# Case No. 320.

[3 Fish. Pat. Cas. 362; <sup>1</sup> 6 Blatchf. 27.]

Circuit Court, E. D. New York.

Jan. 7,  $1868.^{2}$ 

- PATENTS FOR INVENTIONS—PATENTABILITY—NOVELTY—EXTENT OF CLAIM—"SIMILAR SUBSTANCE"—INFRINGEMENT—PROCESS—COMBINATION—OMISSION OF MATERIAL PARTS—PRIOR ADJUDICATION.
- 1. A decision of a court of equity upon final hearing, in relation to the validity of letters patent, furnishes an authority for the action of courts of co-ordinate jurisdiction.
- [Cited in Goodyear Dental Vulcanite Co. v. Willis, Case No. 5,603; Willis v. Oregon Ry. & Nav. Co., 15 Fed. 570.]
- 2. It appears impossible to consider that to be a new material, patentable as a new product, which is simply a substance long well-known to exist in wood and other substances, left in a state nearly pure, and consequently, fit for the manufacture of paper on being bleached by the removal from it of the intercellulose with which it is found to be combined in wood.

[See note at end of case.]

- 3. The last clause of the claim of the letters patent of Mellier is not such a formal summing up and defining of the limits of the invention, as to restrict the patent to the single substance there mentioned, "other vegetable fibrous materials," having been referred to in the body of the specification.
- 4. Upon the question whether wood is a "similar substance" to straw in the manufacture of paper: *Held:* That as wood is a fibrous vegetable substance requiring the like treatment with straw, treated by the respondents in the same way and for the same purpose, it must be held to be a "similar substance" within the meaning of the Mellier patent.
- 5. The principle which Mellier discovered was, that the effect of a solution of pure caustic soda on certain vegetable substances could be increased by it, under pressure, at a temperature of not less than 310°, so as to result in the production of nearly pure fiber without resort to any other chemical process; thereby saving both alkali and time.

6. If the defendants used a process, involving the same principle, to produce the same result in substantially the same way, they can not escape the patent by a previous shivering of the material into shreds, or by a previous boiling it in an open vessel in spent alkali, or by putting it through a beating engine, and then calling the Mellier patent a "one-stage process," and the defendants' a "two-stage process."

[See note at end of case.]

- 7. The pressure of seventy pounds, as spoken of in the Mellier patent, means seventy pounds according to the French tables from which one atmosphere must be deducted to obtain the pressure indicated upon the steam gauge.
- 8. The patent No. 25,418, granted to Keen, is for a combination of which the stirrers described are a material part. If no stirrers are used by the defendants, there can be no infringement.
- 9. The second patent No. 38,901 is for a combination of which the diaphragm and well are material parts, and as the defendants charge their boiler below the diaphragm, and use no well, they do not infringe.

[In equity. Bill by the American Wood-Paper Company against the Fibre Disintegrating Company to restrain the infringement of patents Nos. 11,343, 17,387, 25,418, and 38,901. Decree for complainant. An appeal was subsequently taken to the supreme court, and this decree was affirmed. American Wood-Paper Co. v. Fibre Disintegrating Co., 23 Wall. (90 U. S.) 566.]

The facts of the case are substantially the same as those set forth in American Wood-Paper Co. v. Heft, [Case No. 322.]

Thomas A. Jenckes, for complainants.

George Gifford, for defendants.

BENEDICT, District Judge. This is a suit in equity founded upon five different patents relating to the production of pulp fit for the manufacture of paper, which patents, it is alleged, the respondents have infringed. The questions raised in the case are so similar to those already considered in other actions founded upon the same patents, and especially in an action brought by the same complainants in the circuit court for the eastern district of Pennsylvania, [American Wood-Paper Co. v. Heft, Case No. 322,] and there decided since the commencement of the present suit, that I feel relieved of much of the responsibility which I should otherwise feel in disposing of questions of this character. In the light of these decisions, my way to a correct determination is not obscure.

As to two of the patents sued on, the patents reissued to Watt & Burgess, numbered 1448 and 1449, the determination of the court in the case referred to furnishes an authority from which I should not feel at liberty, had I the inclination, do dissent. In accordance with that authority, it must here be held that the Watt & Burgess patent, No. 1448, which is for a pulp suitable for the manufacture of paper, made from wood or other vegetable substances by boiling the wood or other substances in an alkali, under pressure, as described, can not be sustained as a valid patent for a new product. Aside from that authority, I should feel bound to say that it appears impossible to consider that to be a

new material, patentable as a new product, which is simply a substance long well-known to exist in wood and other substances, left in a state "nearly pure," and consequently fit for the manufacture of paper on being bleached by the removal from it of the intercellulose with which it is found to be combined in wood. The patent No. 1448, is for such a material as a new product, in the production of which, under the patent, if there be anything new, it is, as it seems to me, the process, not the product. The same authority must also dispose of the complainants' case, so far as it rests upon the Watt & Burgess patent No. 1449, which is for the process of producing this material from wood and other vegetable substances as described.

As regards this patent, the learned judge of the district court who took part in the decision of the Pennsylvania case, in his opinion, as delivered, makes the case turn upon the question of fact whether the process described in the reissued patent was invented by Watt & Burgess prior to the issue of their original patent in 1853, and he finds upon evidence, in substance the same as the evidence before me in this case, that this process had not then been invented by Watt & Burgess. Such is also my conclusion; and I am also of the opinion that the reissued patent is for a process substantially different from any described in the original patent. So far, then, as the bill rests upon the two Watt  $\otimes$ Burgess patents 1448 and 1449, it must fail. But the complainants have not based their action upon the Watt & Burgess patents alone; they have also averred and proved the ownership of a patent issued to one Mellier on August 7, 1857, and numbered 17,387. This patent is for the use of a vessel of a peculiar description for heating the material in the manufacture of paper pulp, and also for a process of disintegrating vegetable matter for the purpose of producing pure cellulose fit for the manufacture of paper. It is the latter claim alone which is called in question here. This patent also was brought to the consideration of the court in the Pennsylvania case referred to, where the judges differed in opinion respecting it. It has likewise been considered and passed upon by the circuit court of this circuit, in the case of Buchanan v. Howland, decided in Albany, March 23, 1863, Hall, J., [Case No. 2,074.]

To the claim based upon the patent of Mellier, the first ground of defense taken here is, that the evidence does not show Mellier to have been the first inventor of the process described in his patent. The same point was taken in the Pennsylvania case referred to, and there Judge Cadwalader held with the complainant and Mr. Justice Grier to the

contrary. In the Albany case, however, the patent was sustained by the court as for a new and useful process described by Mellier. The evidence before me upon the point in question differs somewhat from the evidence presented in the Albany case, but is substantially the same as that offered in the Pennsylvania case. I have considered it with care, and see nothing in it which should lead to a different conclusion from that arrived at by those experienced judges who have heretofore sustained the patent.

The next ground of defense is, that the Mellier patent is for a method of treating straw, and does not cover bamboo, which is the material mostly used by the respondents. This point I can not consider to be free from doubt. In the opinion delivered by Judge Hall in the Albany case, the patent is always spoken of as a patent relating to straw; but in that case the infringement proved was in regard to straw, and the court had no occasion to consider, and expressed no opinion as to whether the patent extended to any other substance. In the Pennsylvania case the point was fairly raised, and upon it Judge Cadwalader expressed the opinion that the patent would cover any librous vegetable substance requiring like treatment with straw for the purpose in view, and that wood was within its scope, while Mr. Justice Grier considered the patent to be confined to straw et similar. It appears to me quite manifest, from the language of the specification, that the patentee considered his process as applicable and beneficial in the treatment, not only of straw, but also of other vegetable substances. He uses throughout, the phrase "straw and other vegetable fibrous materials requiring like treatment." His description of his process nowhere limits it to the single article of straw, and his patent is for his process as described; but he does, in the last clause of his specification, say: "I also claim the within process for bleaching straw, consisting, etc. \* \* \* substantially as described." Now, his process described is not a process for bleaching, in the ordinary acceptation of that term, nor is it a process for treating straw alone. No person looking at the whole paper would fail to see that the patented discovery related to other material as well as straw; and in view of the peculiar phraseology of the last clause, which is called the claim, and of the intention manifest elsewhere in the instrument, I incline to the opinion that, according to the principles applicable in the construction of the patent, the last clause should not be held to be such a formal summing up and defining of the limits of the invention as to restrict the patents to the single substance there mentioned, and this must have been the conclusion of Mr. Justice Grier, as well as of Judge Cadwalader. If, then, the patent extends to any other substance than straw, in the common and limited signification of the word, the respondents are within its scope by reason of their treatment of bamboo. They appear at times to have treated common straw, but their principal article is bamboo, which they use for the purpose of producing from it the desired pulp for the manufacture of paper, the stalks of this plant, which is the gigantic grass of the tropics, belonging to the same botanical order as wheat, oats, etc. The defendants, by means of a peculiar process of their own, shiver the bamboo

into a mass of tendrillike shreds or strips very like a mass of straw, which they then boil in caustic alkali, under pressure, sometimes having previously boiled it in spirit alkali, in open vessels, and sometimes not. It is certainly a fibrous vegetable substance requiring like treatment for the purpose in question. It was treated by the respondents in the same way that they treated straw, and for the same purpose, and is in form and substance so very like to the common straw, that it must, in my opinion, be held to be within the scope of the Mellier patent. But again, it is said that the Mellier patent is claimed to a patent for a single-stage chemical process resulting in the production of pulp fit for paper, in which case the respondents do not infringe it, because their treatment is a two-stage process.

The principle of the Mellier discovery was that the effect of a solution of pure caustic soda upon certain vegetable substances could be increased by the use of it, under pressure, at a temperature not less than about 310°, so as to result in the production of nearly pure fiber without resort to any other chemical process, thereby saving both alkali and time. The final process used by the defendants is, as I understand the evidence, a process which invokes the same principle to produce the same result, and in substantially the same way. If this be so, they do not escape the patent by a previous shivering of the material into shreds, or by a previous boiling it in an open vessel in spent alkali, or by putting it through a beating engine. The material so previously treated, is still a fibrous vegetable substance, requiring to be treated by the Mellier process to produce the pulp desired; and when the defendants apply that process to it they infringe. But the respondents insist that they do not infringe the Mellier patent because they use a pressure lower than the minimum pressure required by the Mellier process, which they claim to be the pressure represented by seventy pounds upon the steam gauge. Upon this point I concur with Judge Cadwalader, in the opinion that the minimum pressure of the Mellier patent is the pressure indicated by fifty-five pounds upon the steam gauge instead of seventy pounds. It is true that the patent designated seventy pounds, but it says internal pressure, and gives 310° Fahrenheit as the corresponding temperature. Now, 310° Fahrenheit

is not a temperature corresponding with seventy pounds, as indicated by the steam gauge; and it is quite evident, I think, that the patentee, in mentioning seventy pounds, had in his mind the French tables, which differ from the American tables, and according to which the weight of one atmosphere, 14.7, must be deducted to give the gauge-pressure intended to be indicated. Nor does the statement in the specification that "a steam gauge properly fixed will enable one to ascertain when the pressure had attained the required when the pressure had attained the required degree," appear to me to be inconsistent with this construction. Any skillful person must see from the specification that the internal pressure was to be considered, and that pressure he would ascertain by adding an atmosphere to the reading of the gauge. According to the evidence, the respondents have, at times, used an external pressure of sixty pounds, equivalent to an internal pressure of seventy-five pounds, running down, it is true, at times as low as forty pounds; but their claim is to the right to any rate of pressure, which, according to the views here expressed, is untenable. So, too, in regard to the strength of caustic alkali used. The respondent must be considered within the Mellier patent which designated for straw a strength of from 2° to 3° Beaume. The testimony of the respondents' witness as explained by the respondents, gives a strength of less than 3½° Beaume, and used by them, which would bring them fairly enough within the scope of the patent in question.

I have thus considered the principal objection made to the complainants' demand as based upon the Mellier patent, and my conclusion is, that the decree must be in favor of complainants, so far as that portion of their claim is concerned.

There remains to be considered the two boiler patents which are set out in the bill as to which it seems sufficient to say that the first boiler patent of Keen, No. 25, 418, is for a combination of which the stirrers described are a material part; the evidence, however, shows that the stirrers are not used by the respondents; not using the complainant's combination, they do not infringe his patent. The second boiler patent of 1863, No. 38,901, is also for a combination of which the diaphragm and well are material parts. The respondents use no well with the diaphragm, but charge their boiler below the diaphragm. There is, then, no use of the defendats' combination secured by the patent. So far as the complainants' case rests upon these two boiler patents, it must fail.

The decree must accordingly be in favor of the complainants, the terms of which may be settled on notice to the opposite party, when I will also dispose of the question of costs.

[NOTE. This decree was affirmed by the supreme court. Mr. Justice Strong delivered the opinion, of which he also prepared the following syllabus:

"[1. A manufacture or a product of a process may be no novelty, and therefore unpatentable, while the process or agency by which it is produced may be both new and useful.

- "[2. In cases of chemical inventions, when the manufacture claimed as novel is not a new composition of matter, but an extract obtained by the decomposition or disintegration of material substances, it is of no importance, in considering its patentability, to inquire from what it has been extracted.
- "[3. When the substance of two articles produced by different processes is the same, and their uses are the same, they cannot be considered different manufactures.
- "[4. Paper pulp extracted from wood by chemical agencies alone is not a different manufacture from paper pulp obtained from vegetable substances by chemical and mechanical processes.
- "[5. The reissued patent granted to Ladd & Keene, April 7. 1863, for a pulp suitable for the manufacture of paper, made from wood or other vegetable substances, is void for want of novelty.
- "[6. The patent granted to Watt & Burgess, July 18, 1854, was for a process, consisting of three stages, for obtaining paper pulp from wood. The reissue to Ladd & Keene, dated April 7, 1863, is for a single stage process. It is not, therefore, for the same invention; hence the reissue is void.
- "[7. Construction of the two boiler patents granted to Morris L. Keene, the one dated September 13. 1850, and the other June 16, 1863, both held to he for combinations.
  - "[8. A construction of the patent granted May 26, 1857, to Marie Amedee Mellier.
- "[(A) The patent covers the process claimed when applied to wood, as well as when applied to straw.
- "[(B) The 'internal pressure,' as described in the specification, is to be ascertained by deducting from the pressure marked by the steam gauge the weight of one atmosphere."

[American Wood-Paper Co. v. Fibre Disintegrating Co., 23 Wall. (90 U. S.) 566.]

[The patents involved in this case have also been involved in other suits, as follows:

[No. 17,387, granted to M. A. C. Mellier, May 26, 1857, was sustained in American Wood-Paper Co. v. Glens Falls Paper Co., Case No. 321; Same v. Heft, Id. 322; Buchanan v. Howland. Id. 2,074; Anthony v. Carroll, Id. 487.

[No. 25.418. granted to M. L. Keen, September 13, 1859, was passed upon in American Wood-Paper Co. v. Heft, Id. 322.

[No. 38,901, granted to M. L. Keen, June 16, 1863, was also passed upon in American Wood-Paper Co. v. Heft, Id. 322.

[Reissues Nos. 1,448 and 1,449, to Watt & Burgess, April 7, 1863, were for patent No. 11,343, which had been granted July 18, 1854, The first reissue was for the product of a paper pulp manufacture, and was held void for want of novelty in American Wood-Paper Co. v. Heft, supra, and in Same v. Fibre Disintegrating Co., 23 Wall. (90 U. S.) 566. The second reissue was for the process, and it was also held void in the same cases.]

<sup>&</sup>lt;sup>1</sup> [Reported by Samuel S. Fisher, Esq., and here reprinted by permission.]

<sup>2</sup> [Affirmed by supreme court. 23 Wall. (90 U. S.) 566.]