v.32F, no.5-21 KEARNEY AND ANOTHER V. LEHIGH VALLEY R. CO.

Circuit Court, D. New Jersey.

September 30, 1887.

1. PATENTS FOR INVENTIONS—INFRINGEMENT—SPARK-ARRESTER.

Letters patent issued April 11, 1871, to Kearney & Tronson for an improved locomotive spark-arrester, the specifications and claims showing a grating with vertical bars placed at the foot of the spark or petticoat pipe, etc., *held* infringed by a spark-arrester with grating consisting of upright cast-iron bars, with connections between them at intervals, leaving long spaces or slots between the bars, and only interrupted by the connections, exactly like the spaces between the bars required by the patent.

2. SAME-PRIORITY OF INVENTION.

Complainants' application for a patent was made prior to the date of the patent of one S., introduced in evidence as anticipating it, but was not dated until after the date of the S. patent. *Held* that, in the absence of evidence showing that S.'s invention antedated complainants' application, the presumption was in favor of the priority of complainants' patent.

3. SAME—ANTICIPATION—SPARK-ARRESTER.

Letters patent issued April 11, 1871, to Kearney & Tronson for an improved locomotive spark-arrester, the specifications showing a circular grate of longitudinal upright bars, marked D, and a tube, E, on top of it, extending upward into the smoke-stack, with the netting, marked F, around the top of this tube, to prevent cinders from escaping into the smoke-stack, *held* not anticipated by vanclain's spark-arrester, consisting of a perforated cylindrical box or screen in which the perforations or apertures consisted of latitudinal (horizontal) slots, cut out of sheet-iron, nor by any other patent.

4. SAME—RESTRICTION OF CLAIM—SPARK-ARRESTER.

In letters patent issued April 11, 1871, to Kearney & Tronson for an improved locomotive spark-arrester, the specifications showed a grating with vertical bars placed at the foot of the spark or petticoat pipe, etc. *Held*, that the patent was not to be restricted to the use of a petticoat pipe, but such pipe might be of any form or dimensions.

5. SAME-REISSUE-NEW MATTER.

In an application for reissue of a patent, paragraphs explaining the difficulties and defects of prior inventions of the same character, and how they have been avoided by the new invention, is not that sort of new matter which renders a reissue void.

6. SAME-UTILITY.

In an action for the infringement of a patent, the defense of lack of utility will not be sustained unless there is the clearest evidence that the Invention claimed is utterly frivolous and worthless; and the fact that defendants have used it, and infringed the patent, is a strong argument against such defense.

Elwood C. Harris, for complainant.

Andrew McCallum, for defendant.

BRADLEY, Justice. This is a suit on a reissued patent, brought for an injunction and damages. The original patent was granted to Kearney & Tronson, April 11, 1871, for improvements in spark-arresters on locomotives. The spark-arrester thus patented was lo-

cated in the smoke-head of the boiler, instead of the smoke-stack above. It is described in the specification as follows:

"In the unoccupied space in this smoke-head we place a grate, the peculiar features of which are its perpendicular bars, with fixed apertures sufficiently fine to stop the sparks that come from the fire; the size of the grate being determined by the area of opening needed for the regular draught and escape of

smoke on kindling the fire, or when the engine is not in motion. Upon the top of the grating a tube or pipe is fitted, extending upward a short distance above the top of the smoke-head into the chimney. A space is left around the top of the pipe between the edges of the aperture in the top of the smoke-head and the pipe. This space is covered with netting or grating to prevent sparks or coals from passing through into the chimney."

The claim was for "the grate, D, with the longitudinal bars, as and for the purposes specified and shown."

The drawings show the circular grate of longitudinal upright bars, marked D, and the tube, E, on top of it, extending upward into the smoke-stack, with the netting, marked F, around the top of this tube to prevent cinders from escaping into the smoke-stack. The exhaust steam is brought by pipes through the bottom of the grate, D, and blown upward into the pipe, E, creating a strong draught in the smoke-stack. Most of the smoke and gases are drawn by this draught through the grate, and upward into the pipe, E, and the smoke-stack; but some of them ascend and pass through the netting, F, into the smoke-stack.

The application for the reissued patent was filed June 7, 1872, a little more than a year after the date of the original, and was granted December 10, 1872. The drawings accompanying the specification are the same as those attached, to the original patent; and the specification is the same in substance as the original specification, except that it is so framed as to correct some ambiguity and uncertainty in the original, and to supply an evident omission. The ambiguity or uncertainty was this: As the original was drawn, it might be construed as applying only to cases where the tube, E, in the smoke-head, was of less size at top than the smoke-stack, or orifice in the smoke-head on which the smoke-stack stands; whereas the particular form and size of the tube, E, had nothing to do with the invention, which was as applicable to a pipe which filled the orifice above, and was equal in diameter to the smoke-stack, as to one which was smaller. The invention had relation to the form and construction of the spark-arresting grate, and to that only; and was as applicable to one kind of pipe as to another. This correction was a proper one to be made, if made in reasonable time, as it was. The other correction was the addition of a clause to point out and describe the platform on which the grate was to stand in the smoke-head. This platform was a necessary incident to the apparatus, as the grate could not stand on nothing. It was fairly indicated by the original drawing, but was not described in the specification. Its description in the reissue was a very proper amendment to be made. It did not affect the invention,—it left that untouched; but it showed more clearly the surrounding parts related to it.

The paragraphs which explain the difficulties and defects of prior spark-arresters, and how the patents have avoided them by their invention, cannot be regarded as that sort of new matter which renders a reissue void. The reissue has two claims; the first of which

is substantially the same as the claim in the original patent, and the second is merely for the combination of the grate, D, and netting, F, which

amounts to nothing. The first claim, which is the one contested in this suit, is as follows: "What we claim," etc., "is (1) the grating, D, with vertical bars placed at the foot of the spark or petticoat pipe, E, in the manner and for the purpose substantially as described." The defenses are anticipation of the invention by prior patents, non-patentability of the invention claimed, and non-infringement.

Patents had been granted before this for spark-arresters located in the smoke-head, and surmounted by a tube extending upward into the smoke-stack; but these generally consisted of perforated sheet-metal, wire-netting, or wire-gauze, and not of iron bars. The patents of this kind put in evidence were: One to W. W. Hubbell, dated June 26, 1841; one to E. May, dated July 28, 1857; one to J. L. Vanclain, dated August 20, 1861; one to A. S. Swett, Jr., dated June 23, 1863; one to J. Smith, dated August 16, 1870; one to Weidman and others, dated December 20, 1870; and one to J. Smith, dated March 7, 1871.

Vanclain's spark-arrester consisted of a perforated cylindrical box or screen in which the perforations or apertures consisted of latitudinal (horizontal) slots, which, from the drawing, appear to be cut out of sheet-iron. This slotted sheet-iron constituted the cylindrical box or screen. This screen could not be said to be made of iron bars, which are the thing patented to the plaintiffs; but it approaches very near to it. The slots and iron strips are also placed horizontally, while the plaintiffs' patent is for a grate with vertical bars.

Smith's last patent, dated March 7, 1871, about a month before that of the complainants, describes a spark-arrester consisting of a grated casing or tube, made by a continuous bar of wrought-iron, coiled spirally, in horizontal coils; or of cast-iron rings, one above the other, lying horizontally and strung to upright rods to keep them a proper distance apart; or, the patent says, "the grating may be made in any other desired manner, providing it presents rigid bars for the hard ignited cinders to strike against, and providing there are openings sufficient in number and size to permit the free escape of the lighter particles with the products of combustion." Now, this coiled wrought-iron bar, and these cast-iron bars or rings, approach very near to the invention patented to the plaintiffs; the only difference being that they are horizontally arranged, while the patent of the complainants requires the bars to be vertical. This would fairly raise the question whether the change was a patentable invention.

But the complainants contend that their patent, though dated a month later than Smith's, is not anticipated by it, inasmuch as their application was sworn to December 31, 1870, and was filed in the patent-office January 5, 1871,—two months before the date of Smith's patent. The time of filing of Smith's application is not shown. The relative priority of inventions is determined, first, by the dates of the respective patents therefor. But this is not conclusive. Evidence outside of the patents may be given to prove priority. The date

of the application, if it described the invention sufficiently, is conclusive evidence that the invention was made prior to such date. The complainants, therefore, have

shown that their invention was made prior to the date of Smith's patent, and no evidence has been offered to show that Smith's invention was made prior to that time. The presumptions arising from the course of business in the patent-office are not sufficiently certain and precise to countervail the effect of the complainants' evidence. We may therefore lay the last Smith patent out of view. Without it, I do not see anything in the other patents relied on sufficient to justify me in holding that the invention claimed in the patent of the complainants was not patentable. Confining the patent to the terms of the claim, "the grating, D, with vertical bars," meaning, according to the specification, "straight vertical bars of iron, placed at small distances apart," I see nothing in any prior patent to prevent it from being a good and valid patent.

The defendants, however, have attacked it on the score of utility. They have endeavored to show, by a series of experiments, that a spark-arrester consisting of such a grate as that of the complainants has no superior utility or advantage over those of certain other forms. The first question which presents itself when such a defense is made is, "Then, why did you use it?" This mode of attacking a patent can never succeed without showing, by the clearest evidence, that the invention claimed is utterly frivolous and worthless; and the fact that the defendants have used it, and infringed the patent, is always a strong *argumentum ad hominem* against them. I do not think that this defense is sustained.

The defendants further contend that the patent is to be restricted to cases in which the petticoat pipe, E, which stands on the grate, is smaller at top than the smoke-stack, or orifice underneath the same, so as to leave an annular space to be covered by the netting, F. I have already adverted to this subject in considering the validity of the reissue. An examination of the latter will show that it is not restricted to cases of the kind referred to. The specification, it is true, calls the pipe, E, sun mounting the grate, a petticoat pipe; but that only refers to its shape smaller at top than at the bottom, and it is probably thus referred to be cause it was a pipe in common use at the time. It is not said, as in the original patent, that "a space is left around the top of the pipe between the edges of the aperture in the top of the smoke-head and the pipe." Provision, however, is made for such open space, when it exists, by the netting, F, which covers it. This may have been regarded as the common case, and hence was provided for. But it has nothing to do with the essence of the patent; that, as I have said, consists of a grating of vertical bars of iron, as applicable to one form of pipe as to another, and having no reference to the form. I do not think that the point is well taken. In my judgment, the first claim of the patent covers all spark-arresters coming within its description, and used and applied in the smoke-head of a locomotive boiler, no matter what the form or dimensions of the pipe, to which it is applied.

Lastly, the defendants deny that they have infringed the patent. Specimens of the grating which they have used, and which are charged as an infringement, have been exhibited

to the court. They do not, it is true, consist of separate bars, unconnected with each other. But the

patent does not say that the bars must be unconnected; on the contrary, the drawings show a connection running around the middle of the bars, as if it were a brace, or stiffener, to hold the bars at equal distances apart, and to keep them more firmly in position. The defendants' grate consists of upright cast-iron bars, with connections between them at intervals, leaving long spaces or slots between the bars, and only interrupted by the connections, exactly like the spaces between the bars required by the patent. The imitation of the invention described in the patent is not exact, but it is substantial. The bars used are the equivalent of the bars described in the patent. I think it is an infringement. I refer, of course, to the gratings used by the defendants in which the bars were upright, and the spaces between them were longitudinally conformable thereto.

The complainants are entitled to a decree for an injunction and an account of profits and damages in the usual form.

This volume of American Law was transcribed for use on the Internet