

establish an estoppel, this may be done by way of defense; but the stay of proceedings, which is the gist of the present application, could not, in my opinion, be now ordered, or be awarded upon a cross bill, without an unwarranted exercise of power by the court, and an undue extension of the office of such a bill. *Stonemetz Printers' Mach. Co. v. Brown Folding Mach. Co.*, 46 Fed. 851.

The amendments proposed to be made to paragraph 11 have not been objected to. They are allowed. The motion for leave to add an additional paragraph, to be marked "13," and for an order to stay proceedings, and for leave to file a cross bill, is denied.

UNITED STATES REPAIR & GUARANTY CO. et al. v. STANDARD PAVING CO.

(Circuit Court, N. D. New York. May 5, 1898.)

1. PATENTS—ANTICIPATION—METHOD OF REPAIRING ASPHALT PAVEMENTS.

The Perkins patent, No. 501,537, for an improvement in the method of repairing asphalt pavements, consisting in subjecting the spot to be repaired to heat until the material is softened, then adding new material, and smoothing and burnishing it, was anticipated by the Crochet French patent of June 11, 1880, which describes substantially the same method.

2. SAME—INVENTION.

It being known that heat may be used to soften a Trinidad asphalt pavement at a spot to be repaired, and that rock asphalt and bitumen pavements could be mended by heating the top layer, removing the material with a notched hoe, then adding new material, and tamping in the ordinary way, there was no invention in applying this method to the repair of Trinidad asphalt pavements.

This was a suit in equity by the United States Repair & Guaranty Company and others against the Standard Paving Company for alleged infringement of a patent.

E. N. Dickerson, for complainants.

William Macomber and Tracy C. Becker, for defendant.

COXE, District Judge. This is an equity action for the infringement of letters patent No. 501,537, granted July 18, 1893, to Amos H. Perkins for an improvement in the method of repairing asphalt pavements. The specification states that prior to March 8, 1893, the date of the application, it was customary to dig out with a pick the surface material around the spot to be repaired, sometimes applying heat to soften the material. The depression thus made was thoroughly cleaned and given a coat of tar. New material in a heated state was placed in this depression and was ironed and smoothed in the usual manner, the tar acting as a solder to hold the new material in place. The joint between the old material and the new was plainly visible and sometimes formed a ridge. By reason of frost or other causes the new block of material was frequently torn loose from its soldered connection. After stating the objections to the old method the patentee proceeds:

"In practicing my invention, however, I subject the spot to be repaired and the surrounding edges to such a degree of heat that the surface asphalt, not only the exact spot to be repaired but the surrounding portion to a greater or less degree, is reduced to the soft pliable state in which it is originally laid. With a rake or other suitable instrument it is then agitated and mixed with enough new material to fill up the spot to be repaired. It is then subjected to the usual finishing operation of ironing and burnishing."

Although the patentee does not limit himself to any particular form of apparatus, he illustrates his method in connection with an ingenious gasoline heater which is the subject of another patent of even date. Any heating device, no matter how crude or ancient, is, however, within the claims, which are as follows:

"(1) The method of repairing asphalt pavements which consists in subjecting the spot to be repaired to heat adding new material and smoothing and burnishing it, substantially as described. (2) The method of repairing asphalt pavements which consists in subjecting the spot to be repaired to heat until the material is softened, agitating it and mixing with it new material and finally smoothing and burnishing it, substantially as described."

The method of the first claim consists of the following steps: First. Subjecting the spot to be repaired to heat. Second. Adding new material. Third. Smoothing and burnishing.

The second claim is substantially the same as the first but somewhat more specific in that it states distinctly what is implied in the first claim that the heat must be continued "until the material is softened," and it further provides that the softened material must be agitated and mixed with the new material. One of the methods of repair adopted by the defendant was to wheel a coke heater to the spot to be repaired and when the asphalt was softened to the depth of about half an inch to scrape it off with notched hoes. The edge of the portion scraped off was made even and smooth, the surface sprinkled with asphalt cement and the edges daubed with the same material. New asphalt was then thrown on, leveled, tamped and rolled. The binder of liquid asphalt was sometimes omitted, probably from carelessness. It is apparent that a construction of the claims broad enough to cover this method is necessary. Indeed a much broader construction is asserted. It is argued that the process being a series of operations upon certain materials can be practiced by the use of any apparatus or without an apparatus, as for instance by building a fire of wood or charcoal over the spot to be repaired. Manifestly then the process of the defendant, or one analogous thereto, if found in the prior art, will anticipate the complainants' patent.

Various defenses are interposed, but it will be necessary to consider but one. On the 11th of June, 1880, Paul Crochet, a Parisian, was granted a patent by the French republic "for a process for the repair and renewal of asphalt pavement." Crochet describes the prior method of repair substantially as Perkins describes it. The part to be renewed is dug out with a pick and the asphalt is removed. He then proceeds to describe his own process as follows:

"It consists in heating the part to be repaired by means of a movable furnace which is carried over the surface of the pavement until this disintegrates and becomes friable. The upper part of the layer of asphalt, and that which has been damaged are removed by means of an iron hoe having an arm of little teeth which performs the function of a rake. This hoe while removing

the material, forms on the remaining part numerous striations which render the surface rough, and increase the adherence of the portion added above, which will perform the renewal. * * * After this preparatory operation one spreads a suitable thickness of asphalt in powder and tamps it by the ordinary methods. In consequence of the softening of the (subjacent) layer this unites perfectly with the new layer and forms with it a thickness without solution of continuity, this repairing and renewal having in no way altered the neighboring parts."

Although the patent like the patent in suit is for a process and, therefore, not limited, necessarily, to any particular mechanism, the heating machine described and shown in the drawings is, apparently, the exact counterpart of the one used by the defendant. Crochet states that his system is especially applicable to pavements of compressed asphalt, "but can be used to repair and renew pavements of bitumen." The claim is divided as follows:

"First. The softening of the upper surface of the layer of asphalt in the part to be repaired and the removal of this surface by means of the hoe furnished with teeth which striate the remaining part. Second. The renewal by the addition upon the surface thus softened of a layer of asphalt of suitable thickness, which is tamped by ordinary methods. Third. The movable furnace which I have devised for this purpose, according to the conditions described and represented."

The first thought which strikes the reader after studying this patent is its remarkable similarity to the patent in suit. If two men of the same nationality should witness this process to-day as practiced by the complainants and the defendant and should write out statements of what they observed it is doubtful if these statements would correspond as closely as those of Perkins and Crochet. When the difference in time, language and patent-office procedure is considered the resemblance is remarkable and has seldom been paralleled in reported cases.

The complainants argue that the defendant's process is the patent process, and yet in 1880, 13 years before the Perkins patent and when the art was in its infancy, we find this Frenchman describing the defendant's process almost in hæc verba. Crochet used a movable coke or coal heater. So does the defendant. The former heated the spot to be repaired and removed the upper part by means of a notched hoe which left small channels in the part which remained. The defendant does the same. Into this depression Crochet placed new asphalt and tamped it by the ordinary methods. The defendant does the same. In both cases the pavement is repaired without joint or ridge, or, as the Frenchman phrases it, "sans solution de continuité." The Crochet process is obviously the defendant's process and it is, of course, the Perkins process as well, unless the Perkins patent is limited to the apparatus invented by him. The principal differences, capable of practical statement, are that Perkins uses a gasoline heater and a rake and Crochet uses a coke heater and a hoe "having an arm of little teeth which performs the function of a rake." When it is remembered that Crochet preceded Perkins by 13 years, that he wrote in a different language and under a different system of rules, and that, during the interval, the art of paving advanced in all directions with a rapidity commensurate with the inventive spirit of the age, the wonder is not that the two

patents are dissimilar in some particulars but that the differences are not more numerous and striking.

Various ingenious arguments are advanced in support of the proposition that the Crochet patent related to a totally different process. In order to accept these theories the court must resort to the heroic treatment of reconstructing both patents, and having done so must proceed a step further and reject the meaning which Crochet's language plainly implies. For instance, it is said that Crochet's patent refers to rock asphalt found principally at Neufchatel and Seyssel and that the Perkins patent refers to Trinidad asphalt imported from the Island of Trinidad. Both patents speak of "asphalt pavements." Neither uses any qualifying word and neither can be confined on this proof to any particular kind of asphalt pavement. It is urged that Crochet's process related to country roads as distinguished from city pavements and that these roads were, in many instances, constructed of rock asphalt upon principles similar to the Macadam roads of this country. The contention of the complainants' expert is that the words "asphalt pavement" must be read "rock asphalt pavement" and the words "pavements of bitumen" indicate "another class of rock asphalt pavements." Various words and phrases are pointed out as supporting this theory. For instance, Crochet says, that the use of the pick causes the neighboring portions to be "puffed up"; that after heat is applied the surface of the pavement "disintegrates and becomes friable"; and that "asphalt in powder" is spread upon the part to be repaired. Wrested from the context these expressions might indicate that Crochet had in mind a different material from that described in the patent at bar, but considering the Crochet patent as a whole it cannot be limited to a method of mending country roads. Imprimis, Crochet resided in Paris, a city long pre-eminent for the excellence of its pavements. In the absence of positive proof by witnesses qualified to testify of the progress of the art in France the court would hardly be justified in assuming that Parisians were ignorant of a pavement which has been in use for a quarter of a century and in 1880 was well known even in the interior cities of this country. The patent makes no allusion to country roads but again and again refers to "asphalt pavement." It speaks of the "layer of asphalt," and the drawings, though crude, show a layer of asphalt upon a bed of concrete similar to the pavement as it exists to-day and as it has existed in this country since 1870. The heat "softens" the upper surface, the teeth make grooves in it and the new asphalt adheres to the old without joint or seam. Finally the patent says that the system "though especially applicable to pavements of compressed asphalt, can be used to repair and renew pavements of bitumen." All this is incompatible with the theory that Crochet was dealing with a substance which had been reduced to a dry powder and indicates, beyond a fair doubt, that if he had not in mind the same material that Perkins describes in identical language it was at least an equivalent material having the same attributes and properties and producing the same result when subjected to heat. The language used by Crochet may be infelicitous in some particulars, but that

he describes a process for mending asphalt pavements by heating, raking and compacting, there can be no doubt.

The complainants' expert speaks of the asphalt of the Perkins patent as being "compressed." Obviously, then, a Trinidad asphalt pavement is a "pavement of compressed asphalt," but when Crochet uses this expression it is insisted that he means a pavement of rock asphalt. Again, the expert says of the Perkins process:

"The removal of a certain portion of the old material is in most instances essential, because generally when repairs are required there has been a certain amount of disintegration of the old material leaving on the surface what is termed 'dead material.' * * * It is further almost impossible to heat the surface of an asphalt pavement by a heating apparatus without burning some portion of the upper surface. * * * This burnt crust, and any dead portion, therefore, would naturally be scraped away."

This is what happens to a pavement of Trinidad asphalt, but when Crochet says that he carries his furnace over the pavement until the surface "disintegrates and becomes friable" and then removes "the upper part of the layer of asphalt," it "shows beyond a doubt" to the mind of the expert that Crochet's pavement is one of rock asphalt although the claims speak of the softening of the layer of asphalt. One process requires the removal of disintegrated old material and burnt crust, the other the removal of disintegrated and friable old material. And yet upon this distinction, such as it is, rests the complainants' principal argument to prove dissimilarity.

The assertion that the "numerous striations" of which Crochet speaks cannot be formed in Trinidad asphalt would be more persuasive if the complainants had not proved by several witnesses that these striations cannot be formed in rock asphalt either. For instance, Mr. Kasson says: "When I raked off the disintegrated portion the surface beneath was so hard and dry it would not scratch to any material extent." It surely would not be stretching the rules of construction unduly to assume that Crochet meant when he said that his striations "render the surface rough and increase adherence," precisely what Perkins meant when he speaks of agitating and stirring up the material. The expression "asphalt in powder" while not one which an American would use is not inaccurate as applied to the new material added in repairing a Trinidad pavement and especially so when it is also denominated "a layer of asphalt of suitable thickness" in the second subdivision of the claim of the Crochet patent. In short, the court cannot resist the conclusion that one rule of interpretation has been applied to the Perkins patent and a wholly different rule to the Crochet patent. Both patentees have left something to be supplied by the common sense of the operator. But one has been treated with wide liberality while the other has been held to the strict, literal and most technical meaning of his translated words. When both are subjected to the same treatment there is little difficulty in understanding what each has contributed to the art. The record shows that asphalt pavements substantially as they exist to-day have been known for 28 years. In these circumstances it surely is but just that the same words, appearing in the two patents, should be given the same meaning. If the French pat-

ent means what Crochet says it means it is perfectly plain and simple. If it means what the complainants' expert says it means it is quite possible that it may be inoperative. But in order to reach this conclusion a substance not mentioned and which does not yield to treatment by heat is substituted for a substance which is mentioned and which does so yield. It is not remarkable that the attempt to repair "a Seyssel pavement" proved a failure. Having assumed that the process relates to an impossibility the expert had little difficulty in proving it impossible. Few patents could resist such drastic treatment.

But assume that the complainants are correct in their construction of the Crochet patent, how then stands the case? Before the Perkins patent it was known that heat could be used to soften a Trinidad asphalt pavement at the spot to be repaired. The Perkins patent so says. It was also known that rock asphalt and bitumen pavements could be mended by heating the top layer, removing the material with a notched hoe, adding new material and tamping in the ordinary way, so that the part repaired could not be distinguished from the adjacent parts. Did it involve invention to do this to a pavement made of Trinidad asphalt? Would not a mere tyro in paving, with Crochet's furnace, rake and description before him, know enough to practice his method on any pavement of asphalt or equivalent material? If not, then it must follow that should a new variety of asphalt be discovered, or should the constituents of the present surface material be changed the person who is first to use the patented method in connection with the new material can secure a patent even though the patents of Perkins and Crochet on their face cover asphalt pavements of all kinds. In *Manufacturing Co. v. Cary*, 147 U. S. 623, 13 Sup. Ct. 472, it was argued that the patent, which covered a process of tempering coiled springs, could be sustained because the patentee discovered that the application of heat would restore the lost strength and elasticity of the wire; that he was the first to apply heat to springs which had been weakened by use and that his discovery was the new application of an old process and the production of a new result thereby. The supreme court rejected this argument and voided the patent, observing:

"But we are of opinion that the same principle set forth in the patent was developed in the manufacture of the wire bells for clocks and of the hair-balance spring; that there was no patentable invention in applying that principle to the springs mentioned in the specification, and that the case is merely one of a double use."

See, also, *Ansonia Brass & Copper Co. v. Electrical Supply Co.*, 144 U. S. 11, 12 Sup. Ct. 601; *Phillips v. City of Detroit*, 111 U. S. 604, 4 Sup. Ct. 580; *Frederick R. Stearns & Co. v. Russell*, 29 C. C. A. 121, 85 Fed. 218.

The court is convinced, in view of what this record discloses, that it would be inequitable to place the entire art of repairing asphalt pavements by heat under tribute to the Perkins patent in suit. He should be satisfied with the rewards which flow from his contribution to the art which are secured by another patent. The bill is dismissed.

SWIFT & CO. v. FURNESS, WITHY & CO., Limited.

(District Court, D. Massachusetts. May 10, 1898.)

No. 773.

1. BILLS OF LADING—CONSTRUCTION.

When perishable goods are shipped, and the carrier is to receive adequate pay, no construction of the contract is admissible which will permit the carrier, arbitrarily, and without reason or necessity, to deprive the shipper of the benefit resulting from such shipment.

2. MARITIME LAW—BILL OF LADING—"DEVIATION."

The words "with liberty * * * to make deviation," in a bill of lading, give the carrier the right to make only such departures from the voyage as are necessary and reasonable.

3. SAME—RESPONSIBILITY OF CARRIER.

A provision in a bill of lading that meat "is to be shipped wholly at the risk of the shipper, and that the owners assume no responsibility therefor during the voyage," refers only to the voyage contemplated by the parties, and not to an additional voyage arbitrarily made by order of the owner of the ship.

This was a libel in personam by Swift & Co. against Furness, Withy & Co., Limited, owner of a steamship, for delay in delivering certain beef shipped by such steamship.

Henry M. Rogers, for libelant.

Thomas H. Russell, for respondent.

BROWN, District Judge. Swift & Co., exporters of fresh beef, bring this libel in personam against Furness, Withy & Co., Limited, a British corporation having a place of business in Boston, in this district, owner of the steamship Durham City, for damages arising from delay in delivering at London, 1,229 quarters of beef, causing deterioration of the beef and loss of market. The beef was shipped at Boston in good condition, was properly cared for on the voyage by the men in charge, and the refrigerators were provided with a proper and usual supply of ice and salt for the ordinary voyage, of 14 to 16 days, and for 4 or 5 days in addition. The ship sailed for London October 6, 1894, making an ordinary voyage, and arrived off Dover October 21st, with a London pilot on board. There she received orders from the owners to go to Havre to land cattle, a part of her cargo. The ship went to Havre, and remained there until October 28th, when she sailed for Flushing, in Holland, where she landed sheep; sailing thence October 29th, and arriving at London October 30th. While at Havre the weather was muggy, and a compost heap over the refrigerators added to the heat. Additional salt and ice were purchased at Havre, and all proper exertions were made to prevent deterioration. Nevertheless there was damage to the beef, attributable to the prolongation of the voyage. Upon the evidence it appears that a delay of seven days resulted from the change of course. Though the bill of lading recites that the vessel "is lying at the port of Boston, and bound for London," the respondent contends that the vessel was