

It has been repeatedly held that, if an inventor describes a process or mode of operation which will produce the improved results, it is immaterial whether or not the inventor understood the scientific principle or philosophy of its working. On the whole case, I am of opinion that the use of salt exposed in a frigerating chamber, to improve the preserving qualities of the air of the chamber, was known and practiced before the invention claimed by Haffcke; and that, therefore, the claims of his patent now in controversy are invalid, for want of patentable novelty.

MARYLAND HOMINY & CORALLINE CO. OF BALTIMORE CITY v. DORR.

(Circuit Court, D. Maryland. March 23, 1891.)

1. PATENTS FOR INVENTIONS—INFRINGEMENT—CORALLINE.

Claim 1 of patent No. 341,355, May 4, 1886, to Solter, Robbins & Sheppard, for process of manufacturing coralline from corn, held to be valid, and to have been infringed.

2. SAME—EXTENT OF CLAIM.

Claim 2 of the same patent for the product held not to be sustainable.

(Syllabus by the Court.)

In Equity. Infringement of patent.

John C. Rose and T. J. Johnson, for complainant.

Price & Stewart, for defendant.

MORRIS, J. The complainant corporation is the owner of patent No. 341,355, granted May 4, 1886, to Solter, Robbins & Sheppard, for "Prepared cereals, and mode of production." The claims are as follows:

"(1) The hereinbefore described process of heating cereals in the form of hominy or samp, consisting, first, in cooking the product in a moistened condition to a point at which it still retains the granular form, then passing the same, in its moist condition, through a grinding-mill, and finally drying it substantially as described.

"(2) The hereinbefore described product from Indian corn, consisting of separate grains, in a stringy or coralline form, and cooked and dried condition, substantially as described."

In their specifications the patentees described their method of cooking the broken grains of samp or hominy, the object being to reduce them to a softened but tough condition, each granule separate from the others, and retaining its form, and not reduced to a mush. They then explain that they have discovered that these tough, softened granules, cooked and softened as described by them, if put through a mill of meal or grooved stones, will come out, not as a meal, but each granule as a distinct piece, of a stringy or coralline form, which is rough, light, and porous, and easily dissolved, and which keeps well if dry, and is useful for various purposes, particularly for brewing. The specifications state that the grains of samp or hominy, prior to this discovery, had been softened

in substantially the same manner, and then passed through warm rollers, which pressed the granules into flakes, and dried them so that they came out reduced to dry, hard flakes; and the only novelty they claim is the discovery that the granules, if properly prepared after their method, can be so passed through a grooved mill that they will come out as light, porous, spongy, coralline-shaped pieces, each piece corresponding in bulk to a granule of the hulled corn, and the product having qualities which give it a distinctive value.

So far as the testimony discloses, the result obtained by the patentees was new. Many patents for the treatment of Indian corn and other cereals, and their preparation for use, have been put in evidence, but none of them of date prior to the complainant's patent describe a production similar to the coralline of this patent. Most of them produce some form of meal, others flattened disks or flakes, others interlaced fibers, formed by forcing the material through a perforated plate, and others a product formed of a pasty mass run into molds. So far as the testimony discloses, it was the discovery of Solter and Robbins that hulled and broken corn, usually known as "samp" or "hominy," could be so cooked and passed through a mill that it would come out neither as a paste nor as a meal, but in elongated curled granules, having certain distinctive qualities, which make the product useful and commercially profitable. Immediately upon their discovery, Solter and Robbins, together with Sheppard, to whom they had assigned an interest in the patent, proceeded to manufacture coralline, and have ever since had for it a considerable sale. Their first experiments had been with an iron disk mill, which they found discolored the product. They soon substituted a burr mill, revolving at a high speed of about 1,050 revolutions a minute. With this mill it was found that the friction caused so great a heat that the warm, wet material which went into the hopper came out of the mill as coralline, accompanied by steam, and so hot that it could not at once be held in the closed hand, and in such a state that mere cooling, exposed to the air, more especially as it was found that it had to be fanned or winnowed to get rid of the fine mealy portions, was quite sufficient to dry it. They therefore dispensed with the steam-drier, which had been necessary when they used the iron mill. Some time in the summer of 1889 the defendant, having employed Sheppard, who had sold out his interest in the complainants' business and patent, and having employed others who had been in the coralline mill of complainants, began the manufacture of an article he called "Barlyne." This is the same product as coralline, manufactured precisely as it is manufactured by the complainants, except that there is sometimes added to the hominy a small percentage of rye, wheat, and barley, but not always, as they sometimes use pure corn. The addition of this very small quantity of other grain is shown not to affect the product in any perceptible way, and other testimony showing an intention to use the complainant's process, to employ their workmen familiar with it, and to compete with the same customers, produces the conviction that the addition of the other grains is not a substantial difference. The respondent relies very earn-

estly upon the defense that he does not use one step in the complainants' process, viz., drying the coralline after it leaves the curling mill. It is very obvious that when the patentees were making the product with the iron mill, which they were using at the time of the application for a patent, they were obliged to dry it by artificially applied heat. They say in the specifications of their patent: "As stated, the material is dried after it has been through the mill, and this is done preferably by steam heat, but may be done in any well-known way." With respect to the mill, they say: "The mill which we pass the material through may be an ordinary metal mill, or a mill having grooved stones, such as those used to grind ordinary grains." It was an essential of the process that the hulled corn should be sufficiently moist, sufficiently softened, and yet sufficiently tough, or else it would not curl, but would grind into meal; and it was essential that the curled product should be dried, or else it would mat together, and would not be marketable; and it was to be expected that experience would teach the competent miller how best to apply the process. It was found by the complainants, as soon as they began using the fast-running burr mill, that the heat generated by the friction turned out the product very hot, and with much less moisture than the iron mill. It was not dry, because, if it was dry between the stones, it would grind a wasteful amount of meal, but it was so nearly dry and so hot that exposure to the air dried it. I think this is the fair deduction from the weight of the testimony as to the process actually in use, and I think it gratifies the statement in the specification that the drying may be done in any well-known way. That heat would be generated by the friction of mill-stones is known to millers, and is one of the incidents of grinding that they have to guard against, lest it injure the meal. All that is accomplished is done by the very means pointed out in the Solter and Robbins patent, and by the very machinery pointed out by them. I do not, therefore, think that any step claimed by the patentees as necessary is omitted in the process now employed by them, which is the one afterwards adopted by the respondent.

The point of greatest difficulty raised by the defense is the want of patentability in the patented process. I have considered this difficulty with care. The complainants have in their favor the presumption which their patent gives them. They have in their favor the fact that their process has produced an article which appears from the testimony not to have been intentionally produced before, and which, now that it is known, is of commercial value, and the respondent, because of that commercial value, has set to work to manufacture by the same process. It is true that hulled corn, treated substantially as the complainants' process describes, had been flattened into flakes, and mashed through perforated plates into threads. It is probably true that corn, treated in ways different from complainants' process, has been either intentionally or accidentally curled by running through mill-stones into coralline shapes. But in no patent cited, and in no process testified to by any witness, does it appear that the several steps of hulling, moistening, cooking by

steam, and curling were ever described or put into practice by any one, or that the preparation of Indian corn now known as "coralline," was before produced. Milling and the preparation of cereals are among the oldest arts, but slight changes of process have in recent times resulted in marked improvements and economies, and have been sustained as inventions and patentable discoveries in that art. *Cochrane v. Deener*, 94 U. S. 780. The testimony tends to show that Solter and Robbins experimented with the view of obtaining a specific result, which they had conceived as attainable; that by intelligent experiments they finally hit upon the process which would produce it; that the thing they have produced is new and useful, and is recognized as something not before manufactured. They obtained a patent for their process, and have found a commercial demand for the product. All these facts and presumptions tend to establish the validity of their patent, and to overcome the doubt as to its patentability.

It is also urged against the complainant's patent that the statement therein that the separate grains of hominy remain separate in passing through the mill, and each comes out as a separate piece of coralline, is not a fact. It is claimed that the fact is that the hominy is really ground into a paste, which is curled up in the grooves of the stones, and thrown off in broken pieces of a stringy coralline form. It does not seem to me that this is a matter essential to any step in the process. No one does know just what takes place between the rapidly revolving stones. It does appear to be a fact that the size of the pieces of coralline has some relation to the size of the granules of hominy, and the inference is, that, as the material does not come out either as lumps of paste or as meal, each piece of coralline is the product of a granule of the hominy. But this is not essential to the process or the result. It is not a fraudulent or deceptive statement, or one of importance, so far as the process is concerned. It might, perhaps, be of importance, as affecting the second claim of the patent, which is for the product, and which is described as consisting of separate grains, in a stringy or coralline form, substantially as described. But in my opinion the complainants' product, independently of the process of making it, cannot be supported as for a new composition of matter, or a new substance not before known. Commercially speaking, it may be a new article of manufacture, but it is, after all, only an improved preparation of Indian corn, with the same characteristics and qualities as other similar preparations. It may be less liable to spoil, more porous, more easily soluble; it may unite more readily with the diastase of malt,—but these are not new and peculiar qualities; they are only the same qualities in an improved degree, which are inherent in other preparations of the same substance.

In my judgment, the second claim of the patent is invalid, but the first claim is valid, and the respondent has infringed it.

## ANDERSON v. EILER.

(Circuit Court, W. D. Pennsylvania. June 22, 1891.)

**1. PATENTS FOR INVENTIONS—DESIGNS—ABANDONMENT.**

Under Rev. St. U. S. § 4886, providing that the inventor of an art not in public use or on sale for more than two years before his application, unless it is proved to have been abandoned, may obtain a patent therefor; and section 4920, making a defense to a suit for infringement of a patent, the fact that it has been in public use or on sale for more than two years before application for the patent, or that it has been abandoned to the public; and section 4933, providing that all the regulations and provisions which apply to obtaining or protecting patents for inventions or discoveries shall apply to patents for design,—a design is patentable unless it has been in use or on sale for more than two years, or has been abandoned.

**SAME—SALE OF DESIGN.**

The sale by the inventor of a design of an article bearing his design, before his application for letters patent, to one whom he knows to be a manufacturer of such articles, and to intend to imitate the design, and whose purpose in purchasing he knows to be to obtain a pattern from which to manufacture, is not sufficient to show an abandonment of the invention to the public; but such sale entitles the purchaser to manufacture and sell articles bearing the design, and the purchasers from him to resell the same.

**In Equity.**

*Wm. L. Pierce*, for complainant.

*Levi Bird Duff*, for defendants.

REED, J. The bill in this case alleged infringement by the defendants of design patent No. 19,872, being for a new design for a mantel. To the bill defendants have filed an answer, setting up several defenses, and the case was heard on bill, answer, and testimony. One of the defenses is the claim by defendants that the patent is invalidated by the sale by the plaintiff of mantels of this design and public use of the said design before the date of the granting of the patent, and that therefore there was an abandonment by the plaintiff of his invention. It is conceded that plaintiff commenced the sale of mantels, of the same design as that covered by the patent, as early as April, 1888. Between that time and the granting of the patent he sold mantels of this design to the defendants, and to such others as he could. His application for a patent was filed February 20, 1890, and was granted June 3, 1890. Defendants' counsel contend that sales at any time before the granting of the patent, by the inventor of a design, of articles upon which his design appears, amount to an abandonment of his exclusive rights, and hence his patent is invalid; that the two years' privilege applicable to other classes of patents does not apply to design patents. If defendants' counsel is correct in his latter position, there was such action by the plaintiff in making sales of his mantels, and such public use of the design, as would justify the conclusion that he had abandoned his invention. The sales and the public use were all within the two years prior to the filing of the application, but were such acts as have been held in other cases to justify a presumption of abandonment, when proven to have existed prior to the two-year period. The provisions in the statutes relating to sales and use of the invention, and protecting the inventor