

SMITH AND OTHERS V. MURRAY AND OTHERS.¹*Circuit Court, N. D. Illinois.*

March 22, 1886.

1. PATENTS FOR INVENTIONS—DESCRIPTION OF THE INVENTION.

The specification of letters patent No. 206, 930, of August 13, 1878, to William P. Clotworthy, for a baking powder, described as one of the ingredients “ammoniated potash alum,” but the claim was for “a compound of exsiccated ammonia alum,” etc. The proof showed there was no such article known to commerce or chemistry as “ammoniated potashalum” It was contended that the claim, when standing alone, was a sufficient “description” of the compound to comply with the statute. *Held*, that it was a matter of grave doubt whether the “claim” was to be considered as the “description” required by law, because the statute speaks of the “description and claim,” and the office of the claim is merely to point out what is claimed as the invention.

2. SAME.

But the claim being repugnant to the specification, *held*, that the whole invention must be found in the one or in the other, and that the two, taken together, were so contradictory as to render the patent void for uncertainty.

3. SAME—PATENTABILITY.

It being known to the art that the burning or drying of the alum used as an ingredient of baking powder made it keep better, there was nothing patentable in the discovery that drying the alum so that all the water was expelled would make a baking powder which would keep longer than if a part of the water had not been expelled.

4. SAME—INFRINGEMENT.

As the defendants did not use the entire formula of the patent, but used an additional ingredient producing another result, *held*, that they did not infringe.

In Equity.

Coburn & Thacher, for complainants.

Munday, Evarts & Adcock, for defendants.

BLODGETT, J. This is a bill for an injunction and accounting by reason of the alleged infringement of

letters patent No. 206,930, granted August 13, 1878, to William P. Clotworthy for “an improvement in baking powders.”

In explaining the scope and purpose of his patent, the patentee says in his specifications:

“This invention relates to that class of compounds known as ‘baking powders,’ and used as a substitute for yeast to lighten the various preparations of flour and meal in the processes by which they are transformed by the culinary art into bread, rolls, pancakes, and other articles of food; and it consists in the chemical adjustment of ammoniated potash alum, from which the water of crystallization has been expelled, by exsiccation, with bicarbonate of soda, or other alkaline carbonate, and starch, in such proportions as to retain the carbonic acid gas until the application of heat in the process of baking commences. To prepare the baking powder, take a given quantity of ammoniated potash alum, and burn or calcine the same until the water of crystallization is expelled therefrom, and it loses from forty-three to forty-eight per centum of its weight. This leaves a residue friable, nearly tasteless, and almost insoluble in cold water, but readily soluble in warm water. Add to this exsiccated alum an equal portion, by weight, of bicarbonate of soda or other alkaline carbonate, and a double proportion of powdered corn-starch. Mix all of these ingredients well together, and the composition is ready for use.”

The patent has but one claim, which is as follows: “As a baking powder, a compound composed of exsiccated ammonia alum, bicarbonate of soda, and corn-starch, substantially in the proportion and for the purposes specified.”

The defenses interposed are (1) that the patent is void for uncertainty; (2) that the compound, substantially as covered by the claim, had been in public use in this country for more than two years

prior to the application for this patent; (3) that the defendants do not infringe.

As to the first point. The patent law (section 4888, Rev. St.) requires that the inventor shall file in the patent-office a written description of his patent, and the manner and process of making, constructing, compounding, and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same. It will be noticed that in describing his compound this patentee states, "It consists in the chemical adjustment of ammoniated potash alum;" and in his directions how to compound the parts, he says: "Take a given quantity of ammoniated potash alum, and burn or calcine the same until the water of crystallization is expelled therefrom." He further says that he adds to this exsiccated ammoniated potash alum a certain proportion of bicarbonate of soda, and a certain proportion of powdered corn-starch. When we come to examine his claim, we find nothing said about "ammoniated potash alum;" but the claim is "for a compound composed of exsiccated ammonia alum," etc. The proof shows that there is no such article known to commerce or chemistry as "ammoniated potash alum," and the contention is that this patent is void for uncertainty, because the claim does not cover anything which is covered or described in the specifications.

It was contended upon the hearing that the claim, when standing alone, was a sufficient description of the compound to enable any person skilled in the art to make the baking powder which the patentee intended to cover. I very much doubt, however, whether the "claim" is to be treated or considered as the "description" of the patent required by law to be filed in the patent-office, because the statute speaks of the "description and claim," and the office of the claim is

merely to point out what he claims as his invention or discovery. But, waiving that question, it seems to me that as the specifications and claim of this patent are repugnant to each other, we must either find the whole invention in the specifications or in the claim, and cannot take a part of the specifications to help out the claim, and reject the rest, and, if we do, either the whole patent must be found in the specifications or in the claim. If you treat the specifications as any part of the patent, then it becomes contradictory. ⁷¹ In one part of it you are told to compound “ammoniated potash alum” with the other two ingredients; and in the other, you are told to compound “exsiccated ammonia alum;” and there is nothing in the instrument to show which of these the patentee really intended to use. Ammonia alum not being referred to in the specifications as the article to be compounded with soda and starch, no one can say with certainty in what proportions the patentee intended to compound them, because the fact that he directed the compounding of certain proportions of “ammoniated potash alum” with certain proportions of soda and starch is no evidence that he intended to make a baking powder by compounding the same proportions of starch and soda with “exsiccated ammonia alum.”

But if I am wrong in my conclusion that this patent is void by reason of the uncertainty referred to, and if the term “ammonia alum” in the claim controls and modifies the formula in the specifications, still I think there is a complete defense upon the facts in the case. Conceding for the argument that the direction is to use exsiccated ammonia alum, the proof satisfied me that the only object in burning or drying the alum is that a baking powder made of dried or exsiccated alum will keep longer than such a compound made from the raw alum crystals, which carry from 47 to 49 per cent, of water of crystallization. In the United States Dispensatory, introduced upon the hearing, (Ed.

1884,) under title “Alumnia Exsicca—tum,” page 164, after giving the directions for burning or drying alum, in which it is said the heat must not be raised beyond the temperature of 400 degrees Fahrenheit, it is stated: “The object of this process is to obtain the alum free from the water of crystallization, without otherwise in the least decomposing it.”

Now, there can be no doubt from the proof that M. A. Christian began the manufacture of baking powders in the fall of 1874, in which he used burnt alum as the sole acid ingredient, using bicarbonate of soda and bran-dust or starch as the other ingredients, and that he continued such manufacture up to the time his testimony was taken in this case, having begun at Granby, Missouri, in November, 1874; moved from there to Fort Scott, Kansas, in February, 1875, and from there to St. Louis, Missouri, in August, 1876; and that he has been quite a large manufacturer during all that time, and that powders so made by him and his firm with burnt alum as the only acid constituent have been extensively sold through the state of Missouri and adjacent states since February, 1875. It is urged that, from his description of his apparatus for burning his alum, he could not have burned it so as to expel all the water, but his testimony shows that little, if any, fault was found with his goods on the ground that the powders did not keep well, and he seems to have learned, soon after he commenced the business, that the better and more thoroughly he burnt his alum the better his baking powder kept. The acid ingredient, which is needed to combine with the soda in order to evolve carbonic ⁷² acid gas which leavens the bread, is as effective in unburnt or slightly burnt as in the thoroughly burnt alum. In fact, the only purpose of burning it is to expel so much of the water that the starch or other dryer used will keep the compound, so that the gas will not be evolved until the powder is used, and this depends evidently, to some extent,

upon the quantity of starch or bran-dust used, because a large proportion of starch will absorb and hold more moisture than a small quantity, as that is the sole office of the starch or a similar ingredient. That is, if all the water of crystallization is expelled, no more effective baking powder is made; but you do get one that will keep in stock and retain its properties longer, the degree of dryness having no other effect on the powder than to improve its keeping qualities; so that the degree of dryness of the alum baking powder depends on the dryness to which the alum is burned. Burning, then, is only a question of degree, for a single purpose, and, Christian having learned soon after he began the manufacture that the keeping qualities of his goods depended upon the thoroughness of his burning, the mere fact that Clotworthy learned by his experiments that the best alum baking powder was made by burning or drying the alum until all the water is expelled, was no patentable discovery, when others had learned that the dryer the alum was made the longer the powder would keep. It therefore seems to me that, after what Christian did, there was nothing for Clotworthy to invent. It was a mere question of a better manufacture by taking more pains with the preparation of the ingredients, and a housekeeper might as well claim a patent for more thoroughly kneading her dough than was done by her neighbors, because she had found the more she kneaded the dough the better her bread became. It being known to the art that some burning or drying of alum made the baking powder keep better, there was nothing patentable in drying it so as to expel all the water, and make it keep longer than if the water had not all been expelled.

Then, too, the proof shows that the defendants' baking powders are not made upon the formula of complainants' patent, if it can be said to contain a formula, but that the defendants use a percentage of

acid phosphate in all their powders. It is true that the learned chemist who analyzed defendants' powders, and testified as a chemical expert in this case, testified that the acid phosphate is the equivalent of so much alum, and performs no other office in the compound than the same quantity of alum; but this line of argument would prohibit the use of all or part acid phosphate, cream of tartar, or tartaric acid, or any other acid, because they are the acid equivalents of the alum. The sole function of the acid ingredient is to combine with the alkali and evolve carbonic gas, for it is the carbonic acid gas that is needed to leaven the dough. The proof shows that other acids were used for this purpose long before Clotworthy's experiments began; in fact, proof would hardly be necessary upon a matter so completely within the realm of common knowledge. The proof also shows the further ⁷³ fact that the defendants use acid phosphates because the alum alone makes the bread bitter.

If, therefore, this patent can be sustained at all, it must be for the specific compound of matter disclosed by it; and, as the defendants do not use the entire combination, but use another ingredient producing another result, they do not infringe. And, further, if this patent requires, as was urged upon the argument, that *all* the water of crystallization shall be expelled from the alum by burning or calcining, and if Christian did not practice the invention because he did not expel all the water, then the complainants fail in their proof in this case, because they do not show how much of the water the defendants expel.

The finding is therefore that the patent is void, and that the defendants do not infringe, and the bill is dismissed for want of equity.

¹ Reported by Charles C. Linthicum, Esq., of the Chicago bar.

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

through a contribution from [Google](#). 