

14FED.CAS.—49

Case No. 7,884.

KNIGHT v. GAVIT.

[43 Jour. Fr. Inst 408; Mirror Pat. Off. 94,131, 135.]

Circuit Court, E. D. Pennsylvania.

Oct., 1846.

PATENTS—PLAINTIFF'S TITLE—PART OWNERSHIP—TITLE IN TRUST
CLAIM—FORMAL CLAIM—REFERENCE TO DRAWING—PRIOR IMPERFECT
MACHINE—INTENTION TO INFRINGE—ALTERATIONS—MEASURE OF
DAMAGES—DEFENDANT'S PROFITS—PLAINTIFF'S LOSS.

- [1. Proof of two-thirds ownership of patent will not sustain an action against an alleged infringer when the plaintiff claims sole ownership.]
- [2. The holder in trust of the legal title may maintain action for infringement in his own name.]
- [3. When the claim is for the "arrangement of," etc., "as herein described," the court will not limit its view to the formal words of the claim, but will look to the description thus expressly referred to by the patentees, and deduce from it, and from the drawing which forms part of it, the entire improvement which it was their object to secure to themselves by patent.]
- [4. A machine, which from the imperfections in its material and the want of precision in its adjustments is unfit altogether for the offices that are performed by a later machine, cannot be used to defeat the claim of novelty (in the combination of known parts) in the later machine.]
- [5. Though the machine as made by defendant may not be an infringement on the plaintiff's patent, yet if it was so made that it might be easily adjusted by a third person so as to infringe that patent and the intention was that it be so adjusted, and it was so adjusted; then the defendant is liable.]
- [6. In considering the measure of damages for an infringement of a patent, the jury should take into account not merely the profit which the defendant has derived from the infraction, but the whole amount of loss and injury which the plaintiff has sustained, and among other things the expense and toil incident to bringing the suit for infringement.]

Between forty and fifty witnesses were examined. After the evidence was closed, the plaintiff contended that the specification showed that his patent was for a machine to finish paper by repeated contact of heated metallic cylinders, acting "with graduated temperature and pressure, on the naked sheet, while damp, in successive stages of the drying process, with an intermediate adaptation of former modes of alternately shifting the side next to the flying surface of the cylinders; and that on the question of invention, or of infringement, the explanatory designation of a method of graduating or preventing the closeness of contact of the two first cylinders did not exclude the optional use of other modes of postponing or graduating original contact or pressure, as might be deemed best for the protection of the moist sheet against injury from premature or excessive pressure. He therefore requested the court, first, to instruct the jury that if the terms of art contained in the specification were ordinarily used and applied as testified, and if the jury believed that the varying texture of the damp sheet, during the drying process, as described by the witnesses, rendered such repetition of contact of the driers a process adapted to the successive conditions of the sheet, and useful in converting it into finished paper, in

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the manner testified, plaintiff's interpretation of the specification was correct in point of law, and his patent valid, if original. Upon the question of originality, he insisted that, except in regard to the machines designated, respectively, as Carter's, Howe's, Fisher's, and Ames', there was no testimony opposed to his title as an inventor; and asked the court's direction, secondly, that if the machines designated as Carter's, Howe's, and Fisher's, respectively, operated as had been testified, without such successive graduation of either heat or pressure, neither of these machines was identical with the subject of the plaintiff's patent; and, thirdly, that, if the machine designated as Ames' was constructed as had been testified, the impossibility of any similar graduation of temperature, at the respective stages of dampness of the paper at which the sheet underwent pressure, and the incapacity of the machine do admit of a change of the side next to the drier during the continuance of the process, rendered this a different machine from that which was the subject of the plaintiff's patent. It was also contended in argument that if, through the failure, of defective execution, of Mr. Ames' purpose of a peculiar adaptation of a press roll, he had been obliged to resort to a remedy, through the use of which he had, by accident, and not design, made his machine perform, partially and inappropriately, certain functions to which the plaintiff's machine, as patented, was appropriately designed, and effectually adapted, still, as its casual and partial performance of these functions had not caused any public knowledge of the true principle and object of the plaintiff's machine, and had not even conveyed the true idea of its principle to the mind of Mr. Ames himself, such accidental use of a mode of operation, similar in part to that of the plaintiff's machine, ought not to deprive him of the benefit of his patent. But this point, though insisted on, was not argued at large, as the plaintiff relied confidently on the two radical points of distinction between his machine and that of Ames, on which the instruction to the jury was requested as above.

The defendant's counsel submitted the following points for the court: "the court is requested by defendant to charge: (1) That no action can be maintained for the violation of a patent by any persons who are not the owners of the patent, or the exclusive owners of a license for the places where the violation occurred. (2) That the owners of two-thirds of a patent cannot maintain such an

action. (3) That if the plaintiff has sold one-third of his patent right, formerly owned by William Knight, he cannot maintain this action. (4) That the narr states the plaintiff to be the sole owner of this patent, and, if he is not so, this action cannot be supported. (3) That the account of the plaintiff, as assignee of his father, William Knight, sworn to by the plaintiff, is evidence that he has sold the one-third formerly belonging to said William Knight. (6) That the plaintiff's patent is for a combination only; and as all parts of the machine, separately, were known and used before, the violation must consist in the use of the combination described, and not for making the separate parts of the machine. (7) That making a machine in all respects like the plaintiff's alleged patent, in which the drying cylinders do not touch, is no violation of plaintiff's patent. (8) That making a machine with screws under the journals of the drying cylinders, so as to separate them, is no violation of the plaintiff's patent. (9) That if such a machine be made with screws under the journals, by which the drying cylinders may be kept apart, the machinist is not responsible for a violation of the patent right, although the purchaser should lower those screws, so as to allow the cylinders to come in contact (10) That the plaintiff's patent is for drying and pressing simultaneously; not for changing the sides of the paper; not for applying pressure at any particular stage of the manufacture; not for applying different degrees of heat. (11) That if drying and pressing paper at the same time was known and used before the patent of William Knight, then his patent is invalid. (12) That a mere repetition or reduplication of a machine known and used cannot be the subject of the patent, merely because the same effect is increased. (13) That if Knight's machine is nothing but the use of two or three of Howe's machines, his patent is invalid. (14) Any use, however limited, of a machine similar in principle to the patented machine will defeat the patent (13) The specification which describes only known and previously used parts of a machine will not support a patent for a combination, unless the combination intended to be patented is clearly stated. (16) In Knight's patent, the only combination stated is for drying and pressing simultaneously, and therefore that is all the patent covers. (17) If a machine such as Mr. Knight's, or a combination such as he asserts he has patented, is described in the specification of a previous American patent, Mr. Knight's patent is invalid. (18) Ceasing to use a machine, or preferring the use of another machine, will not authorize another person to take out a patent therefor, although he should be a subsequent inventor thereof. (19) If the patentee claims all the machine described in his patent,—as his combination,—he claims too much, and upon that ground this action cannot be supported. (20) Damages are only for the use of machine proved, so long as it has been proved to be used.”

KANE, District Judge (charging jury). This is an action of trespass on the case, brought by Abijah L. Knight to recover damages from Nelson Gavit, for an alleged breach of patent right. The plaintiff has presented letters patent [No. 1,336] under the seal of the patent office of the United States, duly attested, bearing date 23th September, 1839, by

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which there was granted to William and Abijah L. Knight and Edward F. Condit, their heirs, administrators, and assigns, the exclusive property in a new and useful improvement in the machine for making paper, of which a description is particularly given in an accompanying schedule. The plaintiff claims to be at this time, and to have been at the time when this suit was instituted, the sole owner in law of this patent right. The former interest of Mr. Condit having been regularly transferred to him on the 22d of May, 1841, and the former interest of William Knight in like manner transferred to him on the 15th December, 1842. The latter transfer, however, was by a conveyance in trust, and the defendants have objected that, on that account, as well as because it was not recorded within the time directed by act of congress, the conveyance did not pass such a title as would authorize the plaintiff to sue in his own name as assignee of that interest. This question, however, is one to be settled by the court, not by the jury. For the purposes of your deliberations and verdict, you will assume that the conveyance by William Knight to the plaintiff did pass to him all the legal rights of the assignor, and that, so far as this question is involved, the plaintiff must be regarded by you as if he had been named alone in the patent.

It has been contended, however, at a late moment in the cause, that the plaintiff ceased to be the owner of the interest which he derived from William Knight, at some time prior to the 28th of April, 1843, when he settled his accounts as assignee, and charged himself with the proceeds of sale of the assigned estate. You have seen the entry in the accounts, and have heard the evidence of Mr. Fallon as to the circumstances and purpose of making it. It only remains for the court to instruct you, as it does, that if, upon the evidence, you believe that no sale was in fact made to a third person, but that the plaintiff took the interest of William Knight at its appraised value, the transaction has not been such as to impair his right to maintain this action. That is to say, if you shall be of opinion that the plaintiff did, in fact, sell to some third person, at the time referred to, the interest which he had acquired under his father's assignment, so as to pass away his legal title in that one-third of the patent, then the plaintiff has failed to establish the

title which he has set forth in his declaration,¹ and your verdict will be for the defendant. If, on the other hand, you are not satisfied that such a sale to a third person has been made out by the evidence, then you will proceed to the further consideration of the case, leaving to the creditors of William Knight to assert hereafter, as they may do, any right they may have to a participation in the benefits of the patent right. The question of title under the letters patent being thus disposed of, the next topic of consideration is the patent itself, its import, the adequate clearness in which it is expressed, and the utility of the improvement it professes to recognize. The import of this patent may be determined, without difficulty, from the instrument itself, when construed according to the known rules of law. It therefore becomes the office of the court to declare what that import is; and it will be the duty of the jury to accept the interpretation, as given by the court.

In interpreting a written instrument, all its parts are to be taken together; and, in the present case, the drawing, which forms part of the specification, is to be taken with the rest. It is obvious that the specification and drawing before us relate to a machine of two parts or divisions; the first of which regards the construction of wet paper from the pulp, and the second the completion of the process of manufacture, by drying, consolidating, and finishing the material derived from the first. It is only the latter of these parts which gives rise to the present controversy, and to this alone, therefore, our inquiries must be confined.

The parts of the specification which describe this portion of the machine are found on the last four pages of the printed copy (a pamphlet copy used at the trial). After describing that which may be styled the wet machine, and the progress of the pulp paper to the drying cylinders, it goes on as follows: (With the drawing before the jury, the learned judge here read slowly the parts of the specification referred to.)

Taking all this together, it asserts the invention, by the patentees, of a combined machine, the several parts of which are not claimed as new. The plaintiff has requested us to charge you that this combined machine “is a machine to finish paper, by the repeated contact of heated metallic cylinders, acting with graduated temperature and pressure, on the naked sheet, while damp, in successive stages of the drying process, with an intermediate adaptation of former modes of alternately shifting the side next to the drying surface of the cylinders.” This definition the court is prepared to adopt. It is, perhaps, however, too concise to be apprehended at once clearly. The object of the machine, as we have said, is the completion of the process of manufacture by drying, consolidating, and finishing. It does this by employing a series of heated metallic cylinders, of which the heat is susceptible of graduation, and which are arranged as that some of them shall be pressed upon by the others, with regulated degrees of pressure. The naked paper, while yet damp, is made to pass alternately around and between these cylinders, and is thus progressively dried and consolidated by the heat and the pressure which it derives from them through

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the successive stages of the progress; the two sides of the paper, as it passes, being presented alternately to the heated surface of the cylinders, as in other well-known machines for drying paper.

Such, in the opinion of the court, is the import of the specification for the purposes of this cause; and it submits to you that the principle of the combined machine is therefore the repeated action of heat and pressure, applied alternately and directly upon the material, in degrees adapted to its progressive character. The number of cylinders, except so far as it is implied in the successive character of their action, their exact relative position, provided it be not incompatible with the purposes for which they are employed, their precise dimensions, the fact that some of them may, at the option of the workmen, be made, on occasion, to revolve without absolute contact, and the manner in which this may be effected, the arrangements for graduating the heat and the pressure; these, and numerous details, which, in the form of illustrations, suggestions of preference, or otherwise, find a place, not improperly, in the specification, are not looked upon by the court as essential parts of the machine. These regard matters independent of its principle and substantive character.

In thus defining the extent of the patented improvement, it will be observed that the court does not limit its view to the formal words of claim with which the specification closes. On the contrary, finding that those words "claim," in the name of the patentees, "the arrangement of the drying cylinders, for the purpose of drying and pressing the paper, as herein described," the court looks to the description thus expressly referred to by the patentees, and deduces from it, and from the drawing which makes part of it, the entire improvement which it was their object to secure to themselves by patent. The construction of the letters patent thus given by the court will be accepted by the jury as correct. Its errors, if they exist, can all be repaired, and their consequences be made innoxious by a revisory tribunal.

The next question is one for the jury upon the evidence before them. Is the specification, with its accompanying drawing, such a description of the patentee's improvement and of his mode of using it as to enable any person skilled in the arts of machine building and paper making to make, construct, and use the same? On this question the court is not aware that it can aid the deliberations of the jury. So far as the evidence is recollected, the numerous witnesses, on both sides, who have spoken of the patent, have none of them adverted to any obscurity in the terms of art which it employs, or to any substantial difference between the machine as described and the machine as made. The question, however, is with you. If the description and drawing are not such as might enable a skillful artist to construct the machine, you cannot find a verdict for the plaintiff.

The next question regards the utility of the plaintiff's alleged improvement. Upon this, also, you will pass as the evidence may direct you. If it be merely frivolous, or essentially pernicious, the law gives it no protection; if, on the other hand, it be practical, and not injurious to the interests of society, a difference of opinion as to its degree of usefulness, as compared with other machines, will not affect the right of the patentees. On this point the evidence of Mr. Phelps, Mr. Moore, Mr. Thomas, Mr. Towne, and others will present itself to your minds as entitled to very great weight. The issuing of the patent, upon the oath of the alleged inventors, is *prima facie* evidence of the novelty and originality of the invention. If, therefore, upon the points which I have mentioned, the conclusions to which your minds arrive shall be favorable to the plaintiff, it will remain for him to show that his rights have been infringed upon by the defendant. There is no dispute of the fact that, since the issuing the plaintiff's patent, and the vesting of the title in the plaintiff, and before the institution of this suit, the defendant did make a machine for Messrs. Wilcox, of Delaware county, of which the model is before you, and which machine was, and now is, in use for drying and finishing paper. If that machine was an infraction of the plaintiff's patent, the plaintiff has made out his case, and must have your verdict, unless the defendant can show good cause to the contrary. Was, then, the machine, made by the defendant for Mr. Wilcox, an infraction of the plaintiff's patent? or, in other words, is it or is it not, substantially and in principle, the same which is described in the plaintiff's patent?

In determining this question, you will have reference to the import of the plaintiff's specification, as it has been presented to you by the court. Is or is not the machine made by the defendant "a machine to finish paper, by the repeated contact of heated metallic cylinders acting, with graduated temperature and pressure, on the naked sheet, while damp, in successive stages of the drying process, alternately shifting the side next the drying cylinders?" It is substantially such a machine.

The question is not whether the two machines are identical in form, or whether they are equally perfect in their adaptation to use. It is the commonest of all devices, with those

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who seek to defraud a patentee, to give a novel exterior to their piracy, to modify forms, introduce new parts, or omit old ones, to change the position of the parts, and generally to mask their violations of the patent right as best they may. Sometimes the patent machine is made better by these variations; more frequently it is made worse. But all this is not of any moment to the discussion of an alleged infraction. Courts and juries look through the artifice of dress to the essential substance, and decide by reference to the substance alone. This is the law in regard to combinations of machinery, as well as those which may be, in common language, spoken of as simple. All machines, for which a patent can be sustained, are, in truth, combinations of known elements; the only simple ones are those which we call the "mechanical powers." The question, therefore, which you are to decide, is whether there has been a substantial violation of the plaintiff's rights as the owner of the patented combination. To determine this, you will compare the two machines, and will weigh the evidence of the different experts who have been examined; and, having done this, you will apply the law, as laid down by the court, to your conclusions of fact.

The defendant's counsel has asked the court to charge you that machines in which the drying cylinders do not touch may be made without violating the plaintiff's patent. The court has no difficulty in so instructing you; regarding, as it does, the contact of the cylinders, except so far as they may be separated by the sheet which passes between them, as an essential part of the patented machine. The court has been further asked by the defendant's counsel to instruct you that "making a machine with screws under the journals of the drying cylinders, so as to separate them, is no violation of the plaintiff's patent" and "that if such a machine be made with screws under the journals, by which the drying cylinders may be kept apart, the machinist is not responsible for a violation of the patent right, although the purchaser should lower these screws, so as to allow the cylinders to come in contact" The court is not aware that any evidence has been presented to which the instructions asked for can properly have application. But inasmuch as the request addressed to it implies that, in the opinion of the highly respectable counsel, there has such evidence been adduced, the court will submit its views of the law on these points,—the more readily, as the principles involved are, in its judgment, altogether elementary. If the machine, as

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made by the defendant, was not an infraction of the plaintiff's patent, the alteration of it, toy a third person, will not make the defendant liable for an infraction to which he was not a party. But if the machine, as made by him, was intended by him to operate in such a way as to violate the patent, and has, in fact, so operated, he was a party to the infraction, notwithstanding the ingenuity with which he may have sought to disguise his wrong. The introduction of screws under the journals, by which parts of the machine were for the time kept separated, which the purpose and uses of the machine required to be in contact, might be justly regarded by the jury as an illustration of this misdirected, and, in the result, profitless, ingenuity. So, the maker and vender of a patent lever watch, a combination of machinery, set in motion by a spring, and indicating the time of day by hands upon a dial plate, might infringe the patent for that invention, though at the time of selling the machine he had detached the hands from the dial, or omitted to wind up the spring. The law would be valueless, if it could be eluded by devices like these. No machine maker, however determined to violate a patent right, would fail to leave some corner of his work unfinished, some spring unwound, some screw unadjusted, if, by so doing, he could escape the responsibilities, without impairing the profits of his unlawful act.

The court submits to you the question, as one of fact, whether the defendant did make a machine similar in principle and substance with that of the plaintiff, as the court has defined it. If you find that he did, then the defendant is put upon his defence. By the both section of the act of congress of 1836 [5 Stat 123], the defendant, in an action like the present, is permitted to avail himself of various matters of defense, upon giving notice of them in writing to the plaintiff 30 days before the trial. Among these are included facts tending to show that the patentee was not the original and first discoverer of the thing patented, or that it had been described in some public work anterior to the supposed discovery thereof by the patentee. If, however, the defendant relies, under this section, on the fact of a previous invention, knowledge, or use of the thing patented, he is required to state in his notice of special matter the names and places of residence of those whom he intends to prove to have possessed a prior knowledge of the thing, and where the same had been used.

In accordance with this section, the defendant, 30 days before the trial, gave notice that the subject-matter of the plaintiff's patent had been, before the time at which the patent issued, known to, and in use by, a number of persons, of whom eight were specified. No notice was given of an intention to show that the subject-matter had been described in any public work before the plaintiff's supposed discovery; and no evidence, therefore, of such publication, could be presented at the trial, unless by the plaintiff's consent Two or three books have, however, been read without objection, and are in evidence before you; and many witnesses have been examined to establish the prior knowledge and use of the

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machine. From all of these, the materials are presented in reasonable abundance to enable you to decide the great question of the cause, viz. the novelty of the alleged invention.

It is not my purpose to recapitulate this evidence. The range of inquiry has been very broad, and very much of that which appeared pertinent when introduced has been properly passed over in the argument without notice. The only machines which have been the subject of much discussion before you, as of alleged similar character and prior date, are those of Howe, Carter, Ames, and Fisher. Upon each of these I shall make a few remarks, as introductory to contain instructions which it is my duty to give you on questions of law. For reasons not directly connected with this particular suit, it is my wish that, as far as may be practicable, the action of the jury on the merits of Knight's patent shall be independent of any direct expression of opinion from the bench.

First, then, of Howe's machine. This has the merit, as compared with Knight's, of unquestioned priority of device and structure, and its appearance (referring to the machine itself in court) certainly does not contradict its date. It consisted of a single pair of unpolished cylinders, heated by the rudest of all possible representatives of a steam boiler, without a safety valve, until the unconsidered contingency of an explosion suggested the substitution of hot bars of metal as a less dangerous resort. "That didn't answer, however, so well as the steam;" and at last a common stove was introduced below the machine, one of the cylinders acting as a revolving smoke drum. It dried wrapping paper imperfectly,—a thinner variety of coarse paper somewhat better, but not perfectly,—and it would seem that when the paper on which it was to act was thin, or less moist than common, or when the fire was good, and the potash kettle, which served for a boiler, had not been recently filled, it also pressed the paper without crushing it. It disappeared from the category of things in practical use and application, about the year 1837, when it was discarded by the proprietor, and has since remained in a lumber garret, till it came here for the purpose of this cause. The rudeness of structure of Howe's machine, and the primitive character of its appliances, do not, however, necessarily indicate a difference of principle between it, and a more highly finished specimen of art. Yet they may do so. For if the imperfection of its surface, and the want of precision in its adjustments, unfitted it altogether for the offices that are performed by Knight's machine, then it must follow that the object of Howe's machine was different, or that it failed to effectuate its object; and, if so, it

cannot be legally regarded as a machine known and used before the date of the patent.

It is for the jury, looking at the facts, to say whether this was a machine like Mr. Knight's; whether there was an alternating succession of drying and pressing, that repeated contact of cylinders, that graduation of the heat to the exigencies of the advancing stages of the process, which we observe in his; whether, in a word, it was adapted to finish paper, or whether it necessarily left it unfinished and imperfect. With reference, as we suppose, to this machine of Howe's, the court has been requested to instruct you that "a mere repetition, or reduplication, of a machine known and used, cannot be the subject of a patent, merely because the same effect is increased." The position is, in one sense, true. If it be intended to assert that a man who has no right to patent one machine has no right to patent two of them, it may be conceded as indisputable. But if it be meant that a new and useful combination cannot be patented, because the parts which compose it are similar to each other, the court declines instructing you that such is the law. Nor is it, in the view of the court, an objection to the claim of a patent for such a machine that it merely increases an effect which might be imperfectly produced by a more simple one; since it may be, and often is, the case, that the increased effectiveness of a contrivance constitutes all its value. The repeated reduplication of a feather makes the feather bed,—the reduplication of patches, the quilt that covers it.

We are further asked to instruct you that "if Knight's machine is nothing but the use of two or three of Howe's machines, his patent is invalid." The answer of the court is embodied in the remarks just made.

Again, the counsel for the defense have asked us to instruct you that "any use, however limited, of a machine similar in principle to the patented machine, will defeat the patent." As an abstract proposition, this is somewhat too broadly expressed, according to the best judgment of the court; but, if limited to the ease under trial, it is certainly true that all four of the machines, which assert priority over Knight's, have, according to the evidence, been so used as to invalidate his patent, if they, or either of them, can justly be regarded as the same substantially and in principle with his. Taking these, as they appear to the court, upon the evidence, to have stood at the date of the plaintiff's patent, they may be described thus (the models and drawing of these several machines were before the jury): (1) Carter's. Consisting of several drying cylinders of the ordinary construction, heated by steam, not in contact with each other, with a small calender roller placed above one or more of them; the calender deriving heat only from the paper, which was itself heated by the drying cylinder, around which it passed; the paper not changing sides in its progress. (2) Ames'. A single drying cylinder, of unusually large diameter, heated by steam, with a number of rollers of cloth, canvas, lead, iron, and paper, placed around it,—some of them susceptible of graduated pressure, others so fixed as to be incapable of graduation. None of them heated except from the cylinder through the paper; the paper not changing sides

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in its progress. (3) Fisher's. In which the paper passed over a heated iron drier, of some two feet diameter, between that drier and another of larger dimensions, also heated, and then around the larger drier.

If such be the evidence, of which the jury will judge, it would seem: (1) That in Carter's and Ames' machine, up to the time in question, the paper did not pass between heated cylinders at all, in that which may be regarded as the proper sense of the term, "heated cylinders"; for the rollers having no independent heat, but deriving all their heat from their contact with the paper, could never be hotter than the paper itself, and thus could not aid in drying it. (2) That in Carter's machine, if the testimony of Ayres and Lungren be correct, there was no successive pressure of heated cylinders,—the contact, as in Howe's, occurring only once; and that the same is true as to Fisher's. (3) That in Ames', though there was a succession of imperfectly graduated pressure, there could be no graduation of temperature, there being but one heated cylinder, from which all the rolls derived their heat. And (4) that in neither Ames' nor Carter's were the two sides of the paper presented alternately to the drying surface. (These observations of the learned judge were incidentally explained by reference to the models.) The court has indicated the particulars in which these several machines appear to it to differ from the machine of Mr. Knight. In so doing, it has not been our purpose to influence your action, but to make it more easy. You will decide, upon the evidence, whether these or any other differences exist in point of fact; and, if so, whether they are of form and proportion only, or of principle and substance also. If the machine devised by Mr. Knight is the same with either of those before known, this action cannot be sustained, and your verdict must be for the defendant.

Reference has been made, in the course of the trial, to a patent issued on the 8th of September, 1824, to Isaac Burbank, for an improvement in making paper, called the "revolving mould." The patent itself is for an invention altogether unlike that which is here in controversy; but it is contended that Mr. Burbank has in his specification described an apparatus similar in principle to Knight's drying machine, without, however, claiming it as part of his invention. There is no proof whatever that Burbank ever made or used the machine which he so described, or that Knight ever saw or heard of the description; and the patent office having been burnt some three years

before Knight's patent was applied for, and Burbank's patent not having been since recorded anew, there is no ground on which an inference of fact, still less a presumption of law, can rest adverse to the originality and integrity of Knight's invention. Independent of all which, the court does not feel itself justified in instructing you that a man who patents his invention is bound to take notice, at his peril, of all that all prior patentees have seen fit to mix up with the specifications of their supposed inventions. It is enough, in all reason, for any one mind to inform itself of all the supposed inventions really patented, with their appropriate specifications.

The descriptions and drawings in the books which have been read to you will next claim your attention. In examining them you will be careful to ascertain whether the machine for which a patent is here claimed, and not some other, differing either in its essential structure or purpose, has been the subject of description. If the plaintiff's machine had been described in some public work anterior to his supposed discovery, he cannot recover in this action. If, on the other hand, you shall be of opinion that he, and those to whose rights he succeeds, were really the inventors of the improvement for which he holds a patent; that he has not sold his legal interest, or any part of his legal interest, in the patent; that the invention has been honestly and adequately set forth in his specification and drawing; that it is useful; and that the defendant has made and sold a machine which is substantially and in principle the same as his; in such case, your verdict will be for the plaintiff, and you will proceed to inquire what damages he has sustained. The measure of damages, in a case like this, can scarcely be defined in precise terms. They should be compensatory, not vindictive. The object is not punishment, but it is full indemnity. The amount of profit which the defendant has derived from the infraction is one of the elements to be regarded; but the amount of loss and injury which the plaintiff has sustained should be regarded also. Among other things, the expense and toil incident to the prosecution of a suit like this, ought to be fairly considered. The plaintiff ought not to be made a loser by the assertion of his rights. In the words of the law, your verdict will be for such an amount as you believe to be "the actual damages sustained by the plaintiff." The counsel for the parties respectively have asked the court to instruct you on several legal questions. Some of them have been already adverted to. On the rest, we will now advise you, according to our best judgment.

So far as the plaintiff's points have not been answered, the jury are now instructed as follows:

(1) If the terms of art contained in the specification are ordinarily used and applied as testified, and if the jury believe that the varying texture of the damp sheet during the drying process, as described by the witnesses, renders such repetition of contact of the driers, as is described in the specification, a process adapted to the successive conditions of the sheet, and useful in converting it into finished paper in the matter testified, the

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plaintiff's interpretation of the specification is correct in point of law, and his patent is valid, if original.

(2) If the machines designated as Carter's, Howe's, and Fisher's, respectively, operated, as has been testified, without successive graduation of either heat or pressure, neither of these machines was identical with the subject of the plaintiff's patent.

(3) If the machine designated as Ames' was constructed as has been testified, the impossibility of successive graduations of temperature at the respective stages of dampness of the paper at which the sheet underwent pressure, and the incapacity of the machine to admit of a change on the side next to the drier, during the continuance of the process, render this a different machine from that which is the subject of the plaintiff's patent.

Of the defendant's points, the 7th, 8th, 9th, 12th, 13th, and 14th have been answered by the court in the charge already given. The 18th has also been answered, so far as it regards the case. The 1st, 2nd, 3d, and both points are answered in the affirmative. So, also, is the 4th, meaning, of course, the owner of the legal title; for, whatever may be the equitable rights of others, the legal owner may maintain suit.

The remaining points of the defendant are answered as follows:

(5) It is evidence to go to the jury, with the other evidence that leads to opposite conclusion. It is not conclusive. The jury are to say whether plaintiff sold to a third person, or took to himself at the appraised value. Unless he sold to a third person, the action is well brought.

(6) Answered in the affirmative; but a substantial violation is enough. The forms and proportions are not essential.

(10) The court has construed the patent in the charge, and has nothing to add to what has been said.

(11) His patent is not invalid on the supposition which the point presents, if the plaintiff's combination of machinery for that purpose was new.

(16) Not so. The combination stated is for drying and pressing, "as described" in the specification, and the patent is coextensive with the specification.

(17) Not so. If the patent was not on record, or known to him before his patent, it does not per se invalidate his patent, as to a matter not patented in the previous patent, or claimed in it as an invention of the patentee.

(18) Answered in the charge, so far as it regards the case.

(19) The defendant's counsel, having explained this by reference to the 9th section of the act of congress of 1837 [5 Stat 194], contends that the words "thing patented," as there used, cannot in any case, be applied to a combination. The instruction, as requested, is refused.

(20) If the machine was never used, the damages should be merely nominal, as against the maker; if it has been sold by him and used by others, the verdict should be for the damages actually sustained by the plaintiff, without exclusive reference to the profitability of the use by the wrongdoer, or the length of time such use may have continued.

The jury found a verdict for the plaintiff. Damages, \$1,500.

NOTE. After the verdict, Mr. Wilcox, for whom the machine which formed the subject of controversy had been made by the defendant, paid \$500 to the plaintiff, who, for this consideration, executed to him a release of his liability, in damages, for having used this machine, and another one made by another machinist, on the principle of the patent, with a grant of the privilege of the future use, by Mr. Wilcox, of the same two machines.

¹ Note by the Reporter. It has been suggested in argument that the plaintiff, as admitted proprietor of two-thirds of the patent right, might independently of the objection, have sued in his own name for his damages sustained as such partial proprietor, if his title had been set forth in the declaration. See 11 Adol. & E. 209.