug. 10, 1875.

Fig. 1.

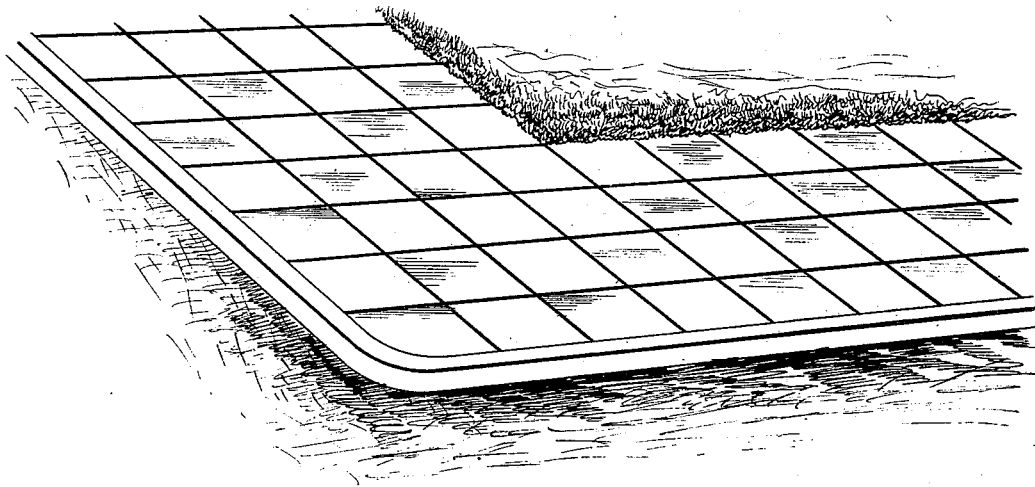


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN H. THORMANN AND FRIEDRICH BRUMSHAGEN, OF BALTIMORE,
MARYLAND.

IMPROVEMENT IN CONCRETE PAVEMENTS.

Specification forming part of Letters Patent No. **166,486**, dated August 10, 1875; application filed
July 22, 1875.

To all whom it may concern:

Be it known that we, JOHN H. THORMANN and FRIEDRICH BRUMSHAGEN, both of Baltimore, in the county of Baltimore and State of Maryland, have invented a certain Improvement in Concrete Pavements, of which the following is a specification:

Our invention relates to that class of concrete pavements or floors which are laid in sections in imitation of stone-flagging. It is desirable always, and in many cases indispensable, to make the joints between the blocks water-tight; and various methods have been adopted and patented for accomplishing this end, but none known so far has met all the requirements.

Our improvement is intended to provide water-tight joints between the blocks without rigidly cementing them together, so that the separate blocks may be readily taken up, and may separately yield to possible slight upheavals of the foundation-bed caused by frost, without any injury to the blocks or to the joints. It consists in filling the joints, in the manner hereafter stated, with white lead.

In the annexed drawings, Figure 1 is a perspective view of a concrete flag pavement, embodying our invention. Fig. 2 is a section of the same.

In laying a concrete flag pavement in accordance with our invention, we proceed to mold, say, every alternate block or flag of a row, directly upon the foundation-bed, as

usual. As soon as the material of which the flags are composed (we employ usually a mixture of cement and sand, but do not confine ourselves to any particular paving composition) has set sufficiently, we mold the intervening flags; but before doing so apply a thick layer of thick white lead to the adjacent edges of the flags already down, and then work the intervening flags close up against these layers of white lead.

We have found, by actual experiments, that joints thus formed are and remain perfectly water-tight. The lead acts in a measure like putty, and the flags may be readily separated from each other when it becomes necessary to take up one or more. The joints also are sufficiently elastic to allow the very slight, independent movements of the flags caused by upheavals of the ground from frost.

What we claim as our invention, and desire to secure by Letters Patent, is—

A pavement or floor composed of concrete flags or blocks, separated by interposed layers of white lead, substantially as and for the purpose specified.

In testimony whereof we have signed our names to the foregoing specification in the presence of two subscribing witnesses.

JOHN H. THORMANN.

FRIEDRICH BRUMSHAGEN.

Witnesses:

JOHN E. LANGHOF,
CHARLES LIMBERG.