

The third claim is not infringed. The guide-links in respondents' corn-planter are nothing more than mere guides for the true pawl-carrier. They perform no function as pawl-carriers.

The respondents' corn-planter does not contain, as we have seen, the "vibrating pawl-carriers pivoted on diagonally opposite corners of the casting," nor "the reciprocating slide connected to the pawl-carriers below the casting," which are included in the fifth claim. The respondents' slide is above the casting, and rides upon it. It results that the fifth claim is not infringed.

The bill will be dismissed, with costs.

HAFCKE v. CLARK.

(Circuit Court, D. Maryland. March 30, 1891.)

1. PATENTS FOR INVENTIONS—NOVELTY—REFRIGERATORS.

Held, that claim 4 of patent No. 343,369, June 8, 1886, to Charles Haffcke, for the use of an exposed body of salt in a refrigerator, for the purpose of purifying the air of the refrigerator, was void for want of novelty.

2. SAME.

Held, that claim 5 of the same patent, for a perforate hopper to contain a body of salt, in combination with a frigerating chamber, was invalid for want of patentable novelty.

(Syllabus by the Court.)

In Equity. Bill of complaint for infringement of patent.

Price & Stewart, for complainant.

A. I. S. Owens and John H. Thomas, for respondent.

MORRIS, J. The patent in suit was granted to the complainant, Charles Haffcke, June 8, 1886, No. 343,369, for improvement in the art of frigeration. The claims which the defendant is charged with infringing are claims 4, 5, and 6, and are as follows:

"(4) In combination with a frigerating chamber, an exposed body of chloride of sodium, arranged to absorb moisture from the air in the chamber, and to establish in said chamber a saline atmosphere, substantially as and for the purpose specified.

"(5) In combination with a frigerating chamber, a perforate hopper, containing a body of chloride of sodium, arranged to absorb moisture from the air in the chamber, and to establish in the said chamber a saline atmosphere, substantially as and for the purpose specified.

"(6) In a frigerating chamber a perforate hopper, containing chloride of sodium, secured to the wall of the said chamber, substantially as and for the purpose specified."

In his specifications Haffcke thus states the nature and scope of his invention:

"The third part of said invention relates to means for absorbing moisture from the air in the frigerating chamber, and diffusing throughout the said

chamber a saline atmosphere, which has antiseptic qualities, and thereby assists in the preservation of meats placed in the chamber."

He thus describes the apparatus employed by him:

"E is a hopper formed of some perforate material, preferably galvanized woven wire, to contain salt; and it may extend partially or entirely around the chamber, as may be preferred. The salt in the hopper, E, absorbs moisture from the air in the chamber, which air becomes strongly saline, and an effective preservative agent. * * * I am aware that common salt [chloride of sodium] has been combined with ice in a frigerator to increase the cooling effect of the ice by hastening its liquefaction. * * * Further, I am aware that chloride of calcium has been exposed in a frigerating chamber to absorb moisture from the air therein; but this salt will not answer the purpose I have in view, partly owing to its extreme deliquescence, but principally from the reason that it would not diffuse a saline atmosphere in the chamber. Instead of chloride of calcium, I employ chloride of sodium, which I find is sufficiently deliquescent for all practical purposes, and by its use I am enabled to obtain a saline atmosphere in the chamber, which, in itself, is a preserving agent. I disclaim the use of combined ice and salt in a frigerating chamber, as also an exposed body of chloride of calcium."

It is obvious that the essential thing claimed by Haffcke as his patentable contribution to the art of frigeration is the use of an exposed body of salt in the frigerating chamber; and the practical method of exposing the salt to produce the results intended by him is by placing the salt against the walls of the chamber, sustained there by any perforated contrivance, which keeps it in place, and exposes it to the air. In his specifications Haffcke concedes that the use of an exposed body of chloride of calcium in a frigerating chamber was old, and he might well have conceded that the exposing of chloride of sodium was also old. In the English patent to Jolley, No. 3,069, of 1861, the patentee says:

"Also, I claim as new another way of extracting damp, etc. I place anywhere within this safe carbon, lime, salt, sulphuric acid, or any other absorbent which has an affinity or attraction for whatever is required to be absorbed or extracted, to prevent decomposition, for keeping and preserving meat, poultry, and all kinds of provisions," etc.

In the English patent to Lake, No. 3,043, of 1865, dated 24th April, 1866, there is described a method of preserving fruits and other perishable substances in a frigerating chamber, cooled by ice, and in which the moisture is absorbed from the air by well-known absorbents. He says: "The cheapest and best absorbent known to me is the refuse bittern of salt and chemical works." He claims the use of a frigerating chamber "kept dry to any extent desired by waste bittern, or other absorbents, spread on extended surface within." Waste bittern is the brine which remains in salt works after the salt is concentered.

In patent No. 168,833, October 10, 1875, to Ehert, he claims a method of filling an interspace of the walls of the refrigerator with salt, and perforating the zinc lining, and he claims that, through these perforations, the salt lining will have the effect of purifying the air of the chamber.

In patent No. 259,401, June 13, 1882, to Kepler, there is described a complicated set of troughs for the interior of a large refrigerating room,

for the purpose, in part, of holding some suitable deliquescent material, to absorb the moisture from the air, "as it circulates freely around and over the deliquescent in the trough." The patentee says: "The material which I prefer to employ for this purpose is chloride of calcium, for it is easily obtained, and is exceedingly cheap." Salt was, however, in fact, just as well-known an absorbent or deliquescent as chloride of calcium. There can be no doubt, I think, that at the date of Haffcke's patent it was not new to expose salt in a refrigerator in various ways, for the beneficial effect which it had in preserving the contents of the chamber. Whenever it was so exposed it had in some degree the effect which Haffcke claims it has in his refrigerator. If its only effect is to absorb moisture, then it had that effect. If it has also the effect of creating a saline atmosphere, as he claims, then it had that effect also. Haffcke may use more of it, and he may expose a greater surface of it, and he may get better results than others had, but, though greater in degree, they are the same results, obtained in the same way, and involved no new discovery or invention. If there had been any patentable novelty in the mechanical device contrived by Haffcke for exposing the salt in the chamber, such a device might have been the subject of a patent; but it seems clear to me that there is nothing patentable in the contrivance used by Haffcke for holding and exposing the salt, and which appears to be claimed in his fifth and sixth claims. In fact, the perforated hopper is not used by the respondent or by Haffcke himself, but he uses a rack made of wooden slats, it having been found by him that the wooden contrivance was better because it did not corrode. It is strenuously urged in support of the patent that, while the use of salt in a refrigerating chamber, to absorb the moisture arising from the melting of the ice, or from the condensation of vapor arising from the cooling of the air, or from the perishable articles themselves, was old, Haffcke was the first to make known that there was also produced what he calls a "saline atmosphere" by the passing of the currents of air over the exposed surfaces of the salt; and that the improved results obtained from the Haffcke refrigerator can only be accounted for upon the theory that a saline atmosphere is produced, and that it has very valuable antiseptic properties. The fact of the existence of this saline atmosphere, as distinguished from the salt held in solution by vapor, and thus suspended in the air, is a matter by no means clearly established. But if it be true that there exists this antiseptic quality in dry air which has been passed over exposed salt, and that Haffcke was the first to recognize it, still, I cannot see that Haffcke makes use of this discovery in a way not practiced before. Whenever before his alleged discovery salt was used as a deliquescent in a refrigerator, the saline atmosphere must have been produced, and the discovery by Haffcke that the salt had two uses, and produced two effects instead of one, is not a patentable discovery. The knowledge of all the uses and effects of a substance or of a law of nature enables one to use it more intelligently, so as to get with more certainty the best results, but there is nothing patentable in such knowledge, unless it is made use of in some new way.

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