Brooks Vs. Fiske

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Appellant : Brooks

Respondent : Fiske

Judgement :

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Brooks v. Fiske

56 U.S. (15 How.) 212

APPEAL FROM THE CIRCUIT COURT OF THE UNITED

STATES FOR THE DISTRICT OF MASSACHUSETTS

SYLLABUS

A machine for planing boards and reducing them to an equal thickness throughout, which was patented by Norcross, decided not to be an infringement of Woodworth's planing machine, for which a patent was obtained in 1828, reissued

in 1845.

The operation of both machines explained.

The appellants were the owners of the Woodworth patent for a planing machine, the documents respecting which are set forth *in extenso* in the report of the case of *Wilson v. Rousseau,* 4 How. 646. They filed a bill against the appellees for an injunction to restrain them from using a certain planing machine, known as the Norcross machine, upon the ground that it was an infringement of their letters patent. Other matters were brought into the bill, which it is not material here to state.

In their answer, the appellees say, that they have jointly, under the firm of Fiske & Norcross, and not otherwise, used one planing machine and no more, since December 25, 1849, at their mill in said Lowell and nowhere else; but they believe, and therefore aver, that said machine is not the same in principle and mode of operation as the said Woodworth machine, but is substantially different therefrom, and contains none of the combinations claimed in the said Woodworth patent, but is a new and different invention, secured to said Norcross by letters patent, duly granted and issued to him by the United States of America, on the twelfth day of February, in the year one thousand eight hundred and fifty; to which, or a duly certified copy thereof, they refer as an exhibit, with this their answer, for the purpose of showing the substantial difference between said machines.

The answers then admit the filing of the bill of complaint charged in this bill to have been filed against them in 1844, and the making of the agreement recited in this bill; but they say that the machine referred to in that agreement, and which they were then using, was constructed according to a patent granted to one Hutchinson, on 16 July, 1839, but they admit that

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it embraced the first combination claimed in the Woodworth amended patent. The answers further contain the following averments:

"And these defendants, further answering, say that they believe, and therefore aver, that the said Woodworth patent is void in part, for want of novelty in the first claim therein, to-wit, for the employment of rotating planes in combination with rollers or any analogous device to keep the board in place, the same thing substantially having been before patented in France, to-wit, in 1817 and 1818, by Sir Louis Victor, Joseph Mari Roguin, and in 1825 by Sir Leonore Thomas de Manneville, and described in the printed publication commonly called Brevets d'Inventions, vol. 23, pages 207 to 212, plates 27 and 28, and vol. 41, pages 111 to 116, plate 12, and these defendants refer also to the Hill machine, mentioned in the said patent of Norcross, as publicly used by Joseph Hill of Lynn, prior to the pretended invention of the said combination by the said William Woodworth, deceased."

"And these defendants further say, that they believe, and therefore aver, that the said patent issued to William W. Woodworth, July 8, 1845, is not for the same invention as the original patent issued to William Woodworth, December 27, 1828, exclusive of the part disclaimed January 2, 1843, as alleged in the plaintiffs' bill."

"And these defendants, further answering, say that they are informed by numerous and able experts, and they verily believe, and therefore aver, that the machine used by them and patented by said, Norcross, as aforesaid, is not an infringement of the said Woodworth patent, nor of any rights of the plaintiffs under the same; and they pray that the question of infringement may be tried by a jury under the direction of the court."

To this answer a general replication was filed.

Much evidence was taken, and in March, 1852, the cause came on to be heard upon the bill annexed, general replication, and the proofs taken therein, before the judge of the district court, MR. JUSTICE CURTIS having been of counsel in the case. The court adjudged that the machine made and used by the defendants, and complained of in the said bill, is not an infringement of the right secured to the complainants under and by virtue of the letters patent reissued and granted to William W. Woodworth, administrator, on the eighth day of July, in the year one

thousand eight hundred and forty-five, referred to in the said bill, and under and by virtue of the several mesne conveyances recited in the said bill, and thereupon the court doth order, adjudge, and decree, that the complainants' said bill be, and the same hereby is, dismissed with costs.

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The complainants appealed to this Court.

MR. JUSTICE CATRON delivered the opinion of the Court.

The bill before us was filed against Fiske and Norcross by the assignees of Woodworth's patented machine for planing boards, and of tonguing and grooving them.

It is alleged that a planing machine, patented to Norcross, and used by the defendants, was substantially in its combination, and in the result it produced, the same as that assigned to the complainants, for a district in which the defendant's machine was used; that the complainant's patent was the elder, and that the use of Norcross' machine was an infringement of that invented by William Woodworth.

The circuit court dismissed the bill on the hearing, and it is this decree we are called on to revise. The contest in the court below could hardly have been more stringent, and much consideration was obviously bestowed on the case by the judge who decided it, as appears from his opinion, which is laid before us, the accuracy of which opinion and the decree founded on it, we are called on to examine. Before doing so, it is proper to state, that the machine used by the defendants, does not tongue and groove boards, and that this part of Woodworth's machine is not in controversy.

It is insisted that Woodworth's monopoly extends to his mode of reducing a plank to an equal thickness, and a principal question is whether the patentee sets up any such claim. It is provided by the 6th section of the act of 1835, that in case of any machine the inventor shall fully explain the principle and the several modes in which he has contemplated the application of that principle, or character, by which

it may be distinguished from other inventions: "And shall particularly specify and point out the part, improvement, and combination, which he claims as his own invention or discovery." An improvement of a machine is here claimed as having been invented, and the statute requires that such improvement shall be particularly specified; it is to be done in writing, and the applicant is to swear that he believes he is the first inventor of the improvement. This is required, so that the public may know what they are

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prohibited from doing during the existence of the monopoly, and what they are to have at the end of the term, as a consideration for the grant.

In the words of Lord Campbell in *Hastings v. Brown,* 1 Ellis & Blackburn 453, "The patentee ought to state distinctly what it is for which he claims a patent, and describe the limits of the monopoly," or, in the language of this Court in *Evans v. Eaton,* 7 Wheat. 434. It is for the purpose of warning an innocent purchaser, or other person, using the machine, of his infringement, and at the same time, of taking from the inventor the means of practicing upon the credulity or fears of other persons, by pretending that his invention was different from its ostensible objects.

Have these requirements been complied with by Woodworth, as respects a claim for planing boards to an equal thickness? He obtained a patent for his machine in 1828, which was surrendered by his executor in 1845, for want of a proper specification, and a second patent issued, and on this reissued patent the case rests. For its better understanding, we give extracts from the claim and specification; they are the same that were relied on by the circuit court, and are as follows:

"What is claimed therein as the invention of William Woodworth, deceased, is the employment of rotary planes, substantially such as herein described, in combination with rollers, or any analogous device to prevent the boards from being drawn up by the planes, when cutting upwards, or from the reduced or planed to the unplaned surface as described."

And afterwards,

"The effect of the pressure rollers in these operations, being such as to keep the boards &c.;, steady, and prevent the cutters from drawing the boards towards the center of the cutter wheel, whilst it is moved through by machinery. In the planing operation, the tendency of the plane is to lift the boards directly up against the rollers; but in the tonguing and grooving, the tendency is to overcome the friction occasioned by the pressure of the rollers."

This language, so far from claiming the new truth or the result now contended for as the invention or discovery, does not describe or even suggest either of them.

The claim, or summing up, however, is not to be taken alone, but in connection with the specification and drawings; the whole instrument is to be construed together. But we are to took at the others only for the purpose of enabling us correctly to interpret the claim.

The specification begins by saying

"The following is a full, clear, and exact description of the method of planing, tonguing, and grooving plank or boards, invented by William Woodworth, deceased. "

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Here the invention is denominated a method of planing, tonguing, and grooving, but not of reducing to an uniform thickness.

The specification, then, after describing the mode of preparing the board, proceeds thus:

"When the plank or boards have been thus prepared on a separate machine, they may be placed on or against a suitable carriage, resting on a frame or platform, so as to be acted upon by a rotary cutting or planing and reducing wheel, which wheel may be made to revolve either horizontally, or vertically, as may be preferred. The carriage which sustains the plank or board to be operated upon

may be moved forwards by means of a rack and pinion by an endless chain or band, by geared friction rollers, or by any of the devices well known to machinists for advancing a carriage or materials to be acted upon in machines for various purposes. The plank or board is to be moved on towards the cutting edges of the cutters, or knives, on the planing cylinder, so that its knives or cutters, as they revolve, may meet and cut the plank or board in a direction contrary to that in which it is made to advance. The edges of the cutters are in this method prevented from coming first into contact with its surface, and are made to cut upwards from the reduced part of the plank towards said surface, by which means their edges are protected from injury by gritty matter and the board, or plank is more evenly and better planed than when moved in the reversed direction."

There is afterwards a reference to, and explanation of, the drawings, as follows:

"In the accompanying drawings, figure 1 is a perspective representation of the principal operating parts of the machine when arranged and combined for planing, tonguing, and grooving, and when so arranged as to be capable of planing two planks at the same time, the axis of the planing wheel being placed vertically."

And again,

"The rollers f.f.f. which stand vertically, are to be made to press against the plank and keep it close to the carriage, and thus prevent the action of the cutters from drawing the plank up from its bed, in cutting from the planed surface upwards; they may be borne against it by means of weights or springs, in a manner well known to machinists. In a single horizontal machine, the horizontal friction rollers may be geared, and the pressure rollers placed above them to feed the board, with or without the carriage, a bed plate being used directly under the planing cylinder."

And afterwards, in describing the process for tonguing and grooving, he says:

"The edges of the plank, as its planed part passes the planing cylinder, are brought into contact with the above described tonguing and grooving wheels, which are so

placed upon these shafts as that the tongue and groove shall be left at the proper distance from the face of the plank, the latter being sustained against the planing cylinder by means of the carriage or bed plate or otherwise, so that it cannot deviate, but must be reduced to a proper thickness and correctly tongued and grooved."

"To meet the different thickness of the plank or boards, the bearings of the shaft of the cylinder must be made movable by screws or other means to adjust it to the work, or the carriage or bed plate may be made so as to raise the board or plank up to the planing cylinder."

The means to produce the result of reducing the board to an equal thickness in a horizontal machine are the pressure rollers f.f. above the plank, operating in connection with two feed rollers, and the pressure rollers, says the specification, "may be held down by springs or weighted levers, which it has not been necessary to show in this drawing, as such are in common use." These rollers are not claimed as new, but are here admitted to be old and to have been in common use when the patent was granted, nor is any intimation given in the specification or claim that the pressure rollers were intended to be used in any combination for the purpose of reducing a board to an equal thickness. In the description of the original machine, patented in 1828, the pressure rollers are not mentioned at all, but they are set forth as having belonged to the original machine in the amended specification of 1845, and which last-described machine, experts declare, materially differs from the original as patented in 1828. But as it is not necessary in this case to go into the allegation of variance set forth in the answer, we will proceed at once to examine the question of infringement. And to do this, we must first inquire what Woodworth's claim to novelty of combination and invention is. His rotary cutter wheel is old, his bed plate is old, and his pressure rollers are old likewise.

The invention relied on is a new combination in the machine of three elements, to produce the result of planing a plank against its motion through the machine, and

the claim of monopoly is the employment of rotary planes in combination with the face of a bench and pressure rollers to prevent the board from being drawn up by the planes when cutting upwards or from the reduced or planed to the unplaned surface, as described.

As the board advances on the rotary cutters, they will strike it thirty times in a second and violently tend to lift it into the knives, and to keep it down to the bench a strong pressure is required. And in the next place, the cutters being over the horizontal bed and stationary, at a fixed distance from it, and the

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board pressed down to it so forcibly as to crush out the winds in warped lumber, the machine will of necessity reduce the board to an equal thickness throughout.

Norcross' planing machine is an improvement of Hill's, which was in use when Woodworth invented his in 1828. Hill used the rotary cutter, which he placed on the underside of the bench with a section cut through it, the cutters extending through the bench to the upper side, so far as to take from the board, passing over the flat surface above, the depth of wood desired. Feed rollers were employed to forward the board, and a steel spring made of the section of a hand saw was used to keep the board steady. The spring pressed a smooth metal surface on the board and operated as a pressure roller does. But then this spring was not used for the purpose that Woodworth used his pressure rollers in this, that the face of the bench above the cutters prevented the board from being drawn into them; the cutters drew it down to the bench, so that this bench is the analogous device to Woodworth's pressure rollers, and is also in combination with the rotary cutters; hence these two elements existed, thus combined, when Woodworth got his patent.

Hill's machine had a bar immediately over the cutters and covering the cut through the bench, where the knives revolved; between this bar and the bench the feed rollers forced the board, but as the rest bar was stationary and the cutter wheel also stationary and the cutters extended to a fixed distance above the upper face

of the bench, the consequence was that the board came through the machine of an unequal thickness. To overcome this defect, Norcross made the rest bar, previously stationary, the cap of a square frame on the vertical side pieces of which he fixed the journals of his cutter wheel, the cutters and rest bar being stationary relatively to each other and always the same distance apart. This frame is supported in a stationary guide frame fastened, to the bench and so made as to allow a free vertical movement up and down of the rest bar and cutting cylinder. As the board passes over the face of the bench and under the rest bar, the whole weight of the sliding frame rests on the board, and as the cutters strike it at a gauged distance from the bar, and as they move up and down with the bar, it follows that when the board in its rough state is of an unequal thickness, and the side presented to the cutters is pressed down to the bench, the thicker parts of the board will force up the movable frame and draw up the rest bar and cutters above the bench equal to the increased thickness of the board, which will be dressed to the thickness of the space the cutters and rest are set apart. Opposite to the outer part of the rest F, that section of the bed over which the planed surface of the board passes,

is a bar horizontal to the rest. The two bars form a throat piece which serves to hold the board steady as it passes through the machine.

In view of this state of facts, the rule is that if a combination has, as here, three different known parts, and the result is proposed to be accomplished by the union of all the parts, arranged with reference to each other, the use of two of these parts only, combined with a third, which is substantially different in the manner of its arrangement and connection with the others, is not the same combination, and no infringement.

The combination and arrangement, as appears from the testimony of experts and by a comparison of the models and drawings presented to us, was the only novelty in the invention of Woodworth. Bentham, in April, 1793, described a rotary cutter and an adjustable bench, which, when adjusted became fixed, so that the board

would be of a determinate thickness when passed between them.

The Hill machine cut the plank from its planed to its unplaned surface, and had feed rollers and a spring to keep it down to the bed, while the bed served to prevent the plank from being drawn into the cutters.

The Baltimore machine, as the one witness who describes it deposed, reduced the plank to a uniform thickness by passing it between a fixed bed and a fixed cutter, and kept it down on the bed by a pressure roller.

The French machine of Roguin patented, and in use as early as 1818, had the rotary cutter and bench; they were stationary relatively to each other, and must have cut the board of an even thickness had it been pressed so hard to the bed as to force out the warps; but this seems not to have been the case. The cut of the planes was with the advance of the board through the machine, and from the unplaned to the planed surface, and for this reason the lift of the cutters was very slight. The plank was kept steady by a rest bar as in Hill's machine.

This is all we deem necessary to describe in regard to other machines to the end of passing judgment on the question of infringement. As to the question of originality of the Woodworth machine compared with the other earlier planing machines produced in evidence and explained by experts, and secondly as to the question whether the original machine, for which Woodworth obtained his patent in 1828, had or had not pressure rollers in connection with other rollers, and which are now claimed as the main element of the machine repatented in 1845, we forbear from deciding, as we suppose these questions would be more appropriately left to a jury on issues, where the witnesses could be heard in open court. It is deemed proper to

remark that the fact of procuring a patent for a new and useful machine in 1845, under the assumption of a reissue, which was not useful as patented in 1828, for want of feed and pressure rollers, now used as is alleged in defense, would present a question of fraud, committed on the public by the patentee by giving his

reissued patent of 1845, date, as an original discovery, made in 1828, and thereby overreaching similar inventions made between 1828 and 1845.

There is one feature in Norcross' machine, and covered by his patent, which is not claimed to be an infringement. It is this: as the board passes under the rest bar F, it is weighted down on the edge of that section of the bed over which the plank first passes. The rest bar is slightly concave and bears heavily on the planed end of the plank, the further side of that section of the bed over which the board last passes being somewhat depressed, and made lower by a beveling than the opposite section. By this means the board is bent and struck by the cutters on a concave surface, the grain of the wood being condensed by the bend in the boards so as to grasp the knots more firmly, and prevent them from being thrown out by the cutter and also to prevent the fibers from eating into the planed surface. Because of the board being bent, the Norcross machine cannot be used for tonguing and grooving boards, as the edges of the board must be straight to perform these operations.

From the distance the pressure rollers, in Woodworth's machine, have to be separated so as to give the cylinder room to rotate, the board tends to curve upwards, and is cut on a convex surface, thus loosening the knots, and causing them to be thrown out, and causing the surface of the planed board to be eaten in where the wood is cross-grained or coarse, and also to be uneven and full of small ridges.

We must, however, disregard this last improvement in Norcross' machine, and also discard the parts of Woodworth's machine which tongue and groove, and treat his invention as a single machine for planing boards on one side only, and, on this state of the facts try the question of infringement. To infringe, Norcross must use all the parts of Woodworth's combination. 1. The use of rollers to keep the board firmly to the bed, and prevent it from being drawn into the cutters and torn to pieces, and to press out the warps, is the principal claim to invention. Norcross uses no such pressure rollers, nor can they be employed in his machine to such purpose.

But it is insisted that the section of the bed plate in Norcross' machine over which the unplaned board passes before it reaches the cutter is equivalent to the pressure roller of Woodworth, and that the throat piece is equivalent in its operation to his

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stationary roller. 2. That Norcross uses his rest F as an equivalent to Woodworth's bed plate; that the front section of the bed being used for the pressure roller, and acting in combination with the rest F, representing Woodworth's bed plate, and the cutter operating alike in both machines, it follows that Norcross in fact used Woodworth's combination but disguised it by turning Woodworth's machine upside down.

The remarks of Judge Sprague, who decided this cause in the circuit court, made in answer to the foregoing argument, are so distinct and satisfactory to us that we deem proper that they should be adopted in this opinion. They are as follows:

"The plaintiff's witnesses, when asked in what part of the defendant's machine they find the plaintiff's pressure roller, are divided in opinion; some of them say that it is the bed, because that prevents the board from being drawn into the axis of the cutter, considering that function as the characteristic of the plaintiff's roller. Others find it in what is called the rest, because that presses the board down upon the bed. But in the Hill machine, the roller performed the same office of pressing the board down, and the bed the same office of preventing it being drawn towards the axis. If either of these sets of witnesses be correct, the Hill machine contained the plaintiff's pressure roller, and as it had also a bed piece and rotary cutter, it would follow that it had the plaintiff's combination. Such a construction therefore cannot be maintained. The truth is that after the Hill machine, it was only left to Woodworth to make some new arrangement of the three elements -- that is, some new mode of combination. Woodworth's invention may be regarded as an improvement upon Hill's. If Norcross uses this improvement, then he infringes, whatever he may add to it or with whatever new invention he connects it. If he does not use this improvement, he does not infringe, although he may by other

means work out the same ultimate result."

"What, then, is the improvement which Woodworth made on the Hill machine? He took the rotating cylinder, which was in a fixed position below the bed, and placed it in a fixed position above the bed. This is the only change in the arrangement of the three elements. But it transferred to the pressure roller a function which had before been performed by the bed. In Hill's machine, the pressure roller only kept the board down upon the bed, the latter keeping it from being drawn into the axis of the cutter. In Woodworth's, the pressure roller performs both these offices. The effect of this is to plane the board on the upper side instead of the lower, and the result of that is that the board comes out of an uniform thickness, which was not accomplished by Hill. In his machine, the rotary cylinder being

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placed below the bed, with the knife projecting above it, the edge of the knife was kept at a fixed distance above the upper surface of the bed, and cut from the lower side of the board, through its whole length and breadth, so much of it as was equal to that distance. Thus, if the edge of the knife was a quarter of an inch above the bed and the board be pressed closely to it, would take off a quarter of an inch of the under side of the board through its whole extent, and if it was of an unequal thickness before, it would remain of an unequal thickness. By placing the cylinder in a fixed position above, and keeping a certain distance between the edge of the cutter and the bed, and all of the board above that distance being taken off by cutting on the upper side, it necessarily comes out of a uniform thickness."

"Now let us look at the Norcross machine. If it has any part which is equivalent to the pressure roller, it is the rest. Let us, then, for the sake of clearness, consider that to be a pressure roller. What then has been done by Norcross? He has left the arrangement of the three elements the same as it was in Hill's. The rotary cylinder is below the bed; the pressure roller still keeps the board down upon the bed, and the bed keeps it from being drawn into the axis of the cutter. His improvement is this: he has made the cutting cylinder movable vertically, which it was not before, and has connected it with his rest -- that is, with the pressure roller -- so that when

the latter is forced upwards by the increased thickness of the board, it draws the cutter upwards with it, which thereby is made to cut just as much more from the under side of the board as the roller is pressed up by the increased thickness. By this contrivance, the edge of the cutter is kept in a fixed relation to the rest, or in other words the pressure roller, the space between them being always the same, whereas in Hill's and also in Woodworth's, the edge of the knife had a fixed relation to the bed, and not to the pressure roller. The defendant therefore has made a new and independent invention, and does not use the arrangement or mode of combination of the plaintiff."

For the reasons above stated, we are of opinion that the machine of the respondents did not infringe the patent of the complainants, and therefore order that the decree of the circuit court dismissing the bill be

Affirmed.

MR. JUSTICE Mc LEAN, MR. JUSTICE WAYNE, and MR. JUSTICE NELSON, dissented.

MR. JUSTICE Mc LEAN.

I dissent from the opinion of the Court. The defendants rest their defense on three grounds:

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1. A want of novelty in Woodworth's invention.

2. That in the new patent of Woodworth, issued on the surrender of the old one to correct the specifications, a new invention is claimed not contained in the first patent.

3. That the defendant's machine is substantially different from the plaintiff's.

The Woodworth patent has been a subject of investigation frequently before the circuit courts of the United States, and of this Court. And although the originality of

the invention has been, I believe, uniformly sustained, still the fact of novelty depends upon proof, and may be disputed by anyone against whom suit is brought. The patent is *prima facie* evidence of right in the patentee. A defense which denies the novelty of the invention must be proved.

The original patent of Woodworth is dated the 27th of December, 1828. He describes his invention to be an

"improvement in the method of planing, tonguing, grooving, and cutting into mouldings of either plank, boards, or any other material and for reducing the same to an equal width and thickness, and also for facing and dressing brick, and cutting mouldings, or facing metallic, mineral, or other substances."

He then describes the machinery by which this result is produced. And he says in the conclusion that he does not claim the invention of circular saws, or cutter wheels, knowing they have long been in use, but he claims as his invention the improvement and application of cutter or planing wheels to planing boards &c.;, as above stated &c.;

There is no claim in his written specifications for pressure rollers on both sides of the cutting cylinder which confine the board to its place and necessarily reduced it to an equal thickness, but in the drawings these rollers appear at the proper places, and are so arranged as to reduce the board to a uniform thickness.

The written specifications, including the drawings, constitute a part of the patent, and must be construed as the claim of the plaintiff. In *Ryan v. Goodwin,* 3 Sumner 514, it is said if the court can perceive on the whole instrument the exact nature and extent of the claim made by the inventor, it is bound to adopt that interpretation and to give it full effect. The same is held in *Wyeth v. Stone,* 1 Story 270, 286; and in *Ames v. Howard,* 1 Sumn. 482, 485, it is said

"the drawings are to be taken in connection with the words, and if, by a comparison of the words and the drawings, the one would explain the other sufficiently to enable a skillful mechanic to perform the work, the specification is sufficient."

Bloxam v. Elsee, 1 Car. & Payne 558, is to the same effect.

Formerly, patents were construed strictly as giving monopolies,

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but of late years in England, inventions are treated differently, and a liberal view is taken in favor of the right. *Blanchard v. Sprague,* 3 Sumn. 535, 539. This has been the settled doctrine in this country, and it is founded upon the highest considerations of policy and justice. The opinion delivered by my brother CURTIS this morning as the organ of the court cites the authorities.

No patent, it is believed, which has ever been granted in this country has been so much litigated as this one. This affords no unsatisfactory evidence of its value. Very shortly after Woodworth's machine was put in operation, a system of piracy was commenced, and although twenty-five years have elapsed, numerous suits are still pending contesting the right. Mr. Justice Story was one of the first judges whose duties required him to scrutinize this patent in all its parts, and he sustained it in all. This was before the specifications were corrected. And this Court also sustained it in 7 How. 712, where it says "the specifications accompanying the application for a patent are sufficiently full to enable a mechanic with ordinary skill to build a machine." And this is what the law requires.

In the corrected specifications, the patentee says:

"Having thus fully described the parts and combinations of parts and operation of the machine for planing, tonguing, and grooving boards or plank and shown various modes in which the same may be constructed and made to operate without changing the principle or mode of operation of the machine, what is claimed therein as the invention of William Woodworth, deceased, is the employment of rotary planes, substantially as herein described, in combination with rollers or any analogous device, to prevent the boards from being drawn up by the planes when cutting upwards, or from the planed to the unplaned surface, as described. And also the combination of the rotating planes with the cutter wheels, for tonguing and grooving, for the purposes of planing, tonguing, and

grooving boards &c.; at one operation, as described."

"And finally, the combination of either the tonguing or grooving cutter wheel for tonguing and grooving boards &c.;, with the pressure rollers, as described, the effect of the pressure in these operations being such as to keep the boards &c.;, steady, and prevent the cutters from drawing the boards towards the center of the cutter wheels whilst it is moved through by machinery,"

&c.;

L. Roguin, of France, in the years 1817 and 1818, invented a machine for planing, grooving wood, moulding &c.;, it is alleged, substantially on the same principles as Woodworth's machine.

A considerable number of experts were examined in the circuit court on both sides, and their opinions, as usual in such cases, were directly in conflict. Such testimony, being written, cannot lead the court to a satisfactory result by weighing the evidence, as might be done by a jury where the witnesses are examined in open court. There seems to be no other mode of arriving at a correct conclusion than to read what the experts have said and make up an opinion on the specifications of the patents and on an examination of the models.

The French machine was improved in 1818. The patentee says:

"The parent idea of the first machine could not vary. This parent idea consisted in subjecting the wood to the action of a tool of a particular shape, and to impart to this tool a rotary movement, but the choice remained, either of making the tool stationary and causing the wood to advance under it with a slow and progressive motion -- one rotary, the other progressive. The first was adopted in the construction of the machine described in support of the petition for letters patent; the second has been adopted in the construction of the improved machine."

After describing the structure of the cylinder, he says:

"It is borne by a cast-iron carriage, and to the back part of this carriage is attached an iron axle tree bearing two brass pinions which gear into a rack and tend to regulate the movement of the carriage. The bench moves itself vertically by means of screws which support it, and tend to raise it or lower it according to the thickness of the wood to be worked. . . . Four small graduated plates of metal, placed in the interior angles of the superstructure, act as a regulator to fix this bench in a perfectly horizontal position. . . . Two iron squares abut the bench at both ends. . . . Experience,"

he says,

"has taught that the weight of the bench was not sufficient, singly, to prevent the vibration imparted to it by the machine when in operation, and there resulted from this vibration waves on the surface of the planed board."

This was obviated by the weight of the carriage.

"The carriage is of cast iron, and weighs about two hundred and forty-one pounds. It is necessary that the carriage should be of sufficient weight so as not to be raised by the strain of the tool."

"The back part of the bench carries a claw, against which the wood is rested and stopped like a carpenter's bench. At the other extremity, the wood is stopped by movable dogs, which pass under a bar through which passes pressure screws."

And he further says:

"We have seen, in the description of the first machine, that the piece called 'guide' (because it serves effectually to guide the wood under the tool for grooving and

moulding) was fixed on the superstructure of the bench. In the new machine, this piece is borne by the carriage."

From this description, it appears that the planing cylinder is carried by an iron frame, and passes over the surface of the board, which is fastened on a bed by a claw at one end, and at the other by movable dogs. This bench, on which the board is placed, is movable vertically so as to be adjusted by screws to the thickness of the wood to be worked.

The wood is fastened on this adjustable bed, and the iron frame which carries the cutting cylinder is of sufficient weight to keep the cutters on the board, but this machinery cannot reduce the plank to the same thickness. When the bench rises or falls, the whole surface of the plank rises and falls, and the cutting knives cannot so operate by pressure on so long a surface as to reduce the inequalities of the board. But this can be done by pressure rollers, as in Woodworth's machine, on each side of the cutting cylinder -- one adjustable, so as to admit the unplaned plank; the other fixed, so as to admit the passage of the plank when reduced to the required thickness. The French machine may present a smooth surface, but the inequalities of the board will not be removed. They will remain in the same proportion as before the planing operation.

It is argued that the piece or bar which, in the first machine, was fastened to the bench, and which in the improved one was annexed to the carriage, operated as a pressure roller. If this were admitted, it would not remove the difficulty, as one pressure roller or bar could answer no valuable purpose. There must be two rollers, one adjustable, as above stated, or two fixed rollers, or bar and an adjustable bed, to reduce the plank to an equal thickness. But if L. Roguin be permitted himself to describe the function of this bar, it is "to guide the wood under the tool for grooving, tonguing, and moulding." Shall the language of the inventor be misapplied, and this bar be appropriated to a use which it would seem be never thought of, to render invalid Woodworth's patent?

Several of the witnesses on both sides gave their testimony from the description of L. Roguin's patent, published in a book called "Brevets d'Inventions," but as that book was not published until after Woodworth's invention, its description is evidence only so far as it agrees with the specification attached to the patent of L. Roguin. And it does appear from the original specifications filed by him, a certified

copy of which has been recently procured by M. Perpigna, that there are some material variances. We must therefore look to the authentic paper and drawings, as certified, for evidence in regard to the machine.

The organization of this machine does not seem to be on

the same principle as Woodworth's, and the result is different.

The other French machine, alleged to be similar to that of Woodworth's, is De Manneville's. This machine was patented in France in 1825, and described in the printed work called "Brevets d'Inventions." The patent embraced two machines, having for their object the grooving, planing, and reducing to a uniform thickness, wood intended for inlaid work, as well as all sorts of boards, whatsoever may be their dimensions. The inventor calls them a groover and planer.

The description of this machine by the inventor is confused and scarcely intelligible. One of the defendants' witnesses describes it as having two planes, one of which is called rough, the other smooth, both of which are kept down to the face of the board by a tool-bearer, and are moved backward and forward by a crank motion. The rough plane is movable to and from the board by being held to it by a spring; the smooth plane, or finisher, is immovable, principally, from the board except to separate the shavings from it. The position of the board is edgewise, resting on the horizontal rollers -- friction rollers -- and it is carried through by a pair of fluted cylinders or rollers, vertical and parallel to each other, which rollers press upon each side of the board, one of which, the back one, is made to slide in its boxes, held up by a spring, and thus made to yield to the inequalities of the thickness of the board. Another pair of rollers holding the same vertical position, called discharging cylinders, neither of which is yielding, nor are they fluted, and to adjust the different thicknesses, the inventor suggests rollers of different diameters and on an adjustable bed.

Any one can at once see that this is not an organization of machinery similar to Woodworth's machine. It is not the same principle, nor is it in substance like it.

This remark is made in regard to the combination claimed by Woodworth, and not to all the elements of which that combination is formed. In the Manneville machine there is no combination of pressure rollers with rotary cutters, as in Woodworth's; the cutters have a reciprocating motion instead of a rotary one. Several of the elements in both machines are the same, but they are not so arranged as to act in the same manner or on the same principle.

Some of the witnesses for the defendants think that from the two French patents, the Woodworth machine might be constructed without invention; but these machines must be considered singly, and not together. In the defense it is alleged, in reference to Woodworth's machine, that "the same thing substantially was patented in France, in 1817 and 1818, by L.

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Roguin, and in 1825, by Manneville." The defense in this respect is not sustained, as neither of the patents is substantially the same as Woodworth's.

The next point for consideration is whether, in the amended specifications of Woodworth's patent in 1845, a new invention was claimed not embraced in the original patent.

It must be admitted that the subject matter of the new patent is the same. The patent was surrendered to correct defective specifications which did not result from any fraudulent intent. This right was secured to the patentee by the thirteenth section of the patent act of 1836, and on an application to the Commissioner of Patents, he finding there had been no fraud, a new patent was issued for the same invention, more accurately described, as the law authorized.

In the case of *Woodworth v. Stone,* 3 Story 749, and *Allen v. Blunt, id.,* 742, it was held that the action of the Commissioner in accepting a surrender of a patent and issuing a new one concluded the parties unless fraud be shown. And in *Stimpson v. West Chester Railroad,* 4 How. 380, this Court said,

"In whatever manner the mistake or inadvertence may have occurred is immaterial. The action of the government in renewing the patent must be considered as closing this point, and as leaving open for inquiry, before the court and jury, the question of fraud only."

The corrected specifications of the new patent on a surrender would necessarily be different from those that were defective. And it is the duty of the Commissioner not to permit a new invention to be claimed under the pretense of correcting defective specifications.

Some things are omitted in the new patent which were claimed in the old one. But the principal objection on this ground seems to be that pressure rollers were claimed in the new patent, and were not claimed in the old one. This is a mistake, as has already been shown. These rollers were represented in the drawings, and in that way were more accurately described than they could have been by a written specification. These drawings are a part of the patent. It does not appear that the corrected specifications embrace a new invention, not included in the original patent.

The third and last point is whether the defendants' machine is an infringement of the plaintiffs'.

In the opinion of the circuit court in this case it is said,

"The defect in the Hill machine was that it did not reduce the board to a uniform thickness. This desideratum the plaintiff has obtained by an improvement for which he was entitled to a patent. The defendant has accomplished the same purpose

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without using the improvement of the plaintiff, but merely by a new invention of his own, and therefore does not infringe."

From these remarks it would seem that the circuit court considered Woodworth as entitled to a patent "for reducing boards to a uniform thickness," but that his patent does not cover it. In this the circuit court was mistaken, as I shall endeavor to

show, in fact and in law.

It is not controverted that Woodworth's combination of machinery does reduce boards to an equal thickness. He did not and could not claim a patent for reducing a board to a uniform thickness, for an exclusive right could not be given for such a result. For centuries, boards have been reduced to a uniform thickness by hand planes, and perhaps by other means. What, under the patent law, could Woodworth claim? He had a right to claim, as he did claim, a combination of machinery which would produce such a result. Was it necessary, in the summing up of his claim, which is done to distinguish what he has invented from parts of his machine which he has not invented, that he should claim the combination of his machine for the purpose of reducing boards to a uniform thickness? This would have limited his invention to that purpose, when it was applicable, and was intended to be applied, to that and many other purposes.

By the sixth section of the patent law of 1836, an inventor is required to describe his invention in every important particular in his application for a patent, so as to enable those skilled in the art or science to which it appertains to make, construct, compound, and use the same, and if the invention be a machine, he is required to state "the several modes in which he has contemplated the application of the principle or character by which it may be distinguished from other inventions," and "shall particularly specify and point out the part, improvement, or combination which he claims as his own invention and discovery." He is required to accompany the whole with a drawing, and if a machine, a model &c.;

Is it not clear that Woodworth has explained the principle, and the several modes in which he has contemplated the application of the principle or character of his machine by which, in the language of the act, it may be distinguished from other inventions? The plank is planed, tongued, and grooved by an organization of machinery unknown before. This is all, in the summing up, which the act requires.

It is objected that Woodworth does not include in his claim that of reducing a plank to a uniform thickness. The invention consists in the means through which this is done. A result or

an effect is not the invention. This appears to have been the turning point in the opinion of the circuit court.

But Woodworth has, in the specifications of his machinery, stated that the board is necessarily reduced to a uniform thickness. He says

"The edges of the plank, as its planed part passes the planing cylinder, are brought into contract with the above-described tonguing and grooving wheels, which are so placed upon their shafts as that the tongue and groove shall be left at the proper distance from the face of the plank, the latter being sustained against the planing cylinder by means of the carriage or bed plate or otherwise, so that it cannot deviate, but must be reduced to a proper thickness, and correctly tongued and grooved."

Here Woodworth describes the combined operation of planing, tonguing, and grooving, and by which the plank is reduced to a proper thickness -- that is, the required thickness -- and correctly tongued and grooved, &c.; This is the effect of his machine in planing boards clearly described.

He says the board is kept against the planing cutters by means of the carriage or bed plate or otherwise. The pressure rollers are claimed in his specification written, and also in his drawings, which show how they are to be applied. He also says,

"Fig. 7 represents the same machine with the axes of the planing cylinder placed horizontally, and intended to operate on one plank only at the same time. A A is the frame; B B the heads of the planing cylinder; C C the knives or cutters attached to said heads, to meet the different thicknesses of the plank; the bearings of the shaft of the cylinder may be made movable by screws or other means to adjust it to the work, or the carriage of the bed plate may be made so as to raise the plank up to the planing cylinder."

The patent of the defendants was issued February 12, 1850. It is alleged to be an improvement upon Hill's machine. That machine, from the description, consisted of a planing cylinder, a platform bench with an aperture in it through which the planing cutters operated so as to cut away any required thickness from the surface of the plank subjected to its action; the relation of the cylinder to the bench was permanent; a spring plate bore upon the plank nearly opposite to the cylinder, and forced it towards the cylinder and bench; feeding rollers carried the plank forward, the same as in Woodworth's machine.

By this operation, a stratum of equal thickness was cut from the plank, leaving a smooth surface but not removing the inequalities of the board. The combination of machinery was different in principle from Woodworth's, and consequently the result was different.

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Norcross says his invention is an improvement of Hill's machine, and "renders it capable of reducing or planing a board to an equal thickness throughout its length." He says "Hill's machine was capable of planing or reducing a board on one side, or removing from such side a stratum or layer of wood of an equal thickness," but this did not make the board of uniform thickness.

The amended machine contains rotary planes which cut from the planed to the unplaned surface of the plank; an adjustable bar and rest is at a fixed distance from the cutting action of the planes; the rotating planes and this rest bar were so connected together in a separate frame as to move vertically with the frame, and is borne downwards by their weight; two bars, one before and the other behind the rotating planes, and on the face of the plank cut by them, to cause its opposite face, in its progress through the machine, of whatever thickness and however warped, to pass in contact with the rest bar F. One of the said bars is termed a platform B, and the distance between this and the rest bar F, is variable and self-adjusting to the varying thickness of the plank before it is planed, and the other, called a horizontal bar or throat piece G, placed at the same distance from the rest

bar F, as the line of the cutting action of the rotating planes, to act on the face of the plank which has been planed, and ensure the contact of the opposite and unplaned face with the rest bar F.

Norcross says

"What I claim as my invention is the combination of the rotary planing cylinder E and the rest F with mechanism by which the two can be freely moved up or down simultaneously and independently of the bed or platform B B, or any analogous device, substantially in the manner and for the purpose of reducing a board to an equal thickness throughout its length, all as hereinbefore specified."

"I also claim the above-described improvement of making the underside of the rest concave, in combination with so extending the part B, under the rest F, and applying it to the concave part thereof, as to cause the board, as it passes across the rest, to be bent and presented with a concave surface to the operation of the rotary cutter planing cylinder, substantially as specified."

This organization of machinery seems to be the same in principle as that of Woodworth's, and produces the same result. If the concave surface of the board, on which the cutters operate, be an improvement, or any other slight change has been made which may be an improvement on Woodworth's machine, that would give the defendants no right to use it without a license.

The difference between the machines appears to be this. The

rotating planes and the plate or bed of Woodworth's are stationary in the main frame, and the roller or analogous device on that face of the plank to be planed is movable toward and from the plate or bed to suit the varying thickness of the plank. While in the Norcross machine two bars are substituted for the pressure rollers, and instead of making the one which acts on the plank before it is planed movable to suit the varying thickness of the plank, it is fixed permanently in the main frame, and the rotating planes and the plate or bed, termed by him the "rest

bar," F, are connected together in a separate frame, and together move up and down to adapt themselves to the inequalities in the thickness of the plank.

Norcross has made that part of his machinery movable which in the Woodworth machine is fixed, and that which is movable in the Woodworth machine he has made permanent. These changes, and the reversal of Woodworth's machine is the difference in their structure. A cast of the eye on the models will satisfy a machinist of the truth of this representation.

Whether the cutting cylinder operates above or below the bench on which the plank is laid can be of no importance; nor is the difference material whether a pressure roller varies to suit the variable thickness of the plank or the planing cylinder, connected permanently with the bench, shall be elevated or depressed to accomplish the same object. These devices, though different in form, are the same in principle and produce the same effect.

I think there is an infringement, and that the decree of the circuit court should be reversed.

ORDER

This cause came on to be heard on the transcript of the record from the Circuit Court of the United States for the District of Massachusetts, and was argued by counsel. On consideration whereof it is now here ordered, adjudged, and decreed by this Court that the decree of the said circuit court in this cause be, and the same is hereby, affirmed with costs.