

devices," will be patentable. *Marsh v. Dodge & Stevenson Manuf'g Co.* 6 Fisher, 563.

I cannot say, without any evidence on the subject, that, corrugating the blank by means of a fluted counter-former and a gear, instead of by rollers, before the blank was projected upon the former, did not require such a change and alteration of the mechanism as to amount to a new device, or was nothing more than a mechanical change. This question involves questions of fact upon which no testimony was presented, and therefore the presumption from the grant of the patent remains undisturbed. The first, third, and fourth claims are, therefore, held to be valid.

The second claim is for the revolving counter-former, fluted or not fluted, presser, and auxiliary supports. This combination is substantially the mechanism of the first part of No. 178,869.

Let there be a decree for an injunction against the infringement of claims 5 and 6, of patent No. 178,869, and claims 1, 3, and 4, of No. 209,826, and for an accounting.

UNITED NICKEL CO. v. MELCHIOR.

(Circuit Court, N. D. Illinois. July 10, 1883.)

PATENTS FOR INVENTIONS—ELECTRO-DEPOSITION OF NICKEL—PATENTS NOS. 93,157 AND 102,748 SUSPAINÉ.—INFRINGEMENT.

Letters patent No. 93,157, granted to Isaac Adams, Jr., August 3, 1869, for an "improvement in the electro-deposition of nickel," and letters patent No. 102,748, granted to Isaac Adams, Jr., May 10, 1870, for an "improvement in the electro-deposition of nickel," sustained; and the first and fourth claims of patent No. 93,157, and both of the claims of patent No. 102,748, held infringed by the solutions used by defendant, and a decree to that effect entered.

In Equity.

Coburn & Thacher, for complainants.

West & Bond, for defendants.

BLODGETT, J. This is a bill for injunction and accounting by reason of the alleged infringement of letters patent No. 93,157, granted to Isaac Adams, Jr., August 3, 1869, for an "improvement in the electro-deposition of nickel," and letters patent No. 102,748, granted to Isaac Adams, Jr., May 10, 1870, for an "improvement in the electro-deposition of nickel." These patents have been so frequently before the United States courts in other circuits, and been so fully discussed and construed, and have been so uniformly sustained, in the face of exhaustive research into the history of the art, and critical analysis of their terms and scope, that little, if anything, more can be said as to the novelty of the invention, or the construction to be given the patents. *United Nickel Co. v. Anthes*, 1 Holmes, 155;

Same v. Keith, Id. 328; *Same v. Harris*, 15 Blatchf. 319; *Same v. Manhattan Brass Co.* 16 Blatchf. 68; *Same v. Pendleton*, 15 FED. REP. 739.

The defendant is charged in this case with the infringement of the first and fourth claims of the patent of 1869, which are as follows:

"(1) The electro-deposition of nickel by means of a solution of the double sulphate of nickel and ammonia, or a solution of the double chloride of nickel and ammonium, prepared and used in such a manner as to be free from the presence of potash, soda, alumina, lime, or nitric acid, or from any acid or alkaline reaction. (4) The electroplating of metals with a coating of compact, coherent, tenacious, flexible nickel, of sufficient thickness to protect the metal upon which the deposit is made from the action of corrosive agents with which the article may be brought in contact."

The 1870 patent relates to the anodes employed in nickel-plating, and consists in a mode of preparing the nickel for the anodes by a combination of carbon or some other metalloid or metal acting in the same way to make the nickel more fusible; the claims being: (1) For a combination with nickel of a metal or metalloid electro-negative to the nickel in the solution; (2) for a nickel anode of nickel and carbon combined, and cast in the required form.

Much testimony has been put into the record in this case bearing upon the question of the novelty of these two patents. But a careful examination of this proof satisfies me that all this testimony, which is worthy of attention, has been considered by the courts before whom these patents have been heretofore adjudicated, and that no new light is shed by the testimony upon the question of novelty. The same ground seems to have been gone over in the former cases that is shown in this, and the devices held to be novel and patentable.

The only point made in this case which does not seem to have been directly passed upon in the prior cases is as to the effect of the subsequent patents issued to Dr. Adams upon the patents now before the court; but it seems to me that the obvious and complete answer to this point is that Dr. Adams could not by the disclaimer found in the English issue of his patent of 1869, nor by the claims of his later American patents, invalidate his older patents; so that the only open question, as it seems to me, in this case, is the question of infringement. Does the proof show that defendant infringes both or either of these patents? There is no doubt, from the proof, that when defendant commenced business he used the double sulphate of nickel and ammonia made pursuant to the directions of the Adams patent of 1869. Reiman, by whom the business was first started, and sold to defendant, states that he made and used an Adams solution and turned it over to the defendant. After a time the defendant undoubtedly used a solution which would be chemically described as an ammonia sulphate, when first prepared, but which becomes a double sulphate of nickel and ammonia by the action of the galvanic

current upon it. Defendant afterwards undoubtedly experimented with a solution made up by Prof. Wheeler, after the directions of Prof. Boettger, but he does not seem to have used it very long, and I doubt, from his own testimony, if he ever did any successful plating with what may be called the Wheeler solution; for I do not think it was, as prepared by Prof. Wheeler, strictly a Boettger solution,—that is, made entirely according to the directions of Prof. Boettger. But whether the Boettger directions were strictly followed in making the Wheeler solution or not, it is quite plain from the proof that this was a mere experiment, and that, in his practical work of nickel-plating, defendant used either the regularly prepared double sulphate of nickel and ammonia, or the ammonia sulphate, up to about the time proceedings were had to attach him for contempt for violation of the injunction in this case, and since then he has been using the Pendleton solution.

The late decisions of Mr. Justice BLATCHFORD, in *United Nickel Co. v. Pendleton*, 15 FED. REP. 739, holding that the Pendleton solution, although an acid solution, is an infringement of the Adams patent of 1869, not only disposes of this case, so far as the use of the Pendleton solution is concerned, but so construes the Adams patent, in regard to all attempted evasions of it by mere changes in the solutions, as to bring all the solutions used by this defendant within the field covered by this patent. What he says on this point seems to be so fully applicable to the arguments used in behalf of defendant in this case that I quote:

“Before Adams, no product possessing the properties described by him as those of his product was known. He introduced a new process, that of claim 1, as well as a new product of manufacture, that of claim 4. In attempts at nickel-plating before acids had been used which were known solvents of nickel, Adams used those acids to prepare his solutions. When he speaks of acid reaction in his specification, and in claim 1, he must be regarded as referring only to the acids he had spoken of as used to clean the articles to be coated, or as solvents of nickel; namely, nitric, sulphuric, and hydrochloric acids. Those are the acids which he mentions as used to make salts of nickel, the metal being dissolved in the acid. Hence the acid reaction spoken of by Adams includes only the mineral acids referred to by Adams, those being the acids, and the only acids, which could fit into the solutions referred to by Adams, or into any plating solutions then known. Adams did not invent the solutions of claim 1. He showed how to prepare and use them successfully. The solution is the vehicle whereby the nickel is conveyed from the anode to the cathode, holding in suspension the nickel to be deposited, and supplying the place of the deposited nickel by taking other nickel from the anode. The real invention was in discovering the proper conditions for the use of such vehicle, not the particular chemical composition of the vehicle. Any proper vehicle used with those conditions would do the work. Any vehicle, in the use of which those conditions should not be observed, would not do the work. The actual chemical composition of the solution, so long as it should be a good working solution, was and is unimportant. The only material point was its freedom from the injurious constituents indicated by Adams. In this view, the defendant's solution is an equivalent, in the sense of the patent law, for the solutions of claim 1. It accomplishes the same re-

sult by the same electro-chemical mode of operation, by the same process, with the absence of the same injurious elements. If claim 1 of the Adams patent claimed the discovery of a new solution, as does claim 1 of the defendant's patent, the question would be a different one. But the claim is a claim to a new method of using solutions, requiring specified conditions by the absence of specified injurious elements."

The learned justice goes further in the consideration of the patent, and holds the fourth claim to be a valid claim for a new article of manufacture. He says:

"As to claim 4, it is distinctly a claim to a product or article of manufacture, and patentable as a manufacture. It was a new product, never known before Adams' invention. As already said, that claim was never construed in any case before referred to, where a decision was not made sustaining claim 1, notwithstanding anything said in the *Harris Case*. The conclusion I have now reached is that claim 4 is a valid claim, irrespective of any employment of the invention covered by claim 1, and that that claim has been infringed. It is contended that claim 4 claims a result, an idea, an abstract principle, and that its invalidity is shown by the decision in the case of *O'Reilly v. Morse*, 15 How. 62. But a patent for a process or product is a different thing from a patent for a principle, as explained by Mr. Justice BRADLEY in *Tilghman v. Proctor*, *ubi supra*, in commenting on *O'Reilly v. Morse*. A manufacture or product, if new, may be claimed irrespective of the mode of making it. In *Cohn v. United States Corset Co.* 93 U. S. 366, a patent for a corset having certain features, and which did not describe any process of making it, was defeated by a prior description of the corset. In the present case the patent describes the product and the mode of making it, and claims it. The text of the specifications sets forth as one of the inventions deposits of nickel having certain characteristics, which are defined, and it states that they were never produced before."

This conclusion as to the scope of the fourth claim had been suggested in the earlier cases upon this patent, but never so fully and distinctly pronounced before.

As to the patent of May, 1870, I have no doubt from the proof that defendant was using anodes prepared in accordance with the directions of this patent at the time this suit was commenced, and there is no proof that he has abandoned such use. The question as to the extent of the use of anodes will be more appropriate in the further stages of the case upon accounting. There will be a decree entered finding that the defendant infringes the first and fourth claims of the patent of 1869, and both claims of the patent of May 10, 1870.

ECLIPSE WINDMILL Co. v. MAY and others.

(Circuit Court, N. D. Illinois. July 10, 1883.)

1. PATENTS FOR INVENTIONS—REISSUED PATENTS Nos. 8,826, 8,443, AND 9,493—INFRINGEMENT.

Reissued patent No. 8,826, granted to the Eclipse Windmill Company, July 29, 1879, as assignee of original patent, granted to L. H. Wheeler, September 10, 1867, and reissued patent No. 8,443, granted to Palmer C. Perkins, October 8, 1878, the original of which was issued August 18, 1869, *held*, not to be infringed by the "improved May windmill," manufactured by the defendant. *Held, further*, that the "improved May windmill" does infringe the third and fourth claims of reissued patent No. 9,493, issued to the Eclipse Windmill Company, December 7, 1880, as assignee of the original patent, William H. Wheeler, dated October 20, 1874.

2. SAME—REISSUED PATENT No. 8,443.

Whether the reissued Perkins patent is valid, *quere*.

In Equity.

Hill & Dixon, for complainant.

G. L. Chapin and Coburn & Thacher, for defendants.

BLODGETT, J. This suit is brought to restrain an alleged ment of the following patents, and for an accounting: (1) Reissued patent No. 8,826, granted to complainant July 29, 1879, as assignee of original patent to L. H. Wheeler, dated September 10, 1867. (2) Reissued patent No. 9,493, issued to complainant, December 7, 1880, as assignee of the original patent to William H. Wheeler, dated October 20, 1874. (3) Reissued patent No. 8,443, to Palmer C. Perkins, dated October 8, 1878, the original of which was issued August 18, 1869. No question is made as to complainant's title.

It appears from the proof that prior to the twenty-third of November, 1880, complainant had brought suit against defendants for infringement of the two first-named patents, reissue No. 8,826, and original patent to W. H. Wheeler of October 20, 1874,—the application for the reissue of the latter being then pending; and on the twenty-third of November, 1880, a written agreement was made between the parties by which defendants admitted the validity of the two Wheeler patents, and agreed that they would not "*contest the validity of said patents or any reissue thereof*," and further agreed that they would "*permanently discontinue and cease the manufacture and sale of windmills constructed with a hinged or pivoted vane, as embodied in said patents, or in any manner infringing upon said patents.*" This agreement takes out of this case all controversy as to the validity of the first two patents set out in complainant's bill, and only leaves open the question whether defendants, by the mill they are now making and selling, infringe these two patents, and the questions of the validity and infringement of the Perkins patent. The object of the L. H. Wheeler patent was to regulate and control the action of wind-wheels for the purpose of rendering their action more uniform and effective than theretofore,