

Statement of the Case.

GANDY v. MAIN BELTING COMPANY.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR
THE EASTERN DISTRICT OF PENNSYLVANIA.

No. 148. Submitted January 8, 1892. — Decided March 7, 1892.

Letters patent No. 228,186, issued June 1, 1880, to Maurice Gandy, for an improved belt or band for driving machinery and an improved mechanical process of manufacturing the same, are valid, and the novelty and utility of the invention protected by it are not disturbed by the evidence in this case.

The "public use or sale" of an invention "for more than two years prior to" the "application" for a patent for it, contemplated by section 4886 of the Revised Statutes as a reason for not issuing the patent or for its invalidation if issued, must be limited to a use or sale in this country.

THE court stated the case as follows:

This was a bill in equity for the infringement of letters patent number 228,186, issued June 1, 1880, to Maurice Gandy, for an improved belt or band for driving machinery, and an improved mechanical process of manufacturing the same. In his application the patentee stated that his invention consisted, first, of an improved cotton belt; second, of an improved mechanical process for making cotton belts. "The belt consists, first, of cotton canvas or duck composed of warp stouter than the weft, both warp and weft being hard spun and the canvas hard and tight woven; second, of cotton canvas or duck thus made, folded and united by longitudinal rows of stitching and stitched under tension; third, of cotton canvas thus made, folded and stitched, saturated with linseed oil; fourth, of cotton canvas thus made, folded, stitched and saturated with linseed oil, pressed and stretched until it is hard, even and rigid, by which the belt is rendered insensible to the atmospheric changes and non-elastic."

The machinery for manufacturing the belting is also set forth in the specification, but the only claim alleged to be infringed in this case is the second, which reads as follows:

Opinion of the Court.

"2. The improved article of manufacture consisting of a hard, even surfaced, rigid, impervious, non-elastic belt composed of cotton canvas or duck having its warp thread larger than the weft, both warp and weft being hard spun, the fabric tight woven and folded, stitched and saturated with linseed oil."

The bill was in the ordinary form, and prayed for an injunction and an accounting. The answer denied that the invention was new, or patentable, and also denied infringement. From a decree dismissing the bill, 28 Fed. Rep. 570, the plaintiff appealed to this court.

Mr. Amos Broadnax and Mr. J. Edgar Bull for appellants.

Mr. E. Cooper Shapley for appellees.

MR. JUSTICE BROWN delivered the opinion of the court.

The bill in this case was dismissed by the court below upon the ground either that the second claim of the patent was anticipated by a provisional specification of Robert B. Jones filed in the office of the British Commissioner of Patents, July 31, 1878; or, if Gandy made the invention before the date of Jones' specification, that there had been a public use and sale of the invention for more than two years prior to the application for the patent in suit—in other words, that the same testimony which showed priority of invention on the part of Gandy, showed a public use or sale by him of such invention more than two years prior to his application.

On May 9, 1877, plaintiff Gandy, who is an alien, and a subject of Her Britannic Majesty, deposited at the office of the British Commissioner of Patents a provisional specification, upon which a patent was subsequently issued for an improvement in machinery belts. He stated the object of his invention to be the manufacture of belts of cotton canvas that would not give out by stretching, or be detrimentally affected by variations in the atmosphere, and at the same time be sufficiently pliable to allow of their running around small pulleys without cracking. To accomplish this he manufac-

Opinion of the Court.

tured his belts of cotton canvas or duck, "hard woven," put together either by hand or by folders, and formed into a belt of the desired width and thickness, stitched with rows of stitching, and then soaked or saturated in linseed oil. After the saturation, the canvas is formed into a belt by folding and stitching. After this, it is passed through rolls to squeeze out the superfluous oil, and it is then dried and painted, and lastly stitched. The claim of this patent was "for constructing belts or bands for driving machinery of cotton canvas or duck, 'woven hard,' and stitched, and saturated or soaked with oil, such as linseed oil or any combination thereof, as herein described or set forth, or any modification thereof." In 1883 this patent became the subject of litigation in the chancery division of the High Court of Justice, and was held to be invalid. In delivering the opinion of the court, Mr. Justice Pearson expressed a serious doubt whether the patentee could claim as a new invention a belt made of hard woven canvas, when belts made of other descriptions of canvas and saturated with oil were well known and manufactured years before. He did not, however, decide the case upon this point, but upon the ground that Gandy had not taken out his patent for his real invention. "I think," he said, "he has described something in his patent which was not his invention, and he has not described in his patent that which was really his invention. . . . It appears that in the beginning of the year 1877 Mr. Gandy was making various experiments in order to perfect a belt which he was intending to patent, and having made those various experiments with different kinds of canvas he at last discovered that a canvas of a particular strength in the warp was the best canvas that could be used for making these belts. . . . But in the patent which he took out there is not a single word to indicate that the warp ought to be stouter than the weft; least of all is there any indication that one particular strength in the warp and one particular strength in the weft would make the best canvas." The learned judge held the patent to be bad because it did not disclose the very best way of making the manufacture, remarking that in a patent subsequently obtained by him, in 1879,

Opinion of the Court.

he did describe the mode in which the belt was to be made, by saying that the canvas in the warp was to be stouter than in the weft.

On appeal to the Court of Appeal, the Master of the Rolls expressed regret at the misfortune of the patentee in not describing his discovery, "because," said he, "I think Mr. Gandy did make a discovery." He held that the evidence showed that Gandy's belts could only be made out of a particular class of hard-woven canvas, and, as his claim was for the whole class, it was too large. In short, he held the patent to be invalid because it did not properly describe the invention, and closed his opinion by again expressing his regret that from the way in which the specification had been drawn up, that which was a real and valuable invention in itself did not seem to have been claimed. Lord Justices Cotton and Lindley expressed practically the same opinion. *Gandy v. Reddaway*, 2 Cutler's Rep. of Pat. Cases, 49.

Prior to this decision, however, and on December 1, 1877, Gandy filed a substantial copy of his British specification with the Commissioner of Patents, and made a similar claim for "a belt or band for driving machinery, constructed of hard-woven cotton canvas or duck, stitched and saturated and interlarded with oil, such as linseed oil, or any combination thereof, as herein described or set forth." A patent was refused, however, upon the ground that the alleged invention was substantially anticipated by certain English patents issued in 1858 and 1861.

Subsequently, and on September 10, 1879, he filed the present application, and, after some correspondence and amendments of his original claims, this patent was issued. With his application he also filed a specimen of his belt, which was the same in all respects as the specimen filed with his prior application of December 1, 1877, and was, in fact, the identical specimen.

(1) The defence to this patent is that on the 31st day of July, 1878, one Jones filed a provisional specification with the British Commissioner of Patents for an improvement in belts, which consisted in increasing the strength of the warp or

Opinion of the Court.

longitudinal fibres or yarns over the weft or cross fibres—in other words, precisely the same specification as that contained in the second claim of the plaintiff's patent, or at least for the only element of such claim which is novel. Plaintiff's reply to this is that, while Jones' application antedates his own in point of time, his own invention was prior in point of fact, and in proof of this he produces the three small pieces of belt attached to his application of December 1, 1877, which the Commissioner of Patents has certified were filed in the Patent Office by Gandy at that date, and more than six months before the Jones specification was filed in the British Patent Office. This canvas is really the only one for which the patentee has sought to obtain a patent, although his first application was refused because he neglected to describe his real invention. Each of these belts is made of canvas with warp obviously larger than the weft, and containing every other element of the second claim of the patent. In relation to this Mr. Gandy also testifies that he was acquainted with Jones, who was a member of the firm of Garnock, Bibby & Co., of Liverpool, and were customers of his. "They also," said he, "made a stitched sail-cloth belting, and when they found I had taken a patent for a belting that was a success, they also applied for a patent. Seeing which in the papers, I asked Mr. Jones to tell me what he was patenting, as he need have no hesitation in doing so, seeing he had filed his provisional specification. He at once told me that it was for a belt made with the warp stouter than the weft. I told him if he would walk along to my factory I would show him that I had been using for some time before his application a cloth to make my belts in which the warp was stouter than the weft. He went with me and saw the cloth and the belts and was satisfied that such was the case, and hence went no further with his patent, but abandoned the application." The fact that no patent appears ever to have been issued upon Jones' application makes the truth of this statement seem quite probable. The canvas of which Gandy made use in England, it seems, was manufactured by the Mt. Vernon Company of Baltimore, and in further proof of the date of his invention,

Opinion of the Court.

he produced the testimony of the shipping clerk of that firm, who swore that as early as 1876 the firm shipped to Gandy belting canvas having the warp threads stouter than the weft; there being six plies in the warp and only four in the weft. Mr. Gandy also swears that since 1875 all the canvas ordered by him was made with the warp stouter than the weft. As there is no testimony to contradict this it must be accepted as a fact in the case.

(2) The court below, however, found that, conceding that his invention was made as early as 1876, antedating the filing of Jones' specification by some two years, the same testimony also proved that it had been in public use more than two years before filing his application, and that under Rev. Stat. section 4886, the patent was therefore void. All that the evidence upon this point shows is that Gandy ordered all his canvas made by the Mt. Vernon Company and shipped to him at Liverpool. There is no direct testimony to show whether this canvas was made up into belting, or when the belts were first publicly used or sold abroad. Indeed, nothing to show that it was in public use or on sale before the application for the patent in this suit was filed. Even if we were authorized to presume that such canvas was manufactured into belting and sold or used in England, there is not a particle of testimony tending to show that it was publicly used or put on sale in this country. Conceding that there was sufficient evidence of the use of such belting in England, we think that this does not vitiate the patent. Section 4886 declares that "any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement thereof, not known or used by others in this country, and not patented or described in any printed publication in this or any foreign country before his invention or discovery thereof, and *not in public use or on sale for more than two years prior to his application*, unless the same is proved to have been abandoned, may, upon payment of the fees required by law, and other due proceedings had, obtain a patent therefor." It is true that the language of this section contains no restriction as to the place or country wherein the public use

Opinion of the Court.

is made of the invention; but taken in connection with section 4887, providing that no person shall be debarred from receiving a patent, by reason of the invention being first patented abroad, "unless the same has been introduced into public use in the United States for more than two years prior to the application," we think that the public use or sale contemplated by section 4886 must be limited to a use or sale in this country. That this was the intent of Congress is also manifest from section 4923, providing that whenever it appears the patentee believed himself to be the original and first inventor of the thing patented, his patent shall not be held void "on account of the invention or discovery, or any part thereof, having been known or used in a foreign country before his invention or discovery thereof, if it had not been patented or described in a printed publication." So also in section 4920, providing what the defendant may plead under the general issue in actions for infringement, there is included the defence "that it had been in public use or on sale in this country for more than two years before his application for a patent, or had been abandoned to the public."

Taking all these provisions of the patent law together, we think it was manifestly the intention of Congress that the right of the patentee to his invention should not be denied by reason of the fact that he had made use of it, or put it on sale abroad, more than two years before the application, provided it were not so used or sold in this country.

(3) The questions of novelty and utility may properly be considered together. There is much testimony tending to show that Gandy believed himself to be the inventor of a belting made of hard woven canvas stitched and saturated with oil, and that the importance of having the warp stouter than the weft was not fully appreciated by him, and hence was not made an element of the claim of his original British patent. The testimony, however, shows that the canvas or duck ordinarily used for sails is made with the weft as stout, if not stouter, than the warp, and that such canvas was found to be impracticable for belting on account of its liability to stretch or to crack in passing around the smaller pulleys. His first

Opinion of the Court.

belts made of ordinary soft canvas proved to be wholly impracticable owing to their apparently endless capacity for stretching. He next experimented with hard-spun and tight-woven canvas, specially manufactured for this purpose. This did not stretch, but developed another fault, of wrinkling and cracking when running around pulleys. This he obviated by saturating it with linseed oil; but found another objection in the unequal strain on the several thicknesses when passing around the pulleys, which tended to break the stitching and permitted the plies to separate. He then conceived the idea that by decreasing the thickness of the belt, without diminishing its tensile strength, he would bring the diameter of the exterior plies more nearly level with the inner plies next the pulley, and thus more nearly equalize the strain on all parts of the belt, increasing its effective strength and diminishing the tendency of the plies to separate or wrinkle. It is obvious even to a non-expert that, if the belting be made very thick, there is a much greater strain upon the exterior plies, when passing around a small pulley, than upon the inner plies, and that the effect must be both to unduly strain the exterior plies, rendering them liable to break, and to wrinkle the inner ones, subjecting them to the danger of cracking; and that the ideal belting would be made as thin as would be consistent with the requisite strength and inflexibility. In view of the fact that previous attempts, of which there appear to have been several, to make a practical canvas belt had been failures, and that Gandy had been experimenting with the subject for several years before he discovered that a change was necessary in the structure of the canvas itself, we do not think his improvement is a change in degree only, or such an one as would have occurred to an ordinary mechanic, and our opinion is that it does involve an exercise of the inventive faculty. The change is such as would only have occurred to one familiar, not alone with the impossibility of making a practical belt out of the ordinary canvas, but to one who had bestowed considerable thought upon the method of overcoming the difficulty. While some of the testimony would seem to indicate that there is no great advantage in this method of

Opinion of the Court.

construction, we think the fact that it has been largely adopted by manufacturers and that all the modern improved belting ordered or made by Gandy and in general use both in this country and in Europe, is made in this way, is, for the purposes of this case, sufficient evidence of its utility. *Magowan v. New York Belting Co.*, 141 U. S. 332.

(4) We have no doubt upon the subject of infringement. While, as claimed by the defendant Plummer, there may be as many plies or individual threads in the weft of his canvas as in the warp, the most casual observer of the relative strength of the warp and the weft cannot fail to notice that the former is much thicker and stouter than the latter—in fact, that the Gandy belting and the defendants' in this particular are identical. The defendant Plummer having adopted Gandy's idea of making warp stouter than his weft, is not in a favorable position to claim that it is useless. Indeed, Plummer appears to have been formerly in business with Gandy, and was sent by him to America in 1879 to confer with his solicitor in reference to his pending application for a patent. Gandy subsequently decided to start the manufacture of belting in America, and to give Plummer employment, and for that purpose took him into his factory in Liverpool, so as to give him an insight into the business. In 1880 he came to America, was met by Plummer, leased a building for a factory, and took him into his employ. Plummer seems, however, to have failed to give satisfaction, and Gandy subsequently dismissed him from his service, whereupon Plummer proceeded to organize a company upon his own account for the manufacture of the infringing belting. In pursuance of this intention he states himself that he came to Washington, examined the Gandy patents, and took legal advice with regard to making a belt which would not infringe them. He also suggested to plaintiff the danger of his marking an unpatented article with words importing that it is patented, and called his attention to Rev. Stat. sec 4901, making this a penal offence.

The language of Mr. Justice Woods, in delivering the opinion of this court in *Lehnbeuter v. Holthaus*, 105 U. S. 94, 96, is equally pertinent to this branch of the case: "The patent is

Syllabus.

prima facie evidence both of novelty and utility, and neither of these presumptions has been rebutted by the evidence. On the contrary, they are strengthened. No anticipation of the design is shown, although the attempt has been made to prove anticipation. The fact that it has been infringed by defendants, is sufficient to establish its utility, at least as against them."

The decree of the Circuit Court is, therefore,

Reversed, and the case remanded with directions to enter an interlocutory decree for the plaintiff, and for further proceedings in conformity with this opinion.

CHICAGO, ROCK ISLAND AND PACIFIC RAILWAY COMPANY *v.* DENVER AND RIO GRANDE RAILROAD COMPANY.

DENVER AND RIO GRANDE RAILROAD COMPANY *v.* CHICAGO, ROCK ISLAND AND PACIFIC RAILWAY COMPANY.

APPEALS FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF COLORADO.

Nos. 1095, 1109. Submitted January 7, 1892. — Decided March 7, 1892.

In the interpretation of any particular clause of a contract, the court is required to examine the entire contract, and may also consider the relations of the parties, their connection with the subject matter of the contract, and the circumstances under which it was made.

The Chicago, Rock Island and Colorado Railway Company contracted with the Denver and Rio Grande Railroad Company for the use by the former of the tracks, stations, sidings, switches, etc. of the latter company between Colorado Springs and Denver, (except its shops at Burnham), and also for its terminal facilities at Denver, and, having so contracted made its connections and entered on the enjoyment of its rights under the contract. Shortly afterwards the Chicago, Rock Island and Pacific Railway Company was organized and acquired the property and rights of the Chicago, Rock Island and Colorado Railway and entered into the enjoyment of them, and its rights were recognized by the Denver and Rio Grande Railroad Company. The Rock Island and Pacific Company then acquired a right to connect with the Union Pacific Railroad