

KUHL *v.* MUELLER and another.

Circuit Court, S. D. Ohio, W. D. June, 1884.)

1. REISSUE No. 4,364—“SCHILLINGER” PATENT—CONCRETE PAVEMENTS—VALIDITY—INFRINGEMENT.

Reissued letters patent No. 4,364, granted John J. Schillinger, May 2, 1871, for improvement in concrete pavements, *held* valid and infringed.

2. SAME—“SCHILLINGER’S” CONSTRUCTION—“MUELLER AND DIETRICH’S” CONSTRUCTION.

Schillinger’s invention, consisting of a concrete pavement laid in sections, with tar paper or its equivalent between the several divisions, permitting the separate removal of each block, and allowing the blocks to be severally and independently affected by varying states of the weather or changes in the temperature, and thus preventing the irregular cracking of the pavement and the cracking of the blocks, the openings resulting from shrinkage coming along the line of the joints or divisions, *held* infringed by the defendant’s construction, in which the cement is laid in a solid mass, and, while in plastic state, its surface is marked off by a fish-line or trowel into blocks, the incision or marking being but a short distance into the body of the cement, and no material being interposed between the several blocks.

In Equity.

George J. Murray, for complainant.

Jere F. Twohig, for defendants.

SAGE, J. The complainant is the owner, for Hamilton county, Ohio, of reissued patent No. 4,364, granted to John J. Schillinger, May 2, 1871, for improvement in concrete pavements. The patent has been so frequently sustained by decisions of the United States courts that it is not necessary to state the reasons for holding it valid in this cause. It is sufficient to refer to the following cases: *Schillinger v. Gunther*, (Oct. 1878,) BLATCHFORD, J. 14 O. G. (U. S. Patent Office,) 713; *Same v. Same*, (May, 1877,) SHIPMAN, J. 11 O. G. 831; *Same v. Same*, BLATCHFORD, J. 16 O. G. 905; *California Artificial Stone Paving Co. v. Perine*, *Same v. Molitor*, (May 7, 1881,) SAWYER, J. 20 O. G. 813; S. C. 8 FED. REP. 821.

The invention relates, as is stated in the specification of the patent, to a concrete pavement which is laid in sections, so that each section can be taken up and relaid without disturbing the adjoining sections. The pavement is formed of concrete, of cement mixed with sand and gravel, or other suitable material, to form a plastic compound, and laid in sections so as “to allow the blocks to be raised separately without affecting the blocks adjacent thereto.” The method stated by the inventor in his specification is to place between the points of the adjacent blocks strips of tar paper, or other suitable material, in the following manner: After completing one block he places the tar paper along the edge where the next block is to be formed, and puts the plastic composition for such next block up against the tar paper, and proceeds with the formation of the new block. He proceeds in this manner until the pavement is completed, interposing tar paper between

the several joints, as described. The paper does not adhere to the blocks. It forms a tight, water-proof joint, allowing the several blocks to heave separately, from the effects of frost, or to be raised or removed separately without injury to adjacent blocks. The claim is "the arrangement of tar paper, or its equivalent, between adjoining blocks of concrete, substantially as and for the purpose set forth." This was the second claim, but the patentee, before making the assignment to complainant under which he sues, filed a disclaimer, disclaiming the first claim, leaving only the claim above quoted.

The patent was at once recognized as valuable. Infringements were numerous. Judge BLATCHFORD states that the first infringers cut joints and fitted the spaces with pitch or asphaltum. Cement also was used to fill the joints. Joints were cut, while the material was yet plastic, with the trowel. It was held that, although the cutting was not entirely through the pavement, it was an infringement, and that it was not material whether the cut was of greater or less depth, provided that it was sufficient to prevent the irregular cracking of the pavement, which had not been accomplished prior to Schillinger's patent.

In the case of *California Artificial Stone Paving Co. v. Perine, supra*, SAWYER, J., said:

"One of the great objections to the solid concrete pavements made before Schillinger's invention was that they cracked irregularly, and one of the chief advantages of his invention, as shown by the testimony in these cases, is that the openings resulting from shrinkage come along the line of joints, and the blocks themselves do not crack, although that advantage is not set forth in the patent. In the pavements constructed by the respondents this result has been attained, and it has been admitted by the respondents in one case in this court, in which this Schillinger patent has been in question, that the object of running the trowel through at the joints was to so weaken the pavement along these lines as to control the cracking and leave the blocks as marked off unbroken. This is clearly an infringement, for the patentee is entitled to all the benefits which result from his invention, whether he has specified all the benefits in his patent or not. So, in heaving from frost and in taking up the pavement, the breakage would be likely to be along the same line."

The defendants, Mueller and Dietrich, have submitted testimony that they have not constructed concrete pavements laid in detached sections having tar paper or the equivalent between the adjoining sections, but that they have laid their pavements in a solid mass, and while they were yet plastic marked the surface with a fish-line one-sixteenth of an inch in diameter, the depth of the impression made by the line not in any case exceeding the diameter of the line; that the object in marking the pavement is to relieve the monotony of a plain surface, and to give to the pavement the appearance of having been constructed of freestone blocks. They insist that the material is not thereby divided; that none of it is removed; and that the pavement at the point of impression is actually strengthened, the particles of the material being pressed closer together by the impression

made by the string, which is stretched across the pavement and then pressed in,—generally by the use of the trowel.

The complainants submitted testimony tending to prove that the defendants cut joints with the trowel, and that the line marks were coincident with the cuts, which had been at least partially closed by cement or other material; also that the line marks, which fill with sand or dirt almost immediately, are the equivalent of the tar paper, for the reason that they control the cracking of the pavement, and limit it to the space within the line marks where it originates. The conflict in the testimony is irreconcilable, but there is in the testimony that which furnishes a means of arriving at a satisfactory conclusion, as will presently appear.

The defendants cite the case of *California Artificial Stone Co. v. Freeborn*, 17 FED. REP. 735, decided by Judge SAWYER. He says:

"It is insisted by complainant that marking off the blocks on the surface, at the time of laying the pavement, with a marker about one-sixteenth of an inch in depth, is an infringement. I am unable to perceive that the mere running along the surface of that blunt and rounded marker one-sixteenth of an inch in depth, there being no cutting elsewhere, is making a joint. I fail to see that it is an infringement."

This clearly indicates the true test. If the marking with the line be, as the defendants claim, merely ornamental, and effecting no other result than to give to the pavement the appearance of being laid in blocks or sections, it is plainly not an infringement. In the case cited, after a line of blocks had been formed and become solidified, a new block was formed, between scantlings and the block or blocks before formed, without interposing anything whatever between the new and the old blocks, and no cutting was made in the joint between the old and the new blocks. The marker was then run along the line between the old and new blocks, upon the surface. The forming of the new block against the block before formed, in the manner above stated, was according to the specifications and claim in the reissue subsequently disclaimed, and the court properly held that the marking along the line of the joint thus formed was not an infringement. But in the cases of *Perine* and *Molitor* the trowel was used to cut the pavement, while in a plastic state, into blocks, and the cuts or joints having been smoothed or floated over, so that they were not visible, a joint-marker cutting from one-sixteenth to one-eighth of an inch in depth and marking off the block was run over the line of the joints. The defendants were held to be infringers. Now, if the marker—whether it be a cord or of any other description is not material—make a cut or depression which has the effect to cause the pavement to break by upheaval, or cracking, from any cause, along the line of the cut or depression, its use is clearly an infringement. Whatever depth of cut or mark will produce the effect stated is as certainly an infringement as if the blocks or sections of the pavement were entirely separated one from another. The cutting with the

trowel, it was held, was an infringement, although it was not to the entire depth of the pavement. The difference is only in degree.

Did the line used by defendants cut joints, form blocks or sections of the pavements constructed by them, in violation of the rights of complainant? Did the defendants separate said pavement into blocks or sections by the use of the trowel? The complainant's witnesses affirm, the defendants deny, as to each of these questions; and, upon the statements of the witnesses alone, it would be extremely difficult to decide. But the exhibits produced—blocks from the pavements laid by defendants—show lines of division clear, distinct, and complete. If these were produced by the use of the marker only, it is incontestable that the use of the marker is an infringement. If they were produced by the trowel, the defendants are infringers, as has been repeatedly held. Therefore, it is not necessary to determine whether the marker only was used. The exhibits establish the fact that the pavement was divided, while yet plastic, into blocks or sections; and if that result was accomplished by the trowel or by the marker, either is the equivalent of the tar paper described in the specification of the patent under which the claimant claims.

But the defendants insist that the use of a line as a marker was known long prior to Schillinger's invention, and witnesses so testify. And counsel point to the walls of the court-room, built 30 years ago, in corroboration of the fact as they claim it. They therefore urge that if the use of the line be the equivalent of the tar paper, it is nevertheless old, and they have a right to use it; citing *Dennis v. Cross*, 6 Fisher, 138. In that case the patentee claimed the application of a spring catch and lips to the purpose of securing the *glass globe* in the bottom of the lantern, and it appeared that spring catches had been previously used for fastening the *oil-pot* in the bottom of the lantern. Judge BLODGETT held that the patent could not be sustained. There can be no doubt that the holding was correct. But that is not this case. There the use of the spring catch by the patentee was substantially the same as that known and used before his invention. Here the marker was used, it is true, before Schillinger's invention, but only upon walls for ornamental purposes, and there was nothing in such prior use that could be held to anticipate Schillinger's patent. It has never been held that an equivalent known at the date of the invention could be used without infringing the patent. Such a holding, if generally adopted, would amount, practically, to the destruction of the law of equivalents. Walk. Pat. § 354 *et seq.*; Merwin, Pat. Inven. c. 4, p. 281 *et seq.*; and chapter 7, p. 527 *et seq.*

Cutting of mortar and other plastic material with the trowel was known long before the date of Schillinger's invention, but that would not be held to be a prior use which would invalidate his patent. Schillinger was the first to produce the result accomplished by his tar paper. He is entitled, and so is the complainant as his assignee, to all means known, at the date of his patent, by which the same re-

sult can be produced, or, in the language of his claim, to tar paper or its equivalent.

A decree will be entered for the complainant for an injunction and account as prayed, with costs.

STEAM-GAUGE & LANTERN Co. and another v. MILLER and others.

(Circuit Court, D. Connecticut. September 13, 1884.)

1. PATENTS FOR INVENTIONS—IRWIN KEROSENE HAND LANTERN—NOVEL PRINCIPLE.

An important and novel principle of the kerosene hand lantern made under reissued letters patent to John H. Irwin, No. 8,598, (original patent No. 89,770,) was the supply of external air to the flame by means of deflectors, which compelled the introduction into the supply tubes, in an irreversible current of air which, but for such deflectors, would blow over and exhaust the tubes.

2. SAME—INFRINGEMENT.

Patent No. 89,770 and reissue No. 8,598 construed, and held to describe and claim a structure having conduits which supplied heated air when the lantern was at rest and external air when it was exposed to the wind, and which could also have the assistance, if any there might be, of heated air in introducing a flow of fresh air through the tubes. The defendant's lantern, which is an external air-feeder only, is therefore not an infringement of reissue 8,598.

3. SAME—PATENTS No. 104,318 AND No. 151,703.

Held, that defendant's lantern infringes the first claim of No. 104,318, and the second claim of No. 151,703, both patents to John H. Irwin.

In Equity.

E. S. Jenney and Benjamin F. Thurston, for plaintiffs.

Frederic H. Betts and Charles E. Mitchell, for defendants.

SHIPMAN, J. This is a bill in equity founded upon the alleged infringement of letters patent to A. R. Cribfield, dated April 2, 1867, and of the four following letters patent to John H. Irwin, viz.: Reissue No. 8,611, dated March 4, 1879, of original patent No. 73,012; reissue No. 8,598, dated February 25, 1879, of original patent No. 89,770, dated May 4, 1869; No. 104,318, dated June 14, 1870; and No. 151,703, dated June 9, 1874. The plaintiffs do not ask for a decree except upon claims 1, 2, 3, 4, 5, and 8 of reissue 8,598, claim 1 of No. 104,318, and claim 2 of No. 151,703. The first two patents are for improvements in lanterns which burn kerosene, and the third is for an improvement in the same class of lamps or lanterns.

The views of the court upon the propriety of granting the plaintiff's motion for an injunction *pendente lite* against an infringement of these patents, a description of reissue 8,598, and of the invention which it claimed, were given in *Steam Gauge & Lantern Co. v. Miller*, 8 FED. REP. 314, and in *Same v. Same*, 11 FED. REP. 718. The history of the inventions of Mr. Irwin preceding and including No. 89,770, and the views of Judges DRUMMOND and BLODGETT upon that