PEIFER v. BROWN & CO.

(Circuit Court, W. D. Pennsylvania. February 17, 1898.)

No. 3.

PATENTS—VALIDITY—INFRINGEMENT—METALLURGICAL FURNACES.

The Peifer patent, No. 411,226, for an improvement in metallurgical furnaces, intended to prevent the part known as the "neck" from being cut away by boiling slag, by providing a series of cold-air inlet ports, whereby jets of cold air are caused to impinge against the sides of the neck just below its floor line, held not anticipated, valid, and infringed.

This was a suit in equity by Christ Peifer against Brown & Co., a corporation, for alleged infringement of a patent.

George L. McCleary and James Negley Cooke, for complainant. Bakewell & Bakewell, for defendant.

ACHESON, Circuit Judge. This suit is based upon letters patent No. 411,226, dated September 17, 1889, for an improvement in metallurgical furnaces, granted to the plaintiff. As stated in the specification:

"The object of the invention is to protect the walls of the heating chamber at the part known as the 'neck' from being cut away by the boiling slag which accumulates at this part. Ordinarily, the side walls at the bottom of the neck are cut out by the slag in two weeks' time, and frequently in less time; but by my improvement the side walls at the point named will last just as long as the rest of the furnace, which is about ten months."

This desideratum the patentee accomplishes by this construction: In side walls built about the heating chamber he forms flues, leading to the stack and communicating by inlet ports with the atmosphere. The cold-air inlet ports range along the lower sides of the neck, just below its floor line, so that the draft of the furnace will cause a series of jets or streams of cold air to impinge against the side walls of the neck at the points where they are ordinarily cut away by the slag. Such cutting action is thus effectually prevented. The claim of the patent is this:

"A straight-draft metallurgical furnace, 10, having a heating chamber terminating in a neck, 11, and a stack over the neck, the air spaces, 13, in the side walls of the neck extending above and below its floor line, provided below the floor line with the series of cold-air inlet ports, 2, opening through the outer side walls, and flues connecting the upper ends of the air spaces with the interior of the furnace, whereby the draft will cause jets of cold air to be drawn through the ports, 2, and impinged against the sides of the neck just below its floor line, substantially as set forth."

Mr. Ells, the plaintiff's expert, thus describes the evil which the plaintiff succeeded in obviating:

"At the point where the downward inclination of the flue or neck stops, and takes a vertical direction, it forms a box-like receptacle, wherein the liquid molten slag or scoria collects as it escapes from the reverberatory chamber. This receptacle is usually provided with a stoppered tap-hole, through which the accumulating molten dross or slag is drawn off at recurrent intervals to prevent its choking the flue, and then flows so as not to interfere with the draft of the furnace. The heat concentrating at the lowest portion of the neck is intense, and keeps the accumulating slag in a high state of violent ebullition, which action on the brick work is very severe, and soon wears the same away, necessitating frequent stoppages and expensive repairs."

John Pedder, the defendant's former general manager, and a man of large practical experience in these matters, thus testifies:

"The improvement of this patent over the old way is for the purpose of preventing what is termed 'slag' from cutting through the wall. Slag will cut through almost any material that is built in the shape of brick. It becomes very hot, and cuts, and finally eats through, the wall. These necks were very expensive. We have had to take these necks out very frequently. It was a source of annoyance to the managers. We would frequently put men out at night and on Sundays to keep these necks up. Outside of our regular bricklayers it took additional bricklayers to keep them up. Mr. Peifer came along, and he had an idea that if he admitted cold air around these necks, that they would last a great deal longer. He finally put one into the works, and tried it, and it proved a grand success. * * In the first place, there was nothing but a square wall built up for the purpose of letting the smoke pass out of the stack. He then went to work and built an outer wall around the neck, admitting air, so that it would strike the neck at that part where it is cut out by the boiling slag."

This testimony as to the evil to be remedied, and the efficacy of the plaintiff's invention, is not contradicted. At the time the plaintiff made this invention, he was in the employ of the defendant as a brick-layer in furnace building. In November or December, 1888, he put his improvement into one of the defendant's furnaces to test it, and the result was so satisfactory that the defendant put the improvement in all its heating furnaces as fast as they needed repairs.

In pursuance of the stipulation of counsel, the court, in the consideration of the case, restricts itself to the three defenses of anticipation,

lack of invention, and noninfringement.

To sustain the defense of anticipation, the defendant mainly relies on three patents, namely, letters patent of October 30, 1866, to Daniel and Joseph Hall, for improvements in puddling furnaces; letters patent of June 11, 1872, to Charles W. and Frederick Siemens, for improvements in glass furnaces; and letters patent of November 20, 1888, to John Heatley, for improvements in furnace stacks. I have attentively examined these patents, and am not able to discover anything therein anticipatory of the plaintiff's invention, or at all suggestive None of these patentees dealt with the problem which the plaintiff set himself to solve. Their constructions were different from that of the plaintiff, and the results they aimed at and attained were also different from his. The plaintiff did not simply make provision for keeping the walls of a furnace cool by the circulation of air, but he devised means to overcome a specific evil,-to prevent molten slag from wearing away its inclosing brick.

The plaintiff's construction, it seems to me, is not only new and useful, but evinces genuine invention. Certainly, the remedy which he conceived and applied to overcome a serious defect was not an obvious one. The hurtful effect of the accumulated boiling slag had been long experienced. Yet no one had devised relief until the plaintiff made his invention. It was a simple remedy, indeed, but none the less valuable and praiseworthy for that reason. The grant of a patent means something, and ought to stand for a good deal. Here, so far as I can perceive, the presumption of patentability arising from the grant itself has not been rebutted by any evidence.

The evidence, I think, sufficiently makes out a prima facie case of

infringement. True, the invention at the first was applied to the defendant's furnaces with the plaintiff's consent, and therefore the original use by the defendant was not wrongful. But, under the proofs, it is certain that the furnaces to which the improvement was applied by the plaintiff were worn out long before this suit was The life of such a furnace, it would seem, does not exceed The plaintiff left the defendant's employ in 1890. Now, the evidence warrants the conclusion that, continuously since, the defendant has used the invention in its furnaces as they were erected from time to time. The defendant has offered no evidence to overthrow the fair inference of unlicensed use arising from the plaintiff's proofs. Upon this branch of the case, the full proof was in the defendant's own hands. I feel quite justified, then, upon the plaintiff's prima facie proofs, in overruling the defense of noninfringement. Fowler, 8 Wall. 445, 448; Spring v. Machine Co., 9 Fed. 505.

Let a decree be drawn in favor of the plaintiff.

MAST, FOOS & CO. v. STOVER MFG. CO.

(Circuit Court, N. D. Illinois, N. D. January 31, 1897.)

1. PATENTS-PRELIMINARY INJUNCTION-PRIOR ADJUDICATION. On motion for preliminary injunction, a prior adjudication upon the validity of the patent is conclusive unless there is a new defense supported by evidence so cogent as to convince the court that, if introduced in the former case, k would have changed the result. Electric Mfg. Co. v. Edison Electric Light Co., 10 C. C. A. 106, 61 Fed. 834, 18 U. S. App. 641, followed.

2. Same—Anticipation—Windmill.

The Martin patent, No. 350,281, for an improvement in windmills, consist-

ing of the substitution for external driving gear of internal gear which is a combination of internal toothed wheels with the pinion, pitman, or pump of a windmill, was not anticipated by the Perkins mill, which had internal gear similar to that in mowing machines.

Suit by Mast, Foos & Co. against the Stover Manufacturing Company to restrain the alleged infringement of letters patent No. 433,-531, issued August 5, 1890, to S. W. Martin, for a windmill.

Lysander Hill and H. A. Toulmin, for complainant. Offield, Towle & Linthicum, for defendant.

GROSSCUP, District Judge. Motion for injunction to restrain infringement of letters patent No. 433,531, relating to a new and useful improvement in windmills. The patent was before the United States circuit court of appeals for the Eighth circuit, where its validity was upheld, and a device almost precisely like that of the defendant in this case was held to be an infringement. Mast, Foos & Co. v. Dempster Mill Mfg. Co., 82 Fed. 327. The majority of the court held that the invention consists in the combination of an internal toothed spur gear with any suitable pinion, wind shaft, wrist pin, pitman, and pump rod of a windmill. Within the ruling in that case relating to the scope of the patent, the device of the defendant in the case under consideration is clearly an infringement.

The only question left is whether this court shall follow the judg-