Case No. 5.039. FRANCIS ET AL. V. MELLOR ET AL.

[5 Fish. Pat. Cas. 153; ¹ 4 Am. Law T. Rep. U. S. Cts. 237; 28 Leg. Int. 333; 8 Phila. 157; 3 Leg. Gaz. 335; 1 Leg. Gaz. Rep. 291; 1 O. G. 48.]

Circuit Court, E. D. Pennsylvania.

Oct. 2, 1871.

PATENTS—LIBERAL CONSTRUCTION—PRINTER'S ROLLER COMPOSITION—INGREDIENTS AND PROPORTION—REISSUE.

1. Patents are to be construed liberally, so as to sustain and not destroy the right of the inventor. [Cited in Burke v. Partridge, 58 N. H. 351.]

- 2. Hence, the whole of the specification may and should be looked at, not only to learn from the description of the invention how to make it, but to ascertain what it really is.
- 3. It is not only where the specification is expressly referred to that the claim is to be construed in connection with it, but, as a general rule, the explanations contained in it are to be taken as the inventor's own interpreter of the meaning of his claim.
- 4. Where, in the body of the specification, a composition of matter is described as the product of glue, glycerine, and sugar, united in certain specified proportions, it being added that the proportions may, in some cases be advantageously varied, but the claim is for "combining glue, glycerine, and sugar, or any other analogous saccharine matter, to form a new and useful composition of matter:" *Held*, that the, patent is not broadly for a substance composed of these ingredients, irrespective of the proportions in which they are combined, but for one produced in substantial or approximate accordance with the formulas given in the specification.
- 5. Semble, that where the original patent described a composition for printers' inking rollers as consisting of glue, glycerine, castor-oil, or any of the fixed oils, borax, ammonia, and sugar, mixed in certain approximately-specified proportions, and claimed "the use of the ingredients specified, when combined to form a composition for the manufacture of printers inking-rollers," a claim upon reissue for "combining glue, glycerine, and sugar, or any other analogous saccharine matter, to form a new and useful composition of matter for various-purposes," can not, if construed in its broadest significance, be sustained.
- 6. While characteristic resemblance is preserved between two compositions of matter, they may, perhaps, be considered as identical, within the meaning of the patent law, although one of them may not contain some of the constituents of the other, which are not necessary to impart to it its peculiar attributes.
- 7. If known elements are combined in new proportions, and the result is a product possessing distinct properties and applicable to distinct uses, this must be regarded as a patentable subject.
- 8. Where only approximate proportions are named in the specification for the several elements of a given composition of matter, the right to vary these proportions is not unlimited. It can only extend, to any adjustment which will result in the production of a substance possessing the peculiar properties attributed to the substance described in the patent.

Final hearing on pleadings and proofs. Suit brought [by L. Francis and C. H. Loutrel against A. Mellor and H. Rittenhouse] upon two letters patent for "improved composition for printers' inking-rollers." The first patent was granted to Lewis Francis and F. W. Letmate, June 21, 1864, and reissued November 26, 1867. The infringement of this patent was expressly denied by defendants, and no proof was offered by the complainants to

FRANCIS et al. v. MELLOR et al.

maintain the same. The second patent was granted to Lewis Francis, March 8, 1864, and reissued in two divisions, Nos. 1771 and 1772, September 27, 1864. Reissue No. 1772 was reissued February 28, 1865, and August 3, 1869.

The original patent of March 8, 1864, described an improved composition in the manufacture of printers' inking-rollers, the ingredients employed being "combined in about the following proportions, namely: Glue, 14 pounds; glycerine, 28 pounds; castor-oil, or any of the fixed oils, 2½ pounds; borax, 3 ounces; ammonia, 2 ounces; sugar, 7 pounds." The glue, before being added to the heated glycerine, was to be soaked in water in which lime had been dissolved. The specification concluded as follows: "I do not wish to be understood as confining myself to the use of lime, ammonia, or borax, as any of the alkalies or alkaline earths, or alkaline compounds of any of the alkaline earths or alkalies, may be used. Neither do I intend to confine myself to the use of the ingredients employed by me in the proportions herein set forth, as, in some cases, it may be necessary to vary their proportions. * * * I claim the use or employment of the ingredients specified, when combined to form a composition for the manufacture of printers inking-rollers."

The reissue of August 3, 1869, omits all reference to the use of the lime, the ammonia, the borax, and the oil, in making the improved composition, and specifies the following approximate proportions of the remaining ingredients, viz.: \$Glue, 15 pounds; glycerine, 30 pounds; sugar, or other analogous crystallizable saccharine matter, 7 pounds." The claim is in these words: "Combining glue, glycerine, and sugar, or any other analogous saccharine matter, to form a new and useful combination of matter for various purposes."

The defendants, in their answer to the bill, admitted the use of glue, glycerine, and sugar, in varying proportions, in the manufacture of inking-rollers, but denied that they had used these ingredients In proportions or in a mode conforming to those specified in complainants patent, averring that the compositions made and sold by them were substantially and materially different from those described and claimed in the patent, and were "in no wise a violation or infringement of any right or privilege validly secured to or vested in" the complainants. It was insisted by the complainants that this apparent denial of infringement was not direct and unequivocal; that the claim of the patent was to be construed broadly, irrespective of the proportions in which the ingredients were used, and, therefore, that the answer was, in fact, an admission of infringement. No direct proofs of infringement were offered. On the other hand, it was urged by the defendants that the patent should be interpreted by the formula stated in the specification, and not by the technical claim, and that, with this construction, the answer constituted a full and sufficient denial of the infringement charged.

Horace Binney, 3d, and George Harding, for complainants.

Charles Howson and Furman Sheppard, for defendants.

MCKENNAN, Circuit Judge. The respondents are charged with the infringement of reissued letters patent No. 3576, dated August 3, 1869, and No. 2805, dated November 26, 1867, for new and useful compositions of matter. The original of the first of these reissues, No. 41887, was issued March 8, 1864, and was surrendered and reissued September 27, 1864, in two divisions, Nos. 1771 and 1772. No. 1772 was again surrendered and reissued February 28, 1865, which was also surrendered and reissued in its present form. No. 2805 is a reissue of No. 43192, dated June 21, 1864.

The respondents opposed a decree in favor of the complainants upon several grounds, involving the validity of the reissued patents and the novelty and utility of the alleged invention; but, in view of the state of the proofs, I do not consider it necessary or proper to consider them. Irrespective of these grounds the case must be decided against the complainants. Whatever may be the merits of their inventions, however defensible their title, they have failed to prove that the respondents are infringers.

The claim of 2805, as limited by a disclaimer of the patentees, is for a composition for printing purposes, combining glue, glycerine, and molasses. The bill alleges that the respondents have made, used, or sold a composition embodying these ingredients; but this,

FRANCIS et al. v. MELLOR et al.

in the words of the interrogatory of the bill, the respondents deny. No proof is produced by the complainants of the truth of their averment, and this patent, therefore, must be put out of the case.

The claim of 3576 is for "combining glue, glycerine, and sugar, or any other analogous saccharine matter, to form a new and useful composition of matter for various purposes." With the infringement of this claim, the respondents are charged, and they answer "that they have for about years been engaged, in the city of Philadelphia, in the manufacture of composition for printers' inking-rollers, said composition containing, with other ingredients, the common and for many, the last twelve, years past, well known ingredients for such purpose, glue, glycerine, and sugar, employed in varying proportions, but in no case in proportions or in mode conforming to those specified in the said plaintiffs' said respective letters patent; and defendants further aver that the said compositions so made and sold by them were and are substantially and materially different from the compositions described and claimed in said plaintiffs' said respective letters patent." This answer is treated by the complainants as an admission of infringement, and no proof has, therefore, been taken in relation to it.

That the complainants have succeeded in producing a valuable composition, adapted to various useful purposes, is beyond dispute; but whether they are justified in treating the respondents' answer as a confession that they have made and used it, depends, necessarily, upon the construction of the patent.

Patents are to be construed liberally, so as to sustain and not destroy the right of the inventor. Hence the whole of the specification may and should be looked at, to learn from the description of the invention not only how to make it, but to ascertain what it really is. By the requirements of the statute, the description must be in full, clear, and exact terms; and it is, therefore, an authorized guide to an accurate comprehension of what the patentee meant to claim as his invention. It is not only where the specification is expressly referred to that the claim is to be construed in connection with it; but, as a general rule, the explanations contained in it are to be taken as the inventor's own interpreter of the meaning of his claim, and of the essential qualities of the invention protected by his patent. Turrill v. Bailroad Co., 1 Wall. [68 U. S.] 511;

Curt Pat §§ 453, 454.

The claim in this case is for combining glue, glycerine, and sugar, or any other analogous saccharine matter, to form a composition for various purposes. In the body of the specification, the proportions in which the ingredients are to be combined are given, approximately, thus: "Glue, 15 pounds; glycerine, 30 pounds; sugar or other analogous crystallizable matter, 7 pounds."

But it is stated that "it is not intended to confine the patent to the use of the ingredients specified, in the proportions specified, as those proportions may, in some cases, be advantageously varied."

It is plain that the patent is not for the mode or process of making the composition. It is for a composition embodying glue, glycerine, and sugar; but is it broadly for a substance containing these Ingredients without regard to the proportions in which they are combined, or is it for a substance produced by their conjunction in substantial or approximate accordance with the formulas given in the specification?

If the claim is to be construed in its broadest significance, it is difficult to see how this reissued patent can be sustained. It is the third reissue of a patent whose claim is for the use or employment of glue, glycerine, castor-oil, or any fixed oil, ammonia, borax, and sugar, when combined to form a composition for the manufacture of printers' inking-rollers. Now, if the composition claimed in the reissue is to be treated with reference exclusively to its constituent parts, it is not identical with the composition for which the original patent was granted. A compound of glue, glycerine, and sugar is not physically the same as a compound consisting of these ingredients, with a fixed oil, ammonia, and borax added to them. They can only be regarded as the same in another sense, as possessing like special and distinguishing properties and like adaptability to the uses for which they are designed. While characteristic resemblance is preserved, they may, perhaps, be considered as identical within the meaning of the patent law, although one of them may not contain some of the constituents of the other, which are not necessary to impart to it its peculiar attributes.

The patent, however, should be so construed as not to avoid it. That conclusion can be averted by interpreting it as claiming a composition of matter distinguished by new and useful qualities, which are the product of the conjunction of certain elements in prescribed relative proportions.

It is apparent that the complainants have produced a substance of great practical excellence, possessing peculiar and valuable properties; and that these constitute its patentable merit. The complainants can not successfully claim to be the first to compound glue, glycerine, and sugar; but they may claim to have discovered that these elements may be combined in such proportions as to yield a new product. Charles and Nelson Goodyear conferred inestimable benefit upon the world by the production of substances respective-

FRANCIS et al. v. MELLOR et al.

ly known as hard and soft rubber. They were not the first to combine the constituents of these substances, but both were treated as original inventors, although their inventions were the product of a combination of the same elements, native India rubber and sulphur. But the proportions in which these elements were combined were different, and the result was a product possessing distinct properties, and applicable to different uses, and so they were each regarded as patentable substances.

The distinctiveness of the complainants' invention must in like manner be determined by its inherently new and useful attributes. It is described as uniting elasticity, firmness, "suction," freedom from the influence of atmospheric changes, susceptibility of recasting, and therefore of indefinite use; and that thereby it is distinguishable from other compositions used for like purposes. That these properties are due to an empirical combination of glue, glycerine, and sugar can not be maintained. They are the product as well of the graduated proportions as of the mechanical union of these ingredients. Glycerine must be used in excess of either of the other ingredients, or the compound will lack some of its most valuable qualities. And it may be said of the other ingredients that they must be employed in proper relative proportions to secure the characteristic merits of the product These are obvious deductions from the testimony of the complainant, Francis.

As the proper adjustment of proportions, then, is essential to the efficiency of the invention, it is a reasonable construction of the patent to expound it as claiming substantial conformity to the specific proportions of glue, glycerine, and sugar, as well as their conjoint use, in producing the described result. Exact conformity to these proportions is not required, because they are stated as approximate, and the right is claimed to vary them. But this right is not unlimited. It can only extend to any adjustment of proportions which will result in the production of a substance possessing the peculiar properties attributed to the substance described in the patent Substantial identity of result is the test of substantial conformity to the mode of combination prescribed in the specification.

The respondents deny that in making the compounds used by them they have conformed to the proportions or adopted the mode specified in the patent; and they aver that their compositions are substantially and materially different from that described and claimed by the complainants. In view of the construction given to the patent, this is not an admission of infringement, but a denial that either in the proportions or mode

of combination observed, or the result produced, the compositions made and used by them are the same as the compositions claimed by the complainants. This denial imposed upon the complainants the burden of proving the fact of infringement; but as they have furnished no proof of it, they have failed to sustain their bill, and it must therefore be dismissed, with costs.

Decreed accordingly.

NOTE [from 1 O. G. 48]. In connection with the above case there was tried the suit of Francis and Loutrel v. Mahn, upon an alleged infringement of the reissued patent No. 2,805. The invention covered by this patent and the appended disclaimer is described as consisting in "combining glue, glycerine, and molasses to form a composition for printing purposes," and certain proportions are stated as those which are "found to be advantageous, and which may be generally adopted," the claim being for "a composition, made substantially as described, for printing purposes." The denial of infringement was in substantially the same terms as in the above suit. The case turned upon the interpretation of the patent and the sufficiency of the answer, the questions arising in the same way as before. The bill was dismissed.

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