

FRYER, JR., *v.* MAURER.

Circuit Court, S. D. New York. March 19, 1884.

PATENTS—TILING—PREVIOUS STATE OF THE ART.

Reissue No. 5,174, for a sectional arch of hollow tiles having plane joints, to be used underneath the floors of fire-proof buildings, is void for lack of patentable novelty. All of the features except the plane *voussoirs* were incorporated in previous foreign patents, and the use of plane *voussoirs* for analogous purposes was not new.

In Equity.

Geo. W. Van Siclen, for complainant.

Gen. John A. Foster, for defendant.

WALLACE, J. The invention described in the complainant's patent (reissue No. 5,174 granted December 3, 1872, to Balthazar Kreisler, original granted March 21, 1871) relates to an improvement in tiling used in fire-proof buildings under the floors. The specification describes it as consisting in a hollow sectional tile combined with the girders of the building in such a manner that the tiling spans the space between opposite girders, the end sections being supported upon or against the girders, and the middle section forming a key to bind the sections together, the whole having a flat under-surface. Considered with the aid of the drawings, the invention may be more intelligently understood as being an arch composed of sections of hollow tiles, and supported by girders against which it abuts at either side, the intrados having no curve, and the sections being *voussoirs* radiating to a center, and the points of the section being plane; and, as an incidental arrangement for supporting the arch, the end sections are provided with a recess, where they rest upon the flanges of girders for receiving and interlocking with the flanges. The arch may be so formed on the upper side as to furnish air spaces for ventilation under the flooring; and it may

also be provided with recesses in the sections at the joints, on the Upper side of the arch, into which the sleepers may be inserted; but neither of these features is essential and neither enters into the claims as one of their constituents. The claims are as follows,;

(1) In combination with supporting beams or girders, a sectional hollow tile, whose end sections abut against opposite beams or girders, and whose middle section forms a key, and so constructed that the under side of the tile forms a flat surface, substantially as described. (2) A hollow tile made in sections, one of which forms a key for the end sections, which are provided with recesses to catch over the flanges of the girders, substantially as described.

The several publications relied on by the defendant as anticipating the patent are ineffectual for this purpose, because none of them describe an arch of hollow tiles in which the several sections have plane joints, or are supported merely by the wedging power of the plane *voussoirs*. These publications, however, contribute important information 757 concerning the prior state of the art, and materially assist the argument for the defendant that there was no invention in what Kreisler did. In considering them the drawings are of great assistance, as they illustrate clearly what the descriptive words alone would fail to point out adequately. These publications show that it was not new to employ an arch of hollow tiles made in sections, supported by girders in either side between the stories of fire-proof buildings. The French letters patent to Vincent Garcin, of October 11, 1867, and amendment of October 9, 1868, show such an arch having a flat under surface or intrados. The *voussoirs* are, however, interlocked by indented joints, so that the sections support each other by this means. The key-stone has also an indented joint. The French letters patent to Roux Freres, of March 24, 1868, show the same thing. They also show a recess in the end sections of the

arch where they rest upon the flanges of girders for receiving the flanges and air spaces for ventilation, on the upper side of the arch. Every substantial feature of the complainant's patent is here shown except the plane joints of the arch, the sections in the Roux Freres patent having indented joints, but indented differently from Garcin's construction. Other publications show very similar arches which are supported by rods or bolts instead of interlocking joints.

It is common knowledge that the flat arch, in which the joints are plane and the intrados has no curve, is old. It was generally employed in door-ways, fire-places, and windows. If Kreisler had been the first to introduce the plane joints of this arch into tiling for spanning the space between the girders of buildings, the case would resolve itself into the single question of fact, whether the substitution of the plane joints for the indented joints of Garcin and Roux Freres was such an obvious thing as not to involve invention. But the English provisional specification of George Davis, of July 10, 1868, for filling pieces for iron floors and ceilings, describes a filling of hollow bricks, in which the pieces which abut against the joists have one side perpendicular and the other oblique, the intermediate pieces have parallel sloping sides, and the center filling piece is of a tapering or wedge form, "so that when the filling pieces are fitted together between the iron beams or joists they form a self-sustaining flat arch, of which the center piece is the key." It thus appears that Kreisler was not the first to employ the plane, joints in an arch of tiling for spanning the space between the girders of buildings. Such joints having been used for this purpose, it was not invention to employ them for the same purpose in the arches of Garcin and Roux Freres. This was merely improving a known structure by introducing a known equivalent for one of its features.

The bill is dismissed

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