plainant has failed to show that these devices either lacked utility, or were incapable of successful practical operation.

Two illustrative exhibits were produced upon final hearing,—one by complainant, known as the "Rhind Lamp"; the other by defendant, known as the "Hoerle-Davis Lamp." The Rhind lamp is constructed substantially in accordance with the specifications of the Rhind patent. Its operation is practically identical with that of the patented apparatus, as stated in the specification:

"The wick may be raised and lowered with care and accuracy by simply turning the operating nut, while, when it is desired to lift the wick very quickly, or push it down suddenly, the coupler is taken hold of, and a direct upward or downward thrust given the drawbar and stem, which will at once respond to such movement, owing to the coarseness of the threads," etc.

The only material difference between the Hoerle-Davis patents and the Rhind lamp is that the screw on the latter is a somewhat quicker pitch than that shown in the Davis patent. I fail to find any inventive conception or patentable novelty in the patented construction or operation. But even if the patent, as limited to the precise construction described and claimed, could be sustained, it is not infringed by defendant. The construction of the defendant's device is best shown by a reference to the Davis patent, already considered, and by a comparison of its construction with that of the patent in suit. Each of these constructions has the wick band, the drawbar attached thereto, the operating sleeve by which the screw tube is suspended in the lamp fount, and the tube with the central perforated operating nut located at its upper end. As already stated, the screw of the Davis patent does not have a quick pitch, such as is described and shown in the Rhind specification and drawing. While the defendant's device does have such a quick-pitch screw, it does not have a stem "provided at its lower end with coarse screw threads," and a tube "constructed with internal screw threads corresponding in pitch to the threads of the stem aforesaid." Nor does it have any coupling connecting the upper end of the stem to the upper end of the drawbar for communicating movement from the operating stem to the drawbar. That the patentee in the claim in suit used the word "connected" in the ordinary sense of fastening by means of an intervening coupler, appears from the associated words, "a stem connected at its upper end with the upper end of said drawbar," as well as from the specification, drawings, and other claims of said patent describing, illustrating and specifically covering said coupler, and is further shown by another patent taken out on the same day by this patentee, wherein he described, illustrated, and claimed an integral drawbar and stem. In the defendant's device such a single piece of wire fulfills the functions of drawbar and stem. Defendant's screw-tube device is like that shown in the Rhind, and illustrated in the Davis, patents. An arm extends laterally from the wick holder, and is provided with a nonrotatable collar or sleeve, so threaded as to operate in the external threads of the screw-tube. In this connection, I have not overlooked the contention of complainant for the application of the well-settled princi-

ple that a mere reversal or immaterial change of parts will not avoid a charge of infringement. Société Anonyme Usine J. Cleret v. Rehfuss, 75 Fed. 657; Devlin v. Paynter, 12 C. C. A. 188, 64 Fed. 398. If this patent covered a primary invention, the broad range permitted to equivalents would embrace the device of defendant. But the only consideration for its grant was a modification of old devices. The patentee chose to confine himself to a claim for a stem connected at its upper end with said bar, and provided at its lower end with coarse screw threads. The defendant does not use such a stem connected at its upper end with said bar, but a solid bar. In its lamp it has availed itself, as it had a right to do, of a construction well known in the prior art. The Rhind patent and the illustrative exhibit of the Rhind lamp show substantially the defendant's construction, except the old and well-known drawbar. When Homan, in differentiating his improvement from Rhind, Davis, and Hoerle, secured a patent therefor, the state of the art was such that he could only claim the exact construction which he selected as the embodiment of his improvement, or its ordinary equivalent. While I do not consider the evidence afforded by dismembering elements of a combination as relevant generally, yet in this case I think it may be material upon the contention of mere immaterial transposition of parts. If the complainant's stem and drawbar be disconnected at the upper end, the device is inoperative, while, if thus disconnected in defendant's device, it continues to operate as before. In view of the fact that complainant insisted that one of the essentials to his patent was this connection at the upper end, with which the defendant may dispense, and which, at best, he uses, not as essential to its construction, but as a convenient guide to its operation, I think infringement is not shown, and therefore a decree may be entered dismissing the bill.

KENNEDY VALVE MANUF'G CO. v. CHAPMAN VALVE MANUF'G CO.

(Circuit Court of Appeals, First Circuit. April 29, 1897.)

No. 208.

PATENTS—LIMITATION BY PRIOR ART—VALVE INDICATORS.

The Kennedy patent, No. 404,844, for a valve indicator, if valid at all, must be limited, in view of the prior state of the art, to the specific structure shown and described; and is narrow. 75 Fed. 277, affirmed.

Appeal from the Circuit Court of the United States for the District of Massachusetts.

This was a bill in equity by the Kennedy Valve Manufacturing Company against the Chapman Valve Manufacturing Company for alleged infringement of the first claim of letters patent No. 404,844, issued June 11, 1889, to Daniel Kennedy, for a valve indicator. The circuit court was inclined to the opinion that the claim was valid, but was limited to the specific structure shown and described, and, being so construed, was not infringed by defendant's valve indicator. 75 Fed. 277. From this decree the complainant has appealed.

William P. Preble, Jr., for appellant.
William H. Chapman, for appellee.

Before PUTNAM, Circuit Judge, and WEBB and ALDRICH, District Judges.

PER CURIAM. Assuming that the device of the complainant below covers a patentable invention, which, however, we do not determine, we agree with the circuit court, for the reasons stated by it, that the patent is so narrow that the respondent below did not infringe it. The decree of the circuit court is affirmed, and the costs of appeal are adjudged to the appellee.

INTERIOR LUMBER CO. et al. v. PERKINS

(Circuit Court of Appeals, Seventh Circuit. May 3, 1897.)

No. 118.

1. PATENTS—COMBINATIONS—SELECTION FROM PRIOR CONSTRUCTIONS.
To prevent a combination from being patentable, it is not necessary that all its elements shall be found in the same relation and combination in one prior patent or device; for the mere bringing together of old devices or elements, especially if they belong to the same or kindred arts, without producing anything new in function, result, or mode of operation, is not patentable.

2. SAME—INVENTION—SHINGLE MACHINE—DUPLICATION OF PARTS.
A movable section having been introduced into one of the two rails constituting the track of a shingle machine, it required no invention to introduce a like section in the other rail beside the first.

3. SAME.
In a patent for a shingle machine the specification stated that the bearing blocks for the saw carriage are preferably of wood cut to present the edge of the grain towards the wheel, and inserted in a trough connected with an oil cup, so that the oil will pass into the trough around the bottom of the block, and be carried up through the pores by capillary attraction, so as to constantly lubricate the bearing. The claim was simply for the "combination, with the saw carriage, of a wooden block, furnishing a bearing for the same, and an oil-retaining trough in which said block is seated." *Held*, that as the claim did not mention the oil cup, nor require the block to be so placed as to present the end of the grain to the wheel, this was not an essential feature, and could not be relied on as sustaining the claim.

4. SAME.
The Perkins patent, No. 380,346, for improvements in shingle machines, is void for want of invention as to claims 4, 5, and 45, which relate to certain dogging devices; also as to claims 26, 27, 29, 30, and 31, which relate to the spalting devices; and as to claim 43, which is for a wooden bearing in combination with the saw carriage. 51 Fed. 286, reversed.

Appeal from the Circuit Court of the United States for the Northern Division of the Northern District of Illinois.

The questions presented by this appeal are of the validity and infringement of claims 4, 5, 26, 27, 29, 30, 31, 43, and 45 of letters patent of the United States, No. 380,346, granted on April 3, 1888, to Willis J. Perkins, for improvements in shingle-sawing machines. Claims 4, 5, and 45, which are for dogging devices, 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 toward 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."

The prior art, in view of which it is denied that these claims show novelty amounting to invention, consists of the following patents issued by the United States and dated respectively as indicated: No. 11,858, to H. H. Everts, October 31, 1854; No. 20,704, to K. Freeman, June 29, 1858; No. 24,111, to K. Freeman, May 24, 1859; No. 39,272, to A. H. Clark, July 21, 1863; No. 49,228, to George Challoner, August 8, 1865; No. 85,103, to Kinney & Parker, December 22, 1868; No. 99,940, to W. H. H. Palmer, February 15, 1870; No. 358,474, to P. O'Connor, March 1, 1887.

The claims numbered 26, 27, 29, 30, and 31 are for spalting devices, and read as follows:

"(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."

These claims, it is contended, are anticipated by the O'Connor patent, No. 358,474, supra, and by certain machines made under and in conformity with that patent.

The forty-third claim reads as follows:

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

This combination, it is insisted, is also found in the O'Connor patent, the specification of which does not state whether the bearing blocks shown in a receptacle are of wood or iron, and therefore leaves to the constructor or user of the machine the choice of either.

L. L. Bond, for appellants.
Edward Taggart and Charles K. Offield, for appellee.

Before WOODS and JENKINS, Circuit Judges, and BUNN, District Judge.

WOODS, Circuit Judge, after making the foregoing statement, delivered the opinion of the court.

Following the testimony of the expert, Bates, the prior art in dogging devices may be summarized as follows: The Freeman patent of 1858 has a rotating carriage, with a dog near the periphery, which is forced inward to hold the bolt, and an arm, pivoted to the dog and to the frame of the carriage, which serves to operate the dog. A cam acts upon the arm, and forces the dog inward, causing it to bite the bolt, and another cam, acting upon an extension of the arm, throws the arm and dog outward to release the bolt. The Freeman patent of 1859 has a rotary carriage, a dog near the periphery, an arm attached to the dog, and bearing a friction roller, and two cams, one of which acts upon the roller to move the dog outward and to release the bolt, and the other to produce the opposite effect. In the patent of Kinney and Parker there is a rotary carriage, a dog, a bent arm pivotally connected to the dog, and a cam acting on the arm to release the dog from the bolt, the dog being near the middle of the carriage, and the cam acting upon the outer end of the arm, instead of the reverse, as in the Perkins device; but, if transposed, as they might be without making any change in them, they could be described in the language of the Perkins claims. The Everts patent has a rotary carriage, movable dog, bent arm connected with the outer end of the dog, and acted upon at its inner end by a cam to cause it to release the dog from the bolt. The Clark patent has a rotary carriage, a dog near its periphery, a spring arm attached to the dog, a friction roller on the arm, and two cams acting upon the roller, one of which withdraws the dog, and the other causes it to bite. The Palmer patent contains almost the exact mechanism of Perkins' fourth claim in its essential details, namely, a rotary carriage, with a dog near its periphery, a bent arm connected at its outer end to the dog, extending inward, with a cam or incline on the frame, which acts upon the inner end of the arm, and a spring connected to the projections or abutments on the arm and the carriage, the spring and the central cam both causing the dog to bite and hold the bolt, and a second cam near the periphery of the carriage, acting upon the arm, to withdraw the dog and release the bolt. This is the entire combination of the fourth claim except the anti-friction roll, but such rolls had theretofore been common in shingle machines and in other kinds of machines. The Clark patent has a rotary carriage with peripheral dog, a bent arm to actuate the dog, and a cam near the center of the machine to act upon the arm. The O'Connor patent has a rotary carriage with a dog near its periphery, and an arm or lever pivoted to the carriage, connected at one end to the dog, and carrying an anti-friction roll at the other end. There is a rod connected to the arm or

lever, and two abutments, one adjustable on the rod and the other fixed upon the carriage, and a spring, surrounding the rod between the abutments, serves to move the dog inward and cause it to bite the bolt. A cam on the frame, against which the anti-friction roll has a bearing when the carriage rotates, moves the dog outward to release the bolt. The only changes from the device of O'Connor necessary to convert it into that of Perkins are suggested by the prior patents mentioned, and especially by the Palmer; that is, the substitution of a bent arm and a cam near the center of the machine for the pivoted straight arm or lever and peripheral cam of the O'Connor design. The O'Connor patent has all the parts of the fifth and forty-fifth claims except that the portion of the arm which extends inwardly is not quite long enough to reach past the stationary dog,—a circumstance which does not affect its function, purpose, or operation, and therefore is not a material difference.

The foregoing propositions, and especially the conclusions supposed to result from them, are strenuously controverted by the opposing expert, Mr. Powers, who after pointing out particulars of difference between the devices of O'Connor and Perkins, says:

"I am aware that the witness Bates states that the missing elements not shown by the O'Connor patent may be found in some other patents in the record, but I do not understand that an anticipation can be created by taking up elements in different patents, and combining them for the occasion; but, on the other hand, in order to anticipate the claim of a patent, all of its elements, either identically or substantially, must be found in the same relation and combination with each other in some one patent or device."

To the doctrine of selection he refused to subscribe, and for that reason failed to find the invention of Perkins in the patent of O'Connor. In matters of fact the entire testimony of the witnesses shows them to be in substantial accord. Their differences of opinion are explained by Mr. Powers' mistaken understanding of the rule by which the patentability of combinations of old devices should be determined. That the mere bringing together, in a new combination, of old devices or elements, especially if they belong to the same art or to arts kindred to that to which the combination belongs, does not constitute invention is well settled. "It is not enough that a thing shall be new, in the sense that in the shape or form in which it is produced it shall not have been before known and that it shall be useful, but it must, under the constitution and the statute, amount to an invention or discovery." Thompson v. Boisselier, 114 U. S. 1, 11, 5 Sup. Ct. 1042; Hill v. Wooster, 132 U. S. 693, 10 Sup. Ct. 228; Burt v. Evory, 133 U. S. 349, 10 Sup. Ct. 394; Pickering v. McCullough, 104 U. S. 310; Florsheim v. Schilling, 137 U. S. 64, 11 Sup. Ct. 20; Adams v. Stamping Co., 141 U. S. 539, 12 Sup. Ct. 66; Deere & Co. v. J. I. Case Plow Works, 9 U. S. App. 567, 6 C. C. A. 157, 56 Fed. 841. The differences between the dogs described in the patent of Perkins and those of the earlier patents are differences of form and arrangement which produce nothing new in function, result, or mode of operation. It is certainly not a matter of invention that a bent arm is operated by a centrally located cam instead of an outside ring; there being no essential difference in the result; or that one dog, rather than the other, is made

movable; or that an arm is not radial, extending centrally down in a machine to operate upon an interior cam; or that levers extend over and are actuated outside of instead of inside the periphery of the carriage; or that a spring is shown without means of adjustment for greater or less tension, such means being well known; or that a radial arm extends outward a considerable distance beyond the periphery of the carriage, and has its outer dog not pivoted to, but integral with it; or that a radial arm does not extend over and beyond the inner dog; or that a dog is adapted to be released beyond the periphery of the carriage instead of by an interior cam; or that a rectangular frame is employed instead of an arm; or that a cam instead of a spring is used to push a dog into place. It is testified, and perhaps would be evident without proof, that of these various forms of construction and arrangement of parts, while one may be better than another, the differences are not such as to affect the question of invention.

Of the claims for spalting devices, the special feature of the first —No. 26—is "two movable sections, side by side, and forming part of said tracks, adapted to be displaced from normal positions under the bolt." In the O'Connor patent there is a single movable section in one of the two tracks, and it follows that "two movable sections, side by side," can be regarded only as a duplication, unless their being adapted to be displaced from normal position under the bolt is a novel and patentable improvement. That cannot be conceded, because it is a mere matter of adjustment whether the displacement shall be in advance of or directly under the moving bolt. As examples of movable sections in parallel or concentric tracks, reference is made in the testimony of Mr. Bates to the store railway or cash carrier, as illustrated in the Holbrook patent, No. 282,320, the machine for sorting and loading lumber, shown in the Davies patent, No. 238,220, and to the well-known movable sections in railway tracks. If, therefore, there is patentability in this feature of the Perkins patent, it must be found in the other claims.

The twenty-seventh claim adds to the twenty-sixth hinged posts to support the movable sections and lever mechanism connected to the posts, whereby the sections may be swung radially in opposite directions, substantially as stated. The one section of the O'Connor patent is moved in a radial direction by means of a lever mechanism connected to it. It is not supported on hinged posts, but, as Bates testifies, hinged posts were old devices, of which harvester reels and buggy tops were examples, and therefore it would require no invention to mount the O'Connor movable section on hinged posts like the harvester reel or buggy top, so that both ends of it would move equally, instead of pivoting it at one end, so that one end moved more than the other. Swinging gates, if supposed to move in perpendicular instead of horizontal planes, afford a familiar illustration.

The additional features of the twenty-ninth claim are "a movable bar, outside the rotating carriage," connected to the movable section of the way, and "a trip on the carriage," adapted for the purpose stated. There are corresponding parts in the O'Connor machine, except that the operation is reversed, the lug or trip being