APPLETON MANUF'G CO. v. STAR MANUF'G CO. et al.

(Circuit Court of Appeals, Seventh Circuit. February 9, 1894.)

No. 94.

PATENTS FOR INVENTIONS—PATENTABILITY—CORN HUSKERS.

Letters patent No. 290,571, issued Dec. 18, 1883, to S. P. Goddard for an improvement in the method of reducing corn in the stalk and separating the kernels, consisting of a cutter with feed rollers in front, a beater or thresher, a revolving screen or separator, and a shaking screen under it, all mounted in one frame, and so geared that the parts are driven by a single band wheel, are void for want of invention, since the device consists merely in the application to a new use of old and well-known devices. 51 Fed. 284, affirmed.

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

Bill by the Appleton Manufacturing Company against the Star Manufacturing Company, Delos Dunton, and H. G. Sawyer to restrain infringement of a patent. Defendants obtained a decree. 51 Fed. 284. Complainant appeals.

The suit was by the appellant against the appellees for an accounting and to enjoin infringement of letters patent No. 290,571, issued December 18, 1883, to S. P. Goddard, for "improvements in methods of reducing corn in the stalk and separating the kernels," of which the specification and claims are as follows: "My invention has relation to a new and useful method of reducing and separating corn from the stalk, husk, and cob, and at the same time the stalk, husk, and cob are cut up or comminuted, and ready for use as stock food,—ensilage; or, in this fine condition, it may be plowed into the soil as a fertilizer without any further treatment; and to these ends the novelty consists in the method hereinafter described, and particularly set forth in the claims. In carrying out my invention, the result is accomplished by means of the devices shown in the accompanying drawings; but I do not wish to be understood as limiting myself to the means shown, as any mechanism which will produce the same result may be used. Fig. 1 is a longitudinal, vertical section of a machine adapted to carry out my invention, and Fig. 2 is a side elevation of the same. A is a feed trough, supported at one end by legs, one of which is shown at B. C, C', are the feed rollers, the upper one, C, being corrugated, and both driven by the ordinary gears. D is the cutter bar, rigidly secured to the base, and E is the cutters or knives secured to the cylinder, F, so that the latter rotates the material as it is fed by the rollers, C, C', when forced over the cutter bar, D, and the knives, E, cut it into suitable lengths, and the cut pieces fall on the incline, G, and are thence fed to the toothed cylinders, H, H', which thoroughly break up the pieces and discharge them into the inclined rotating screen, I. The grain corn then falls through said screen, while the stalks, cobs, and husks pass out the lower end of the screen onto the incline, K, and thence to the floor or ground. L is a shaking screen having inclined screen bottom, M, and, as the grain corn and chaff or refuse fall into it from the rotating screen, the shaking motion sifts all the dirt or foreign matter through, while the clean grain is carried forward and discharged through the opening, N, into a box or bin placed there to receive it. It will thus be seen that, as the stalks and ears with the husks on are fed to the cutters, they cut the stalks, and also the ears, husks, and cobs, into small disks. This in the first place practically shells the corn, in addition to cutting the cobs, husks, and stalks, and as the pieces of cob pass between the toothed cylinders, H, H', what few remaining grains may be attached are separated by the threshing operation of said cylinders. The knife cylinder, F, is mounted on a shaft, O, one end of which is provided with a band or fly wheel, P', and on the other end is a small gear, P, giving motion, through the idler, R, to the gear, S, secured to the upper feed roller, C. The shaft of this feed roller has a vertical play in the slot, 2, to facilitate

feeding the material, and a spring, 3, serves to keep the roller to its work. 4 is an idler, which receives motion from the gear, V, on the shaft, O, and communicates it to the gear, 5, attached to the toothed cylinder, H, and the said gear, 5, in turn meshes with a larger gear, 6, on the other toothed cylinder, H'. To the face of the gear, 6, is secured an angle gear, 7, meshing with a similar gear, 8, on the shaft, 9, the lower end of which is provided with a band pulley 10, by means of which a rotary motion is given to the pulley, 11, on the shaft, 12, of the revolving screen, I, said pulleys, 10 and 11, being connected with a belt. (Not shown.) 13 is a pitman eccentrically connected to the face of the gear, 5, so as to give a shaking motion to the arm, 14, secured to the rock shaft, 15, upon which the shaking screen, L, is mounted. It will thus be seen that the machine may be placed in the field, and the stalks of corn, being first cut down a few inches from the ground, may then be fed in suitable bunches to the feed rollers, C, C', and cutters, which cut the stalks, ears, and husks into small pieces, and, as above stated, this cutting operation removes the greater portion of the grain corn from the cob, and the remaining adhering grains are entirely removed by the threshing action of cylinders, H, H', and the mass then passes into the revolving screen, I, where the corn and chaff or dirt pass through said screen, and fall into the shaker, L, while the stalks, husks, and cobs pass out the lower end upon the incline, K, thence to the ground. The grain corn and chaff in falling into the shaker, L, are continually agitated, which sifts the chaff through the bottom, leaving the corn clean and clear to be discharged through the opening, N. Having thus fully described my improved method of separating corn, what I claim as new and useful, and desire to secure by letters patent of the United States is: (1) The method herein described of reducing and separating corn in the stalk at a single operation, which consists, first, in cutting up the ears, husks, and stalks; second, in removing the remaining grain from the cobs; and, finally, in separating the clean grain from the stalks, cobs, and husks, as set forth. (2) The method herein described of reducing and separating corn in the stalks, which consists in cutting the corn, stalks, cobs, and husks at a single operation, and then removing the remaining grain from the cobs, as set forth." The defenses pleaded were justification under letters patent No. 437,803, granted October 7, 1890, to P. B. Still, noninfringement and noninvention, with references to the following patents in the prior art: No. 1,111, issued March 26, 1839, to T. Elliott; No. 3,775, issued October 3, 1844, to R. Miller; No. 5,207, issued July 31, 1847, to E. Potts; No. 8,753, issued February 24, 1852, to A. B. Earle; No. 19,425, issued February 23, 1858, to W. D. Hickok; No. 19,935, issued April 13, 1858, to John K. Landis; No. 22,718, issued January 25, 1859, to Ford, Sullivan & Gregg; No. 27,487, issued March 13, 1860, to Utley & Teed; No. 29,572, issued August 14, 1860, to P. S. Clinger; No. 32,273, issued May 14, 1861, to Bundy & Edgerton; No. 71,000, issued November 19, 1867, to J. T. Harvey; No. 177,304, issued May, 9, 1876, to I. and J. F. Wentzel; No. 180,862, issued August 8, 1876, to H. G. Fritz. Mr. M. E. Dayton, an expert examined in behalf of the complainant, on cross-examination, testified to the effect that assuming the Goddard claims, instead of being method claims, to be in fact claims for the machine, they would be void because anticipated by the construction shown in the Ford, Sullivan & Gregg patent; that in accomplishing Goddard's new process he uses a machine which in all its material parts and mechanical elements was old; that to cut, to thresh, and to sift grain by a single machine embodying each and every the elements shown in the Goddard patent, or their well-known equivalents, was old, as shown by the Ford, Sullivan & Gregg machine; that the cutting devices of the Goddard patent and of the Still patent and of the defendant's machine were all old and perfectly well known, and the use of the one or the other in any given machine a mere matter of selection, and not at all a matter of invention; that, if the cutting device of the Goddard patent were substituted for the cutting device of the Ford, Sullivan & Gregg device, it would make that a commercially operative device, which would do everything which can be done with the Goddard machine; that the prior public use of the Ford, Sullivan & Gregg machine with the cutting devices, modified as stated, upon Indian corn in the husk and on the stalk, would constitute a perfect anticipation of the

Goddard patent; that such use of such a machine, without a separator, would constitute a perfect anticipation of the second claim of the Goddard patent; that in such case there would not, in his opinion, be the slightest element of invention in adding a separator to the machine unless the separator itself was of a new construction; that revolving cylindrical sifters and either horizontal or tilted reciprocating cylinders were old and perfectly well known at the date of the Goddard patent; that the use of one rather than another in any given machine was solely a matter of selection, and not at all of invention; that the machine of the Miller patent, No. 3,775, could be used in the practice of the method described in the second claim of the Goddard patent without any changes whatever, and that the same is true of several other patents set up in the defendant's answer, and introduced in evidence, as, for instance, the Neff patent of 1860 and the Wentzel patent of 1876; that in respect to the threshing and screening devices, but not in respect to the cutting devices, the machine shown in the Still patent and the defendant's machine are more like the machine described in the Ford, Sullivan & Gregg patent in construction and organism than they are like the machine shown in the Goddard patent. The opinion of the circuit court is reported in 51 Fed. 284.

Offield, Towle & Linthicum, for appellant.
Raymond & Veeder, for appellees.

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

WOODS, Circuit Judge (after stating the case). The utterances of the supreme court upon the question whether or not a mechanical process is patentable are not in clear harmony: Corning v. Burden, 15 How. 267; O'Reilly v. Morse, Id. 62; Tilghman v. Proctor, 102 U. S. 707; Lawther v. Hamilton, 124 U. S. 1, 8 Sup. Ct. 342; Cochrane v. Deener, 94 U. S. 788; Brown v. Piper, 91 U. S. 37. In Lawther v. Hamilton, the process was for extracting oil from oleaginous seeds, and was not entirely mechanical; but the improvement for which the patent there considered was granted consisted merely in the omission of a mechanical part of the process, namely, the grinding of the seeds under muller stones, and the patent was sustained, though not in the broad and general sense of the claim; the process being held to be "limited by the clear terms of the specification, at least so far as the crushing of the seed is concerned, to the use of the kind of instrumentality described." In Cochrane v. Deener, the original process and the patented improvement which was in issue, comprising the use of an air blast, related to the manufacture of flour, and were entirely mechanical in character and operation.

"A process," it was there said, "is a mode of treatment of certain materials to produce a given result. It is an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing. If new and useful, it is just as patentable as is a piece of machinery. In the language of the patent law, it is an art. The machinery pointed out as suitable to perform the process may or may not be new or patentable; whilst the process itself may be altogether new, and produce an entirely new result. The process requires that certain things be done with certain substances, and in a certain order; but the tools to be used in doing this may be of secondary consequence."

But in Corning v. Burden, quoted with approval in Tilghman v. Proctor, it is said:

"A process eo nomine is not made the subject of a patent in our act of congress. It is included under the general term 'useful art.' An art may require one or more processes in order to produce a certain result or manufacture. The term 'machine' includes every mechanical device or combination of mechanical powers and devices to perform some function or to produce a certain effect or result. But where the result or effect is produced by chemical action, by the operation or application of some element or power of nature or of some substance to another, such modes, methods, or operations are called processes. A new process is usually the result of discovery, a machine of invention. * * * It is when the term 'process' is used to represent the means or method of producing a result that it is patentable, and it will include all methods or means which are not effected by mechanism or mechanical combinations. But the term 'process' is often used in a more vague sense, in which it cannot be the subject of a patent. Thus we say that a board is undergoing the process of being planed, grain of being ground, iron of being hammered or rolled. Here the term is used subjectively or passively, as applied to the material operated upon, and not to the method or mode of producing that operation, which is by mechanical means, or the use of a machine, as distinguished from a process. In this use of the term it represents the function of a machine, or the effect produced by it on the material subjected to the action of the machine. But it is well settled that a man cannot have a patent for the function or abstract effect of a machine, but only for the machine which produces it."

In general harmony with these propositions are the numerous cases of which, in Pennsylvania R. Co. v. Locomotive, etc., Truck Co., 110 U. S. 490, 4 Sup. Ct. 220, it is said:

"It is settled by many decisions of this court, which it is unnecessary to quote from or refer to in detail, that the application of an old process or machine to a similar or analogous subject, with no change in the manner of application, and no result substantially different in its nature, will not sustain a patent, even if the new form or result has not been before contemplated."

In Brown v. Piper, 91 U. S. 37, a patent for a method of preserving fish in a closed chamber by means of a freezing mixture was held to have been anticipated by a like method practiced by undertakers for the preservation of dead bodies; and, to the proposition that the process had never before been applied to the preservation of fish and meats, the court said:

"The answer is that this is simply the application by the patentee of an old process to a new subject, without any exercise of the inventive faculty, and without the development of any idea which can be deemed new or original in the sense of the patent law. The thing was within the circle of what was well known before, and belonged to the public."

And so, in Howe v. Abbott, 2 Story, 190, Fed. Cas. No. 6,766, a patent for the process of curling palm leaf for mattresses was held invalid in view of the fact that hair had been prepared by the same means for analogous uses. Justice Story said:

"It is precisely the same as if a coffee mill were now for the first time used to grind corn. The application of an old process to manufacture an article to which it had never before been applied is not a patentable invention. There must be some new process or some new machinery used to produce the result. If the old spinning machines to spin flax were now first applied to spin cotton, no man could hold a new patent to spin cotton in all modes, although he had invented none."

In Fuller v. Yentzer, 94 U. S. 288, where the claims, though in terms for the function or result of the operation of the mechanism

described, were construed, in order to uphold the patent, to be for the mechanism itself, it is said:

"Patents for a machine will not be sustained if the claim is for a result, the established rule being that the invention, if any, within the meaning of the patent act, consists in the means or apparatus by which the result is obtained, and not merely in the mode of operation, independent of the mechanical devices employed; nor will a patent be held valid for a principle or for an idea, or any other mere abstraction. Burr v. Duryee, 1 Wall. 531."

And in Roberts v. Ryer, 91 U. S. 150, 157, is this expression:

"It is no new invention to use an old machine for a new purpose. The inventor of a machine is entitled to the benefit of all the uses to which it can be put, no matter whether he had conceived the idea of the use or not."

To same effect, see Stow v. Chicago, 104 U. S. 550; Heald v. Rice, Id. 755; Stimpson v. Woodman, 10 Wall. 117; Tucker v. Spalding, 13 Wall. 453.

It being, as we suppose, well settled that a patent for a machine covers its use for all purposes, whether anticipated by the patentee or not, and that the functions or methods of operation of mechanical devices may not be patented, it would seem to follow that processes, which are to be effected wholly by mechanical means, in order to be patentable must be capable of being distinguished from the method of operation or mere function of the mechanism necessary for their accomplishment. Whether or not such processes are possible is a question primarily for inventors; the courts can decide only whether a particular process presented for consideration is of that character. The processes now in question were designed for—

"Reducing and separating corn in the stalk at a single operation, so that the grains will be separated from the cob, and at the same time the stalk, husk, and cob are cut up or comminuted and [made] ready for use as stock food,—ensilage."

The means specified for accomplishing these results are entirely mechanical, consisting of a combination of machines and devices long well known, and we find it impossible to see any distinction between the processes and the mere functions or mode of operation of the mechanism itself; and the same objection manifestly would apply if other devices were substituted for those described. But, if we waive the objection stated as one which under the decisions and dicta of the cases cited may or may not be tenable, and consider these processes in the light of the prior art in proof, we are constrained to find them devoid of patentable novelty. A completely analogous process is shown by the patent of Ford, Sullivan & Gregg, which is upon machinery designed for cutting, separating, and threshing wheat and other small grains. It is insisted, however, that cornstalks and ears in the husk resemble trees more than wheat, oats, rye, or barley, and that the process shown for the treatment of the latter afforded no suggestion for the treatment of the other by the same or a similar method; though it is admitted that if the cutting device of the Goddard patent were substituted for the cutting device of the Ford, Sullivan & Gregg machine,—a substitution which would not involve

invention,—it would make of it an operative machine upon which the processes of the Goddard patent might be completely performed. But as our conclusion rests only in small measure upon the patent of Ford, Sullivan & Gregg, we do not stop to consider further the force of the arguments in respect to it.

The first two steps of the process covered by Goddard's first claim are identical with the two steps which constitute the process of the second claim, and the fair presumption is that those two steps were first conceived or discovered, and that the third was devised later. The first inquiry in logical order, therefore, is whether or not in the two steps common to both claims there was a patentable discovery. The proof to the contrary is convincing. The only feature of novelty asserted is that Goddard was the first to conceive or discover that the shelling of corn, either wholly or in part, could be done by means of a feed cutter; and "this fact," says the appellant's expert, "lies at the bottom of his invention or process." The same witness testified that "it has long been a practice among farmers to chop up ears of corn with an axe to fit it for feed for cattle;" that he did not know "that corn was ever cut in the stalk, husk, or ear, with a feed cutter;" though he admitted that upon the cutters shown in the patents of Miller, Neff, Wentzel, and others, referred to in the prior art, without any change of parts or construction, the process of Goddard's claim could be performed. Though not explicitly so stated, we think it inferable from this testimony that the practice of farmers was to chop up for feed the unhusked ears of corn, and it would seem entirely probable, because so manifestly practicable, if, indeed, the fact may not be affirmed upon common knowledge within the cognizance of the court, that the cutting was done upon the old-fashioned cutting boxes, as well as with axe or hatchet; and if corn and husk and stalk together were not cut in the same way, and especially by means of the improved and patented cutters after they came into use, it was because an obvious and important utility for which the inventions were adapted was blindly overlooked or purposely rejected. On account of late planting, early frosts, and for other reasons, growing corn is often cut when the grain upon the ears is too immature to ripen after cutting into a merchantable article, and in that condition the farmer, already possessed of a cutter adapted for the purpose, needed no inventive suggestion to enable him to subject the stalk and ear together to the very process of which appellant would have a monopoly. It is hardly to be believed, in the absence of proof, that since the introduction of improved cutters, designed to reduce the entire product of the corn plant into a condition fit to be fed to cattle, they have not been used more or less to chop cornstalks and ears of corn by a single operation, affording complete illustration of Goddard's second process, both in respect to its operation and result. And this proposition does not rest on probability alone. The Harvey machine, patented in 1867, which is in evidence, though called a straw cutter, was expressly designed "for cutting not only hay, straw, cornstalks, etc., but

also ears of corn and other vegetable products;" another part of the specification being that "when the material to be cut is of a coarser quality, such as cornstalks, ears of corn," etc., certain arms of the device were to be lengthened. While, therefore, it is not explicitly said that the cutter of that patent was designed to operate upon the unseparated ears and stalks, the obvious possibility of its being so used left no room for patentable novelty in a suggestion of that method; and whether Harvey's design was that the corn and stalks should be treated separately or together, and whether the practice with that and like machines was one way or the other, the result of the operation or process necessarily was the cutting of the stalks, ears, and cobs into disks, and the more or less complete shelling of the corn. It cannot be true, therefore, that Goddard was the first to discover that corn could be shelled by means of feed cutters, though he may have been the first to perceive how completely the shelling had been and could be accomplished in that way, and that by separating the shelled corn, when of good quality, from the comminuted mass of other materials, as they came from the cutters, the clean product could be made a merchantable commodity. To accomplish that, it was only necessary to add to Miller's cutter, or any other of the devices adapted to cutting cornstalks, or stalks and ears, a screen or sieve, which might be vibrating or revolving or stationary. They were well-known devices, of common use in threshers, as illustrated by the patent of Ford, Sullivan & Gregg, which, if it did not contain an obvious suggestion that corn in the husk and on the stalk could be treated by the method which it embodied, did show plainly enough how the process of the second claim could be carried to the third step, constituting the first claim of the patent, simply by annexing to the feed cutters adapted to chop cornstalks and ears of corn some form of screen or separator. As was said of the Grant patent in Grant v. Walter, 148 U. S. 547, 556, 13 Sup. Ct. 699, the most that can be said of the Goddard patent is that it is a discovery of a new use for old devices, which does not involve patentability. The decree of the circuit court should be affirmed, and it is so ordered.

GALT et al. v. PARLIN & ORENDORF CO.

(Circuit Court of Appeals, Seventh Circuit. February 9, 1894.)

No. 95.

PATENTS FOR INVENTIONS—NOVELTY—WHEEL HARROWS.

The fifth, sixth, and seventh claims of reissued letters patent No. 8,765, granted June 24, 1879, to Jay S. Corbin for an improvement in wheel harrows, consisting of the combination with a gang of rotating harrow disks of a lever for setting the same, are void for want of novelty, the improvement being merely a change in the location of the lever previously used. 52 Fed. 749, affirmed.

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