

PERKINS v. INTERIOR LUMBER Co. et al.

(Circuit Court, N. D. Illinois. July 29, 1899.)

1. **PATENTS FOR INVENTIONS—SHINGLE SAWING MACHINE—PATENTABILITY—NOVELTY.**
The first and third claims of letters patent No. 380,346, issued April 3, 1888, to Willis J. Perkins, for improvements in shingle sawing machines, which claims are for the combination of a shingle sawing machine with a lever fulcrumed near the central shaft, so that shaft and carriage may be lifted so as to permit access to the saws, and having a catch piece to lock the lever in position, are void for want of novelty.
2. **SAME—DOGGING DEVICE—ANTICIPATION.**
The 4th, 5th, and 45th claims of said patent, for the combination of the rotating carriage of a shingle sawing machine with a dog near the periphery of the carriage, so arranged that the dog secures and maintains a firm hold on the block of wood while it is being sawed, grasping and releasing the block at precisely the right time to insure the sawing of the shingle and the dropping of the block for the next operation, were not anticipated by previous patents.
3. **SAME—SPALTING DEVICE—ANTICIPATION.**
The 26th, 27th, 29th, 30th, and 31st claims of said patent, for a spalting device consisting of two tracks capable of opening or moving apart while the block of wood is resting on them, so as to drop the block when it is desired to saw no more shingles out of it, were not anticipated by previous patents.
4. **SAME—PATENTABILITY—INVENTION.**
The forty-third claim of said patent, for the combination with a saw carriage of a wooden block furnishing a bearing for the same, and an oil-retaining trough in which the block is seated, is not void for want of patentable invention, the blocks formerly in use being of iron.

In Equity. Bill by Willis J. Perkins against the Interior Lumber Company, Charles A. Street, Wayne B. Chatfield, and Frederick A. Keep for injunction and accounting.

Offield, Towle & Linthicum and *Taggard & Dennison*, for complainant.
Winkler, Flanders, Smith, Botum & Vilas, for defendants.

GRESHAM, Circuit Judge. This is a suit for infringement of letters patent No. 380,346, granted to the complainant, April 3, 1888, for new and useful improvements in shingle sawing machines. The invention relates more particularly to machines of the character which have a rotary carriage carrying a plurality of shingle bolts or blocks, and saws which cut the shingles from the block. "The object of the invention," says the specification, "is to improve the working parts of a machine of the character described; and the invention consists in improvements in the carriage controlling and operating devices; also in certain improvements in the mechanism for bringing the blocks to position preparatory to sawing; also in improved constructions and combinations for delivering the spalt and the sawdust from the machine; also in many other details of construction and combination of parts." Claims 1, 3, 4, 5, 26, 27, 29, 30, 31, 43, and 45 are in issue.

The chief element of the first claim is a lever to facilitate the lifting of the carriage wheel or rim, in order to obtain access to the saws, which it is necessary to change at short intervals, and to lift the rim quickly when a spalt or thin piece of timber gets between the saw and the carriage. The claim reads:

"(1) A shingle sawing machine having saws mounted on vertical arbors, and a rotary bolt carriage supported on a central vertical shaft, in combination with a lever extending from the outside of the frame to the central shaft, fulcrumed near and having a bearing on said shaft, whereby the shaft and carriage may be lifted to permit access to the saws, substantially as described."

The use of the lever in this combination was undoubtedly an improvement upon the old way of lifting the shaft for the same purpose by a crowbar having a bearing at or near its lower end, and properly fulcrumed, but it was an improvement involving no invention. The third claim is the same as the first, with the addition of a catch piece attached to the frame to connect the lever and hold it up or down—lock it in position. Such locks were old in connection with levers and other devices. This claim should not have been allowed.

Perkins' dogging device inventions are represented by claims 4, 5, and 45, and read as follows:

"(4) The combination, with the rotating carriage of a shingle-sawing machine, of a dog near the periphery of said carriage, a bent arm pivotally connected at its outer end to said carriage, and at its inner end bearing an anti-friction roll, a spring surrounding said arm, having an abutment on the carriage, and an adjustable abutment on the arm, whereby the pressure of the spring may be regulated, and a cam or incline on the frame against which the anti-friction roll has a bearing in the rotation of the carriage, substantially as described. (5) The combination, with the rotary carriage of a shingle sawing machine, of a dog near the periphery thereof, and guided in radial ways in said carriage, an arm connected to said dog, and extending inwardly past the stationary dog towards the center of the carriage, a spring pressing said arm and dog inwardly, a cam surface on the frame in position to press out the said arm during a portion of the revolution of the carriage, and a support for the inner end of said arm, substantially as described." "(45) In combination, in a shingle sawing machine, a series of block receptacles grouped round a central axis, a movable dog at the outer side of each block receptacle, a fixed dog at the inside of each block receptacle, and an arm connected to the movable dog, and extending inward past the fixed dog."

Claim 45 is substantially the same as claim 4, and, with the exception of the support at the inner end of the dog arm, claim 5 is not unlike it. The dog secures and maintains a firm hold on the block while it is operated upon by the saw. The action of the dog is such that it grasps and releases the single block of wood at precisely the right time to insure the sawing of the shingle and the dropping of the bolt for the next operation. The great utility of the dogging devices is clearly established. Indeed, it is not denied, and the only question is whether the combinations covered by the three claims are anticipated by any of the patents set up in the answer. In the Freeman patent of 1858 the outer dog is moved by a device situated outside the rim. This device is intended to cause the dog to bite the block, and hold it in position until released. The automatic lock of the movable outer dog is the essential feature of this alleged invention. The Freeman patent of 1859 dispenses with the automatic lock, and substitutes in place of it a track extending more than one third the circumference of the rim. Neither of these patents

would suggest to a skilled mechanic the Perkins dogging devices. The mechanisms described in the Kinney & Parker patent of 1868 are unlike the three Perkins dogging devices, both in construction and mode of operation. The Evarts patent of 1854 merely shows a lever with a weight attached to it, and without any spring used in connection with it. This lever is connected to the inner, and not to the outer, dog, and the saw cuts against the outer or stationary dog. This is not the Perkins dogging device. The Clark patent of 1861 is for a device having a rotating carriage, and a dog near the periphery. It has a compressing spring to prevent a too rigid bite of the dog, but it is not the spring arm of the Perkins patent. The block is dogged and undogged by the operation of the two tracks. The tracks which cause the dogs to act upon the block terminate in a curved piece concentric with the rim, which extends over one third of the way around the machine, holds the dog upon the block during the passage, and retains the bite of the dog upon the block during the passage of the rim for one third or more of its revolution. This is not the device covered by the three claims now under consideration.

The machine described in the Palmer patent of 1870 is unlike the Perkins dogging mechanism. The Palmer machine does not contain cams located within the inner dog for the purpose of releasing the dog from the block. It does not contain a dog supported by a link. It shows no button on the arms. It shows no dog arm pivoted to the outer dog, and extending past the inner dog. It shows an extension of the outer dog itself connected with the inner dog. It shows the inner dog mounted upon the lever turning upon a pivot, and pivoted to that lever a short arm to be operated upon by a weighted lever, which is in no sense a cam; the end of the latter lever being beveled perpendicularly to allow a ready clearance from the block which acts upon the lever. The saw in a rotary shingle machine cuts in one direction only, and, practically, lengthwise of the shingle bolt, thus pressing it with great force against the dog towards which the saw turns. It is believed that a dog constructed as shown in the Palmer patent would vibrate under the varying pressure of the saw, and not firmly retain the shingle bolt. The Palmer device does not contain the elements in the combinations known as the Perkins dogging devices. The evidence does not show that the Palmer device was ever used practically, and it is not probable that it is capable of such use. The O'Connor patent of 1887 shows an outer dog operated from the track on the outside of the carriage rim. It contains no dog or dog arm extending inwardly past the inner dog, and no track within the inner dog for undogging the block. This is not the Perkins dogging device. The Clark patent of 1863 shows a machine with a frame which entirely surrounds the block receptacle. Within the frame, and between it and the inner dog, is a semielliptical spring, which fills a portion of the space which should be occupied by the block, thus rendering it necessary to make the rims much larger. This frame is provided with a cam at its inner end, but it contains no friction roller or link. It has no spring for operating the dog arm or the dog, and the frame is moved positively by the cam. The spring is used to prevent a too rigid bite of the outer dog by the

positive movement given it by the cam. In the Perkins dogging device, the spring constitutes the sole means of moving inwardly the outer dog, thus causing it to dog the block, and the cam alone releases the block from the dog, and holds it undogged for a suitable time. There is a material difference between this device and the structure shown in the Clark patent. The dogging devices used by the defendants are the full equivalents of the devices covered by claims 4, 5, and 45 of the patent in suit, and infringe them.

We now take up the Perkins spalting device, inventions, and claims. Much timber, not fit to be cut into boards, is now manufactured into shingles. Before the spalting devices came into use, it required an extra man to remove the refuse blocks of timber and spalts from a rotary shingle machine, which work was not free from danger to both operator and machine. The complainant insists that he invented the first practical and commercial automatic spalter. A rotary shingle machine has a series of block receptacles arranged around a carriage wheel extending from a point near the periphery inwardly. The block receptacles are placed as close to each other as possible to economize room and expense. The wheel revolves at the rate of eight or nine revolutions per minute, and the time for opening the movable track sections, dropping the block, and closing the sections to receive the next block must be accomplished in one second. To attain this result, Perkins realized that it was necessary to move the track sections quickly, drop both ends of the block at once in a true vertical plane, move the sections so that no time would be lost and no space left open, open the sections after the preceding shingle bolt had passed from them, and close them before the following bolt had reached the opening. He accordingly moved his track sections bodily away from each other, thus obtaining the widest opening with the least possible movement of the track. He moved these sections "from beneath the block," so that the block, dropping in a horizontal position, would clear the movable sections. He placed a trip on the carriage rim that is shifted by the sawyer as it passes him into position to cause the spalter to open when in its revolution it reaches the spalting mechanism. The evidence shows that this machine is so nicely constructed and adjusted that it will drop blocks varying in thickness from a few inches to two feet, when running at a speed of 187 clips per minute. The claims here under consideration read:

"(26) In a shingle sawing machine, the combination of the saw, the rotating carriage having bolt receptacles which move over the saw, a bolt-supporting way consisting of two concentric circular tracks and two movable sections side by side, and forming part of said tracks, adapted to be displaced from normal positions under the bolt. (27) The saw and carriage, substantially as described, the circular guideway, movable sections in and forming part of said guideway, supported on hinged posts, and lever mechanism connected to the posts, whereby the sections may be swung radially in opposite directions, all in combination, substantially as stated." "(29) The combination, with the rotating carriage and its saw, arranged substantially as shown, of the circular way beneath the carriage, having a movable section, a movable bar outside the rotating carriage and connected to the movable section of the way,

and a trip on the carriage adapted to be thrown into position to displace the movable track section, as set forth. (30) The rotating carriage and saw, arranged substantially as described, the way beneath the carriage having a movable section, the movable bar outside the carriage connected to the movable section, the trip on the carriage adapted to be thrown into position to engage the movable bar, and a stop on the frame in position to throw the trip out of operative position, substantially as described. (31) The combination, with a rotary carriage and a horizontal saw, of a block-supporting way, consisting of two tracks, a section of each track in advance of the saw made movable, and a catch on the carriage in position to operate both tracks simultaneously, as set forth.

The O'Connor patent is chiefly relied on as an anticipation of these claims. It thus describes its mechanism for dropping the imperfect shingle blocks:

"At the left of Fig. 1, and at the right of Fig. 4, I show a detachable or swinging track section, f^1 . One end of said track is pivoted to an upright post at 34, upon which said track section swings. The free end of the section, f^1 , when in the position of Fig. 4, laps against the outer stationary section of track 33. Near the center of the swinging section, at 8, I pivotally attach a draw bar, d^1 . The other end of said bar is loosely attached to an upright swinging or reciprocating bar, K, and to the bar, K, I attach a swinging bar, d , its inner end being pivoted to the stationary frame, H. To the forked upper end of the bar, K, I pivot a dog, f , and to the rear end of said dog I pivot an operating rod, n . Said rod is attached to the bar, K, and travels with said bar. Its lower end is bent outward, forming a horizontal foot-step, n^3 . See Fig. 1. e is a collar fixed on said rod, and O is a coiled wire encircling said rod. The spring holds the rod up to its normal position, as shown in Fig. 1. The lower end of the reciprocating bar, K, is pivoted to the forked standard at S, which is firmly attached to the base, A, of the machine. See Fig. 1. Attached to the bar, K, and passing over the pulley, n^1 , is a cord, c^1 , with weight, w^1 . Said cord and weight hold the bar, K, in its normal position, as shown in Figs. 1 and 4, also inclosing the swinging section of the track, f^1 . The object of the foregoing parts is in cutting the shingles from the lower face of the blocks. As they are reduced, the remaining portion of the block may be unfit for shingles on account of a bad heart, or because of rotten material or knots, and to discharge such a block from the machine, and not be obliged to saw it up into shingles, the operator places his foot upon the step, n^3 , throwing the dog, f , up, when its projecting end will engage with one of the lugs, x , on the periphery of the traveling carriage, W, when the bar, K, will be swung back to the dotted position of Fig. 1, drawing the swinging track section, f^1 , back to the dotted position of Fig. 4. When the refuse block passing from the saw reaches the opening, it drops through and down the slideway, O^1 . As soon as the block has passed through, and the lug, x , has left the end of the dog, f , the operator removes his foot from the step, n^3 , when the weight, W^1 , will draw the bar, K, back to its normal position of Fig. 1, also closing or swinging the track, f^1 , back to its normal position, as shown in Figs. 1, 2, and 4. The shingle blocks are dropped onto the stationary tracks by the operator from the table, D^3 , the sliding heads, 28, being drawn back as they pass the table, D^3 , to freely receive the shingle blocks.

It will be observed that instead of displacing the track from beneath the block, and dropping it with its lower surface in a horizontal plane, as Perkins does, O'Connor, by his mechanism, opens his track in ad-

vance of the arrival of the block, so that it plunges end foremost into the opening. The block necessarily drops through the O'Connor machine in a somewhat tilted position, and thus lodges and interferes with the operation of the mechanism: The Perkins spalting device contains two tracks capable of opening or moving from each other while the block is resting upon them. Perkins was the first to construct such a device. He first invented mechanism capable of automatically operating spalting ways at the proper time to drop the block or spalt. He first used a trip upon the carriage adapted to be set or placed in position in advance of the time when the spalter was to drop the block. In short, he invented and put into actual use the first spalting device of real commercial value on a shingle machine. The evidence shows that not a single machine has been made in accordance with the O'Connor patent within the last six or seven years, and that those that were made before were unsatisfactory, if not worthless. The defect in the O'Connor machine is inherent, and cannot be remedied. George Challoner & Sons own the O'Connor patent, and they are bearing the expense incident to the defense of this suit. It was claimed by their counsel that the Perkins device involved no invention; that it was a mere mechanical improvement upon the O'Connor device; and yet, with the latter before them, they did not see how it could be improved. The machines made by the defendants contain the dogging device and dropping device covered by the Perkins patent. An obvious effort has been made to avoid the responsibility of infringement by mere mechanical changes. The Perkins spalting device and the O'Connor spalting device do not operate upon the same principle; they are functionally unlike. The Holbrook patent of July, 1883, also relied on as an anticipation of the Perkins spalting claims, relates to a cash and parcel carrying device in common use in stores; that device is so constructed that the rails spread at desired points. I do not think this patent is relevant. The defendants infringe these claims.

Claim 43 reads:

"(43) The combination, with a saw carriage, of a wooden block furnishing a bearing for the same, and an oil-retaining trough in which said block is seated."

Iron blocks had previously supported the carriage rim, but they bent and wore the rim, and the friction quickly scraped away the oil from the blocks, the "faces of which also became uneven from wear." In the place of these, Perkins substituted wooden blocks, resting in oil receptacles, to feed or lubricate the wheel, and keep it in a true plane and in good condition. Oil is supplied but once a day, and by capillary attraction it keeps the rim lubricated. The great utility of this device is not disputed, and I think it involved invention. The substitution of one material for another in manufacturing often effects material changes both in product and expense. In *Turrill v. Railroad Co.*, 3 Biss. 66, Judge DRUMMOND said:

"A slight change, sometimes, of a known machine, or some of its parts, will affect surprising results, and to protect a party who, by inventing such

change, has produced a new and useful result, was clearly one of the objects of the patent laws."

This language is pertinent to the forty-third claim, which the defendants infringe. The usual decree will be entered in favor of complainant.

DIXON-WOODS Co. v. PFEIFER.

(Circuit Court, N. D. New York. June 29, 1893.)

1. PATENTS FOR INVENTIONS—EXTENT OF CLAIM—GLASS-ANNEALING FURNACES.

Claim 1 of letters patent No. 258,156, issued May 16, 1882, to Cleon Tondeur for an improvement in glass-annealing furnaces, covers: "The combination of the bars, *d*, *d'*, arranged side by side, and alternately between each other, the set, *d*, supporting the sheets of glass, while the bars, *d'*, are pushed towards the leer or flattening wheel, *a*, and the set, *d*, supporting the sheets of glass, and moving them onward and through the tunnel, substantially as set forth." The drawings show the bars raised some distance from the floor, and the specifications state that a space of about one foot is desirable beneath the bars; also that in transferring the glass one set of bars is raised, and the other lowered, about one inch. The evidence showed that there were great advantages in holding the glass some distance above the floor and carrying it in a horizontal plane. *Held* that, in view of the prior patents to Bievez, Bouvy, and others, the patent could only be sustained as describing mechanism for carrying the plate in a practically horizontal plane, above the floor, and that the statements in the specifications were sufficiently definite to be read into the claim, so as to give it this construction. *Tondeur v. Stewart*, 28 Fed. Rep. 561, and *Same v. Chambers*, 37 Fed. Rep. 383, followed.

SAME—SPECIFICATIONS.

As the specifications point out that the bars are to be located at some distance above the floor, and so arranged as to carry the glass on practically the same horizontal plane while advancing it through the leer, it is immaterial that the inventor did not more precisely point out the advantages which would inure from this arrangement, or that he himself was not aware thereof when obtaining the patent.

In Equity. Bill by the Dixon-Woods Company against Pfeifer for infringement of letters patent No. 258,156, issued May 16, 1882, to Cleon Tondeur, for an improvement in glass-annealing furnaces. Decree for complainant.

W. Bakewell & Sons, for plaintiff.

Hey & Wilkinson, for defendant.

WALLACE, Circuit Judge. The patent in suit (granted May 16, 1882, to Cleon Tondeur, for glass-annealing furnace) has been twice adjudicated by Judge ACHESON at final hearing in fully contested cases in the circuit court for the western district of Pennsylvania, and sustained as to all the claims of which infringement was alleged. The combinations which are the subjects of the several claims are each employed in the furnaces or leers of the defendant, who is a contractor and builder of leers. Evidence has been introduced for the defendant in the present case respecting the prior state of the art, and the utility of the patented invention, which was not introduced in the former cases. Unless, in view of this new evidence, there should seem to be reason for disagreeing with the conclusions reached by Judge ACHESON, the rule of comity