Statement of the Case.

California and Indiana under similar statutes, from one of which the present statute of Arizona would seem to have been taken. Payne v Treadwell, 16 California, 220, 242–247, Statham v Dusy, 11 Pacific Reporter, 606, Heeser v Miller, 19 Pacific Reporter, 375, Jefferson &c. Railroad v Oyler, 60 Indiana, 383, 392, Trittipo v Morgan, 99 Indiana, 269.

The result is, that the complaint in this case is sufficient to authorize the court to determine the claim of the defendants and the title of the plaintiff, and also, if the facts proved at the hearing shall justify it, to grant an injunction or other equitable relief.

Judgment reversed, and case remanded to the Supreme Court of Arizona, with directions to overrule the demurrer to the complaint, and to take such further proceedings as may be consistent with this opinion.

PATTEE PLOW COMPANY v. KINGMAN.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE EASTERN DISTRICT OF MISSOURI.

No. 88. Argued November 16, 19, 1888. - Decided February 4, 1889.

- The second claim of reissued letters patent No. 6080, granted to James H. Pattee, October 6, 1874, for improvements in cultivators, changes the first claim of the original patent, (1), by omitting the plates B, and (2) by the addition of the direct draft; and thus substantially enlarges the invention, and consequently is invalid.
- The machines manufactured by the defendants do not infringe letters patent No. 174,684, granted to Thomas W Kendall, March 14, 1876, for improvements in cultivators.
- Letters patent No. 187,899, granted to Henry H. Pattee, February 27 1877 for improvements in cultivators, embrace nothing that is not old, and nothing that is patentable,—that is, which involves invention rather than mechanical skill.

In Equity for the infringement of letters patent. Decree dismissing the bill, from which complainant appealed.

Mr John R. Bennett for appellant.

Mr L. L. Bond for appellees. Mr E. A. West was with him on the brief.

Mr. CHIEF JUSTICE FULLER delivered the opinion of the court.

This is an appeal from a decree of the Circuit Court of the United States for the Eastern District of Missouri, dismissing appellant's bill of complaint.

The bill charges appellees with infringement of the second claim of reissued letters patent No. 6080, dated October 6, 1874, which is a reissue of original patent No. 124;218, to J. H. Pattee, dated March 5, 1872, of the first and second claims of original patent No. 174,684, granted Thomas W. Kendall, March 14, 1876, and of original patent No. 187,899, granted Henry H. Pattee, February 27, 1877, all for improvements in cultivators.

Appellee is an Illinois corporation, having a branch house in St. Louis, selling, among other things, cultivators manufactured by B. D. Buford &. Co., at Rock Island, Illinois, which are the alleged infringing machines.

The opinion of the Circuit Court was as follows

"Reissued patent 6080, of 1874, second claim of which is under consideration, has, as to that claim, expanded the original beyond legal limits. Therefore, said reissued patent is void, to the extent claimed, wherein the defendant is alleged to have infringed. Second, as to the Kendall patent No. 174,684, there is no infringement. Third, as to the Pattee patent of 1877, No. 187,899, said patent is void, there being no novelty of invention therein that is patentable."

The second specification of the original Pattee patent No. 124,218, states that the invention consists "in pivoting the wheels to the axle in such manner that the wheels may either one be advanced forward of the other, throwing the axle diagonal with the line of progression, while the wheels preserve the same relative position to the said line of progression."

The second specification of the reissue reads as follows "It consists in hinging the ends of the axle to plates, to which the draft animals are attached, and which are supported on wheels in such manner that the wheels are retained in the line of progression of the machine by the draft of the animals, and may either one be advanced forward of the other, throwing the axle diagonal with the line of progression, while the wheels preserve the same relative position to the said line of progression."

The fourth specification of the original is "It consists in the peculiar construction of the hitching device, allowing the draft animals to advance or recede, the one ahead or in the rear of the other, without influencing the plow-beams to the extent of the variation made by the said animals, all as hereinafter fully described."

The sixth specification of the reissue is "It consists in the arrangement of a hitching device with the draft-plates, which allow the draft animals to advance or recede, the one ahead or in rear of the other, without influencing the plow-beams to the extent of the variation made by the said animals, all as hereinafter fully described."

The description of the accompanying drawings is given in the original and in the reissue, thus:

Original.

"A is the axle, bowed or elevated at its central part. B B are plates secured to the ends of the axle A. The ends of the plates B B are turned outward, forming snugs b b b b. b¹ b¹ are snugs projecting inward from the plates B B. C C are triangular-shaped draft-plates, from which project snugs c c c c, corresponding with the snugs b b b b. D D are pins or bolts, passing

Reissue.

"A represents the axle, formed as shown in the drawings, of an elevated central part A, vertical side portions A¹ A¹, and horizontal projections a a, from each of the vertical side portions A¹ B B are draft-plates, with projecting forward ends b, to which the draft animals may be attached direct or by any suitable device, and with an enlarged rear end, from which

through holes in the snugs c c and b b, and thereby pivoting the plates C C to the axle A. E E are the wheels. F F are the wheel-spindles, their inner ends shouldered, threaded, and secured in slots e e in the lower ends of the plates C C by nuts ff G G are eveners, pivoted near their centres in the forward ends of the plates C C. HH are bars, their forward ends pivoted to the inner ends of the eveners G G, and their rearward ends pivoted to the snugs b^1 b^1 I I are hooks on the outer ends of the eveners G G, to which the draft animals are attached."

project lugs b^1 b^1 , corresponding with the projections α a of the axle A, to which they are hinged by vertical bolts C, as plainly shown in the drawings. DD are the supporting wheels. E E are the wheel-spindles, their inner ends shouldered, threaded, and secured in slots e in the lower ends of the plates B by nuts e^1 are eveners, pivoted near their centres in the forward ends of the plates B. H H are bars. their forward ends pivoted to the inner ends of the eveners G G, and their rearward ends pivoted to lugs a^1 a^1 , which project inwardly from the vertical parts A¹ of the axle. I I are hooks on the outer ends of the eveners G G, to which the draft animals are attached."

From this on, the original and reissue specifications are substantially alike, the description of figure 1 of the reissue closing with the words, "It will be evident that the draft-plates B support and give direction to the course of the wheels, while the wheels in turn serve to support them."

The first claim of the original is for. "The axle A, having plates B hinged to the wheel-spindle plates C, so that the wheels are retained in the line of progression when one is in advance of the other, as set forth."

The second claim of the reissue is for "The axle A, hinged to the wheel-spindle or draft-plates BB, so that the wheels are retained in the line of progression by the draft of the animals, when one is in advance of the other, substantially as described, and for the purpose specified."

The third claim of the original is: "The evener-bars G G and bars H H, when combined and arranged to operate with the hinged axle A, plates C, and wheels E E, substantially as and for the purpose specified."

And the sixth claim of the reissue: "The evener-bars G and bars H, combined and arranged to operate with the hinged axle A, plates B, and wheels D, substantially as and for the purpose specified."

That purpose is stated in the second claim to be the retaining of the wheels "in the line of progression by the draft of the animals, when one is in advance of the other," and as this purpose can only be accomplished by the aid of the evenerbars G G and bars H H, that is, not by the combination of the second claim alone, but only by carrying into it the eveners and bars of the sixth claim, it follows that the latter must be brought into the former by intendment.

In the original patent the mode of attachment of the team to the cultivator is stated to be by the hooks II "on the outer ends of the eveners GG, to which the draft animals are attached," while the reissue patent contains these words "BB are draft-plates, with projecting forward ends b, to which the draft animals may be attached direct, or by any suitable device."

An examination of the machine discloses that the wheels are kept in the line of progression by the eveners G G and their connection, and when they are dispensed with, and the hitch made direct, the wheels follow the animals and may get out of the line of progression.

As it is admitted that if the eveners are elements of the second claim, the effect of their omission and of hitching directly to the draft-plates instead of to the eveners would be to enlarge the claim, and as in our judgment this is precisely what was done, the reissue must be held to have been illegally expanded.

It may also be observed that the connecting bow in the original patent, called an axle, consists of a central curved portion with a plate attached to each end, and two spindle-plates, a combination of five parts. In the reissue the axle

and side-plates are treated as one part, making with the two spindle draft-plates three parts. There is, therefore, an omission in the latter combination, which tends, by reducing the number of elements, to render its scope less narrow than that of the original.

As we have seen, the original first claim was for "the axle A, having plates B, hinged to the wheel-spindle plates C, so that the wheels are retained in the line of progression when one is in advance of the other, as set forth."

The second claim of the reissue is for "the axle A hinged to the wheel-spindle or draft-plates B B, so that the wheels are retained in the line of progression by the draft of the animals when one is in advance of the other, substantially as described, and for the purpose specified."

The axle, having plates as described hinged to wheel-spindle plates, is not identical with an axle omitting the first-named plates, or having them so affixed as to become a constituent part thereof. The omission of the plates B and the addition of the direct draft are significant and material changes, and it is well settled that a reissue can only be granted for the same invention intended to be embraced by the original patent, and the specification cannot be substantially changed, either by the addition of new matter or the omission of important particulars, so as to enlarge the invention as intended to be originally claimed.

Passing to the question of infringement, it will be found that when the extent of the invention is determined, as it must be, by reference to the state of the art, the appellee's machine does not infringe in respect to those parts of the claim which can be held to have been unanticipated. It is alleged in the bill that in *Pattee* v. *Moline Plow Company*, in the United States Circuit Court for the Northern District of Illinois, the court sustained the validity of said reissued letters patent No. 6080. Upon referring to that case (10 Bissell, 377 and 9 Fed. Rep. 821) we find that Judge Blodgett held "From the proof in this case it is quite clear to me that Pattee was not the first to conceive and embody in a working machine the idea of a tongueless straddle-row cultivator. The first

machine shown in the proof which embodies this idea is that patented by Isaac Constant, in November, 1851. It is a tongueless straddle-row cultivator, with all the elements for a working machine of that description, and so arranged as to be what may be called in this art self-sustaining, that is, it will stand upon its own supports. This was also done by Arnton Smith in January, 1855, by Whitely in 1860 to 1865, by E. W Vangundy in February, 1864, by Pratt in October, 1864 and by Adam Young in November, 1866. All these show cultivators constructed without a tongue, with two plow-beams held together by a yoke, each plow drawn by its own draft animal and operating independently of the other."

The Constant patent here referred to is in this record and shows a tongueless cultivator, in which the inside beams move vertically and laterally, independent of each other, and each draft animal is hitched to its own side, while the side supports are beams to which two cultivator shovels are applied.

The Smith machine is a tongueless cultivator, in which two mold-board plows are connected together by a bar in front, not arched up in the centre. A horse is to be attached to each plow, and the coupling so made as to allow an independent motion.

Of the Pratt patent Judge Blodgett says that Pattee's arched and jointed axle is fully anticipated by it in form of construction, function and mode of operation. This Pratt patent shows a flexible, parallel, tongueless cultivator, in which each horse pulls his own side of the machine.

The patent to William Tasker of 1859 has an axle hinged to draft or spindle arms, having projecting bars so coupled that the wheels are retained in the line of progression by the draft of the animals. Tasker's fifth claim is "The connecting of the wheel stumps to a vertical spindle or spindles, capable of turning freely in vertical collar bearings or sockets, as hereinbefore described." The description as to this part of his machine is thus "J J are adjustable stumps for carrying the running wheels K K. These stumps pass through the overhanging lugs L L, formed at the top and bottom of each of the round spindles M M, which are contained in the vertical

sockets N N (one of which is shown in section in figure 3) of the cast-iron frame C, and are free to turn therein, thereby enabling the stump of each wheel to swivel or lock round when turning the plow, as shown by the dotted lines in figure 2."

If Pattee's claim were merely for a combination of an axle, having an elevated central portion, with the wheel-spindles, so that the draft of the team controls the direction of the wheels, the Tasker patent anticipates it, but the combination differs from that in the arrangement by which the evener-bars are carried inwardly so as to connect with the arch or central part of the axle, making the axle a part of the evener so combined, and thus maintaining the parallelism of the wheels.

Appellee's machine does not have "the wheel-spindles or draft-plates" of the patent, nor the axle A with side-plates B, but it uses the Pratt axle of 1864. Nor in appellee's machine is the parallelism of the wheels maintained by the draft devices, nor are they retained in the line of progression by the draft of the animals, but turn as the animals may pull. The beam-frames of appellee's machine have nothing to do with the wheel-spindle. The snugs of Pattee's have nothing to do with the plow-beams. The differences are so great that interchangeability of the parts of the two machines would be utterly out of the question.

In our judgment the ressue if valid, when limited to what alone could be claimed as new, is not infringed by appellee.

The first and second claims of the Kendall patent No. 174,684 are as follows,

- "1. The runners E, arranged to support the axle of a tongueless cultivator, with the plows D suspended therefrom, in manner substantially as described.
- "2. The combination of the runners E, plows D, hook-rods F, and axle A of a tongueless cultivator, substantially as and for the purpose specified."

As stated on behalf of appellant, "the second claim in said patent is a claim for substantially the same combination as recited in the first claim, but differently worded from the first claim," and as the hang-up devices are necessary for the suspension of the plows, the two claims may be treated as one.

The invention is said in the specifications to consist of the use of runners attached to the truck-frame or axle in such manner that they will not interfere with the operations of the machine when in use, and will act as supporting runners for the axle when the rear ends of the plows are elevated and suspended thereon, and, second, in the combination of hooks or rods for suspending the plows on the axle, with said axle and plows.

The drawings show the axle, the wheels, the draft-plates, and the plows of an ordinary cultivator of the tongueless class. The runners, constituting as alleged the "main feature" of the improvement, are journaled on the outer ends of the spindles of the wheels, midway their lengths, and their forward ends curved inward, and secured to the draft-plates by a threaded end and nut, while their rear ends are extended backward and downward and curved in such position that when the plows are in operation in the field and the axle upright, the rear ends of the runners will be above and free from the surface of the ground, and when the rear ends of the plows are elevated and suspended by any means from the axle, the rear ends of the runners will rest upon the ground and support the axle from being pulled backward and downward.

In short, as in the machines with a tongue, the plows are raised up and suspended from the tongue to keep them off the ground, so in the tongueless machine the plows are raised up and hooked on to the axle, and, to prevent their falling backward with the axle, runners are provided, connected with the axle and the hitching-arm of the machine, which sustain the axle when the plows are hooked on, but are themselves raised from contact with the ground by the draft when the plows are in use.

The runners are described as "journaled on the outer ends of the spindles," but it is also stated that they "may be attached rigidly to any suitable part of the axle at one or more points of attachment, and extend backward in the same manner as described.

These runners having the wheel-spindle or axle for their fixed point of support, are necessarily rigid and unyielding, and work

automatically, their rear ends being raised by the pulling of the team and lowered by the weight of the plow-beams when placed on the hooks.

The rigidity of the runners and the resulting automatic action are the essential characteristics of the patent, for tongueless wheel cultivators with runners to keep the plows off the ground were common and well known in the art when it was issued.

It is contended by appellant that the true state of the art is contained in the prior patents of Poling of 1872 and Robertson of 1875, and while many others are exhibited, an examination of these will, we think, sufficiently establish the conclusion just expressed.

Poling's patent is for a tongueless cultivator, provided with runners, which are placed under the beams by hand, when the plows are being transported, and which are taken out and carried on the beams when the plows are in operation.

Robertson's patent is for a tongueless cultivator, with draftplates, wheels and beams, and runners proted to the beams near the axle, and arranged with set-screws to lock the plows up and let them down. It is immaterial to the operation of the runners whether they act directly on the plow-beams or through the axle.

In appellee's machine the runner is arranged upon the end of an arm which projects backward from the axle. When the plows are in use the runner is turned up out of the way. When the runners are used the plows are raised and the runners prevented from turning up by a catch on the arm.

This machine does not contain runners constructed as the Kendall runners are, in the rigid form, and operated by the draft of the team to keep them off, or by the weight of the plows to keep them on the ground, and so lacks the distinctive features of the Kendall patent.

It is not automatic, but requires manipulation every time the use is changed.

When the runner is put in use its rear extension is turned down by hand, and a locking-dog, hung within a slot in the arm, turned into position. When the runner is not to be used,

it must be moved so as to release the dog and permit it to be thrown up, and the arm is then thrown upward and forward, the dog being allowed to drop so as to afford a support for the runner.

This jointed runner with a lock cannot be held to be the Kendall rigid bar.

We agree with the Circuit Court that there is no infringement.

Patent No. 187,899 is described as being for a new and improved mode of constructing the arch or central and main part of straddle-row cultivator beam-yokes or axles, and of connecting the side parts thereto, and the invention as consisting "in constructing said arch of curved adjacent bars of iron or steel, to the ends of which may be attached, by riveting, the cast-iron parts for securing thereto the plows and wheels, and which may be strengthened by the use of stiffening bolts."

The use of parallel bars is exceedingly common, and so far as the attachment of the bars to the end plates is concerned there is nothing new in that method.

The Burnham and Lathrop patent of 1866 shows a yoke connecting the plow-beams together, made with two parallel bars with end castings, put together with one bolt near the rear ends of the beams instead of with two bolts at the front ends, as in appellant's machine. The specification says "The two frames G G are connected by an arched or semi-circular yoke H*, the ends of which are pivoted to bars II, which are secured on the tops of the plow frames G G by pivots e, the bars being allowed to turn freely on the pivots e."

The Louden patent of 1876 has an arched axle of tubular wrought iron, gas-pipe being stated to be very suitable, having end castings attached rigidly or cast thereon.

The Barr patent of 1872, and the Miller patent of the same year, show arched axles or beam-yokes of two or more parts.

The Perkins patent of the same year shows the beams themselves made of parallel curved bars.

What is sought in all these patents is strength and lightness, together with cheapness and durability, but they are simply modes of construction. And that described in this patent

Syllabus.

embraces nothing that is not old and really nothing that is patentable, that is, which involves invention rather than mechanical skill.

Upon the whole case we are satisfied with the conclusions reached by the Circuit Court, and its decree is, therefore,

Affirmed.

UNION PACIFIC RAILWAY COMPANY v. McALPINE.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF KANSAS.

No. 128. Argued December 14, 15, 1888. - Decided January 28, 1889.

In October, 1874, Mrs. M. owned a tract of land consisting of four acres on Kansas River in the town of Wyandotte, Kansas, called Ferry tract, and the Kansas Pacific Railway Company owned a tract of 251 acres lying north of Wyandotte. In that year negotiations were opened between her and the company for an exchange of 2,700 acres of the Ferry tract, valued at \$2000, for the 251-acre tract, valued at \$1500, Mrs. M. offering to take for the difference in value a quarter section of land estimated at \$3 an acre. Negotiations for the exchange were had between Mrs. M. and officers of that company. On February 26, 1878, the president of the company informed its general superintendent, in substance, that the exchange would be made, and directed him to proceed with the matter. The superintendent turned the matter over to the attorney of the company, who acquainted Mrs. M. with the conclusion. She, considering the proposition for an exchange of lands accepted, took possession of the-25; acre tract with her husband, and made valuable improvements upon it, and has remained in possession ever since. The railway company, who had previously been permitted to lay a track across the land for temporary use, took possession of the 2^{70}_{100} acres and made improvements thereon. In June, 1878, at a meeting of the directors of the company, the president presented a form of deed to Mrs. M. of 251 acres in exchange for the $2\frac{70}{100}$ acres at the landing, and asked for instructions. It was then resolved that an exchange of said lands be made and the deed executed to Mrs. M. whenever the land to be conveyed by her was released from a tax claim thereon. A deed from her and her husband of the $2\frac{70}{100}$ acres, had previously been executed to the company and sent to its officers. After this resolution of the board, proceedings were taken by her for the release of the tax claim mentioned in it, which was accomplished, under the advice of the attorney of the company, by purchasing