

Case No. 7,275. JENKINS v. WALKER ET AL.

[Holmes, 120; 5 Fish. Pat. Cas. 347; 1 O. G. 359; Merw. Pat. Inv. 124.]¹

Circuit Court, D. Massachusetts.

March 22, 1872.

INVENTION—ANTICIPATION IN SPECIFICATION OF PRIOR PATENT.

1. An invention of a compound to be used for a specified purpose is not anticipated by a description in a prior patent of a compound having physical properties which render it unfit for such use, and described as intended for a different and not analogous, purpose.

[Cited in *Clarke v. Johnson*, Case No. 2,855.]

2. To anticipate an invention of a compound, the specification of a prior patent must state the relative proportions of the ingredients of the compound in such full, clear, and exact terms, as to enable one skilled in the art to make and use the described compound without experiment of his own.

[In equity. Bill by Nathaniel Jenkins against George W. Walker and others.

[Final hearing on pleadings and proofs. Suit brought on letters patent [No. 54,554], for an improvement in the manufacture of elastic packing, granted to complainant, May 8, 1866, and reissued August 3, 1869. [No. 3,579].

[The defendants claim to have manufactured the goods alleged to be an infringement under letters patent for an “improved rubber composition,” granted to C. L. Frink, May 8, 1866.]²

Thomas W. Clarke, for complainant.

E. L. Sherman and J. J. Storrow, for defendants.

SHEPLEY, Circuit Judge. This is a bill in equity alleging an infringement of the

letters-patent granted to the complainant on the eighth day of May, 1866, and reissued on the third day of August, 1869, for a new and useful elastic packing for joints and valves exposed to destructive fluids. The substance of the complainant's invention consisted in the employment of an elastic packing for joints and valves, of a crude, burnt, refractory rubber compound, sufficiently elastic and indestructible to resist the solvent action of steam, or hot and corrosive liquids, and made from a composition containing forty per cent or more of refractory mineral matter, cemented together by vulcanized rubber. The term "refractory," as used in the arts, indicates the quality of resisting the action of heat and solvents. In this sense, Paris white, French chalk, and plumbago are refractory.

Prior to 1866, rubber-packing used for steam-packing for joints and valves did not in any degree possess or have the character of hard rubber. The kinds of rubber-goods in use before that time for packing steam joints and valves were, as represented by exhibits in the case: First, "pure packing," a soft rubber fabric, made in sheets; second, "plain packing," a soft rubber fabric, made in sheets, and having a cloth insertion; and, third, "mixed or fibrous packing," a rough-looking, soft rubber fabric, made of old scraps.

The answer of the respondents denies that the reissued letters-patent are for the same invention as the original letters-patent; and they say that the reissue was obtained by fraud, and is therefore invalid. There is no evidence in the case to support these allegations in the answer. The answer also denies that Jenkins was the original and first inventor of the thing patented, and denies any infringement of the reissued letters-patent. The defendants further allege, that the elastic packing, manufactured, sold, and used by the defendants, was manufactured under and according to letters-patent of the United States, granted to C. L. Frink on the eighth day of May, 1866.

Upon the issue of novelty, defendants rely upon the letters-patent granted in England to W. E. Newton, and dated April 24, 1854; and upon letters-patent of the United States to A. K. Eaton, and dated June 19, 1860. Newton's patent was for mingling plumbago with hard rubber compound, to be used in the manufacture of bearings for machinery, in order to prevent attrition or friction. It appears from the evidence in this case that the composition of matter described in the Newton specification, if made in the mode there described, would not have the physical properties of the compound described in the complainant's specification, because the presence of so large a proportion of sulphur, as indicated in the formula of the Newton patent, would render the valves susceptible to the action of the heat and solvents.

The patenting a material for one purpose does not necessarily invalidate patenting it for another different and not analogous purpose. *Newton v. Vaucher*, 6 Exch. 859.

The two patents are essentially different. The principle of the Newton patent is clearly the application of the hard rubber compound, for the purpose of diminishing the effect of attrition. The principle of the plaintiff's patent is the use of the crude, burnt, refractory

rubber compound, to resist the solvent action of steam, or hot and corrosive fluids. The two inventions differ in principle; and there is a substantial difference in the product in which the invention is embodied, and the purpose to which that product is to be applied.

The same principles and considerations apply to the case of the Eaton patent. It is perfectly plain, from a comparison of the plaintiff's specification with the specifications in the Newton and Eaton patents, taken in connection with the fact that there is no evidence that under either of those patents a product was ever made having the physical properties of the plaintiff's compound, that these patents do not anticipate the plaintiff's invention.

Letters-patent, on the eighth day of May, 1866, being the day of the date of the complainant's patent, issued to C. L. Frink for a new and improved rubber-composition. He describes his invention as consisting in a compound made of india-rubber, sulphur, black-lead, or other suitable material, generally mixed with rubber, to give it consistency and to increase its weight, and metal filings (brass filings being used in preference), in such a manner that a compound is obtained which is not liable to stick when exposed to a great heat or steam and which is particularly fit for packing safety-valves, globe-valves, or other parts which are exposed to the action of steam, and which, when packed with ordinary rubber, require constant repairs. The only description which he gives of the manner of making his compound is as follows: "I mix the filings with the mass, simultaneously with the sulphur and black-lead, or clay, or other ingredients which are usually mixed with the crude rubber; and, when the composition is made, I vulcanize or cure the same in the ordinary manner. The quantity or proportion of filings to be mixed with the rubber is variable, according to the nature of the work for which the rubber is to be used. For packing small valves, about one part by weight of filings is sufficient." It is obvious, from inspection of this specification, that as the relative proportions of the rubber, sulphur, and plumbago are not given or indicated in any way, the description is not sufficiently clear and exact to enable others skilled in the art to make a rubber-compound of the ingredients therein specified, adapted for use as an elastic packing for joints and valves, and sufficiently indestructible to resist the solvent action of steam, or

heated and corrosive fluids. And this want of such full, clear, and exact description, which will enable others skilled in the art to make and use the same, is abundantly proved by the testimony of persons skilled in the art.

Henry W. Burr, who has been engaged in the rubber-business twenty-eight years, and is the superintendent of a rubber-factory, and is a thoroughly practical manufacturer and manipulator of rubber-compounds, testifies, that from the directions in the Frink patent he is not well skilled enough in the art to produce a valve-disc from that which will stand the heat. Dr. S. Dana Hayes, an eminent chemical expert, the state as sayer of Massachusetts, and the consulting chemist of several manufactories of rubber-goods, testifies that he cannot tell, from reading Frink's specification, what the composition of the proposed compound was, nor what its physical characteristics would be. No evidence is offered in rebuttal of these statements.

It is evident that the success of the process, and the value of the product for the desired purpose, are entirely dependent upon proportions and temperatures: and proportions and temperatures are not even indicated in the Frink specification.

When the specification of a new composition of matter gives only the names of the substances which are to be mixed together, without stating any relative proportion, undoubtedly it would be the duty of the court to declare the patent to be void; and the same rule would prevail when it was apparent that the proportions were stated ambiguously or vaguely; for in such cases it would be evident on the face of the specification that no one could use the invention without first ascertaining by experiment the exact proportions of the different ingredients required to produce the result intended to be obtained. The specification must be in such full, clear, and exact terms as to enable any one skilled in the art to which it appertains to compound and use the invention; that is to say, to compound and use it without making any experiments of his own. *Wood v. Underhill*, 5 How. [46 U. S.] 1.

The record does not afford any satisfactory proof that Frink made a composition of matter like that which the plaintiff has patented, before the date of the plaintiff's invention. The complainant's composition of matter, according to his specification, consisted of rubber, from twenty to twenty-five per cent; gum-shellac, from ten to twenty per cent; Paris white, from twenty to thirty per cent; French chalk, from fifteen to twenty-five per cent; litharge, from eleven to eighteen percent; lampblack, from two to three per cent; sulphur, from one to three per cent. The analysis made by Dr. Hayes of the valve-seats used and sold by the defendants, and claimed by them to have been made under the Frink patent, contained rubber, 30.60 per cent; plumbago, 40.00 per cent; copper and zinc, 14.60 per cent; lead, 8.20 per cent; sulphur, 6.60 per cent.

Now, classifying in both patents plumbago, French chalk, and Paris white as the refractory mineral matter, and the rubber and shellac and sulphur as the cementing material,

and the lead or litharge and brass-filings as sulphur-absorbents, the testimony showing that they combine with each other in vulcanizing, making another comparatively refractory ingredient, sulphuretted metal,—it appears that the proportions of the ingredients, which are substantially alike in the two formulas, are very nearly identical, except that the defendants use, in addition, about ten and a half per cent more of metal, and about three and a half per cent more of sulphur, which, combining as before stated, constitute an addition to or adulteration of the complainant's compound of fourteen per cent in excess of comparatively refractory mineral matter, consisting of the metals which have been partially mineralized by the sulphur. The defendants use substantially the same elements, compounded and treated on principles substantially the same as those of the patented article, and produce substantially the same product. If the addition of this percentage of sulphur, and also of brass-filings, to the complainant's compound, was any improvement, it would not authorize the use of the patented product improved upon, without license from the patentee, any more than the patent to Edwin L. Simpson, for his improvement in dental-rubber, for the purpose of avoiding the odor and taste of the sulphur used in the vulcanizing of dental-rubber, would have authorized him to use the Invention of Nelson Goodyear. Decree for injunction and account.

[For other cases involving this patent, see note to [Jenkins v. Johnson, Case No. 7,271.](#)]

¹ [Reported by Jabez S. Holmes, Esq., and by Samuel S. Fisher, Esq., and here compiled and reprinted by permission. The syllabus and opinion are from Holmes, 120, and the statement is from 5 Fish. Pat. Cas. 347. Merw. Pat. Inv. 124, contains only a partial report.]

² [From 5 Fish. Pat. Cas. 347.]