

10FED.CAS.—43

Case No. 5,563. GOODYEAR ET AL. V. CENTRAL R. CO. OF N. J.

{1 Fish. Pat. Cas. 626; 2 Wall. Jr. 356.}¹

Circuit Court, D. New Jersey.

March Term, 1853.

PATENT—DESCRIPTION—SPECIFICATION.

1. Possession of sufficient duration and exclusiveness may be the foundation of an interlocutory injunction, without a trial at law.
2. If there is no allegation or pretense that proceedings at law are collusive, it can not be said to detract from the moral or legal effect of a verdict and judgment, that the plaintiff made so plain a case, that the defendant felt compelled to abandon his defense, and plead guilty.

{Cited in *Bridgeport Wood-Finishing Co. v. Hooper*, 5 Fed. 66; *Alabastine Co. v. Payne*, 27 Fed. 560.}

3. The right, franchise, or monopoly granted by a patent, is by the statute made divisible in the category of its locality only.
4. The owner of the legal title to the patent, and the party equitably entitled to the damages, as the person immediately injured by the infringement, are the proper parties to a bill for an injunction.

{Cited in *Black v. Allen*, 42 Fed. 621.}

5. Where the question of infringement is one that admits of doubt, or where the facts are in dispute, the court will not decide it summarily on a motion for a preliminary or interlocutory injunction.

{Cited in *Whitney v. Mowry*, Case No. 17,592.}

6. But where the question as stated, admits the facts, and its solution depends upon the construction of the patent, a hearing upon the preliminary motion may be as satisfactory as a final hearing, and shorten litigation.
7. The sale or use of the product of a patented machine is no violation of the exclusive right to use, construct or sell the machine itself.
8. Where a known manufacture or product is in the market, purchasers are not bound to inquire whether it was made on a patented machine or by a patented process.
9. The patent for a discovery of a new and improved process, by which any product or manufacture, before known in commerce, may be made in a cheaper and better manner, grants nothing but the exclusive right to use the particular process.
10. But, if the patentee be the inventor or discoverer of a “new manufacture or composition of matter, not known or used by others before his discovery or invention,” it is clear that his franchise, or sole right to use and

vend to others to be used, is the new composition or substance itself.

[Cited in *Durand v. Green*, 60 Fed. 392.]

11. Patents are granted “to promote science and useful arts.” They are not odious monopolies, or restrictions on the rights of the public. For the temporary monopoly given to the inventor, the public receive the full compensation by the publication of the invention.

[Cited in *Burke v. Partridge*, 58 N. H. 351.]

12. When the specification honestly sets forth the process and mode of compounding a new and valuable composition of matter, courts are bound to give it a liberal construction, and not to fritter it away, or annul its benefits, by formal or subtle objection.

13. The patent should be carefully examined to find the thing discovered, and if it be clearly set forth, the patentee should not suffer from the imperfection or vagueness of the language used in describing its true extent and nature.

[Cited in *Geier v. Goetinger*, Case No. 5,299.]

14. While the specification is usually, and always ought to be, drawn with the assistance of learned and able counsel, the short description (title) in the patent is usually suggested by the commissioner of patents.

[Cited in *Hamilton v. Ives*, Case No. 5,982.]

15. This description ought not to be repugnant to the specification; but, provided it honestly sets forth, in a few words, the nature and design of the patent, it is sufficient.

16. The product and the process being both new and proper subjects of a patent, the patentee has a right to prohibit the sale or use of the composition, unless when purchased from persons licensed by him to use the process and vend the product.

[Cited in *Welling v. Rubber-Coated Harness Trimming Co.*, Case No. 17,383. Applied in *Ingels v. Mast*, Id. 7,033. Cited in *Andrews v. Carman*, Id. 371; *Sewall v. Jones*, 91 U. S. 190; *Giant Powder Co. v. California Powder Works*, 98 U. S. 126; *Tucker v. Dana*, 7 Fed. 214.]

17. Where the only inconvenience produced by an injunction is to prohibit the defendants from purchasing and using any fresh infringing articles, no reason for delay can be founded upon inconvenience to the public or the parties. *Dickerson, J.*

This was a motion for a provisional injunction to restrain defendants from infringing letters patent [No. 3,633] granted to Charles Goodyear June 15, 1844, and reissued [No. 156] December 25, 1849, for “improvement in processes for the manufacture of India rubber,” the exclusive use to employ which, in the manufacture of car springs, had been granted to the New England Car Spring Company. The claims are given in the report of the case of *Goodyear v. Dunbar* [Case No. 5,570]. Both judges delivered opinions upon the motion.

² [The act of congress, commonly called the “Patent Acts” (July 4, 1836, c. 357 [5 Stat 117]), makes it a pre-requisite to the issue or validity of any patent, that the inventor “shall deliver a written description of his invention or discovery, and of the manner and process of making, constructing, using and compounding the same, in such full, clear and exact terms, &c., as to enable any person skilled in the art or science to which it appertains, &c., to make, construct, compound and use the same.” With this law in force, Mr. Charles Goodyear, the inventor or discoverer of vulcanized India rubber, obtained a

patent for that valuable substance. His invention or discovery was described by him “as a new and useful improvement in the processes for the manufacture of India rubber.” His description of “the manner and process of making, constructing, using and compounding the same,” or, as it is sometimes called, his specification, first stated the valuable qualities possessed by caoutchouc or India rubber; it being elastic, water proof, and durable. But went on to say, that it was in a measure useless, because it became soft, clammy, and would even dissolve under the action of a moderate degree of heat, and also became hard with cold; that the great desideratum was to get a substance, or preparation of rubber, which would retain its good qualities and remain unaffected by heat or cold; that thus far the only step towards improving this substance, was a discovery that a compound of sulphur with caoutchouc, improved its qualities for some purposes; that the patentee commenced a series of experiments with a view to render India rubber capable of resisting heat and cold, by treating it with heat. That finding that this substance, if subjected to heat by itself, could not be cured, he was led to experiment on it, in combination with other substances; that afterwards he discovered that when compounded with sulphur, and treated with a high degree of heat, good results were obtained; and finally, that a compound of caoutchouc, sulphur and carbonate of lead, when treated with a high degree of heat, produced the desired result; but that this result could be obtained only by a high degree of heat. He then went on to describe the nature of his invention as follows: “The nature of the first part of my invention consists in curing caoutchouc, or India rubber, when combined with, or in the presence of sulphur, by submitting the same to the action of a high degree of artificial heat at a temperature above solar heat, say from 212° to 350°, or thereabouts; whereby this substance becomes so changed in its properties, as to resist, without material change, the variations of temperature below that under which it is cured, and also the action of the expressed and essential oils, and its other known solvents. And the second part of my invention consists in preparing and curing the triple compound of caoutchouc or India rubber, sulphur, and a carbonate or other salt or oxide of lead, for the purpose above pointed out.” He then proceeded to describe the process and relative proportions of the materials which enter into the composition of “his fabric;” and after stating the leading features of his invention to be the effects produced by heat on the rubber thus combined, he concludes as follows: “What I claim as my invention, and desire to secure by letters-patent is, the curing of

caoutchouc or India rubber, by subjecting it to the action of a high degree of artificial heat, substantially as herein described, and for the purposes specified. And I also claim the preparing and curing the compound of India rubber, sulphur, and a carbonate or other salt or oxide of lead, by subjecting the same to the action of artificial heat, substantially as herein described.”²

E. N. Dickerson and James T. Brady, for complainants.

Joseph P. Bradley, for defendants.

Before GRIER, Circuit Justice, and DICKERSON, District Judge.

GRIER, Circuit Justice. It will not be necessary to give an abstract of the several averments of the bill, and answer, in order to a correct application of the question involved in the present motion. The possession under Goodyear's patent is of sufficient duration and exclusiveness to be the foundation of an interlocutory injunction, even if the verdict and judgment in the suit against the agents of Day were not in the case. There is no allegation or pretense that those proceedings were collusive; and it can not be said to detract from the moral or legal effect of a verdict and judgment, that the plaintiff made so plain a case that the defendant felt compelled to abandon his defense, and plead guilty.

The defendants do not deny that they use car springs made of the substance called “vulcanized rubber,” nor aver that such rubber was manufactured by the patentee, or any licensee under him; but they rely upon the three following objections, viz: 1. That these are not proper parties to the bill. 2. That the rubber used in the car springs was made by a process in which steam is the chief agent; and is therefore no infringement of the complainants' patent. 3. That the complainants' patent is for a process of curing rubber, and not for the product or manufacture; and consequently that the use of the product is no infringement of the patent.

1st. The same objection as to parties has heretofore been taken in this court, and overruled. The assignments to Dorr and Judson, of certain undivided interests, or shares in the patent, appear at first to contain language apt and sufficient to transfer the legal title; but a further examination of the instrument shows that the intention of the parties is only to confer on them an interest in the profits. The whole power of disposal, and consequently the whole legal title is in Goodyear. The New England Car Spring Company, who have the sole right of using this substance for the manufacture of car springs, are the party in interest. Their right is wholly equitable, as their license, though exclusive, does not amount to a legal transfer of a several title to a portion of the patent. The right franchise, or monopoly granted by a patentee, is by statute made divisible in the category of its locality only. The owner of the legal title to the patent and the party equitably entitled to the damages, as the person immediately injured by the infringement, being parties to the bill, it can not be successfully objected to for want of proper parties.

2nd. Where the question of infringement is one that admits of doubt, or where the facts are in dispute, the court will not decide it summarily, on the motion for a preliminary or interlocutory injunction. In this case, the defendants are amply able to respond in damages, and an injunction is not necessary on the ground of any irreparable injury to the complainant, likely to occur before a final decree. But the question as now stated, admits the facts; and its solution will depend on the construction of the patent. It is, therefore, as fully before us as it can be on final hearing; and the parties have, I presume, no desire to protract litigation. In the case of *Goodyear v. Day* [Case No. 5,569], the specific proposition was not before the court, and was, therefore, not decided. But assuming the general doctrines asserted by the court in that case to be correct, there will be little difficulty in the decision of this question. It requires only the specification of complainants' patent, in order to discover whether the process admitted to have been used in manufacturing the vulcanized rubber used by defendants is substantially the same with that described in the patent, "and to see whether in reality, in substance and effect, the defendants have availed themselves of plaintiff's invention, in order to make that fabric or manufacture;" or whether it is not the mere following out the invention or discovery of the plaintiff, with some variation of the means.

Before plaintiff's discovery, many attempts had been made to use the substance called caoutchouc, or India rubber, in the manufacture of certain goods, in order to have the benefits of its qualities of elasticity and impenetrability by water, imparted to certain fabrics. These had all failed in a great measure because this substance became soft and clammy by heat, and stiff and hard by cold. It was then deemed of great importance to discover some method, if possible, by which these bad qualities might be removed, and its valuable ones retained. That this substance was capable of such a change in its qualities was a fact which science could not demonstrate "a priori," much less point out the means of effecting it. Its discovery must necessarily be empirical, or the result of patient experiment, and judicious observation of phenomena.

That sulphur and some metallic oxydes could be used beneficially in drying the fabric, "had been discovered; but no one had ever succeeded in producing a compound or

substance having all the good qualities of caoutchouc, but unaffected by changes of temperature. The patience, energy, and perseverance of Mr. Goodyear, at length succeeded in making the discovery, that, by exposing this substance in combination with sulphur and some metallic oxydes (of which white lead was found to be the best), to a high degree of heat, for a certain length of time, the result so much desired could be obtained. The fabric, product, or manufacture which was the result of this process, was found to be almost indestructible; its elasticity under pressure was vastly increased; heat would not soften it, nor cold harden it, nor water penetrate it. It was a great and useful discovery, rather than an invention. It was not a mere composition of known substances, like a patent medicine; nor the production of a known result, substance, or fabric, by newly-discovered means or process. We know substance only by its qualities.

The fabric or product having qualities which can not be found combined in any other substance, may be called a new substance. But whether we call it a fabric or a manufacture, substance, or product, is immaterial. It is a new product, the result of a new process discovered by the plaintiff. What forms the essence or substance of this discovery? What is the *sine qua non*, or that without which this composition of matter can not be produced? The specification says it is the application of a high degree of heat—between 212° and 350° of Fahrenheit. You may vary the proportions of sulphur, or change the metallic oxydes, and succeed more or less, if the exposure to heat between these points be continued for a sufficient length of time. But no mere changes in the combined materials will have a beneficial effect without this application of a high degree of artificial heat. Now it must be abundantly evident to the most simple apprehension, that any person having the benefit of plaintiff's discoveries, starting from the platform erected by him, may possibly vary the process and obtain the same result. He may use salts of zinc for salts of lead; arsenic or magnesia for sulphur; or heat by steam instead of air; and many other variations of the relative proportions of the materials might be discovered to be equal to those patented.

Yet it must be equally evident that such person is pirating the plaintiff's invention. Suppose that before Goodyear's discovery, a manufacturer had taken to a chemist's laboratory some India rubber, sulphur, and white lead, and asked him to make him a compound having the qualities now exhibited by the substance known as "vulcanized rubber." He would have received an answer denying the possibility of making such a compound by any process known to scientific men. Now, suppose he had put into the same person's hands the specification of plaintiff's patent, and asked him to discover some means by which the same result might be produced, in mode or proportions different from that set forth in the patent; what science was before incapable of performing by synthesis, or any reasoning a priori, can now be improved by valuable hints derived from analysis. The chemist can now immediately suggest many changes in the process, which may produce

equivalent or better results. He could at once suggest that a carbonate of zinc, or some other metallic oxyde, could probably perform the office of white lead; that possibly arsenic, or magnesia, or some other metal or earth might be substituted for sulphur; that sulphur might be used better, perhaps, in a gaseous form; that the high degree of heat so necessary to the process could be as well or better applied by means of steam than dry heated air. Yet, no one whose perceptions are not perverted can fail to see that all such changes of mode or operation—such interposition of chemical equivalents—though possibly improvements on the original process patented, have their foundation on the patentee's first discovery, and start by appropriating or pirating it. It must be obvious, also, that there is not only a distinction, but a wide difference between one who merely invents a new method or process, by which a well-known fabric, product, or manufacture is produced, in a cheaper or better way, and the discovery of a new compound, substance, or manufacture, having qualities never found to exist together in any other material. In the first case the inventor can patent nothing but his process, and not his composition of matter. In the latter, both, are new and original, and both patentable—not severally, but as one discovery or invention. It is evident, also, that the question of infringement must, in such cases, depend on different conditions. Steel is a well-known substance, and one who could devise a new and cheaper method of combining the iron and carbon, in order to form, it, could patent his process only; and every other person would be at liberty to devise any different process for effecting the purpose.

But if steel, as a substance, was before unknown, the person who first discovered that a composition of iron and carbon could be made to assume such valuable qualities would have a right to patent not only his process, but his product. And no person who had thus taken the benefit of the patentee's discovery, and by it was informed of the valuable qualities of this compound of iron and carbon, could, by varying or improving the mode of process of its production, rob the patentee of his franchise.

But, assuming this patent to be merely for a process, and not for a product or fabric, still, in a question of infringement, the inquiry is, what is the essential or substantial

agent in the patentee's process or discovery? The specification affirms it to be a high degree of heat, and that no commixture or combination of substances with caoutchouc will give it these qualities, unless the composition be exposed for a length of time to a high degree of heat. Can any person doubt that the mere substitution of steam for heated air, in such manufacture, is a bold attempt to pirate the patentee's invention, and evade his patent? No learned hypothesis of chemists or philosophers as to the different chemical action of hot steam and hot air, can be received to palliate or protect so gross an invasion of the patentee's rights. We have, therefore, no doubt that the use of steam in place of heated air, in the manufacture of vulcanized India rubber, is a palpable infringement of the patent of Goodyear.

3d. We will notice the third objection made by defendants' counsel, to the complainants' right to an injunction, which is, "That the complainants' patent is for a process only, and not for a product or manufacture; and consequently that the use of the product is no infringement on the patent." If the premises assumed in this proposition are true, the conclusion is undoubtedly correct. A patent grants to the patentee "the full and exclusive right and liberty of making, using, and vending to others to be used, the said invention or discovery." It is evident that the sale or use of the product of a patented machine, is no violation of the exclusive right to use, construct, or sell the machine itself; and that the patent for a new and improved process, by which any product, or manufacture before known in commerce may be made in a cheaper and better manner, grants nothing but the exclusive right to use the particular process. Where a known manufacture or process, is in the market, purchasers are not bound to inquire whether it was made on a patented machine, or by a patented process.

But, if the patentee be the inventor or discoverer of a "new manufacture or composition of matter not known or used by others before his discovery, or invention," it is clear that his franchise, or sole right to use and vend to others to be used, is the new composition or substance itself.

The product, and the process constitute one discovery, the monopoly of which is secured to the inventor or discoverer, as a consideration or compensation for making it known to the public. That the composition of matter now known as "vulcanized rubber," was not known before the discovery patented by Goodyear, and that it has since been most beneficially and extensively applied in numerous manufactures, as a substance having certain qualities not possessed by caoutchouc in its natural state, or any other known substance, are facts well known and admitted by all, except those who have been engaged in pirating the discovery, or whose interests are otherwise concerned in denying the fact. It is true the patent, in this case, does not use the phrase, "vulcanized rubber," a term since invented to denote the newly-discovered manufacture or composition of matter. Patents are granted to "promote science and useful arts." They are not odious monopolies, or re-

strictions on the rights of the public. For the temporary monopoly given to the inventor, the public receive full compensation by the publication of the invention. And when the specification of a patent honestly sets forth the process and mode of compounding a new and valuable composition of matter, courts are bound to give it a liberal construction; and not to fritter it away, or annul its benefits by formal or subtle objections.

What we consider the true extent and merit of the plaintiff's discovery, we have already stated in this opinion. It only remains to examine whether the patent and specification will bear a construction coextensive with the patentee's rights, arising from such discovery. On account of the great vagueness and indefiniteness of the language used in describing the various arts, machines, manufactures, and compositions of matter, it is almost impossible to describe the real nature of many discoveries or processes, in language free from ambiguity or misconstruction. Different persons, looking at it from different points of view, would describe it in different terms. In the present case, one would describe it as "the art of curing India rubber;" another, "the art of rendering caoutchouc, and manufactures in which it is used, insensible to heat or cold, or the action of most of its known solvents;" another, as a "fabric, manufacture, or new composition of matter, having qualities never before combined in any other known substance, being elastic, water-proof, insensible to acids, to heat, or to cold."

Still, call it what you will, if the patentee has set forth fully the materials, their various proportions, and the processes necessary to the production of this composition of matter, he has done all that the law requires, and should be entitled to its protection. The patent should be carefully examined to find the thing discovered, and if it be clearly set forth, the patentee should not suffer for the imperfection or vagueness of the language used in describing its true extent and nature. Applying this principle to the present case, let us examine the patent, to see if the specification does not set forth a discovery which might be described by the most extended of the descriptions given, as well as the narrowest.

In this country the inventor must file a specification or description of his invention or discovery before he can receive a patent. The patent is required to "contain a short description or title of the invention or discovery,

correctly indicating its nature and design." This description ought not to be repugnant to the specification; but, provided it honestly sets forth, in few words, the "nature and design," of the patent, it is sufficient. The specification must be looked to for the full disclosure of the discovery, and the extent of the inventor's claims. It should show what the patentee claims to have discovered or invented; wherein it differs from what was before known; and by what combinations or processes the new material may be compounded. While the specification is usually, and always ought to be, drawn with the assistance of learned and able counsel, the short description in the patent is usually suggested by the commissioner of patents. The extent of the patentee's rights must be judged from the whole instrument taken together, and not from any one sentence.

It is especially proper, in patents for complicated machines, that the specification should clearly set forth what the patentee admits to be old, and what he claims to be of his invention, and that he should be held to such statement. In anomalous cases, like the present, when a new product has been discovered, and the process of compounding it or obtaining it is disclosed, the patentee, by stating his discovery and revealing his process, has done all that he is required to do or can do. The careful separation of new from old, the limitation of claims to particular parts or combinations, can not be required as a substantial part of the specification. If a specification sets forth a discovery, a new composition of matter, and the process for compounding it, that should be taken as the extent of his claim and the measure of his franchise.

The patent describes the discovery or invention as "a new and useful improvement in the processes for the manufacture of India rubber." "As a brief description of the discovery, indicating its nature and design," this may be said to be correct, so far as it goes, for it briefly states the nature of the discovery. But it can not limit the claim of the patentee to narrower bounds than those described in his specification.

The specification first states the valuable qualities possessed by caoutchouc, or India rubber, being elastic, water-proof, and durable; but that it was in a measure useless, because it became soft, clammy, and would even dissolve under the action of a moderate degree of heat, and also, become hard with cold. That the great desideratum was, to get a substance or preparation of rubber, which would retain its good qualities, and remain unaffected by heat or cold. That thus far, the only step toward improving this substance, was a discovery of Nathaniel Hayward, that a compound of sulphur with caoutchouc improved its qualities for some purposes.

That the patentee commenced a series of experiments with a view to render India rubber capable of resisting heat and cold, by treating it with heat. That finding that this substance, if subjected to heat by itself, could not be cured, he was led to experiment on it, in combination with other substances.

That afterward, he discovered that when compounded with sulphur, and treated with a high degree of heat, good results were obtained; and, finally, that a compound of caoutchouc, sulphur, and carbonate of lead, when treated with a high degree of heat, produced the desired result; but that this result could be obtained only by a high degree of heat.

The patentee then goes on to describe the nature of his first invention, as follows: "The nature of the first part of my invention consists in curing caoutchouc, or India rubber, when combined with, or in the presence of sulphur, by submitting the same to the action of a high degree of artificial heat, at a temperature above solar heat, say from 212° to 350°, or thereabouts; whereby this substance becomes so changed in its properties, as to resist, without material change, the variations of temperature below that under which it is cured, and also the action of the expressed and essential oils, and its other known solvents. And the second part of my invention consists in preparing and curing the triple compound of caoutchouc or India rubber, sulphur, and a carbonate, or other salt, or oxyde of lead, for the purpose above pointed out.

He then proceeds to describe the process and relative proportions of the materials which enter into the composition of the "fabric."

He concludes by stating the leading features of his invention to be the effects produced by heat on the rubber thus combined, and concludes, as follows: "What I claim as my invention, and desire to secure by letters patent, is, the curing of caoutchouc or India rubber, by subjecting it to the action of a high degree of artificial heat, substantially as herein described, and for the purposes specified. And I also claim, the preparing and curing the compound of India rubber, sulphur, and a carbonate of other salt, or oxyde of lead, by subjecting the same to the action of artificial heat substantially as herein described."

Now, what is this India rubber, cured "substantially as herein described?" It is clearly not merely an improved method or process of producing an old and well-known composition or material, but it is a new product, fabric, manufacture or composition of matter, having qualities possessed by no other known material. This is what is described and claimed in the patent—a new product as well as a new process.

The product and process being both new and proper subjects of a patent, the patentee has a right to prohibit the sale or use of the composition, unless when purchased from persons licensed by him to use the process

and vend the product. If precedent be needed for this doctrine, the case of *Hancock v. Sommerville*, in the English court of common pleas, tried in June, 1851, will be found directly in point.

Hancock had seen samples of vulcanized rubber made by Goodyear, and had succeeded in discovering the process for preparing it. His patent was "for improvements in the preparation or manufacture of caoutchouc in combination with other substances, which preparation, or manufacture, is suitable for leather, cloth, and other fabrics, water-proof, and for various other purposes for which caoutchouc is employed."

The claim in the specification was in these words: "What I claim as my invention or discovery, is—First, the combination of caoutchouc with silicate of magnesia, whereby manufactured caoutchouc is rendered free from that clammy and adhesive character which it usually possesses; secondly, I claim the modes herein described of combining asphalte with caoutchouc: and, thirdly, I claim the treating of caoutchouc (either alone, or in combination with silicate of magnesia, or other substances) with sulphur when acted on by heat, and thus changing the character of caoutchouc herein described."

The infringement charged upon the defendants was the importation and sale of articles made by Mr. Goodyear. Hancock was decided to be an independent original inventor, though posterior to Goodyear, because the substance manufactured by Goodyear did not disclose the process by which it was compounded, or manufactured. And the sale of articles in England, manufactured by Goodyear, was adjudged to be an infringement of Hancock's rights as secured by his patent. The patent of Hancock describes his invention. "An improvement in the preparation," etc. His specification and claim set forth a new product, and a new process, in terms not as well chosen as those of Good-year's patent; yet not even a doubt was suggested by counsel that the sale or use of articles manufactured by Goodyear was an infringement of Hancock's patent, provided his patent could be supported. We should ill protect our patentee (who is admitted to be the first inventor) if we should permit articles manufactured by Hancock to be placed in competition with Goodyear here, while the English courts, in the construction of a similar patent, restrain the sale of Good-year's articles in England. Yet such would be the necessary consequence of a decision of this point adverse to the complainant.

It follows that the plaintiffs are entitled to their injunction. But the court will not allow it to have the effect of stopping railroad cars having springs made of this composition, without license. It is to be presumed that the defendants have no intention or desire to continue litigation, or to encourage those who are pirating the plaintiff's invention; and believing that the object of the parties is to have these questions decided, and their respective rights ascertained, without regard to the matter of damages, which are, in this case, of small amount, and the cause having been fully and ably argued by the learned counsel, I have given the case more than the usual consideration which it is customary to

give, on motion for an interlocutory order. My general practice has been to postpone the consideration of difficult or doubtful points till the final hearing of the cause and not to decide the whole merits of a cause on a mere preliminary motion.

DICKERSON, District Judge. In this case, the bill charges that Charles Goodyear, one of the complainants, having a patent for the improvement in curing caoutchouc, or India rubber, by which is produced the material or manufacture now known as vulcanized rubber, assigned to the other complainants, "The New England Car Spring Company," the right to use the material in the manufacture of car springs; and that the defendants are using car springs made of the same material, and thereby infringing the rights of the complainants, and it prays an injunction, and an account.

The defendants resist the application for various reasons: First. Because the proper parties, complainants, to wit, Judson & Dorr, are not joined, they being assignees or licensees. Second. Because the patent of Goodyear is for a new mode or process, and the defendants only use the articles produced by such process, and which were not made or procured to be made by themselves, and therefore no bill can be sustained. Third. Because the article used, is itself the subject of a distinct patent. It is vulcanized rubber, manufactured into an article of merchandise. Fourth. Because it is not a case where a preliminary injunction should be granted, because: 1. Defendants are in good credit. 2. No irreparable injury to complainants will be produced by waiting. 3. Great public inconvenience would ensue if injunction be granted. 4. The complainants have not established their right at law. Fifth. Because the manufacture of the article in question is not an infringement, as it is manufactured by the use of steam, which courts have decided is not an infringement.

Upon examining the bill, and the affidavits on behalf of the defendants and these objections, it is quite manifest that there is no material fact in the case which is controverted. As to parties, there is no dispute, but that these parties, complainants, are proper parties; but the allegation is, that others, to wit Judson & Dorr, as assignees, or licensees, are also interested in the patent, and therefore should have been joined. I will not inquire whether they would be necessary parties, if an account were to be taken. It is enough at this time to say, that the present application is for an injunction, and they are certainly not

necessary parties for that purpose. The next objection is, that the bill will not lie against the defendants, for the mere use of the article, as the patent is only for the process, or mode of making it; and this leads directly to the inquiry as to the extent and character of the patent.

The rules of construction upon such inquiry, I think, are properly defined by Justice Story, in several cases which came under his decision. In the case of *Ames v. Howard* [Case No. 326], he says that "It has always been the course of the American courts to construe these patents fairly and liberally, and not to subject them to any over-nice and critical refinements. The object is to ascertain what, from the fair sense of the words of the specification, is the nature and extent of the invention claimed by the party; and when the nature and extent of that claim are apparent, not to fritter away his rights upon formal or subtle objections, of a purely technical character." In the case of *Blanchard v. Sprague* [Id. 1,518], he says: "Patents, then, are clearly entitled to a liberal construction, since they are not granted as restrictions upon the rights of the community, but are granted to promote science and useful arts." And in the case of *Ryan v. Goodwin* [Id. 12,186], it is said: "If, therefore, there be any ambiguity or uncertainty in any part of the specification, yet, if, taking the whole together, the court can perceive the exact nature and extent of the claim made by the inventor, it is bound to adopt that interpretation, and to give it full effect."

With these rules of construction for a guide, I proceed to examine the patent and specification of Mr. Goodyear now in question. He commences by saying: "I have invented a certain new and useful improvement in the manner of preparing fabrics of caoutchouc or India rubber, and the following is a full, clear, and exact description of the principles or character which distinguishes them from all other things before known." And in the latter part of the specification he says: "Although I have only described the mode of preparing and curing sheets of India rubber, it will be obvious that my method is applicable to articles of any desired form." The clear and obvious meaning of which is, that he has discovered how to make of India rubber a new thing or manufacture, which, in principle and character, is distinguished from any other thing before known.

He then proceeds, as by law required, to describe the mode or process by which he produces the result; showing that the effect is produced by mixing certain materials with the India rubber, and submitting it to a high degree of heat; but he does not claim the discovery of any particular process or manner of applying the heat, but says that "the operator may communicate the heat in any suitable manner or form;" nor does he claim, in his description or specification, any particular form, or manner, or process of combining the different ingredients, and preparing them to be submitted to the action of the heat. On the contrary, he expressly claims in his specification, that "the leading feature of his invention, and that which chiefly constitutes the substance or essence of its usefulness, is the discovery of the effects produced on India rubber by the action of artificial heat, at

a temperature above that to which the fabric would be exposed in ordinary or common use.”

What is it, then, that he claims as his invention or discovery, in order to entitle him to a patent? The law requires that he should have discovered or invented some new and useful art, machine, manufacture, or composition of matter. It must therefore, be a manufacture. It is not the process, alone, which he claims as being new in his invention, but the thing itself. In the first part of the specification, he states that the fabrics which he prepares, and the improvements, are distinguished from all other things before known; and in the latter part he says, that the leading feature of his discovery, and of that which constitutes the essence of its usefulness, is the discovery of the effects produced on India rubber by the action of heat, and that effect is vulcanized rubber. At the close of his specification, he claims the curing of caoutchouc, or India rubber, by subjecting it to the action of a high degree of artificial heat, substantially as therein described, and for the purpose specified.

This may not be the most appropriate form of words to meet the views of the applicant, as contained in the former part of his specification. The question, however, is not whether these are the most appropriate terms; but what is the meaning of those terms, when taken in connection with the other parts of the specification and description. The word “curing,” as here used, must be considered as a technical term. If the expression, “curing of India rubber by the application of heat, as therein described,” be construed to mean the converting of India rubber into a new substance or manufacture, now known as vulcanized rubber, it will be consistent with the other parts of the specification and description; and *ex vi termini*, it will bear that construction better than any other. Whereas, if it be construed to be a claim for a new process, it will be inconsistent with the other parts of the specification, and in violation of the obvious meaning of the applicant.

I am, therefore, of opinion, that, upon a fair construction of the specification and description in this case, it appears that Charles Goodyear has discovered a new and useful manufacture now known as vulcanized rubber; and that the right and liberty of making, constructing, using, and vending the same to others to be used, is secured to him by letters patent.

This view of the case is sustained by the

decision of the courts in England, upon the Hancock patent, which is for the same invention. In this patent, Hancock claims "the treating caoutchouc, either alone or in combination with other substances, with sulphur, when acted on by heat, and thereby changing the character of caoutchouc, as described." The one claims "curing," and the other "treating," India rubber. And in order to understand the meaning of either of the words as applicable to the subject-matter, it is necessary to refer to the description and other parts of the specification, by which it will appear that they mean the same thing. And yet the courts of England protected Hancock against the sale of shoes made of vulcanized rubber in this country, and sent there as merchandise.

In the case of *Cornick v. Keane* [unreported], the patent was for "an improvement in the making or manufacturing of elastic goods or fabrics applicable to various useful purposes." It was, in fact, an improvement in making shirred goods, and after describing the manner of doing it, the patentee concludes his specification thus: "By thus combining the strands of India rubber with yarns of cotton, flax, or other non-elastic material, I am enabled to produce a cloth which shall afford any degree of elastic pressure, according to the proportion of the elastic or non-elastic material. It remains only to add, that the strands of India rubber are, in the first instance, stretched to their utmost tension, and rendered non-elastic (as described in my former specification), and being in that state introduced in the fabric, they acquire their elasticity by the application of heat after the fabric is made. Lastly, as my invention consists solely in the employment of strands of India rubber in connection with yarn, in the way described for manufacturing elastic goods or fabrics, I have not deemed it necessary to describe any particular kind of machinery for carrying the same into effect, as such machinery is well known, and forms no part of my invention."

Upon that patent the suit was brought; and the jury, upon evidence showing that the defendants had only sold goods similar to those patented, found that they had infringed the patent, and the verdict was sustained. On the argument of the cause at bar, the defendants, among other objections, contended that the invention was not the subject-matter of a patent; that it was neither a new manufacture nor an improvement in any old manufacture, but merely the application of a known material to a purpose before known. But in giving judgment, the court say: "Whether it is new or not, or whether it is an improvement of an old manufacture, was one of the questions for the jury upon the evidence before them. But that it came within the description of a manufacture, and so far is an invention which may be protected by a patent, we feel no doubt whatever. The materials, indeed, are old, and have been used before, but the combination is alleged to be, and (if the jury are right in their finding) is new, and the result or production is equally so."

This case is singularly like the one under discussion, and strongly confirms the view which I have taken of it.

The third objection necessarily falls with the second.

The defendants insist, in the fourth place, that this is no case for a preliminary injunction, because it is not pretended that the defendants are insolvent, nor that the complainants would suffer irreparable injury by waiting until final hearing.

But it is manifest that neither the public nor the defendants would suffer any inconvenience at this time by restraining them from purchasing and using any vulcanized rubber car springs, except those which they now have in use; and, therefore, no reason for delay can be founded upon inconvenience to the public or the parties. On the contrary, it should be the desire of the defendants, and it is interesting to all others wishing to use car springs of this character, to have the earliest possible decision upon the subject.

As to the allegations that Goodyear has not established his right at law, that he is not the original inventor, and that his renewed patent is void, these are points which were settled in the case of *Goodyear v. Day* [Case No. 5,569], in this circuit, and I have seen nothing since to alter my opinion on the subject.

As a further objection to a preliminary injunction, it is said that the infringement is denied. The defendants do not deny that they use the car springs, but say that the rubber is prepared by the application of steam, and therefore no infringement; and this is made the subject of their last general objection to granting the injunction at any time. I was somewhat surprised to find this objection taken by the defendants at all, but much more when I found my own opinion in the case of *Goodyear v. Day* [supra], cited in support of the position. In that case, the right to use steam in vulcanizing rubber was not raised, except as applicable to an objection started by the defendants, that the reissued patent of 1849, embraced a different and more extensive use of heat than the original patent of 1844, which was surrendered upon examining the two patents and specifications. I was satisfied that there was no foundation for the objection, and therefore I remarked that, "I did not inquire whether the complainant might use heat in the form of steam, for the purpose of curing rubber, as that was not an issue." And I am at a loss to discover how the defendants in this cause can use that opinion to support their position, and more especially as by reference to a former part of the same opinion,

when remarking upon the patent of 1844, I say, “Under this specification, he had the undoubted right to use heat of any kind then known.” “It is true that this case was a mere dictum, but it was, and still is, my opinion. Mr. Goodyear, in his specification, uses the term, “heat, or artificial heat,” without distinguishing any particular kind of heat; and it appears to me that the maxim, “qui haeret in litera, haeret in cortice,” most applies to any one who should contend that there was any essential difference, whether the heat be applied by means of steam or hot air, both being heated by the combustion of fuel. A similar distinction was, indeed, once attempted as to Daniell’s patent, in which the invention consisted in immersing rolls of cloth in hot water. Another patent was obtained for subjecting similar rolls of cloth to the operation of a steam bath, instead of immersing them in hot water, but it was held to be an infringement.

Unfortunately for the position of the defendants in the case, the complainant, Goodyear, did, in fact, use steam for vulcanizing rubber, as it appears by his description, in which he says “this heating process may be effected by running the fabrics over heated cylinders, but I prefer to expose them to an atmosphere of artificial heat, of the proper temperature, etc.” Now, it is well known that these cylinders are heated by steam, and it is also known that the car springs of the defendant are made by placing the rubber in a cylinder, and submitting the cylinder to the action of steam, so that the only difference between them is, that in the one case, the rubber is placed inside of the cylinder, and the steam applied to the outside; in the other, they change places, and the rubber takes the outside of the cylinder, and the steam the inside.

So, it appears that Goodyear did, in fact, contemplate and describe the use of steam in vulcanizing rubber; but he made no claim to that particular mode, for the plain reason that it is included in the claim of applying heat generally. I am, therefore, of opinion, upon a view of the whole case, that the complainants are entitled to their injunction.

[NOTE. Patent No. 3,633 was granted to C. Goodyear, June 15, 1844; reissued December 25, 1849 (No. 156): again reissued November 20, 1860 (No. 1,085). For other cases involving these patents, see *Goodyear v. Providence Rubber Co.*, Case No. 5,583; *Same v. Congress Rubber Co.* Id. 5,505; *Same v. Hills*, Id. 5,571a; *Same v. Phelps*, Id. 5,581; *Same v. McBurney*. Id. 5,574; *Same v. Day*, Id. 5,569; *Same v. Bourn*, Id. 5,561; *Same v. Bishop*, Id. 5,558, 5,559; *Same v. Mullee*, Id. 5,579; *Same v. Hullihen*, Id. 5,573; *Same v. Chaffee*, Id. 5,504; *Same v. Dunbar*, Id. 5,570; *Same v. New York Gutta-Percha Co.*, Id. 5,580; *Same v. Beverly Rubber Co.*, Id. 5,557; *Rubber Co. v. Goodyear*. 9 Wall. (70 U. S.) 788, 807; *Suydam v. Day*, Case No. 13,654; *Washmg-Machine Co. v. Earle*, Id. 17,219; *Day v. Newark India-Rubber Manuf’g Co.*, Id. 3,685; *Goodyear v. Day*, Id. 5,568; *Same v. Cary*, Id. 5,562; *Gardner v. Goodyear Dental Vulcanite Co.*, 131 U. S. 103; *Ex parte Robinson*, Case No. 11,932.]

¹ [Reported by Samuel S. Fisher, Esq, and here reprinted by permission.]

² [From 2 Wall. Jr. 356.]

² [From 2 Wall. Jr. 356.]