

RUMFORD CHEMICAL WORKS v. HECKER.

{2 Ban. & A. 351;¹ 10 O. G. 289.}

Circuit Court, D. New Jersey.

June, 1876.

PATENTS—FINAL DECREE—EFFECT OF DECISION
OF CO-ORDINATE COURT—BAKING
POWDER—CHEMICAL EQUIVALENTS.

1. The complainant brought a suit, in another district, against the defendant, founded upon the same patent, and the court in that suit declared three of the claims void for want of novelty, but sustained the fourth claim and entered an interlocutory decree referring the case to the master to take an account: *Held*, that as the decree was not final, it did not make the question of the novelty of the claims *res adjudicata*.

{Cited in *Harmon v. Struthers*, 48 Fed. 261.}

2. Although an interlocutory decree entered in another suit between the same parties, under the same patent, does not conclude them, it does not follow that the controversy between the litigants remains open as it would have remained if there had been no previous adjudication.

3. The decisions of a co-ordinate court, upon the same subject-matter should, in comity, be followed, where there does not appear to be new or additional or contradictory evidence, Which impels the court, in the second hearing, to a different result.

{Cited in *Hancock Inspirator Co. v. Regester*, 35 Fed. 63:
Brown Manuf'g Co. v. Mast, 53 Fed. 582.}

4. Authorities relating to the custom adopted by the judges, of following the rulings of each other upon the same point, noticed.

5. Authorities upon the distinction between chemical and mechanical equivalents noticed.

6. A claim for "the use of phosphoric acid or acid phosphates when employed with alkaline carbonates as a substitute for ferment or leaven in the preparation of farinaceous food," is infringed by the use of acid phosphates and bicarbonate of soda mixed with flour, although the combination when at rest or unexcited is not bread, and requires the addition of water and heat to produce a chemical action which will

set free the carbonic acid, and convert the flour into risen dough ready for the oven.

7. The sale by the defendant of the constituents of the complainant's patent with the intent and further purpose of enabling the buyer to turn the compound into bread, by the application of water and heat, places him in the attitude of an infringer.

[Cited in *Alabastine Co. v. Payne*, 27 Fed. 560; *Hatch v. Hall*, 30 Fed. 614; *Boyd v. Cherry*, 50 Fed. 282.]

8. The fourth claim of reissued patent No. 2,979, granted to the Rumford Chemical Works, assignee of V. Horsford, June 9, 1868, for "pulverulent acid for use in the preparation of soda powders, farinaceous food, and for other purposes," *held* valid.

{This was a bill in equity by the Rumford Chemical Works against George V. Hecker for the infringement of letters patent No. 14,722, granted to E. N. Horsford, April 22, 1856, reissued June 9, 1868, No. 2,979.}

C. A. Seward, for complainant.

Keller & Blake, for defendant.

NIXON, District Judge. The questions, raised by the pleadings in this case, are within a narrower range than the arguments of counsel would seem to indicate. Some matters have been settled by previous adjudication between the parties.

The complainant is a corporation, organized under the laws of the state of Rhode Island, and claims to own, by assignment, certain letters patent, No. 14,722, originally granted to Eben N. Horsford, April 22, 1856, for an "improvement in preparing phosphoric acid as a substitute for other solid acids."

After the second reissue of said patent, June 9, 1868 [No. 2,979], the complainant filed a bill, against this defendant, in the Southern district of New York, alleging an infringement of said reissue, in which a decree was entered, March 20, 1873, the court holding the first, second and third claims of the said patent, as reissued, void, but affirming the validity of the fourth claim, adjudging the defendant to have infringed the same, and ordering an account of the profits in

consequence thereof. Whether such infringement had taken place solely by a use of what was named in the fourth claim, irrespective of any selling by the defendant, of the mixture claimed in the third claim, or whether it had taken place also through sales by the defendant, of such mixture, in connection with a use of it by the vendees, under the fourth claim, was treated as a question not then to be decided, but to arise in evidence, to be given on the accounting, in regard to the facts attending the sales, and the use made by the vendees, of the mixture sold.

The prayer of the bill in the above case was for an account of the profits only—it having been filed before the passage of the patent act of July 8, 1870, in the 55th section of which (16 Stat 206) it is enacted that “the court shall have power, upon bill in equity filed by any party aggrieved, to grant injunctions according to the course and principles of courts of equity, to prevent the violation of any right secured by patent, on such terms as the court may deem reasonable; and upon a decree being rendered in any such case for an infringement, the complainant shall be entitled to recover, in addition to the profits to be accounted for by the defendant, the damages the complainant has sustained thereby, and the court shall assess the same, or cause the same to be assessed, under its direction, and the court shall have the same powers to increase the same in its discretion, that are given by the act to increase 1343 the damages found by verdicts in actions upon the case.”

The bill in this case, filed since the enactment of the above section, sets up the decree in the first-mentioned suit, and alleges that it was to recover profits only, and prays (1) for the damages which the complainant has sustained, in consequence of the infringement of the reissued patent, by the defendant, prior to the 20th day of March, 1873, and also (2) for the damages, and gains and profits, subsequent to that date, on the ground,

that, since then, the defendant had substituted a new acid for the one on which the recovery was had, and which new acid was not embraced within the former decree.

The answer of the defendant admits the decree in the circuit court of the United States for the Southern district of New York, in the suit between the same parties, and that the court sustained the validity of the fourth claim of the complainant's reissue; but alleges, that, by the same decree, it became *res adjudicata* between the complainant and defendant; that the first, second and third claims of the patent were invalid and void, and that the complainant ought not to be heard, on any allegations in this court, that said claims are good and valid in law. It further avers, that the defendant should not be held to answer, in this suit, for any of the matters alleged against him prior to the decree. It admits, that, after the entering of the said decree, the defendant ceased to manufacture and use acid, prepared in the manner in which the acid, which was the subject of the former bill, was prepared; and, that he has since made and used an acid, but whether it is substantially the same as, or an equivalent for, the acid which was the subject of the former suit, he is ignorant, and cannot answer; and avers that it would require a scientific research to enable him to answer, touching the nature and character of said acid. It further denies the infringement of the complainant's patent, by the defendant, and also that Horsford is the original and first inventor of the alleged invention.

Issue was duly joined, the proofs taken, and the case set down for hearing at the September term of 1874. But before the argument, to wit, on the 12th day of September, an application was made to the court, on behalf of the defendant, for leave to file a supplemental answer, and to open the proofs for further evidence. The motion was based on the existence of certain alleged facts, which had come to

the knowledge of the defendant, and which, either did not exist, or were not within his personal cognizance, at the time of filing his answer, or when the testimony was closed. These facts were: (1) That since the filing of said answer, the defendant had been ordered by the circuit court of the United States for the Southern district of New York, to answer interrogatories, which he had before refused to answer before the master, on the accounting in the New York suit, and which fully disclosed the amount and the extent of his business, in the use of all acids in the manufacture and sale of self-raising flour, from the date of the reissued patent, to June 13, 1874; and, (2) that the acid which the defendant used, since the 20th of March, 1873, was a dry, fine, homogeneous powder, containing as an active agent, phosphoric acid, in an available condition, to be used as a substitute for tartaric acid, in decomposing an alkaline carbonate in making bread without the use of ferment, and is, in fact, the same acid as that which was held by the court, in the said suit pending in the circuit court of the United States for the Southern district of New York, to be the acid, the manufacture and use of which is described and claimed in the complainant's patent.

After argument I refused the motion, being satisfied in regard to the first stated fact, that no evil or injustice could arise to the defendant as, at most, it simply involved the question of double accounting, which was at all times under the control of the court; and in regard to the second, that, if the allegation was material, it came too late, as by the use of the most ordinary diligence, he could have ascertained it before the answer was put in.

After the hearing, and while the cause was sub judice, another application was made by the defendant, to have the case opened, and a supplemental answer filed, alleging, in substance, (1) that all the self-raising flour sold by the defendant, as charged in the bill

of complaint, was by him purchased of Hecker & Brother, in the city of New York, and that the said Hecker & Brother had accounted to the complainant herein therefor, in the suit of the Rumford Chemical Works against Hecker & Brother, then pending in the circuit court of the United States for the Southern district of New York; and, (2) that the invention described in the letters patent of the complainant, was described in "The Elements of Experimental Chemistry," by William Henry, M. D., P. B. S., eleventh edition in two volumes, published by Robert Desilver, 111 Walnut St., Philadelphia, 1831. Volume 1, pp. 323, 324, c. 7, § 5.

This motion was also refused, for the reasons assigned on the previous application, and for the additional reason, that the amendment secondly proposed, was in the nature of cumulative evidence on the issue of want of novelty in the complainant's patent, and had reference only to the first and second claims of said patent which, according to the view that the court was disposed to take of the ease, were not involved in the present controversy.

The complainant's reissue, the infringement of which is alleged, has reference to a chemical composition or product, useful in the making of bread—a matter which closely touches the comfort and well-being of the 1344 whole family of man. Prof. Horsford was familiar with the methods in use when he obtained his original patent. He knew of yeast or leaven; of cream tartar, saleratus and tartaric acid, and his object was to find some other compound, which, being mixed with flour, would produce the necessary porosity or lightness, and at the same time would increase the healthfulness of the bread, and diminish the cost of its production. A reference to the different reissues will show, that at the start he had not developed in his own mind, nor did he fully

comprehend, all the beneficial results which were to flow from his alleged invention.

The original patent, No. 14,722, "for improvement in preparing phosphoric acid as a substitute for other solid acids," was granted April 22d, 1856. In the schedule he alleges, that he has invented a new and improved preparation or substance, being a substitute for a pulverulent acid, for use in the manufacture of soda powders and other similar compounds, where a dry acid is required. After stating the proportions of the ingredients and the processes of the manufacture, he proceeds to say, that "the object is to obtain available phosphoric acid in such form, that it may be intimately mixed with dry alkaline carbonates or other sensitive chemical compounds without decomposing them, or entering into combination with them, except upon the addition of moisture on the application of artificial heat. This requires that the acid, or acid phosphates be mixed with a neutral diluting agent, as flour or starch, to increase the extent of surface, that the action may be prompt when moisture or heat is applied, and at the same time, to more or less invest the particles of acids, to prevent them from action or contact, while dry. * * * As a dry, brittle powder, the article has the advantages of a pulverulent acid; may be handled, weighed, stirred, etc., as tartaric acid or cream tartar, and, as a substitute for these and a variety of similar pulverulent acids and acid salts, has many uses in manufactures. It may, among other uses, be mixed with dry alkaline carbonates (carbonate of potassa or carbonate of soda), and remain in this state without evolution of carbonic acid until moistened or heated, thus making it a substitute for cream tartar and tartaric acid, in the preparation of yeast powder or baking powder."

His sole claim is "for pulverulent phosphoric acid, for neutralizing alkaline bases and producing carbonic acid, at will, from a mixture of said pulverulent acid

with alkaline carbonates, upon the addition of moisture or heat, or both.”

On the 7th of May, 1867, the complainant, as the assignee of Horsford, surrendered the patent and obtained reissue No. 2,597, for an “improvement in the manufacture of phosphoric acid and phosphates for use in the preparation of food, and for other purposes.” In this reissue he makes the following addition to the schedule of the original patent: “The acidified mixture, prepared in accordance with the foregoing specification, is called by the inventor “Pulverulent Phosphoric Acid.” The acid agent, which this preparation places in available condition, is phosphoric acid, as tartaric acid is the available acid agent in cream tartar, and this is used as a substitute for tartaric acid or cream tartar, to decompose alkaline carbonates in the well-known process of making bread, cake, etc., without the use of ferment or leaven. It may be well to add, that the substance produced and used, in substantial accordance with this invention, yields phosphates of lime and the alkalies, which are important constituents of human food, and which are, in a great degree, removed from the flour in the process of bolting, and thus the nutritious qualities of which it has been deprived are restored to the flour, and in general terms, the various forms of farinaceous food are enriched with phosphates at the same time and with the same agents, that are provided for a substitute for ferment or leaven:” and then claims as follows: First, the mixing, in the preparation of farinaceous food, with flour, of a powder or powders, such as described, consisting of ingredients of which phosphoric acid or acid phosphates and alkaline carbonates are the active agents, for the purpose of liberating carbonic acid, as described, when subjected to moisture, or heat or both. Second, the use of phosphoric acid or acid phosphates when employed

with alkaline carbonates, as a substitute for ferment or leaven in the preparation of farinaceous food.

Subsequently, another surrender was made, and a new reissue, No. 2,979, was obtained June 9, 1868, for an “improvement in pulverulent acid, for use in the preparation of soda powders, farinaceous food, and for other purposes.”

He therein states, as an addition to the former schedule and specifications: “I am aware that acid phosphates have been used as fertilizers, but, because of the method pursued in their manufacture, their coarseness, dark color and offensive impurities, they were totally unfit to be used in the preparation of food. I am also aware that acid phosphates and phosphoric acid, in a liquid or more or less viscid condition, have been prepared in the laboratory of the chemist; but neither of these forms of phosphoric acid or acid phosphates possesses the properties essential to the purpose for which I design to employ them. The body which I have invented and above described, is a form of acid phosphate of lime or of mixed acid phosphate of lime and phosphoric acid, in which the phosphoric acid is the active and valuable constituent, free from the objectionable qualities of the above-mentioned bodies.”

He further alleges, that his invention is a dry, fine, white, homogeneous powder, unobjectionable on account of odor, taste or composition, 1345 and that these traits—together with the restoration to the flour of the phosphates—which are, to a great degree, lost in removing the bran in the process of bolting—are the essential, requisites in any compound for obtaining the best results in the practical preparation of self-raising flour. He then claims: 1. As a new manufacture, the above-described pulverulent acid. 2. The manufacture of the above-described pulverulent phosphoric acid, so that it may be applied in the manner and for the purposes above described. 3. The mixing, in the

preparation of farinaceous food, with flour, of a powder or powders such as described, consisting of ingredients of which phosphoric acid or acid phosphates and alkaline carbonates are the active agents, for the purpose of liberating carbonic acid, as described, when subjected to moisture, or heat or both. 4. The use of phosphoric acid or acid phosphates, when employed with alkaline carbonates, as a substitute for ferment or leaven in the preparation of farinaceous food.

The first of these claims is for the acid; the second, for the process by which it is produced; the third, for the mixing of the acid with flour, thereby forming a marketable commodity, having all the preliminary steps toward breadmaking completed, except the addition of water, and baking; and, the fourth, for the use of the combined materials in the making of bread. In their construction, it is insisted by the counsel for the defendant, that the complainant is estopped by the decree of the circuit court for the Southern district of New York, from any inquiry into the validity of the first, second and third claims. That suit was, substantially, between the same parties, and involved the same subject-matter, but the third essential requisite seems to be wanting to make the question *res adjudicata* between the parties, to wit, a final decree. The matters involved in the controversy were not fully settled. Not only was an account ordered to be taken, but the learned judge expressly reserved for future consideration the questions of costs and the compensation to be allowed to the master. The supreme court has repeatedly held, that decrees like the one under consideration, were not final, but interlocutory. *Barnard v. Gibson*, 7 How. [48 U. S.] 630; *Beebe v. Russell*. 19 How. [60 U. S.] 285; *Humiston v. Stainthorp*, 2 Wall. [69 U. S.] 106. In *Beebe v. Russell*, *supra*, Mr. Justice Swayne, in delivering the opinion of the court, said: "A decree is

understood to be interlocutory, whenever an inquiry as to matter of law or fact is directed, preparatory to a final decision. * * * When a decree finally decides and disposes of the whole merits of the cause, and reserves no further questions or directions for the future judgment of the court, so that it will not be necessary to bring the cause again before the court for its final decision, it is a final decree.”

But, although there has been no final decree rendered in the cause, that concludes the parties in this court, it does not follow that the controversy between the litigants remains open, as it would have remained, if there had been no adjudication there. That court is one of co-ordinate jurisdiction. The question of the novelty of the claims of the complainant's reissue was submitted to its consideration, and after the aid of full and exhaustive argument, by very able counsel, the learned judge held that the first and second claims of the patent were anticipated by Lawes, and the third by Fowler, and that the three were void for want of novelty.

What effect should such a decision have upon the action of this court? Some rule of comity must be observed, especially in regard to the construction of patents, which are in the nature of franchises, granted by the government to the citizen, the scope and limits of which are first examinable in the circuit courts, and afterward, if need be, by a common appellate tribunal. I have long been of the opinion, that the interests of the public will be best conserved, and the respect and authority of the courts best maintained, by following in all instances the decisions of the courts upon the same subject-matter of controversy, when, after a fair comparison of the testimony in the two cases, there does not appear to be new, or additional or contradictory evidence which impels the court in the second hearing, to a different result. It has long been the custom of the justices of the supreme court,

at the circuits, to adopt the rulings of each other upon the same point, even where their own judgment would probably have been different, if the question had been one of first impression. In arguing the case of *Washburn v. Gould* [Case No. 17,214], the counsel for plaintiffs called Mr. Justice Story's attention to the opinion of Justice McLean in *Brooks v. Bicknell* [Id. 1,944], that under the law, as it then stood, a patent could be renewed by the administrator of a deceased patentee, whereupon that learned judge interposed: "The rule of comity always observed by justices of the supreme court, in cases which admitted of being carried before the whole court, was to conform to the opinions of each other, if any had been given. Such decisions amounted to authority, which, though not conclusive, were operative whenever the question should be carried up, and, therefore, although his mind was not without much difficulty on this point, he should rule for the plaintiffs, in conformity with the opinion of Mr. Justice McLean."

Observing the same rule of comity in the present case, I adopt the construction given by Judge Blatchford to the several claims of this reissue, and hold (1) that the fourth claim is valid, and (2) that the question of the novelty of the first, second and third claims is not an open one here, at the present stage of the litigation between these parties. I do this somewhat reluctantly as to 1346 the third claim, because it seems to me, that the learned judge has not discriminated with his usual accuracy between the use of chemical and mechanical equivalents; but has assumed, that the same rule obtains in the one case as in the other. He says that the acid phosphate of Horsford is a mere equivalent for the tartaric acid of Fowler, as much so as a screw or lever is a mechanical equivalent for a pulley. This is doubtless true, unless new results are produced by the substitution of the new acid; but, since the leading case of *Crane v. Price*, 1 *Webst. Pat.*

Cas. 409, it has not been considered safe to invoke the ordinary doctrine of equivalents, in construing patents for new manufactures or compositions of matter. The supreme court in *Hicks v. Kelsey*, 18 Wali. [85 U. S.] 674, seems to recognize the authority and principles of that case, by observing: "In *Crane v. Price*, it is true, the use of anthracite instead of bituminous coal with the hot-blast in smelting iron ore, was held to be a good invention, inasmuch as it produced a better article of iron at a less expense. But that was a process of manufacture, and in such processes a different article replacing another article in the combination, often produces different results. The latter case is more analogous to the cases of composition of matter than it is to those of machinery; and in compositions of matter a different ingredient changes the identity of the compound, whereas an iron bar in place of a wooden one, and subserving the same purpose, does not change the identity of a machine."

But I am not disposed to dwell upon this, as I incline to the opinion, that a fair construction of the fourth claim of the complainant's patent, renders the third claim of little practical value.

I come next to the question of infringement, and whether the proofs sustain this issue depends upon the construction of the fourth claim of the complainant's patent. The evidence is, that the defendant manufactured and sold a self-raising flour. The application of usual chemical tests to the compound, revealed the fact that the materials selected to be mixed with the flour, were the bi-carbonate of soda and the acid phosphate, which were substantially produced by Lawes in the manufacture of manure, but which, according to the testimony were first applied by Prof. Horsford in the making of bread. It is true, that this combination when at rest or unexcited, is not bread, and that it requires the addition of water and heat to produce a chemical action, which will set

free the carbonic acid, and convert the flour into risen dough ready for the oven.

It is further shown, that the defendant advertised and sold large quantities of self-raising flour, thus prepared, and claimed, in his communications to the community, and in order to arrest the public attention, that his "self-raising flour is an invaluable article for producing in a few minutes, by the addition of cold water only, without yeast or salt, the most nutritious and wholesome bread." And he recognized Prof. Horsford as the inventor of the improved ingredients for producing the self-raising property imparted to the flour, not only by paying to the owner of the patent, from 1862 to 1868, large sums of money for the use of these ingredients, but by referring to him, from time to time, in his publications and advertisements, as one of our most eminent chemists, to whom the public was indebted for the invaluable invention or discovery.

Does such a preparation and sale, for the purpose of being used by the purchaser, in making of bread, infringe the fourth claim, which is defined by the inventor to be, "the use of phosphoric acid or acid phosphates, when employed with alkaline carbonates, as a substitute for ferment or leaven in the preparation of farinaceous food"?

I think the proof of what the defendant did, to wit, use the constituents of the complainant's patent with the intent and further purpose of enabling the buyer to turn the compound into bread, by the application of water and heat, places him in the attitude of an infringer; that it establishes, at least, a prima facie case of infringement, and throws upon the defendant the burden of showing, that the self-raising flour thus prepared by him, was not, in fact, used for breadmaking. Such antecedent steps taken by him in mixing a compound to be used in the making of bread, with such avowals of the purpose and use for which it was made, and followed by large sales

by the defendant, bring the case within the principle of *Wallace v. Holmes* [Case No. 17,100] and of *Renwick v. Pond* [Id. 11,702]; and there must be a decree against the defendant for the infringement of the fourth claim of the complainant's patent, and for an injunction and an account.

I am in doubt, whether the decree should also embrace the damages from the date of the reissue to the 20th of March, 1873—the period of time covered by the decree in New York, in which profits only were prayed for and recovered. I incline to the opinion, that a fair construction of the 55th section of the act of 1870 (16 Stat. 206) only allows a decree for the damages arising from the specific infringement, alleged in the bill of complaint. If, however, the counsel of the complainant desire to be heard further upon that point, the solicitor may so prepare the decree, that the master shall be instructed to take a separate account for damages, if any, prior to March 20th, 1873, and I will hear the parties on exceptions to the master's report.

[For other cases involving this patent, see note to Case No. 12,135.]

¹ [Reported by Hubert A. Banning, Esq., and Henry Arden, Esq., and here reprinted by permission.]

This volume of American Law was transcribed for use
on the Internet

through a contribution from [Google](#). 