

was patented. That the defendants infringe is, I think, also clear. It is true that the escape pipe of their purifier is connected to the steam-pipe which supplies the steam to run the feed-pump, and is not connected to the dome of the boiler; but the variation is not material, and does not make the defendants any less infringers. The decree will be for the complainant, for an injunction, with costs.

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VULCANIZED FIBER Co. v. TAYLOR.

(Circuit Court, D. Delaware. July 27, 1891.)

PATENTS FOR INVENTIONS — INVENTION — SUBSTITUTION OF MATERIALS — CHAIR BACKS, Etc.

Letters patent No. 185,576, issued December 19, 1876, to Reuben H. Plass, for an improvement in seats and backs for chairs, and claiming simply the substitution of vulcanized fiber for veneers, coated paper, metal, etc., are void for want of invention, as the application of an old material to a new use, as a mere substitute, is in no sense an invention or discovery. *Smith v. Vulcanite Co.*, 93 U. S. 436, distinguished.

In Equity. Suit by the Vulcanized Fiber Company against Edward M. Taylor for infringement of a patent. On motion for preliminary injunction. Denied.

*Bradford & Vandegrift*, for complainants.

*Wm. S. Hilles*, for defendant.

WALES, District Judge. Letters patent No. 185,576, dated December 19, 1876, for an improvement in seats and backs for chairs, were issued to Reuben H. Plass, and subsequently, by sundry mesne assignments, became the property of the complainant corporation, which now sues the defendant for an infringement. The defense is want of novelty and the consequent unpatentability of the alleged improvement. The specification states the object of the improvement to be—

“A seat or back for chairs, lounges, etc., of greater strength, durability, and rigidity, and less liable to be affected by the atmosphere than those of the ordinary character. Heretofore veneers, coated paper, metal, and other materials have been employed as substitutes for cane and leather in the manufacture of seats and backs for chairs, etc., but to a greater or less degree have failed to meet the requirements of a practical article.”

After detailing the objections to other materials, and in the making of chair seats and backs, the specification continues:

“My improved seat, which is liable to none of these objections, consists of vegetable fiber formed into a sheet which is tough, elastic, light in weight, flexible, yet possessing the requisite stiffness, extremely durable, and of any required color.”

The specification next describes the process of making the vegetable fiber, and concludes:

"The material thus prepared is termed 'vulcanized fiber,' and may be used in sheets or strips, solid or perforated, and applied to either the bottoms or backs of chairs, lounges, and other furniture. I do not claim vulcanized fiber, as that is not my invention. My invention relates only to the improvement of chair seats, backs, etc., and consists in the application of the material herein named in the manner set forth. I claim, as a new manufacture, a seat or back for chairs, lounges, etc., consisting, in whole or in part, of vulcanized fiber,—that is, vegetable fiber prepared by treating it with chloride of zinc, or its equivalent, consolidating and drying as set forth."

Does this claim, in connection with the specification, present a patentable invention? The provisions of the constitution, art. 1, § 8, subd. 8, is that congress shall have power to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries. The beneficiary must be an inventor, and must have made a discovery. The patent law has always carried out this idea. In the act of July 8, 1870, (16 St. p. 201, § 24,) the patentee was required to be a person who had "invented or discovered any new and useful art, machine, manufacture, or combination of matter, or any new or useful improvement thereof;" and that language is reproduced in section 4886, Rev. St. So it is not enough that a thing shall be new, in the sense that in the shape or form in which it is produced it shall not have been before known, and that it shall be useful; but it must, under the constitution and the statute, amount to an invention or discovery. *Thompson v. Boisselier*, 114 U. S.

5 Sup. Ct. Rep. 1042.

What did Plass claim to have invented or discovered? Not the process of making vulcanized fiber, for that he expressly disclaims, but simply the substitution of that material in the place of wood, iron, or leather. The substitute purposes no new function, nor does it produce, in combination with old materials, a new result. The application of a material that was never before used in making chairs did not require the exercise of the inventive faculty. He may have been the first person to see the adaptability of vulcanized fiber to this purpose, and to reduce it to practice; but that was nothing more than the judicious selection of a material for two of the component parts of a chair,—a choice that could have been made by any mechanic who was skilled in the art of making chairs, and had the material at hand. Before the date of Plass' application for his patent, vulcanized fiber had been employed as a substitute for wood and for leather in the manufacture of various articles in common use, and is now extensively used in the making of traveling trunks. In the course of time, if its cost shall become cheaper, it may still more generally take the place of other materials. But such substitution, if it amounts to nothing more than the change of one substance for another, the new performing the same function as the old, will not constitute invention or discovery, according to the legal meaning of those words as defined by repeated decisions of the supreme court. The substitution may produce in some respects a new and useful article, yet, if it is not the result of a creative invention, it will not be entitled to a patent.

In *Hicks v. Kilsey*, 18 Wall. 670, the patent related to an improved wagon-reach; that is, a pole connecting the fore and hind axles of a wagon, which was curved upward from the hind axle so as to allow the fore wheels to pass under it when the wagon was turned around. The contrivance was not new, but had formerly been made of wood throughout, having the curved part strengthened by iron straps bolted together. The improvement of the plaintiff consisted in leaving out the wood in the curve, and substituting iron, whereby the reach was made less bulky, but in all other respects having the same shape and performing the same office as before. Mr. Justice BRADLEY, in delivering the opinion of the court, said:

"It is certainly difficult to bring the case within any recognized rule of novelty by which the patent can be sustained. The use of one material instead of another in constructing a known machine is, in most cases, so obviously a matter of mere mechanical judgment, and not of invention, that it cannot be called an invention unless some new and useful result—an increase of efficiency or a decided saving in the operation—is clearly attained. Some evidence was given to show that the wagon-reach of the plaintiff is a better reach, requiring less repair, as having greater solidity than the wooden reach. But it is not sufficient to bring the case out of the category of more or less excellence of construction. Axe helves made of hickory may be more durable and more cheap in the end than those made of beech or pine, but the first application of hickory to the purpose would not be therefore patentable."

In *Hotchkiss v. Greenwood*, 11 How. 248, the court decided that the substitution of porcelain for metal in making door-knobs of a particular construction was not patentable, though the new material was better adapted for the purpose, and made a better and cheaper knob; and so, also, the substitution of wood for bone, as the basis of a bottom covered with tin, was held to be not patentable.

In support of Plass' patent, counsel for complainant relied on the case of *Smith v. Vulcanite Co.*, 93 U. S. 486. There the patent was for an improvement in the manufacture of artificial sets of teeth, and consisted in substituting a plate made of vulcanizable compound for the cement or other material formerly used. But there was something more than a substitution of hard rubber for gold, silver, tin, etc. The article made under the patent was a combination of materials fused together, and producing a new result, which differed in its mode of manufacture from any other article of its class, and was vastly better in several respects to all that had been before known. Plass' claim is for a plain substitution, like the iron in the wagon-reach and the porcelain in the door-knob, being the same in principle, and certainly displaying no higher degree of ingenuity. The motion is denied.

LEE v. PILLSBURY *et al.*

(Circuit Court, D. Minnesota. January Term, 1892.)

## 1. PATENTS FOR INVENTIONS—PROPERTY RIGHT—DAMAGES FOR INFRINGEMENT.

The exclusive use granted by a patent is a property right, and a plaintiff, in an action at law for infringement, may recover actual damages therefor.

## 2. SAME—CONSTRUCTION OF CLAIM—INOPERATIVE CLAIM.

The words "substantially as specified," in the claim of a patent, are to be given effect; and where the claim, read literally, would be inoperative, their effect is to include in the claim elements or devices contained in the specification that are wanting in the claim.

## 3. SAME—DAMAGES—GENERAL EVIDENCE.

Where there is no license fee, and nothing to show that the patentee puts his machine upon the market, he must furnish other evidence to enable the jury to come to a proximate amount of the damage which he has sustained by the infringement, and for this purpose general evidence may be resorted to.

## 4. SAME.

The actual damages suffered by plaintiff may be arrived at by evidence showing the value of that which defendants have used, the utility and advantage of the invention of the plaintiff over the old modes or devices that have been used for working out similar results, and the saving effected thereby.

## 5. SAME—NOMINAL DAMAGES.

Plaintiff can recover only nominal damages for the infringement of an impracticable machine, or if he fails to show actual advantage to defendants by the use of his machine.

## 6. SAME—PROOF OF DAMAGES—MERE OPINION.

Plaintiff must prove the actual damages directly, or show such facts as will enable the jury to ascertain the amount; and mere opinion as to the amount of that damage cannot be considered.

## 7. SAME—MEASURE OF DAMAGES.

The proper measure of damages for infringement of a patent is an indemnity to the plaintiff for the loss sustained by the infringement.

Action at Law for the infringement of letters patent No. 155,874, issued to the plaintiff October 13, 1874, for a seed separator. It was claimed by plaintiff that certain machines of defendants, used in their mills, infringed the third claim of his patent. Plaintiff's machine consists of a revolving sheet-metal cylinder, into which the grain is spouted. The cylinder is perforated with holes large enough to receive such grains as cockle, but too small to receive the wheat grains completely within them. On the outside, a skin belt, as wide as the length of the cylinder, surrounds it, so as to cause the perforations to retain the cockle. A trough is suspended lengthwise within the cylinder, and as the cylinder revolves the cockle is retained in the perforations, carried above the trough, and is dropped upon it, to be discharged out of the machine. This chute or trough has a brush at one edge, which rubs against the inner surface of the cylinder, to brush down the wheat, and leave the cockle in the holes, to be carried up and discharged in the trough. The third claim reads: "The brush, J, in combination with the perforated cylinder, A, and trough, C, substantially as specified." Defendants contended that the claim was inoperative, because it did not include the skin belt; that they did not infringe it; also that it was anticipated by