## DUDLEY E. JONES CO. v. MUNGER IMPROVED COTTON MACH. MANUF'G CO. '

iCircuit Court of Appeals, Fifth Circuit. December 7, 1891.)

1. PATENTS FOR INVENTIONS—NOVELTY—COMBINATION.

Letters patent No. 308,790, issued December 2, 1884, to R. S. Munger, are for an apparatus designed to take loose cotton from the wagon or store-house into the ginhouse, clean it of dust and dirt, and feed it directly to the gin. The second claim, which substantially covers the whole device, is for the "combination with a cottongin of a pneumatic conveyer for the cotton, a screen arranged in the conveyer, and exhaust chamber inclosing the screen, means for delivering the cotton from the conveyer to the gin, and an exhaust fan for creating an air current through the conveyer, substantially as described." *Held*, that this is only a combination of well-known elements, but, as it appears to have produced a new and useful result, the patent is valid as to the specific device, taken as a whole.

Claim 4 is as follows: "In an apparatus for handling seed cotton, the combination of a pneum-tic conveyer, of a telescopic drop-pipe communicating therewith by a flexible joint, a valve placed in said pipe, substantially as described." Held, that this drop-pipe is merely the equivalent of an extension of the pneumatic conveyer, with a flexible joint, and is not a patentable novelty.

A cap used in defendant's machine to fit over the end of the pneumatic tube is merely the equivalent of the valves of the patent, which are located within the tube.

SAME—CONSTRUCTION.

The patent, being for a combination of old elements, must be limited to the specific devices used or suggested, and, although the claims sued on describe one element as "means of conveying cotton to the gin, substantially as described," the court may refer to other claims and to the specifications for a description of the specific means used or suggested for that purpose, and must limit the claim thereto.

L SAME.

The designs filed by the patentee with his application show that the means used by him for conveying the cotton from the cotton chamber downward to the gin onsists of a valve chamber with a valve shaft, upon which are mounted valves or buckets of flexible material, each closely fitting the walls of the chamber, so as to prevent the upward passage of air by reason of the suction of the fan. The means used in defendant's machine is a square box, with two stiff sides and two flexible or collapsible ones, the same being fastened at its upper end to the cotton chamber. When the fan is in operation the lower end is drawn together by the suction, making a wedge-shaped cavity into which the cotton falls; the cotton being delivered therefore to the girp by means of a valve in the neumonic tube between the cotton therefrom to the gin by means of a valve in the pneumatic tube between the cotton chamber and the fan, which, being periodically closed, stops the suction, and allows the stiff sides of the box to drop apart. Held, that this device is not the equivalent of the valve chamber, shaft, and buckets, and hence defendant's machine does not infringe the patent.

The fact that the box, with collapsible sides, was used prior to the granting of the patent, for the purpose of delivering grain from a pneumatic tune, does not affect the question of infringement, it appearing that its lower en was there opened by the weight of the accumulating grain, whereas, by reason of the lightness of the cotton, it was necessary to check the air current by means of the additional during of the partial colling. tional device of the periodically acting valve.

Appeal from the Circuit Court for the Northern District of 'lexas. Suit by the Munger Improved Cotton Machine Manufacturing Company against the Dudley E. Jones Company for infringement of a patent. Defendant appeals. Decree for complainant. Reversed.

M. L. Crawford, for appellant.

L. L. Bond and J. R. Beckwith, for appellee.

Before PARDEE, Circuit Judge, and Locke and Bruce, District Judges.

LOCKE, District Judge. This is a bill in equity filed in the circuit court for the northern district of Texas charging infringement of certain letters patent No. 308,790, granted to R. S. Munger, December 2, 1884, held by complainant as assignee, and praying an injunction and accounting. This patent was for apparatus for handling seed cotton, consisting of a combination of elements by which cotton is taken from the wagon or store-house to and into the gin-house, thoroughly cleaned of dust, dirt, and other foreign substances, and fed directly to the gin. The defendant, by its answer, denies the novelty of said apparatus, or that said Munger was the original inventor, or that it has ever made or sold any apparatus or machine covered by said letters patent; but admits that it has been making and selling machines manufactured under letters patent No. 362,041, granted B. A. Saylor, April 26, 1887; but denies that such machines are an infringement of the patent of the complainant.

The 1st, 2d, 4th, and 9th claims of complainant's application upon

which the infringement is alleged are as follows:

"(1) The combination with a cotton-gin of a pneumatic conveyer for the cotton, means for delivering the cotton from the conveyer to the gin, and an exhaust fan for creating an air current through the conveyer, substantially as described. (2) The combination with a cotton-gin of a pneumatic conveyer for the cotton, a screen arranged in the conveyer, and exhaust chamber inclosing the screen, means for delivering the cotton from the conveyer to the gin, and an exhaust fan for creating an air current through the conveyer, substantially as described." "(4) In an apparatus for handling seed cotton, the combination with a pneumatic conveyer of a telescopic drop-pipe communicating therewith by a flexible joint, a valve placed in said pipe, and a second valve placed in the conveyer beyond said drop-pipe, substantially as described." (9) In an apparatus for handling seed cotton, the combination of the ginning-house, the pneumatic conveyer entering the same, an exhaust chamber communicating with the conveyer, and a chimney communicating with the exhaust chamber, for removing the dust and leaf trash from the cotton, and carrying it out of the ginning-room, substantially as described."

A careful examination of these claims shows that the 1st, 4th, and 9th describe and claim only a portion of the several elements which go to make up the entire machine, and which, with the exception of some enlargement of description found in the 4th, are all included in the 2d, which then only needs demand our attention; for, if the entire combination contains no element of patentability, no division of it can.

The first question presenting itself for consideration is whether this patent is for a combination of well-known elements which had been in common use, and therefore not patentable, unless shown to be a useful and novel combination, or whether there is entering into it any novel and newly-invented device. Taking each element separately, and examining the prior patents, we find that the pneumatic tubes have been known and used for years in various forms and for various purposes, and numerous patents have been granted for machines in which they have been found as an important element. In patent of Johnson, No. 56,948, and Von Schmidt, No. 185,600, the pneumatic tube was used for dredging purposes; in that of Beach, No. 96,187, for conveying letters, parcels, and other freight; in that of Penman, 124,851, for conveying wool; in that of Pearce, 168,282, for conveying cotton; in those of Taggart, 213,709, and Reynard and De la Haye, 219,019, and several others, for con-

The telescopic drop-pipe claimed in the claim No. 4 can veying grain. only be considered as an equivalent for an extension of said pneumatic conveyer in another form, and would not be patentable for novelty; the flexible joint being but an equivalent for any other means by which the pipe or conveyer could be turned in any direction, and is found in the flexible hose in the invention of Taggart, or the ball and socket joint of the telescopic pipe of the Von Schmidt patent. Similar valves to those found in the pneumatic tube are found in the pneumatic tubes in the patent of L. Smith, 305,976; the exhaust chamber and wire screens of the claimant's patent are found in the air-tight box and wire gauze of the Beach patent. The means for conveying the cotton from the exhaust chamber to the gin, which is found in the specifications and in actual use in complainant's machine, -i. e., the shaft upon which are affixed certain valves working in an air-tight box,—is found in the receiving boxes of said Beach's patent. The exhaust fan for the purpose of producing the air current is found in the Penman, the Craven, the Pearce, the Taggart, and the Williams patents. The dust chimney is found in the conductor of the Craven machine. It appears, therefore, that every element found in the complainant's machine is found in a prior patent, and was well known to the art. His patent, therefore, must be treated as for a combination of wellknown elements and devices.

The testimony has been very full as to the effect which the patenting and introduction of complainant's apparatus has had upon the handling of cotton between the field and the gin; of the saving in labor; in risks from fire; in the improved condition of the cotton; the health of those compelled to work in the gin-house and around the gin; and the exemption from damage to the seed to which it was exposed when the seed cotton was driven through the fan for the purpose of cleaning; and there can be no question but what the revolution and improvement in this province of industry, all of which may be directly traceable to this combination, has been great. We find, therefore, the patent of the complainant to be for a combination of well-known devices, but producing a new and useful result, and entitled to letters patent under the second claim. Loom Co. v. Higgins, 105 U. S. 591; Gill v. Wells, 22 Wall. 1; Collar Co. v. Van Deusen, 23 Wall. 538; Fuller v. Yentzer, 94 U. S. 297.

But while the law recognizes the patentability of such combination of known devices, it patents the entire combination of the elements, and not any single element of it, nor any combination containing any different or other elements. The patent of the complainant must be considered to be for the entire apparatus, and, in order to claim damage for infringement, it is necessary to show that each and every element of complainant's machine, or its equivalent, entered into respondent's machine.

In Fuller v. Yentzer, the court say:

"Valid letters patent undoubtedly may be granted for an invention which consists entirely in a new combination of old elements or ingredients, provided it appear that the new combination produces a new and useful result. But the rule is equally well settled that the invention in such a case consists

merely in a new combination, and that a suit for infringement cannot be maintained against the party who constructs or uses a different combination."

Commencing with the pneumatic conveyer, and examining each element of the two machines, the first difference found is the alleged absence from the machine of defendant of the two valves situated in the pneumatic conveyer of the complainant. His apparatus has a valve in each of the branches or divisions of the pneumatic tubes,—i. e., the socalled conveyer leading to the store-house or elsewhere,—and a telescopic drop-pipe fitted to reach the wagon; while the defendant's, instead of having valves so arranged, uses a cap or removable valve or cover at the end of each division of the pipe whenever it is desired to close it. valve is a gate, a door, or anything used to open or close at will a passage-way; and, unless the location tends to affect the action in some other way, it is immaterial whether it is inserted in the body of the pipe or put upon the end. In this case there can be no different effect, and the cap or stop put over or against the end of the pneumatic tube or the drop-pipe, when it is desired to have it closed, must be considered equivalent to the valve inserted in it in complainant's machine.

The so-called "deflector" inserted in the so-called "Y" in defendant's machine can answer no further purpose than to act as a portion of the wall or partition of either tube which may be in use for the time being, and cannot be considered as being of any other use or service in the function of the machine. With a suction or current of inrushing air sufficient to bring in from the wagon or store-house unconfined cotton, certainly a small space opening through the wall of one tube into the other can have no effect either beneficial or injurious. The dust escape in both machines is through the fan-box and fan into the open air. In complainant's it is shown to be upward through the roof, and in defendant's through the side of the gin-house; but such direction is of no materiality or importance, and the devices must be considered equivalent.

But when we approach the means by which the cotton is passed from the exhaust chamber of the complainant's combination—which is equivalent to the cotton-box of the defendant—to the gin, a greater difference appears, and the most difficult question of the case is reached. first claim, complainant claims for this element of his combination "means for delivering the cotton from the conveyer to the gin." In the second, the language is the same; but in the third (which has not been urged in this suit) is claimed "the rotating shaft, the buckets, and means for delivering the cotton from the conveyer to the gin, substantially as described." It is true that the claim No. 3 has been stricken out of the complainant's bill, and there is no suit for infringement under it; but, in each of the claims sued upon, there is a provision "for means of conveying cotton to the gin, substantially as described," and reference may be had to the other claims of the same patent and the specifications for ascertaining what those means might be. In Evans v. Kelly, 9 Biss. 251, 13 Fed. Rep. 903, the court say:

"Where the patent claims the whole as described, we cannot sever one part of the description from another, but we must take it in its totality, and apply the description to the claim." Turrill v. Railroad Co., 1 Wall. 491; Tompkins v. Gage, 5 Blatchf. 268.

It is true that the claims must be construed according to the language of each, but specifications and designs may be referred to to limit or explain, if not to enlarge. Can we consider that the patent of complainant may be held to cover any and every means that might possibly be used to convey the cotton from the exhaust chamber to the gin, or must it be limited to the actual means claimed, described, or suggested in the specifications? This is, as has been herein decided, a patent for a combination, and each and every element of such combination must be used as patented, or the entire result is changed, and the machine sought to be held as infringing is a different one. In Vance v. Campbell, 1 Black, 427, the court say:

"Unless the combination is maintained, the whole of the invention fails. The combination is an entirety. If one of the elements is given up, the thing claimed disappears."

In determining what the combination is, for which letters patent have been granted, the entire designs, specifications, and claims may be considered. It is this special combination which has been held to be patentable on account of its producing a new and useful result; and, should it be held that this patent could cover every means that could be used for this function, there might be a new and other combination which would be valuable and useful, yet would be covered by these letters patent.

The design filed upon application for a patent by complainant shows that the means used by him for the purpose stated is a valve chamber. with a peculiar form of valve shaft upon which are mounted valves or buckets, preferably of leather or other flexible material, so constructed and arranged that each fits the inner wall of said chamber closely. is also provided in one clause of the specification that it may be possible to employ a screw conveyer or other suitable means which will not only carry the cotton downward, but will cut off the upward air current. This language shows conclusively complainant's ideas of what means he suggested using in his combination, and upon which the patent was obtained, i. e., some device or contrivance which would carry the cotton downward to the gin, and at the same time prevent an upward circuit of air; or, in other words, some kind of a valve that, while permitting the cotton to pass down, would be air-tight to an upward current. the model presented in the evidence, the same device that was declared in the design, specification, and claim was shown, and we consider that he must be held to such a device or means, and not be permitted to extend his claim to anything of a different character or description, although he has omitted from his bill the claim particularly describing this special element. Has the defendant adopted, used, and sold a machine containing such device or any equivalent to it in the means used for conveying the cotton from the chamber to the gin? What in patent law is an equivalent, or what may be so considered, is a question upon which no positive rule nor any harmonious line of decisions can be in-

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voked. It is an important and delicate question in any case in which it may arise. The general principle is that, in order to be considered an equivalent of another, one device must perform the same functions, and perform them substantially in the same way; but this principle in many cases leaves the question open for a determination according to the facts and circumstances of each particular case, and an examination of the numerous instances in which devices or appliances have been held to be or not to be equivalents of others affords but little aid in determining a new question.

In place of the rotary shaft and valve affixed thereto working in an air-tight chamber, as heretofore described, defendant uses a square box, or "valve," as it is termed, with two stiff or solid sides, and two collapsible or elastic ones, the upper end of which is made fast by hinges or flexible material to the enlarged chamber or cotton-box. ends of the two solid sides, whenever the machine is in operation, are drawn together by the pressure of the atmosphere, making a tight wedge shaped cavity into which the cotton falls. This form of the box is only maintained by the upward draught or current of air to the fan above; and, whenever such current ceases, the stiff sides fall apart by their own weight, and the cotton is delivered to the gin. This so-called "flexible valve" is the same as is found in the Taggart patent, but in that case, the apparatus being used for grain, its weight alone was sufficient to open the valve whenever any desired amount had accumulated, and permit it to pass into the receptacle below. But in defendant's, the weight of the cotton being insufficient for such purpose, it was necessary to provide some other and further device. The current of air or force of suction being what brought the two stiff sides together and held them in that position, the suspension of this force would permit them to fall apart. The suspending of this current of air in said machine was successfully accomplished by inserting a valve in the pneumatic tube between the enlarged screen chamber and the fan, the closing of which shut off the current, suspended the force, holding the sides of the cotton-box together, and permitted the cotton to fall through to the gin. This valve was so arranged that it was worked automatically by the same force that drove the fan, opening and closing as often as desired by a chain belt, with catch links inserted at such distances as was required.

Were or not these appliances or devices equivalent as means of feeding the clean cotton to the gin? It has been frequently determined that one point which may be considered in determining equivalents is the age of the two devices, or whether the alleged infringement was known and in force at the time of the granting of the complainant's patent; the presumption being in such case that it was used as an equivalent, only to avoid the charge of infringement, and not as an improvement. Refinery v. Matthiessen, 2 Fish, Pat. Cas. 629; O'Reilly v. Morse, 15 How. 123.

It is true that the flexible valve was a well-known and patented device at the granting of complainant's patent, but the manner in which

it worked was entirely different, on account of the weight of the material handled, and, in order to make it a success in this case, it was necessary to provide a supplementary appliance,—the automatic arrangement which opened and closed this flexible valve by means of a second valve in the chamber,—which became a part of the mechanical device, and does not appear to have been known at the time of complainant's patent. fore we consider that, as a whole, the means for feeding the cotton to the gin was not known or in use at the time of complainant's patent. But this is not a final nor conclusive test, (Blake v. Robertson, 94 U.S. 732;) and the question is still open, if, notwithstanding the lack of age of defendant's device, it may be considered to be an equivalent. only must the device charged to be an infringement perform the same functions, but it must perform them in the same manner, with substantially the same result. In complainant's machine, the controlling idea is to maintain a constant and continuous current of air from the cotton in the wagon or store-house to the final exit of the dust from the chimney, with the means for permitting the cotton to be passed out to the gin without admitting any air. For this means the rotary or box valve was provided, and a screw or any other means that would pass out the cotton and not admit air suggested. The checking of the current would, for the time being, directly combat and conflict with this idea. would permit the cotton, in the portion of the pneumatic tube having a perpendicular position, to fall back to the cotton pile, and the dust in the flue or screening chamber to fall back into the cotton. It is claimed by the defendant that the checking of the air current assisted in the clearing of the screen from the accumulated cotion, but if it did so, whether it was an improvement or not, when taken in connection with the several undesirable results, is not for the court, but for those who use the different machines, to determine.

But it appears to us plain that the functions of that element, the feeding of the cotton to the gin, after being cleaned, is not performed in the same manner in the defendant's machine as in complainant's. one operates by maintaining the current; the other by interrupting it. The one requires and maintains a comparative vacuum; the other requires for its operation the destruction of the vacuum. The one feeds regularly and continuously; the other by entirely different means feeds intermittently. In short, in construction, operation, and result, there is a decided difference between "the means for delivering the cotton from the conveyer to the gin," as claimed in complainant's second claim. and the apparatus used by the defendant in discharging cotton from "the receiver." In combinations, the doctrine of equivalents is construed most strongly against him who alleges an infringement, and each party is held to his own element or device, or a positive and exact equivalent which performs the same functions, in the same manner; the burden being upon the complainant to show this. In this case we cannot consider that the flexible expanding valve of the defendant, opened and closed by the automatic arrangement of the second valve with the chain belt and catch links, is an equivalent of the rotary valve of the complainant, and we must find the charge of infringement has not been sustained; and the bill must be dismissed, with costs. And it is ordered that this cause be remanded to the court below with orders to dismiss said bill, with costs.

## REGAN VAPOR-ENGINE Co. v. PACIFIC GAS-ENGINE Co. et al.

(Circuit Court of Appeals, Ninth Circuit. January 80, 1892.)

 Invention to be Made—Contract Concerning.
 A contract by which A. does "license, grant, and convey" any invention he may thereafter make in gas-engines to B. does not operate as an assignment of such invention when made, and, at most, gives to A. the right in equity to have an assignment of such invention to him, which may be defeated by a prior assignment of the same, to a purchaser without notice of such contract, in good faith, and for a valuable consideration.

2. Same—Assignment of Such Contract.

An indorsement of such contract by B. in these words: "I hereby sell, assign, and transfer unto M. M. Barrett all my right, title, and interest in and to the above agreement,"—only passes the paper on which it is written, with such rights of action thereon as have not become vested in the indorser.

8. RECORD OF THE ASSIGNMENT OF A PATENT.

The record of the assignment of two patents contained the words, "contracts concerning the same." Held to mean "concerning the rights and privileges granted by said patents, and thereby assigned;" and also that constructive notice could not be predicated of such record, as to the status or ownership of another patent. 47 Fed. Rep. 511, reversed.

(Sullabus by the Court.)

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

J. H. Miller, for appellant.

John L. Boone, for appellees.

Before DEADY, HANDFORD, and Morrow, District Judges.

DEADY, District Judge. On May 12, 1890, the appellant brought suit against the appellees, in the circuit court of the United States for the northern district of California, for an alleged infringement of reissued letters patent numbered 11,068, for a gas-engine, issued to the appellant, as the assignee of Daniel Regan, the inventor, on April 1, 1890.

The appellees pleaded in abatement that the Pacific Gas-Engine Company, one of the appellees, was the owner of all rights under said patent for the Pacific coast. To this plea a replication was filed. The case was then referred to the master, who reported against the plea. Exceptions were taken to the report, which were sustained, and the bill was dismissed. The plaintiff appeals to this court.

On May 15, 1886, Regan and Garratt entered into an agreement wherein they stated that we "do hereby license, and grant and convey, each to the other," throughout certain states and territories,—the license to Garratt being for the Pacific coast, - "all such inventions and improvements, whether patented or not, which may be here a ter made by either of us," in gas-engines and the mechanism by which they are operated.