

HAMMERSCHLAG MANUF'G CO. v. BANCROFT.

Circuit Court, N. D. Illinois.

September 5, 1887.

1. PATENTS FOR INVENTIONS—WAXING PAPER—HAMMERSCHLAG AND STENHOUSB INVENTIONS.

The fifth claim of reissued letters patent No. 8,460, October 22, 1878, to Siegfried Hammerschlag is for a "method * * * of waxing paper, consisting in spreading the wax upon the surface, heating the paper from the opposite side to spread and fuse the wax into the fabric of the paper, removing the surplus wax, and remelting and polishing the wax upon the paper. * * *

HAMMERSCHLAG MANUF'G CO. v. BANCROFT.

The paper is passed over and in contact with a heated revolving cylinder, partly submerged in a vat of melted paraffine, then over a scraper, and lastly over a polishing roller. A scraper is also applied to the cylinder, between the wax-trough and the place of contact with the paper. In the Stenhouse English patents granted in 1862, and the American patent No. 97,983, to Cheney and Milliken, assignees of Stenhouse, December 14, 1869, one method of coating or impregnating fabrics with paraffine, to render them less liable to decay, and less pervious to air and liquids, was by passing them over one or more hot metallic rollers, working in a bath of paraffine; the amount of paraffine applied to the rollers being regulated by a gauger or knife or brush, and the incorporation of the paraffine into the fabric being effected by hot rollers, which also removed any excess of paraffine. Another method was to stretch the fabric on a heated metallic surface, and rub over it a fiat block of paraffine, then compressing by a hot flat-iron or hot rollers. *Held*, that the Stenhouse invention was no anticipation of the Hammerschlag invention; following *Hammerschlag v. Scamoni*, 7 Fed. Rep. 584.

2. SAME—INFRINGEMENT.

In defendant's machine the paper is passed from the supply reel under a heated pipe submerged in paraffine, then up between two cylinders or squeeze-rollers located over the vat of paraffine; the process of waxing paper being by heat, pressure, and friction, substantially as in plaintiff's process. *Held* an infringement of the fifth claim of plaintiff's patent.

3. SAME—PROCESS OR ART.

The plaintiff's patent being for a process or an art, it is not limited to the particular means described in the patent for carrying out the process.

In Chancery.

Roscoe Conkling, Frost & Coe, and Jesse A. Baldwin, for complainant.

John G. Elliott and Lysander Hill, for defendant.

GRESHAM, J. This suit is brought to enjoin the defendant from infringing the fifth claim of reissued letters patent No. 8,460, issued October 22, 1878, to Siegfried Hammerschlag, complainant's assignor; also the first; third, and fourth claims of letters patent No. 217,280, granted on the second day of June, 1879, to the same person, and by him assigned to the complainant. The fifth claim in the reissue is identical with the second claim in the original patent. *Gage v. Herring*, 107 U. S.: 640, 2 Sup. Ct. Rep. 819.

After argument of counsel, Judge BLODGETT granted a preliminary injunction against the defendant on all the claims. The complainant's chief reliance is upon the fifth claim in the reissue, which is for a process of waxing paper by machinery. I do not understand that any relief is expected upon the other patent, (No. 217,280,) which is for an improvement in machinery for waxing paper, and no further attention will be given it. The answer contains the usual defenses, but those chiefly relied on are anticipation by a large number of machines and patents, both American and foreign, and non-infringement. The fifth claim of the reissue is as follows:

"The method herein set forth of waxing paper, consisting in spreading the wax upon the surface, heating the paper from the opposite side to spread and fuse the wax into the fabric of the paper, removing the surplus wax, and re-melting and polishing the wax upon the paper, substantially as set forth."

YesWeScan: The FEDERAL REPORTER

The paper is passed from a supply reel over and in contact with a heated cylinder, which revolves partly submerged in a vat containing

HAMMERSCHLAG MANUF'G CO. v. BANCROFT.

melted paraffine, thus receiving the wax, to and over a heated roller which diffuses the wax equally, then to and over a scraper which removes the surplus wax, and finally to and over a polishing roller. A scraper is also attached to the cylinder that takes up the melted paraffine and applies it to the paper, and this scraper is applied between the wax-trough and the place of contact with the paper, for the purpose of removing surplus wax, and distributing the remaining wax uniformly over the cylinder. A full description of the process, step by step, and the means of carrying it out, will be found in *Hammerschlag v. Scamoni*, 7 Fed. Rep. 584. In an elaborate opinion in that case, Judge BLATCHFORD held that Hammerschlag's invention was new and useful; that he was a pioneer in the art,—the creator of a new industry or article of commerce; and in sustaining the fifth claim gave it a broad and liberal construction. This decision was followed in the Third circuit (*Hammerschlag v. Garrett*, 9 Fed. Rep. 43) by Judge BUTLER, the circuit judge concurring; also by Judge LOWELL in the First circuit, in *Hammerschlag v. Wood*, 18 Fed. Rep. 175.

In referring to the broad construction given to the fifth claim by Judge BLATCHFORD, Judge LOWELL said: "I am myself of opinion that the claim may and should have this liberal construction." It is true that, on a motion in *Hammerschlag v. Garrett* to commit the defendant for contempt, the court held the fifth claim was not entitled to the liberal construction given to it in the *Scamoni Case*; but on a similar motion in the latter case, before Judge BLATCHFORD, he adhered to this first interpretation of this claim, and held that dipping the web itself into a bath of wax, instead of dipping the cylinder into the bath, and carrying the paper over the cylinder, was an infringement of the fifth claim. It is not necessary to refer to other cases for infringement of the fifth claim, in some of which the complainant obtained preliminary or perpetual injunctions, while failing in others, on the ground, however, that the proof did not show infringement.

The two English patents granted to John Stenhouse in 1862, and the American patent, No. 97,983, granted to Cheney and Milliken, as assignees of Stenhouse, December 14, 1869, are relied on here, as they were in the three cases above cited, as a complete anticipation of the Hammerschlag invention. Other patents and machines are also relied on as anticipating defenses; but I shall not notice them further than to say that if the fifth claim, broadly interpreted as it was by Judges BLATCHFORD and LOWELL, was not anticipated by Stenhouse, it was not anticipated at all. The Stenhouse invention was for a new improvement in rendering wood, leather, paper, and textile fabrics less pervious to air and liquids, and less liable to decay, by coating or impregnating them with paraffine. In one of his specifications, Stenhouse thus speaks of his invention:

"One way in which I treat leather and textile fabrics is as follows: I take a plate of iron or other metal, the upper surface of which is quite clean, and this I heat to a temperature

YesWeScan: The FEDERAL REPORTER

of 130 to 250 Fahrenheit, or even higher if desirable, either by placing over a suitable furnace, or by means of low or high

pressure steam, or a metallic or other bath. On this plate I stretch out the cloth or leather which I wish to coat or impregnate, and hold it tight and flat, by means of a frame, or some other suitable arrangement. When it has become sufficiently warm to soften or melt the paraffine easily, I then rub over it, on the wrong side of the cloth, a flat rectangular block of solid paraffine, so as to coat its surface as evenly as possible. The cloth is then strongly compressed by means of a hot flat-iron or hot rollers, or other suitable arrangement, in order to distribute the paraffine more equally among the fibres. * * * This plan will serve also for preparing water-proof paper. A thorough incorporation of the paraffine with the cloth is completed by calendering between hot metallic rollers, as in the previous case. * * * When fabrics of considerable length have to be treated with paraffine, the process can be made continuous by passing them over one or more hot metallic rollers coated with paraffine from working in a bath of that substance. The excess of paraffine is removed by means of what is called a gauge-spreader, having a ganger or knife fixed about it, and furnished with screws so as to regulate the amount of paraffine applied to the rollers. The amount of paraffine can also be regulated by means of a brush or similar apparatus, also acting on a roller; the thorough incorporation of the paraffine into the fabric being subsequently completed with hot rollers, by means of which any excess of paraffine can also be removed.”

Judge BLATGHFORD held that there was nothing in the Stenhouse patents which anticipated reissued patent No. 8,460.

It is insisted by the defendant's counsel that no drawings of a machine in accordance with the Stenhouse patents were shown to Judge BLATCHFORLV and JUDGE LOWELL, and that they held the Hammerschlag invention was not disclosed in the Stenhouse patents without understanding those patents, or the prior state of the art. The defendant cannot thus avoid the force of the opinions of these two learned judges. In disposing of the contempt motion in the *Scamoni Case*, Judge Blatchford again considered the reissued patent and the Stenhouse patents, and stated that, while no drawings accompanied the latter, he had carefully examined the specifications.

The defendant makes waxed paper on two machines, which are so nearly alike that they need not be noticed separately. He passes a web of paper from a supply reel under a heated pipe or guide, which is submerged in a bath of paraffine, and then passes the paper up between two cylinders or squeeze-rollers which are located over a vat containing the melted paraffine. These squeeze-rollers remove the surplus wax, force the wax into the fibre of the paper, and smooth or polish the surface. In short, the defendant, by his machines, makes waxed paper by the action of heat, pressure, and friction; the process being substantially the same as the process covered by the fifth claim under the broad construction already referred to. The complainant's expert witness, Knight, in speaking of the defendant's machines and process, says:

“Referring to the fifth claim in reissue No. 8,460 and complainant’s exhibits Bancroft Patent and Bancroft Machine No. 2, I find that the operation of the machine made in accordance with said exhibits would carry out the process pointed out in said fifth claim in all its essential conditions of spreading and forcing the wax upon and through the paper, removing surplus wax, and smoothing the surface by the combined agency of heat, pressure, and

HAMMERSCHLAG MANUF'G CO. v. BANCROFT.

friction. In the words of Judge LOWELL, I find that the wax is spread, equalized, polished, and diffused by the defendant's machine. The lower roller, or cylinder, in defendant's machine is described in the exhibit Bancroft Patent as of polished metal. In the exhibit Bancroft Machine No. 2, it is shown hollow, and connects with steam-pipes, which serve to heat the bath of melted wax, and to remelt the wax, and to smooth the surface of the waxed paper after it leaves the pressure rolls; while the upper pressure cylinder or roller is described in the exhibit 'Bancroft Patent' covered with a jacket of rubber, or other suitable material, and suitable means are provided for carrying the web of paper under the surface of the melted wax in the bath, as in several other mechanisms which have been enjoined in the course of litigation under the fifth claim in question. The manifest and necessary effect of the apparatus shown and described in the exhibit Bancroft Patent, and represented in the exhibit Bancroft Machine No. 2, will thus be to spread and diffuse the wax on and through the paper, to remove surplus wax, and smooth the surface of the waxed paper, by the combined agency of heat, pressure, and friction; and the defendant's apparatus, therefore, in my opinion, carries out all the essential conditions of the art or process pointed out in said fifth claim of reissued patent 8,460."

Adopting, as I do, the broad construction that has been given to the fifth claim, I think this witness was correct in saying that the defendant makes waxed paper by a method which is essentially the same as the Hammerschlag process.

One of the reasons urged against the identity of the two processes, and against infringement of the fifth claim, is that the defendant passes the paper under a roller submerged in a bath of paraffine, thus applying the wax to both surfaces of the paper, and then passing it through two squeeze-rollers located over the vat. The defendant may not observe the same order in the various steps of the process that we find described in the reissued patent, but it does not follow that the processes are different because the various steps do not succeed each other in precisely the same order. The invention being for a process or an art, the inventor was not restricted to the particular means described in his patent for carrying out his process.

In speaking of the defendant's machine and process, in *Hammerschlag v. Wood*, Judge LOWELL said:

"The defendant's machine, considered as a combination of particular devices, differs somewhat from that, of the patent, and is more simple; it gets rid of one cylinder. The principal difference is that it passes the web through the bath directly, instead of passing the cylinder through it, and then passing the paper over the cylinder. I find, however, that the wax is spread, equalized, polished, and diffused by the defendant's machine, and, if the fifth claim of reissued 8,460 is to have the broad interpretation which Judge BLATCHFORD appears to me to give it, it is done in a substantially similar way."

YesWeScan: The FEDERAL REPORTER

The record in this case contains the same evidence, in the way of alleged anticipating machines and patents, that has been before the courts in prior suits involving the validity of the claim in question, and additional cumulative evidence of the same character.

It may be that, with the Stenhouse machines, and other devices described in the record are capable of being used to some extent in waxing paper, and that with slight modification some of them could be used

HAMMERSCHLAG MANUF'G CO. v. BANCROFT.

successfully for that purpose; but the evidence shows that, prior to the Hammerschlag invention, the supply of waxed paper was limited and expensive, and imperfect in quality. It remained for Hammerschlag to devise a means or process of producing an article superior in quality and finish to anything that had been previously produced, and in quantities and at prices which brought it within the reach of the public. His patent has been sustained by the courts in a number of contested cases; and a proper regard for uniformity of decision, especially in litigation of this character, should incline other courts to hold the patent valid against the same, or substantially the same, defenses, until all controversy over its validity is put at rest by a decree of the supreme court of the United States.