

BOYKIN, CARMER & CO. v. BAKER & CO.

Circuit Court, D. Maryland. December 28, 1881.

1. LETTERS PATENT—FERTILIZING COMPOUND.

Patent No. 206,077, July 16, 1878, granted to Boykin, Carmer & Co. for an improved fertilizing compound, *held* to be invalid for want of any patentable invention or discovery.

In Equity.

Slingluff & Slingluff, for complainants.

Snowden & Busey, for defendants.

MORRIS, D. J. This bill is filed by the complainants, Boykin, Carmer & Co., against the defendants, R. J. Baker & Co., for an alleged infringement of patent No. 206, 077, granted to the complainants July 16, 1878, upon application dated March 1, 1878, for an improved fertilizing compound. The respondents admit that they have been selling the same materials for fertilizing purposes in the same proportions as mentioned in the patented formula, but they claim that they had been doing so long before the date of the patent, and that the patent is invalid for want of novelty.

The compound described in the patent is composed of (1) *dissolved bone*; (2) *ground plaster*; (3) nitrate of soda; (4) sulphate of soda; (5) sulphate of ammonia; (6) dry peat muck, unleached ashes, or any refuse matter having fertilizing properties, in the proportions set forth in the patent.

The proof discloses that a formula for a fertilizer alleged to have been prepared and published by Baron Liebig has been known and in use among farmers and others for 25 or 30 years, and that it was printed and circulated by both complainants and defendants long prior to the date of the patent. It is identical with the patented formula as to the ingredients, their proportions, and the directions for mixing them, in

every respect, except that the Liebig formula, as originally published, called for ground bone instead of dissolved bone, and calcined plaster instead of ground plaster.

The issues raised by the pleadings and evidence are (1) whether the formula as patented, calling for dissolved bone or ground plaster, was in public use or on sale for more than two years prior to March 1, 1878, (the date of the application;) and (2) whether, if not so in use or on sale, the patented formula differs from the Liebig formula in any patentable respect, and, if so, were the complainants the inventors or discoverers of the change constituting that difference.

700

It is proved that there was in common use, prior to March 1, 1876, very numerous formulas for fertilizers, intended to be compounded by the farmers themselves, called by the witnesses "home fertilizers," and that these formulas differed but slightly from each other. It appears that it was the practice of dealers in chemicals to publish and draw attention to these formulas for the purpose of getting persons to buy the ingredients of them. Many of these, including the Liebig formula, were used and published by both the complainants and defendants, and in some of them ground plaster and dissolved bone were called for. There is testimony tending very strongly to establish that in compounding the Liebig formula—that is to say, in a composition in which the ingredients were to be used in the same manner and substantially in the same proportions as in the Liebig formula—there were instances prior to March 1, 1876, in which others than the complainants used dissolved bone instead of ground bone, and ground plaster instead of calcined plaster. The defendants produce a written order from Parker & Watson, of Warrentown, North Carolina, dated January 24, 1876, in obedience to which they supplied the materials in substantially the

same proportions as mentioned in the Liebig formula, substituting dissolved bone for ground bone, and ground plaster for calcined plaster; and immediately subsequent to March 1, 1876, numerous instances are proved from the books of defendants.

The testimony of Dr. Starke, of Petersburg, Virginia, also tends strongly to prove that the Liebig formula, with the changes above indicated, making it identical with the patent, was used by him in 1875. He produces a printed circular containing the formula exactly as patented, which he says is the same that he has been using since the fall of 1875. The circular produced was printed in 1878 or 1879, but he states that he is satisfied that it is a copy of the previous ones circulated by him. He is positive that the earlier ones did not call for calcined, but for ground plaster, and he thinks they called for dissolved bone, and not ground bone. Although, of course, it is possible this witness may be mistaken in his recollection, his recollection is supported by an original entry in his sales-book, under date of February 18, 1876, in which a sale is recorded of the materials required for the Liebig formula, and in which *dissolved* bone is one of the items and “plaster” another.

The witness—Dr. Nicholson, of South Hampton, Virginia—testifies very positively that the printed circular produced by him, which 701 is identical with the Liebig formula, except that it calls for *ground* plaster instead of calcined plaster, was printed and circulated for him in 1875.

This evidence is very persuasive in support of the defence of prior public use, and goes very far towards overcoming the presumption in favor of the patent. It has very important weight, also, when considered in connection with other facts and testimony adduced to show the absence of patentable invention or discovery in the patented formula.

That the Liebig formula was the foundation of the one patented by the complainants there can be no doubt. The ingredients, with the changes above mentioned, are the same, the proportions are the same, the directions for mixing are in the same words, and the general similarity such as could not have been accidental. Dr. Boykin, one of the complainants, and the only one examined as a witness, in his testimony states the circumstances which led him to introduce dissolved bone and ground plaster in the formula as patented by them. He says:

“As well as I can recollect, about 1872 or 1873, as we were in the drug business, customers began ordering from us chemicals to make fertilizers. The first order, I think, we had was from a party in North Carolina, for a formula known as Bryant’s Compound, which was not very unlike formula No. 1, [the patented formula;] worth probably three or four dollars a ton more. The quantities were larger. They used South Carolina phosphate in place of bone. Later on we had orders for formulas very similar to what is known now (I did not know it at that time) as Liebig’s Compound and Harris’ Compound, all varying in amounts, in the articles, but not very unlike. When we would get orders for these different formulas from one party, in the same neighborhood probably somebody else, not knowing what the formula was, would write us to know what the formula was. We issued two or three circulars, with these two or three formulas on them, in order to save writing letters and answering in that way. Finally, from our observation of the success of certain ones, we were led to introduce dissolved bone as being superior to anything else. After using that for a while the demand for it was so great (we saw the value of it, and issuing these circulars was making a reputation and name for it in certain localities, by persons who saw other parties whom we had given the article to and were buying

it) that we were induced to settle upon this article of dissolved bone as being an improvement on any other that we had seen, and the ground plaster an improvement on calcined; and we made application for a patent.”

In another part of his testimony, in answer to a question as to the date when the changes in the formula were made, he says:

702

“The changes were made in the ‘home fertilizers’ at the time we made application for the patent, and we then, as I have stated before, concluded, inasmuch as dissolved bone was an improvement on fine bone, to use that in the place of it, and we made application for the patent with that improvement—at least, with that change—for dissolved bone instead of bone dust or fine bone, which we had been using before. I know it was the date of the application of the patent, but I cannot tell you how near that date it was, or anything about it, without reference to the books. We all agreed among ourselves that dissolved bone was an improvement on bone dust; and we made application for the patent with that understanding, that it was an improvement, and that it was the great improvement in our formula.”

When Dr. Boykin states that from the complainants’ observation of the success of certain formulas, and I think he means by this the increasing demand, they were led to introduce dissolved bone as being superior to anything else, he does not of course pretend to any claim to have discovered the merits of dissolved bone as a fertilizer. Dissolved bone had then for 15 or 20 years been well known, among persons using or dealing in fertilizers, as one of the approved methods of preparing bone phosphates for that purpose, and dissolved bone was on all the price-lists of such dealers, and was called for in some on all the price-lists of such dealers, and was called for in some

of the many formulas produced in evidence which were in use prior to 1876. The virtues claimed for it as compared with ground bone, bone meal, or bone dust, for fertilizing, were known, and were the subject of discussion and experiment. It appears from the expert testimony to have been thought then, as now, that the dissolved bone was more immediate in its effects but not so lasting; that if there was present in the soil sufficient soil water to dissolve the ground bone as rapidly as required by the plant, it was to be preferred as cheaper and more lasting, but that if there was a deficiency of soil water, so that the ground bone was liable to decompose too slowly, then the dissolved bone was the better. One of the complainants' experts states that he has known dissolved bone to have been used in formulas for fertilizers, in greater or less quantities, for 15 years past.

All that the complainants can possibly claim, so far as the dissolved bone is concerned, is that they have substituted in the Liebig formula one well-known form of bone phosphate fertilizer for another well-known form. Beyond the presumption arising from the patent, there is very little to show just when they made this change. The testimony of Dr. Boykin leaves it very uncertain. In one part of his testimony above quoted he says the change was made by them at the time they made application for the patent, viz., March 1,

703

1878; and in another part he says, in answer to a very leading question, that they never used dissolved bone in the Liebig formula prior to March 1, 1876. There is abundant testimony that it was used constantly by the defendants during the year 1876, subsequent to the first of March.

Whenever it was that the complainants began substituting the dissolved bone in the Liebig formula, it is very evident that they did not then themselves think that they had made a discovery or had originated

anything which they could claim as new. This appears conclusively from a circular of four pages issued by them in 1875 or 1876. With regard to the date when this circular was issued, Dr. Boykin states it was the first circular they ever issued, and his best recollection is that it was in 1876, although he is not certain whether it was in 1876 or 1875. From all the facts connected with it, it would appear hardly possible that it could have been issued later than the spring of 1876. In this circular the formula, precisely as patented, is printed, and the attention of farmers is earnestly called to the advantages of preparing their own fertilizers by this formula. In it three letters commending it are printed, all of them dated in 1875, and reference is made to Dr. Nicholson, who is stated to have bought for his neighbors "last year" over 100 tons of this fertilizer. In this circular the complainants say:

"After investigating the matter with great care and some expense; after consulting agricultural chemists and many of our most intelligent and successful farmers,—we do not hesitate to advise the use of the chemicals in the attached formula."

The circular concludes:

"*We do not claim it as any specialty of ours*, though we have sold large quantities of it, and will sell as low as you can get a pure article anywhere else."

The 100 tons which the circular states Dr. Nicholson bought from the complainants appears from his testimony to have been purchased not later than 1875; and of the commendatory letters one is dated June, 1875, and the others August, 1875. The explanation given by Dr. Boykin of this circular is that the letters were from persons who had never used the formula as then printed, but who had used the Liebig formula and similar formulas, all called by the complainants "home fertilizers;" and as the complainants were confident they had improved these formulas, they used the letters, although they were not

literally true as applied to the formula printed with them, 704 and to which they were attached. Accepting this explanation, still the circular does clearly show that the complainants did not then think that their change in the Liebig formula was anything in the nature of a new discovery. In this long and full circular, in which they use many arguments to prove the excellence of the fertilizer now patented, they not only do not call any attention whatever to the change as new and important, but they felt at liberty to use letters written with regard to a formula which they now claim was essentially different; and, moreover, they then expressly declared to the public that they did not claim the altered formula as any specialty of theirs.

This is not similar to a case of alleged abandonment of an invention. It is not a case in which an inventor says, "I do not intend to patent my invention;" but it is a case where parties having entirely perfected what they subsequently claim as a discovery, say, when the whole matter is fresh under their hands, "This is nothing new; we disclaim it as any specialty of ours." It seems to me that this disclaimer so made is entitled to great weight, and, considering it in connection with all the other facts and testimony in the case, I am convinced that the change made by the complainants in the Liebig formula, even if they were the first to make it, which would appear extremely doubtful, was not the result of invention or discovery.

In the state of the general knowledge concerning fertilizers which existed on the first of March, 1876, I cannot think that it required experiment or invention to find out that dissolved bone might be, for some purposes and for some soils, profitably substituted for ground bone. In the language of Judge Lowell, (*Smith v. Nichols*, 1 Holmes, 175,) it was "the application of known means in a known way to produce a known result." As was said by the supreme court in the same case, on appeal, (21 Wall. 119.)—

“A mere carrying forward or new or more extended application of the original thought, a change only in form, proportions, or degree, the substitution of equivalents doing substantially the same thing in the same way by substantially the same means with better results, is not such invention as will sustain a patent.”

The process, as detailed by Dr. Boykin, by which the complainants were led to adopt the patented formula, is not such as suggests a patentable mental result. They were dealers in drugs, selling the chemicals required by farmers for compounding fertilizers, and by 705 watching the demand for and the reported success of certain formulas sold by them, they were led, he says, to settle upon dissolved bone as superior to anything else. This tends strongly to show an intelligent judgment, or business sagacity, in selecting from things well known and in public use, but it does not show invention or discovery. If the Liebig formula was protected by an existing patent, I do not see that it could be successfully contended that the change made in it by the complainants was not a mere substitution of equivalents, and an infringement.

I have not overlooked the testimony of one of the complainants' experts with regard to the chemical properties contained in and developed by the dissolved bone, and not contained in or developed by the ground bone. But these properties of dissolved bone were known; their use in fertilizers was known; and it was a common practice to make use of them in fertilizing compounds, the other ingredients in which were not very different from the one in controversy. Whenever a new material is substituted for an old one in an article of manufacture, as silk for cotton, steel for iron, metal for wood, a better result may be obtained, and one which may give a greatly increased beauty, usefulness, or commercial value to the article produced, and may greatly increase the demand for it; but this is a result which is to be attributed to mechanical skill or

business enterprise, and not to invention as that word is applied to patents.

With regard to the substitution of ground plaster for calcined plaster, the considerations above stated with regard to the bone apply with still greater force. Indeed, it appears somewhat doubtful whether any one skilled in compounding fertilizers would, in 1876, have used calcined plaster in the Liebig formula. When plaster for fertilizing purposes or land plaster is mentioned, it seems to be generally understood to be ground plaster, and certainly required no invention to make use of it in the Liebig formula.

In my opinion the complainants' patent is invalid, and the bill must be dismissed.

This volume of American Law was transcribed for use
on the Internet
through a contribution from Anurag Acharya.