

Case No. 322. AMERICAN WOOD-PAPER CO. V. HEFT ET AL.
[3 Fish. Pat. Cas. 316.]¹

Circuit Court, E. D. Pennsylvania.

Nov. 1867.

PATENTS FOR INVENTIONS—ACTION FOR INFRINGEMENT—VALIDITY OF REISSUES—WOOD PAPER—PROCESS—EQUITY PRACTICE.

1. The two reissues granted to Ladd & Keen, April 7, 1863, of original patent granted to Watt & Burgess, July 18, 1854, for improvement in manufacture of paper pulp from wood, are illegal and void.—Grier, J.
2. The letters patent granted to M. A. C. Mellier, May 26, 1857, for improvement in manufacture of paper from straw, is intended for straw alone, et similia.—Grier, J.
3. Mellier was not the first to succeed in the enterprise of making paper from straw.—Grier, J.
4. Mellier's patent must be construed by taking a view of all its parts.—Grier, J.
5. Mellier says his invention consists in subjecting straw to a pressure of at least seventy pounds to a square inch—prefers eighty. The process used by defendants does not come up to the minimum claimed by Mellier.—Grier, J.
6. The letters patent granted Morris L. Keen, September, 13, 1859, is for a combination of devices which is not used by defendants.—Grier, J.
7. The letters patent granted Morris L. Keen, June 16, 1863, claims a perforated diaphragm of which he was not the inventor.—Grier, J.
8. The arrangement of a discharge pipe, with stop-cock, is what every one using a vertical boiler might use without invention, and was not open to be monopolized by Keen.—Grier, J.
9. The phrase "preparatory process," as applied to the process of Watt & Burgess, is satisfied by a process which although finishing the pulp for making brown paper, requires the further process of bleaching to make the pulp suitable for white paper.—Cadwalader, J.
10. If it were otherwise, the objection to the use of this phrase might be removed by a disclaimer.—Cadwalader, J.
11. The legal question under a reissue is not what the patentee intended to patent, but what the patentee intended to patent, but what he had, in fact, invented.—Cadwalader, J.
12. The invention of Watt & Burgess, described in the reissues of 1863, not having been made in 1854, when the original patent was granted, the reissues are void.—Cadwalader, J.
13. The patent of Mellier is maintainable for wood as well as straw.—Calwalader, J.
14. Where the complainants filed a bill on five patents, and the court found for the defendants

on four, but the judges disagreed as to the fifth: *Held*: That the bill must be dismissed, but without costs.—Cadwalader, J.

15. If the decree had been for the complainants on the fifth patent, it should have been without costs.—Cadwalader, J.

In equity. This was a bill in equity filed [by the American Wood-Paper Company against J. D. Heft and others] to restrain the defendants from infringing the following letters patent, which had been assigned to complainants:

I. Letters patent for “improvements in pulping and disintegrating vegetable substances,” granted to Charles Watt and Hugh Burgess, July 18, 1854, [No. 11,343,] for fourteen years from August 10, 1853, when the same invention was patented on England, assigned to William F. Ladd and Morris L. Keen, reissued to them October 5, 1858, and again reissued to them, April 7, 1863. This invention, as described in the original patents, was substantially as follows: The wood was reduced to shavings (the finer the better), boiled in a solution of caustic alkali (time and strength to suit the wood), washed and pressed, and exposed to the action of chlorine, or any composition of chlorine and oxygen, either gaseous or aqueous, washed and pressed again, using occasionally mechanical aid, and then placed in a weak solution of caustic alkali, when it will assume the form of a brown pulp. The latter is freed from alkali by washing, and then bleached in the usual way.

The claim of the original patent was as follows: “The pulping and disintegrating of the shavings of wood, and other similar vegetable matter for making paper, by treating them with caustic alkali, chlorine, simple or its compound with oxygen and alkali, in the order substantially as described.”

The claim of the two reissues, Nos. 1448 and 1449, granted April 7, 1863, were as follows:

Reissue No. 1448: “A pulp suitable for the manufacture of paper, made from wood or other vegetable substances by boiling the wood or other vegetable substance in an alkali under pressure, substantially, as described”.

Reissue No. 1449: “First, the process of treating wood or other vegetable substance by boiling in an alkali under pressure, as a process, or preparatory process, for making pulp for the manufacture of paper from such woods or other vegetable substances substantially as described. Second, the process of treating resinous woods by boiling in an alkali under pressure, and treating the product with chlorine and its compounds with oxygen, for making white pulp for the manufacture of paper from such woods, substantially as described”.

II. Letters patent for “improvement in making paper pulp,”. granted to Marie Amedie Charles Mellier, May 26, 1857, [No. 17,387,] for fourteen years from August 7, 1854, when the same invention was patented in France. The specification of this patent is given in full in the report of the case of *Buchanan v. Howland*, [Case No. 2,074.] The invention had “for its object a peculiar process for the treating of straw and other vegetable fibrous materials requiring like treatment, preparatory to the use of such fibers in the manufacture

of paper; and the improvement consists in subjecting straw, or such other fibrous materials, to a pressure of at least seventy pounds on the square inch, when boiling such fibrous matters in a solution of caustic alkali”.

The disclaimer and claims of the patent were as follows: “Having thus described the nature of my said invention and the manner of performing the same, I would have it understood that I do not claim the general use of caustic alkaline solution, nor the employment generally of a close boiler for boiling straw, or other vegetable fibrous substances. But what I claim as my invention, and desire to secure by letters patent, is the use of a solution of caustic soda (N a O) in a compartment of a rotary vessel separate from that which contains the steam heat, substantially as described. I also claim the within described process for bleaching straw, consisting in boiling it in a solution of pure caustic soda (N a O) from two to three degrees Beaume, at a temperature of not less than three hundred and ten degrees Fahrenheit; after it has been soaked and cleansed, and before submitting it to the action of a solution of chloride of lime, from one to one and a half degrees, substantially as described.”

III. Letters patent for “improvement in boilers for making paper pulp from wood,” granted to Morris L. Keen, September 13, 1859, [No.25,418]

The claim of this patent was as follows: “A boiler for boiling under pressure wood and ligneous materials for making paper pulp, constructed with an expansion chamber, stirrers, and discharge valve or cock, arranged for the purpose and in the manner substantially as stated.”

IV. Letters patent for “improved boiler for making paper pulp,” granted to Morris L. Keen, June 16, 1863, [No. 38,901]

The claims of this patent were as follows: “First, a boiler provided with a perforated diaphragm and well, or their substantial equivalents, arranged in the manner and for the purpose described. Also, in combination with the boiler, the arrangement of the discharge pipe and valve, for the purpose of blowing out or discharging the contents of the boiler under pressure, substantially as and for the purpose set forth”.

The defendants relied upon the invalidity of the reissues of the Watt & Burgess Patent, insisting that they were not for the same invention as the original. They also insisted that Mellier’s patent was limited to the use of caustic soda at a temperature due

to a pressure of seventy pounds, claiming that the patentee had repeatedly stated in his specification that a pressure of seventy pounds was equivalent to 310° Fahrenheit. The defendants used a pressure not exceeding sixty pounds.

{Complainants' bill was dismissed, with costs, and an appeal was taken to the supreme court by complainants, but was dismissed on a question not affecting the merits. See *The American Wood-Paper Co. v. Heft*, 8 Wall (75 U. S. 333.)

Thomas A. Jenckes, for complainants.

George Harding, for defendants.

Before GRIER, Circuit Justice, and CADWALADER, District Judge.

GRIER, Circuit Justice, That the reissued patents of 1863 are illegal and void requires no further reasons than those alleged in the answer and clearly substantiated by the evidence.

Mellier's patent is intended for straw alone, et similia.

He was not the first to succeed in this enterprise.

His patent must be construed by taking a view of all its parts.

He says his invention consists in subjecting straw to a pressure of at least seventy pounds to the square inch—prefers eighty.

"I have found by experiment that it is essential that a temperature equivalent to seventy pounds must be employed."

The only practical method of determining the temperature of the liquid is by noting the pressure on the boiler—testimony of Burgess.

Accordingly the patentee describes seventy pounds as synonymous with 310° Fahrenheit. Again he describes it at seventy to eight-four pounds. The claim uses the term not less than 310° Fahrenheit which he has before defined by seventy pounds to the square inch.

The claim of this patent was sustained only against those who went beyond the seventy pounds in New York.

The process used by defendants does not come up to the minimum claimed by Mellier.

The defendants do not use over sixty pounds to the square inch.

There is no proof that defendants infringe either of Keen's boiler patents, that of 1859 or 1863.

Keen's patent of 1859 is for a combination of devices which is not used by defendants.

His patent of 1863 claims a perforated diaphragm of which he was not the inventor—see Martin Nixon's patent, 1853.

Nor was he first to use a discharge pipe and valve for the purpose of blowing out or discharging the contents of the boiler under pressure.

The arrangement of a discharge pipe, with stop-cock, is what every one using a vertical boiler might use without invention, and is not open to be monopolized by Keen.

The combination of devices in defendants' Dixon patent has more claim to originality and invention, and does not infringe either of Keen's patents. The bill ought to be dismissed.

CADWALADER., District Judge. As to the patents for alleged improvements in the boiler, or its appendages, it may suffice it to say, that so far as the alleged inventions may have been patentable and new, they have not been infringed. The other patents on which the bill is founded require careful consideration. I regret that the early departure of the circuit judge for Washington renders a decision so soon after the argument necessary.

Watt & Burgess, practical chemists, on August 19, 1853, obtained a patent in England. On July 18, 1854, they obtained one from the United States, for the same alleged invention, for fourteen years from the date of their English patent. The patent from the United States, and a reissued patent which was substituted for it, have been successively surrendered, and a second reissue has been obtained. This reissue was in two patents, dated April 7, 1863, Nos. 1448 and 1449. Each describes a process for boiling fine shavings, or cuttings of wood, or other vegetable substances, in a solution of caustic alkali, in a close vessel, under a high pressure, in order to obtain a pulp fit for making paper, the length of the time of boiling, and the strength and heat of the solution graduated respectively to one another, and to the more or less refractory nature of the vegetable substance to be thus treated; the duration of such boiling from four hours to twelve; the strength of the solution from 17° to 12° or 10° T. (corresponding with 12° to 8½° or 7¼° Beaume); and the heat ordinarily "at near or above" 300° Fahrenheit, which might, however, be raised to 500°. This means a minimum heat, not much below that indicated on the steam-gauge as due to a pressure of fifty pounds to the square inch, which heat might be increased as required. The pressure appears, from the evidence, to be no further useful than as the required heat of the liquid above 212° can not be imparted except under pressure, nor measured otherwise than by the degree of pressure, as indicated on the steam-gauge. The specification implies, that the graduation of the heat, the strength, and the duration were to depend, in a great measure, upon experience, not restricted within any narrow limits. Their graduation to the nature of the vegetable substance, whatever it might be, is expressly required in the specification. Their adjustment or graduation to one another, as occasion might require, though not expressed, is obviously implied.

The claim in the specification of No. 1448

is of the invention of a pulp suitable for the manufacture of paper made from wood, or other vegetable substances, by boiling in an alkali, under pressure substantially as described. The claim in the specification of No. 1449 is the invention of treating wood, or other vegetable substances, by boiling in an alkali, under pressure, as a process, or preparatory process, for making pulp for the manufacture of paper substantially as described. The invention claimed in these two patents, whether that of a product, or that of a process, depends wholly upon boiling in an alkaline solution in a close vessel, with such graduation of heat, strength, and time to one another, and to the refractoriness of the material, as may produce a suitable pulp at one operation. The question is whether Watt & Burgess invented either the product or the process at or before the date of their English patent of August 19, 1853, to which the American patents relate. Before this date, and before any maturity of their previous experiments, a pulp fit for making paper had been obtained by others from such fibrous substances as wood and straw, through the use of different processes for disintegration of the fibers. In every such case, the process had been one of successive stages. The substances had been boiled in an alkali, strong or weak, in open vessels and in close ones, under pressure and without pressure. The process had never been such as to produce the pulp at one operation. In some cases the boiling itself had been repeated. In all of them, there had, besides mere soaking and cleansing, been a succession of mechanical or of chemical treatments, or of both, with applications of heat. But as I have already said, a suitable pulp, that is to say, cellulose approximately pure, had, through some of these former processes, been obtained from both wood and straw. It is thus very clear that Watt & Burgess did not, nor did either of them, invent or discover the product as distinguished from the process.

As to the process, it was, on the part of the defendants, assumed that the case must be decided upon the patent No. 1449 alone; and, independently of the question whether the process in itself was new, the argument was urged that this patent was invalid because it claimed too much. The claim in it is for the invention of a process, or preparatory process. The novelty, if there was any, consisting wholly in the singleness of the process, it could not, according to the argument, be considered new as a preparatory process. Perhaps the phrase preparatory process, in the specification of this patent, has not precisely the meaning which this argument attributes to it. Pulp which is already fit for making brown paper, requires bleaching, in order to render it suitable for making white paper. If no further treatment than suffices to whiten the pulp is required for the latter purpose, the same process which suffices to finish the pulp for making brown paper, is thus, in a relative sense, preparatory as to white paper. If this were otherwise, the objection to the patent could be removed by a disclaimer, as was done in *Morse's Case*, 15 How. [56 U. S.] 120, 121. It is therefore unnecessary to inquire whether the difficulty might not also be

avoided by recurring to the patent No. 1448, which is not simply for a product, but for the product as made by the single process described.

The specification will therefore be considered as including a legally-sufficient claim of the invention of the process of boiling in an alkaline solution in a close vessel with such a graduation and adjustment of heat, strength, and time as will produce the pulp at a single operation. That the process thus claimed, if actually invented by Watt & Burgess at any time not later than the date of their English patent, was new, is, I think, on the evidence, unquestionable. Therefore, if they had invented it by August 19, 1853, the reissued patent must be sustained.

The evidence upon the question of fact as to the alleged invention of this date, consists of the testimony of Mr. Burgess, and his manuscripts, which have been preserved; the specifications of the English patent, and of the first patent obtained from the United States; the correspondence and other papers on file in the patent office, and the specimens deposited there. Let us consider first the documentary evidence, and after ward the testimony of Mr. Burgess.

It is quite clear, from all the writings which are not of date subsequent to the American patent of July, 1854, that what was patented, and what it was intended to patent in 1853 and 1854, was an alleged invention of a process of successive stages, one of which was boiling in an alkali, and that such boiling might be under pressure, but that it was optional. The patentees did not intend to describe, or to claim, any process completed at one operation, to which boiling under pressure was indispensable. It may be said that there is, nevertheless, no absolute impossibility that they had invented such a process; and that the legal question under the reissue is not what they had intended to patent, but what they had, in fact, invented. This, in the abstract, is true. But its mere legal truth does not lessen the immense improbability that they had, in fact, invented or discovered the process.

Nor is this improbability diminished by the testimony of Mr. Burgess, that economical considerations may have influenced the patentees to suppress, at the time, a part of their supposed invention. His testimony, as given to this effect at this late day, does not go, by any means, to the extent assumed in the argument for the complainants. If the matured invention had been fully conceived by him, it is probable that motives of economy

would, on the contrary, have suggested the idea of elevating the temperature in order to reduce the quantity of alkali used. The experiments of Watt & Burgess, in England, were begun in 1851, and there is nothing in the testimony of Mr. Burgess to induce a belief that by August 19, 1853, either of them had made any experiment with a view to such a simultaneous graduation of the time of boiling, and graduation of the heat and of the strength of the solution, as was required for a process of only a single state. He testifies that in a laboratory in 1852 he produced a pure pulp by boiling in a caustic alkaline solution. But how long it was boiled, he does not state, nor of what strength was the liquid. He says that he had not the means at his disposal for determining the pressure used. How many, or what were the stages of the process, he does not mention. He left England for the United States in the early part of 1854. The single previous experiment in which he made a pulp at one operation occupied only about twenty minutes, when he was alone in the laboratory. On this occasion he put about a pound of pine wood into a wrought iron mercury bottle of the size of about fourteen by six or eight inches. He could not recollect the strength of the solution, and had no means of determining the pressure. There was no ascertainment or estimate of strength, or heat, or time, much less graduation or adjustment of them; nor was there any attempt at either, unless it consisted in the simple use of extreme heat. From the shortness of the time, the pressure must (if the material was crude) have been very high, far above the extreme of tension for any working purpose. He does not appear to have had any mental conception of such a practical process as the patents of 1863 describe.

Great care in referring the different parts of his testimony to the proper periods must be observed, or it may be misapplied. In 1854, after the American patent of July in that year, he recommenced experiments in this country, and before the end of the same year had approximately matured them. Whether he then attained a sufficient knowledge of the process afterward described in the reissued patents of 1863 can not be material. If such was the fact, and if Mellier had not obtained his patent in the mean time, it would be the misfortune of the complainants that Mr. Burgess did not apply for an independent patent in the latter part of 1854, instead of referring his new invention, by the reissues, to the patent of August, 1853. But the misfortune could not be judiciously remedied. No such invention had been made at that time, and consequently the bill, so far as it rests upon the patents of resissue, must be dismissed.

The remaining question is, whether the bill can be maintained on the patent to Mellier, which is also vested in the complainants. A patent granted to Ladet, in France, on August 7, 1854, appears to have been obtained by him for this Mellier. The patent from the United States was obtained by Mellier himself on May 26, 1857, for fourteen years from the former date, August 7, 1854. He had, in the meantime, 1855, obtained a patent in England. The first claim and many parts of the specification of his American patent

are applicable to the subject which is here of no importance. Hereafter, when his claim is mentioned, it will be understood as the second claim. He describes the invention as a process for the treating of straw and other vegetable fibrous materials requiring like treatment preparatory to the use of such fibers in the manufacture of paper. The improvement, he says, consists in subjecting straw or such other fibrous materials to a pressure of at least seventy pounds on the square inch, when boiling such fibrous matters in a solution of caustic alkali. For this purpose the straw or fibrous matters are cut, soaked, and cleaned, and then placed in a suitable boiler. He prefers a temperature to produce at or above eighty pounds on the square inch in the boiler containing the fibrous materials; but says that so high a temperature is not absolutely necessary, for he has found by experiment a temperature equivalent to seventy pounds on the square inch essential. The quantity of alkali used is at the rate of about sixteen per cent, of the straw or fibrous substance under treatment. In describing the details of the process, he says that the heat is to be raised to such a degree as to attain and maintain for a time an internal pressure equal to, or exceeding, seventy pounds on the square inch, that is, about 310° Fahrenheit, by which a considerable saving of alkali, as well as time and fuel, results, as compared with former means of using a caustic alkali, in preparing straw and other fibers for paper makers. He adds, that by submitting the straw or similar fibrous materials to a pressure of between seventy and eighty-four pounds on the square inch inside of the boiler, he can reduce considerably the proportion of alkali, and that the solution which he preferred to use was to be from 2° to 3° Beaume, and at the rate of about seventy gallons to each hundred weight of straw or other fibrous vegetable matters requiring like treatment; and that he found it desirable to keep up the heat and pressure during about three hours after the above pressure obtained. After further washing, the straw or fiber may, he says, be bleached in the ordinary manner, and this will be found to be accomplished by a comparatively small quantity of chloride of lime.

He declared that he did not claim the general use of caustic alkaline solutions, nor the employment generally of a close boiler for boiling straw or other vegetable fibrous substances, but claimed the process for bleaching straw consisting in boiling it in a solution of pure caustic soda from 2° to 3° Beaume, at a temperature not less than

310° Fahrenheit, after it has been soaked and cleaned, and before submitting it to the action of a solution of chloride of lime from 1° to 1½° substantially as described. In this claim and in the body of the patent, the word bleaching is used with applications chemically the same, but practically somewhat different, through difference in degree. The word signifies, in the claim, a disintegrating, and in the body of the patent a mere whitening process.

The reason for giving so full an abstract, almost a transcript, of the material parts of the specification, with some of its repetitions of the same phrases, will appear as we proceed. In the mean time, we may remark that whenever the number of pounds of pressure is mentioned by Mellier, the means the internal pressure, exceeding by fourteen and seven-tenths pounds, the pressure as indicated on the steam-gauges here in use, the difference being the weight of the atmosphere. This difference must always be considered in comparing this French expression of the measure with the usual expression of it in this country. Thus the measure of seventy pounds in the specification of Meallier corresponds with about fifty-five pounds on the steam-gauge here in use. His French patent mentions a pressure of five or six atmospheres. From the less extreme, five atmospheres, the deduction of one for this difference leaves the minimum four atmospheres, not quite fifty-nine pounds. An observation of less importance is that the tables used by him, according to which the degrees of heat are tested by the pressures, must have been somewhat inaccurate. Thus, in the specification of his American patent, he gives seventy pounds, or, as indicated on our steamgauges, about fifty-five pounds as the pressure due to a heat of 310° Fahrenheit. The pressure due to such a heat should have been stated as internally about seventy-four pounds, or, as indicated on the steam-gauges, about fifty-nine pounds. so, in his English patent, he mentions eighty pounds on the square inch as the pressure due to a heat of about 322° Fahrenheit, whereas the internal pressure due to such a heat is about eighty-seven pounds, and the pressure as indicated on our steam-gauges about seventy-two pounds. These comparisons are facilitated by the tables annexed to Dr. Rand's testimony.

It is argued for the defendant that the process described in this patent applies to straw alone, or is limited to it by the claim; that the patentee was not the first person who succeeded in applying the process even to straw, and that if he was, the claim is limited to the use of a temperature not below 310° Fahrenheit, which he defines as seventy pounds to the square inch, internal pressure (corresponding with a pressure of about fifty-five pounds as indicated on the steam-gauge); that the pressure used by the defendants is below this, and that consequently they do not infringe the patent. I do not think any part of this argument maintainable. As I understand the specification, it describes, in substance, the process afterward claimed in the reissued patents of 1863, as the invention of Watt & Burgess. If so, Mellier would appear to have been the first person who discovered that

the temperature and strength of the solution, and the duration of the boiling, could, in practice, be so graduated and adjusted as to produce the pulp at one operation. The claim does not, in the apparent purpose of that part of it which mentions straw, resemble in all respects the claims ordinarily found at the foot of specifications of patents. If it did, it would limit the application of this patent to straw alone. But there is, in this respect, very little resemblance to such ordinary claims. The intended subjects of the process patented are explicitly and repeatedly designated in the specification as straw and other fibrous vegetable substances requiring like treatment, for the purpose in view. This treatment is exemplified with the requisite descriptive precision in the type case of straw. The description of this application of the treatment suffices to enable a skillful person to apply it to other substances requiring like treatment. Such a person ought to know, and if he did not, passages in the specification would instruct him, that with a crude fibrous vegetable substance, more refractory than straw, a stronger alkali, or a greater heat, or a longer time of boiling, would be necessary. In the application of the treatment to such a substance, the proportions which were as yet untaught by science, would be tested by future experience. The case of straw best exemplified the "considerable saving of alkali as well as time," etc., which the specification mentions. But a solution in which, at a certain temperature, straw could be made into a pulp in a certain time, would, if the strength were increased, and the time of boiling prolonged, serve to make wood into pulp, in the same close vessel, with or perhaps without, an elevation of temperature. With an elevation of temperature the wood might be made into a pulp in the same time as the straw, or in a time somewhat longer, and, perhaps, in a solution of somewhat greater strength. Experience would furnish and test the standards.

The substances must, indeed, be such as require like treatment with straw for the purpose in view. But what is this purpose? It is to obtain cellulose approximately pure, by disintegration. A fibrous vegetable substance which is ligneous, is not the less an object of this purpose because it is ligneous, if the treatment of it should be similar, and differing only in graduation and adjustment.

That the treatment required for straw and for wood are not otherwise different, appears beyond a doubt, from the answers of the defendants in this case, and from the sworn

report of the viewers who witnessed the processes at the defendants' manufactory. Their answer describes the process then and previously used by them in making pulp for paper from wood, and also in making it from straw. They at first treated wood with a solution of caustic alkali of the strength of 12° Beaume; but afterward found a strength from 4° to 6°, say 5°, to answer best. For straw they state that they have used a strength of about 3° Beaume. For both wood and straw they state the pressure as between fifty and sixty pounds, not exceeding sixty pounds. In the subsequent experiments at the manufactory, they used a pressure generally somewhat lower, but with a more than corresponding increase in the strength of the solutions.

The claim of Mellier sums up in the specification so far as it had exemplified the application of the general process in the specific treatment of straw, which, when boiled in a solution of only 2° or 3° Beaume, requires a temperature of at least 310° Fahrenheit, if this heat of the liquid is to be maintained, as he suggests, for only three hours. But in a solution of greater strength, like that used by the defendants for straw, with a cooking process continued for a longer time, as theirs was in the experiments witnessed by the viewers, the specification implies that a lower temperature would suffice. In Mellier's French patent the time of boiling mentioned is, instead of three, six or eight hours, and the strength of the solution, instead of 2° or 3°, is 3° or 4° Beaume. The French patent described the process as consisting in the production of a pulp, either white or of a color fit for the manufacture of paper from straw or other fibrous vegetable matters; and, in describing the details, occasionally mentioned straw without mentioning other materials.

Independently of recurrence to Mellier's French patent, I think his patent from the United States maintainable as to both wood and straw. I also think that the defendants have infringed as to each, and that if the patent were limited to straw, there should be still a decree for the complainants. But I am not of opinion that such an absolute restriction is within the fair import of the specification. The difference of opinion upon the bench applies to this patent only. But it prevents a decree for the complainants. Their bill must be dismissed in order that they may be enabled to appeal. The dismissal should be without costs. If the decree had been in their favor, it should, I think, have been without costs.

[NOTE. For a reference to the other cases involving the same patents, see note to *American Wood-Paper Co. v. Fibre Disintegrating Co.*, Case No. 320. An appeal was afterwards taken to the supreme court by the *American Wood-Paper Co.*, but the appeal was dismissed, on the ground that the complainants owned and controlled both sides of the litigation. *American Wood-Paper Co. v. Heft*, 8 Wall. (75 U. S.) 333.]

¹ [Reported by William Hubbell Fisher, Esq., and here reprinted by permission.]