v.38F, no.3-16 WORSWICK MANUFG CO. ET AL. V. CITY OF KANSAS ET AL.

Circuit Court, W. D. Missouri, W. D.

March 4, 1889.

1. PATENTS FOR INVENTIONS—INFRINGEMENT—SWINGING HARNESS.

The third Claim of letters patent No. 171,190, to Edward O. Sullivan, December 14, 1875, is for the combination with the harness for a fire-engine, etc of a device for suspending the harness above the position of the horse when attached to the apparatus. The collar, which is an open one, and hames attached to it, both of which were old, and the inner and part of the outer trace only, are suspended. The specification states that the device can be applied to an apparatus using but one horse. Various persons had previously suspended parts of the harness over the position of the horse, and there was evidence that the collar and harness had been so suspended with other parts. *Held* that; considering the prior state of the art, the device described in letters patent No. 830,320, November 10, 1885, to George C. Hale, which has for its object the suspension of the entire harness, is not an infringement.

2. SAME—PRESUMPTIONS FROM ISSUANCCE OF PATENT.

The rule that the issuance of a patent is presumptive evidence of the novelty and usefulness of the device applies in favor, of the defendant in a suit for infringement who has a patent for his device.

3. SAME—PRIOR ADJUDICATIONS.

A prior adjudication of a federal court upon the validity of a patent, though entitled to respect as a precedent in a case in another court between other parties presenting substantially the same facts, is not conclusive, and where the defense in the subsequent case is placed on additional grounds, and new and important facts are developed, it should stand on its merits.

In Equity.

Bill by the Worswick Manufacturing Company and Isaac Kidd against the City of Kansas and George C. Hale, to restrain the infringement of a patent.

M. D. & L. L. Leggett, for complainants.

W. A. Alderson, for defendants.

Before BREWER and PHILIPS, JJ.

PHILLPS, J. This is a bill in equity, complaining of an alleged infringement by respondents of patent No. 171,190, granted to Edward O. Sullivan, December 14, 1875, and assigned to complainants. The issue in this case is limited to the third claim of said patent, which is as follows:

"The combination, with the harness for a fire-engine or like apparatus, of a device for suspending said harness above the place occupied by the horse when attached to the apparatus, substantially as and for the purpose set forth."

This double harness, in combination, consists of the collar, with hames permanently attached, the collar opening at bottom, fastening with a spring-lock secured to the lower points of the hames. The other part of the harness consists of an outer and inner trace, back strap, belly-band, and breeching. The suspension of this harness over the place occupied by the horse at the vehicle is effected by means of straps suspended from spring barrels secured to the ceiling above the front part of the engine. The ends of these straps are provided with catches, which are attached to the hames and the inner part of the harness for suspending them. In this device only the collar and hames and the inner trace are suspended. The breeching is constructed with a hinge, and the other trace is in two parts, the first secured to the hames and the other to the whiffletree, so that the trace is divided, and the one part and the breeching are carried back by hand and laid on the fore part of the engine or vehicle; and in harnessing this breeching and outer trace are likewise brought forward by hand, and the two parts of the trace attached. The respondents also claim under patent No. 330,320, granted to the respondent George C. Hale, November 10, 1885, which relates to improvements in such swinging harness, and has also for its object the suspension of the entire harness over the pole of a fire-engine or like apparatus, so that the horses can readily place themselves in position for hitching without obstruction by the harness, and by one effort to detach the harness simultaneously with the lowering thereof from its suspending frame. By this method the entire harness, collar, and hames, and breeching, with both traces attached to the whiffletree, are suspended. The harness is suspended by means of a square adjustable frame over the point of elevation, with slotted straps extending therefrom to the harness, with improved snaps for seizing the different parts of the harness. The two front suspending cords engage the middle and outside ferrets or rings of the collar, thus elevating the outside of the collar, and holding the sections apart. Like cords are suspended from the frame for suspending the traces, back strap, and breeching, whereby the whole harness is suspended, and the horses take their places under it, and the entire harness comes down on then. The frame is suspended in proper position by means of cords or ropes passing over pulleys, connecting

with a rod extending transversely across the bars on the ceiling, and thence by cords down the sides of the wall of the room, connecting with a weight, which operates automatically, by which the whole process of suspension and letting down the harness on the horses is accomplished. The Hale device also employs the opening collar, with hames attached; the collar working on a rigid hinge at the top, and being secured at the bottom by a springlock, different in its construction from that of the Sullivan patent. In the Sullivan device the fastenings of the suspending straps are detached from the harness by the driver, after taking his seat on the engine or vehicle, by reaching a ring at the end of a rope running on pulleys above, and jerking it. In the Hale device the suspending cords are detached by the mere movement forward of the horses. The principal propositions insisted on by the defendants are substantially as follows: (1) That the invention in the third claim of the Sullivan patent was substantially known to and used by others before Sullivan's discovery; and because of the history of the art the third claim of the Sullivan patent is to be restricted to the particular devices and apparatus described in his letters patent. (2) In view of the state of the art no invention was required in making the pretended invention and combination described in the said third claim. (3) The third claim of the Sullivan patent is not for the same invention covered by any one of the five claims in Sullivan's original application, and that the said third claim was granted in violation of rule 11 of the patent-office, and is therefore void. (4) The Sullivan patent, particularly the third claim, is void on the ground of ambiguity

We are met at the threshold of this discussion with the suggestion that the validity and priority of the Sullivan invention has been adjudicated in complainant's favor in the case of *Manufacturing Co.* v. *City of Buffalo*, reported in 20 Fed. Rep. 126. It requires no citation of authorities to the proposition that that adjudication constitutes no estoppel. The respondents were not parties to that litigation, nor do they sustain the relation of privies to the city of Buffalo. The only consideration to which that decision is entitled, aside from the recognized ability of the judge, rests upon the comity between courts. The broadest application that can possibly be claimed for this principle is that the decision of courts of co-ordinate jurisdiction upon the same subject-matter of controversy is entitled to high respect as a precedent, when the subsequent case presents substantially the same state of facts. The former case is not conclusive. After giving due weight to all prior adjudications, the question of infringement of a patent is still to be determined in each particular case as it arises on the evidence adduced. *Manufacturing Co.* v. *Judd*, 28 Fed. Rep. 621; *Blake* v. Robertson, 60. G. 297. Where the facts in evidence are materially different, a decision of the supreme court itself sustaining a patent may not be followed in a suit between other parties. Kirby v. Manufacturing Co., 10 Blatchf. 307. A comparison of the pleadings and evidence in the Buffalo Case with these in the pending case, satisfies us that the questions of fact, as well as law to be considered and determined here are materially different.

The defense is not only placed on new and additional grounds, but new and important facts have been developed and presented. The case, therefore, must stand on its own merits.

That the third claim applies to a single as well as double harness suspension the complainants are in no position to deny. In paragraph commencing on line 13 of the second page of the printed specification of the Sullivan patent it is stated that" the same arrangement of harness can be readily applied to a hose-cart or other apparatus using one horse." It also states that the parts will be connected with the shafts. And this is the construction placed by the complainants on the patent. In their circular letter, in evidence, commending this device to the public, they say:

"This Sullivan patent broadly covers and includes all and any method of suspending a harness over the place where it is designed to be put upon a horse."

This circular letter has for its frontispiece the cut of a single set of harness in suspension. It must therefore follow that, if a single set of harness was suspended and used on substantially the same principle prior to the application of the Sullivan patent, the novelty of the third claim in issue would be broken, and the Sullivan patent must be restricted to the particular device expressed in it The first inquiry in this connection is, what was the state of the art anterior to the Sullivan patent of 1875, respecting the suspension of a single set of harness? Respondents have taken a large amount of evidence, with photographs, cuts, and exhibits, presenting in detail the extent of efforts in this direction, at various times and places prior to 1875. We will notice the principal instances.

Cleveland, Ohio. It appears from stipulation of counsel that in the Stables of the Hughes' Brewing Company, at this city, in 1873, there was one set of double harness suspended over the horses. After the horses were unhitched from the vehicle, and thereby separated from each other, each horse, having his own harness on, went to his stall, where the bridle and collar were removed in the usual manner, and hung upon brackets. The balance of the harness was raised from each horse separately, and held suspended in that position ready for replacing on the horse as he stood in his stall. Over each horse there was secured to the ceiling or rafters above, two pulleys, one over the front of the horse single, and the one over the rear double, through which there passed a rope, to the end of which, coming in contact with the harness, were attached two snaps. In suspending the harness said snaps were fastened thereto as follows: One snap in the top breeching ring, the other in the top hame-strap of the back-band. When said snaps were so secured to the harness, the rope was drawn, and the harness was raised up over the horse, and the rope secured to a pin in the post. A photographic view of this harness in suspense is in evidence. By releasing the rope from the pin the harness was lowered onto the horse. The harness has thus been used in suspension in this stable ever since. Said harness was

of such unusual weight that the men complained of handling it in the usual way, and this led to the invention of the said device for suspending

and lowering it by means of said pulleys. The original hooks, pulleys, and snaps used in this device are presented in court. This use at this stable was public, and well known.

The Allegheny City device. It is stipulated between the parties hereto that as early as 1871 there was and has been used up to 1879 a device by which the harness, with the shafts or thills attached, was suspended over the horse without the suspension of the collar. Said device consisted of two pulleys,—one secured to the ceiling immediately over the shafts of the carriage, and the other to the ceiling at its junction with the side of the room, and to the front of the carriage. Through these pulleys was placed a rope, one end of which, with a hook or snap thereto attached, descended from the pulleys over the shafts of the carriage, while the other end of the rope hung from the other pulley down the side of the room, entering the cellar or basement of the building through a hole in the floor, and then being secured to a balance weight. That when the horse was attached to the hose-carriage, and it was desired to unhitch him therefrom, the lines were unsnapped and the traces unsnapped from the hames. Then the end of the rope with the snap hanging from the pulley over the shafts of the carriage was secured to the check-rein hook on the saddle or back-band of the harness, and all of the harness, with the shafts, was pulled up and suspended over the position to be taken by the horse when he was to be harnessed to the carriage, except the part of the harness named, aforesaid, to-wit, the bridle, hames, and collar. When the horse entered his stall, the collar and hames were raised from his neck, and he was relieved of the weight thereof by means of a pulley secured to the ceiling over the stall, through which there was a rope, having at one end a snap, which was secured to the collar and hames; at the other end a balance weight. When there was an alarm of fire, the horse starting from his stall, detached said last named snap from the collar and hames, and, taking his position at the hose-carriage, the shafts and harness as aforesaid suspended were pulled down, and the harness fell in place on him. Then the girth was secured, the traces snapped to the hames, and the lines to the bit-rings, and everything was ready to run. Extensive notices of this suspended harness were published in the various Pittsburgh papers at various dates in 1871. From this description, and the photographic exhibit, it is apparent that the entire set of harness, excepting collar and hames, was suspended on substantially the same principle as that involved in the Sullivan patent, and even the collar and hames by means of a pulley were so suspended as to relieve the horse's neck from their weight; and, had the collar been open at the bottom, it would have presented a case of the whole combination. But for the latter device no patent could have been obtained, for the reason that the open collar and hames device had long prior thereto been discovered, and patents of invention issued therefor to other parties.

Dr. B. F. Whitney. The evidence shows that Dr. Whitney, a practicing physician at Loudonville, Ohio, prior to 1860, and at Mansfield, Ohio, between 1863 and 1868, used a device by which he suspended the

harness and shafts of the vehicle employed in his practice. The photographic view of this device, in evidence, shows the complete suspension of the harness, with the shafts, by means of pulleys hung from the ceiling with weights attached at the ends of the rope. The tugs were left attached to the vehicle, and by the device the harness was completely drawn off the horse, and held in suspense over him, as also the thills. He employed one or two hooks. The witness states: "threw the collar and hames back on the hooks, and hooked the hooks into the terret behind. I backed the horse sometimes; sometimes I drove the horse into the stable, and raised the harness up, and dropped it on the horse. The rigging I had to support the horse's collar separated the harness so that it would fall on the horse's back, and the harness was kept apart. I just took hold of the weights and pulled them up, and let the harness come down on the horse's back." He used a heavy wire, bent, by which he attached the rope to the back-band or saddle. "The wire was suspended by a rope through the pulley, one end of the wire hooked into the ferrets or saddle rings, and the hames were laid over the other end of the wire. The wire represented in the drawing held the collar hames apart from the saddle or back-band." This witness testified that the collar was attached to the hames in a single harness, and the hames were secured to the collar by a loop or buckle on each hame. The collar was open at the bottom. "After unbuckling there were two straps that buckled on top of the collar, and a wide strap at the bottom, holding the collar and hames together. Unhitch that strap at the bottom of the hames, then raise the collar and hames together." This was at Loudonville. Later, at Mansfield, the witness testified to the use of a double harness suspended in the same manner, and with the employment of additional pulleys, one on either side. For the single harness he there used a breast-strap in lieu of collar and hames, which was fastened with a buckle which was unbuckled before suspending. By his device, he testified it was much more convenient and rapid in harnessing and unharnessing, especially at night, and it kept the harness in better condition. While it is to be conceded that the evidence as to the employment of double harness by Dr. Whitney is not satisfactory, yet we can discover no reasonable ground for discrediting his testimony as to the suspension of an entire set of single harness, as stated by him. He is sustained by other evidence as to the principal fact of suspending a single harness by pulleys, and letting it down on the horse by the same means.

St. Joseph, Mo. The evidence strongly tends to show that as early as 1871 a device was in use by the fire company of this city for suspending an entire set of single harness, and also the collar and hames. The manner of this suspension is described by the principal witness, as follows: A string was tied to each side of the collar. There was also a string tied to each side of the back-band or saddle, and a string tied to the center of the breeching. These strings extended to the ceiling; making, in all, five strings. The traces were left

fastened to the single-tree, and when the harness was suspended the shafts were also elevated with it; and, when ready for the run, the horse was placed under the harness,

the open collar and hames held in suspense were pulled down on the horse's neck, and fastened by means of an iron catch; one man grabbed the shafts and hose-reel, pulled that down, breaking the strings, and fastening the belly-band underneath the horse. The shafts were not pulled from the shaft rings or holders attached to the back-band. The strings used for suspending the harness were heavy twine, with a piece of cotton string tied to the end of it, and when the harness was pulled down this cotton string was broken; that is, that part attached to the harness. When returned to the engine-house, to unfasten the horse he was driven under the point of suspension of the harness, the lines were unfastened from the bit, the hames unclasped at the bottom, the cotton string reattached to the harness and the twine strings, and the horse led out. The weight of the hose-carriage dropping to the rear elevated the shafts. Exhibit is made here in court of the open collar, with hame attached, and the clasp fastening the hames used by this company. These devices were used for some time by this company; alter that they laid the harness on top of the shafts. The advantages of the device above detailed were quickness in getting the horse harnessed, the preventing of the chafing of the horse by wear of the harness, and giving him better rest in the stall. It is true that some countervailing evidence was introduced by the complainants. At best it is of but a negative character,—that certain witnesses, with favorable opportunities, did not see the collar and hames thus suspended; but the overwhelming weight of the evidence supports the fact that the harness and collar and hames were suspended. This evidence is detailed by a number of unimpeached witnesses with a circumstantiality of statement that can leave no reasonable doubt of their truth in any impartial mind.

Louisville, Ky. Evidence respecting a similarity of the device used at this place as early as 1872 was presented on the trial of the Buffalo Case. Of this Judge COXE in his opinion in that case observes:

"There was also evidence tending to show that in 1872, at Louisville, the harness of a hose-cart was suspended by a rope and pulley from the ceiling, and that the collar was hinged and was fastened by a snap or spring-lock at the bottom. No witness was called who recollected seeing a harness for fire-engines suspended prior to the date of the patent. But, if not discredited, the evidence relating to the Louisville apparatus would certainly have the effect of restricting the claim within exceedingly narrow limits. The complainants have, however, succeeded in showing that there may well be a mistake both as to the time when and the manner in which the harness was suspended at Louisville."

Had the evidence now presented touching this issue been before that court it is inconceivable to us that such a conclusion could have been reached. Much additional evidence is now presented, with an array of facts and circumstances tending to establish a similar suspension of harness which we can find no reasonable grounds for discrediting. To discredit it would be to violently attribute bold perjury to a large number of witnesses

whose veracity we discover no sufficient reason for assailing. There are at least a dozen witnesses to this issue on behalf of respondents, while some of the witnesses introduced by the complainants have

testified to the suspension of the harness. The only evidence of any corrupt tampering with witnesses was not on the part of the respondents. At the taking of depositions at this place, a model of the alleged device, since constructed, was produced, as also before this court, which, if proximately representing the fact, clearly demonstrates that in respect of a single-harness suspension the device of Sullivan was anticipated. The inventor of this device was one Thomas Pendigrast, connected with the fire department at that time. The character of this witness is assailed by complainant's counsel with severe invective; but we fail to find any of the ordinary methods resorted to in evidence to discredit his testimony, aside from the fact that the witness was under the influence of an impression, in ignorance of the statutory limitation which would preclude the realization of any such expectation, that, if complainants should fail, he might be in a position yet to advance his claim to a patent as the original inventor. We may eliminate from this evidence the statements of this witness wherein they are not essentially corroborated, and the evidence will establish, so far as human testimony can be relied upon in any business affair, that there was in use in the city of Louisville, about the year 1872, a complete suspension of a harness in combination with a fire hose-cart, so similar in principle to the third claim of the Sullivan patent as to constitute it an anticipation of the invention of such suspension. The expert testimony, by a decided weight, is that such a device as claimed to have been used at Louisville is clearly covered by the third claim of the Sullivan patent, and the reasons assigned therefore are incontrovertible. The resistance made to this proof by the complainants is an implied admission of its damaging effect upon their claim. "The exceedingly narrow limits," alluded to in the opinion of Judge COXE, to which the Louisville device would reduce the third claim of the Sullivan patent, Would be to restrict it to the mere improvements made in the mechanical contrivances by which greater convenience in suspending and celerity in harnessing are attained. The very utmost that can be claimed under the countervailing evidence offered by complainants respecting the Louisville device is that it is calculated to create a reasonable doubt in the mind of the court as to its completeness. The general rule is that the issuance of a patent is presumptive evidence of the novelty and utility of the device; and it devolves upon him who defends upon the ground of an anterior discovery and use to show it by such convincing proof "that the court can say without hesitancy that the allegations of the answer are true." As applied to the Buffalo Case, this rule was properly invoked, because the city of Buffalo did not claim to be acting under the authority of a patent conceded to it by the government; whereas, in this case, the respondents claim to be acting under a patent granted to the respondent George C. Hale,—patent No. 330,320. In a controversy between two such patentees the above rule does not apply further than that the complainant in making out a prima facie case may stop after putting in evidence his patent. The rule in question rests upon the

fundamental postulate; that by the act of granting the patent the department officials adjudge that there exists *prima facie*, a patentable

device possessing novelty and utility. Its origin is discussed in *Corning* v. *Burden*, 15 How. 271. The rule being founded on the fact that the patent was issued after due inquisition made by skillful arid sworn public officers, GRIER, J., says:

"And, if so, it is not easy to perceive why the defendant, who used a patented machine, should not have the benefit of a like presumption in his favor, arising from a like investigation of the originality of his invention, and the judgment of public officers that his machine is new, and not an infringement of the patent previously granted to the plaintiff. * * * It is true, the mere question of originality or infringement generally turns on the testimony of the witnesses produced on the trial; but if the plaintiff's patent in a doubtful case may have some weight in turning the scale in his favor, it is but just that the defendant should have the same benefit from his; *valeat quantum valeat*. The parties should contend on an equal field, and, be allowed to use the same weapons".

The claim of the Iouisville device was, substantially, by suspending the harness over the reel or hose-cart by rope and pulley and balance weight fastened in the ring of the saddle, released by rope fastened to the wall, with a pin through this rope in the ring of the saddle, and an open collar at the bottom, with a hame attached. The shafts were elevated with the harness. That the harness proper was thus suspended and used for a considerable length of time is established by an overwhelming weight of evidence, supported by several of the witnesses introduced by the complainants. In fact, the only debatable ground of controversy on this evidence is as to whether the collar, opening at the bottom, with hames attached, was suspended in combination with the harness. The evidence, we think, establishes such combination. But if it be conceded that the collar and hames were not thus suspended in conjunction with the harness at Louisville, would this fact alone defeat the defenses? As already stated, the evidence incontestibly shows that at the grant of his letters patent Sullivan was not entitled to assert the "claim of novelty for the invention of such open collar with hames attached; for this claim, set up in his original application, was rejected by the commissioner, for the reason that it had been anticipated. The utmost, therefore, that can be predicated of his third claim, on the score of novelty in this particular, is a device for suspending the harness in combination with the collar and hames. This Dr. Whitney testifies to having done; and both collar and hames were suspended at St. Joseph. And if this evidence were rejected, the question arises, was the act of the simultaneous suspension in combination patentable as an original invention? "The law means, by invention, not maturity. It must be the idea struck out, the brilliant thought obtained, the great improvement in embryo. He must have that; but if he has that, he may be years improving it—maturing it. It may require half a life. * * * But the period when he strikes out the plan, * * * that is the time of the invention,—that is the time when the discovery occurs." Adams v. Edwards, 1 Fish. Pat. Cas. 1; Merely improving the concep-

tion of another by change in form, proportion, or degree is not such an invention as will sustain a patent. *Theberathv. Harness Trimming Co.*, 15 Fed. Rep. 246. A device which

is merely the result of mechanical skill is not patentable. So, where an article exists in a given form, and applied to a given use, and is taken in substantially the same form and applied to an analogous use, so as to make a case of mere double use, there is no invention. *Grandal* v. *Wallers*, 9 Fed. Rep. 659. So it is said that "in order to ascertain and determine whether the change in the arrangement and construction of an existing machine is to be considered as a substantial change or not, you must ascertain and determine whether the change is the result of mechanical skill worked out by mechanical devices,—of a knowledge that belongs to that department of labor,—or whether the change is the result of mind, or genius of invention, in which you discover something more than mere mechanical skill and ingenuity. A change in the arrangement and construction is not substantial, unless you find embodied in it, over and beyond the skill of the mechanic, that inventive element of the mind which is to be found in every machine or improvement that is the proper subject of a patent." *Tatham* v. *Le Roy*, 2 Blatchf. 474. So Mr. Justice STORY, in *Bean* v. *Smallwood*, 2 Story, 408, said:

"Now, I take it to be clear that a machine, or apparatus, or other mechanical contrivance, in order to give the party a claim to a patent therefor, must in itself be substantially new. If it is old, and well known, and applied only to a new purpose, that does not make it patentable."

So, in *Hailes v. Van Wormer*, 20 Wall. 353–368, Mr. Justice STRONG said:

"All the devices of which the alleged combination is made are confessedly old. No claim is made for any one of them singly, as an independent invention. It must be conceded that a new combination, if it produces new and useful results, is patentable, though all the constituents of the combination were well known, and in common use, before the combination was made. But the result must be a product of the combination, and not a mere aggregate of several results, each the complete product of one of the combined elements. Combined results are not necessarily a novel result, nor are they an old result obtained in a new and improved manner. Merely bringing old devices into juxtaposition, and there allowing each to work out its own effect, without the production of something novel, is not invention."

See recent decision of THAYER, J., in *Brinkerhoff* v. *Abe*, 46 O. G. 338–341, 37 Fed. Rep. 92.

The expert witness Cowles testified that it would not require an invention to raise the collar and hames with the harness.

"When provision is made for raising the harness, as shown in Photographic Exhibit A. to attach an additional matter would not be inventable. It would require some mechanical change to do this in this case. But as I understand the Sullivan patent in the third claim, he does not claim the dividing of the collar at the breast or throat, and attaching the hames thereto. The point of the third claim is the combination of a device with the harness for a

fire-engine, or of a like apparatus, for suspending the harness above the place occupied by the horse; that is, in this claim he has provided a way and means for raising the harness, and suspending it. Now, when Photographic Exhibit A pointed out the way for suspending the harness, as it does, it accomplishes what is claimed in the third claim. It employs substantially the same means to do the act of suspending, and employs them substantially the same way. To add more or less to what it raises would not require invention,—that is, so far as

accomplishing the act of raising or suspending. It might require modification or change to prepare the harness to be raised, but this is not the object of the third claim. That is provided for by other claims."

The witness Robertson, whose reputation as an expert in such matters gives him great respect, testifies that there was nothing whatever in the third claim which limited it to a device of a suspension "supporting the collar as well as the saddle and breeching." The criticism made by this witness upon the evidence of the witness Knight, who testified as an expert on the part of complainants, is so pertinent and sensible as to justify its presentation in this connection. He says:

"Mr. Knight takes the ground that the third claim is for a combination of two elements; but, knowing that the combination of those elements is an old one, he takes the ground that the elements must have structural peculiarities to adapt them to work together; but he fails entirely to show what these structural peculiarities are. Instead of this, he states that the harness most be such as is adapted to be used with a suspension device, and that a suspension device must be adapted to the use of the harness. In trying to explain the third claim on his theory, the witness Knight brought into it, by mere implication, structural peculiarities which he could not define, and which are not referred to in the claim itself. He admits that a claim for an old combination, which depends upon structural peculiarities to make it valid, should have such peculiarities specifically named in it; but no such peculiarities are pointed out in the third claim, and it is impossible to ascertain from his testimony what the structural peculiarities referred to are."

In the opinion of this witness, any one who desired to build a device for suspending a harness on the principle previously used by Dr. Whitney, or at Allegheny City, Louisville, or St. Joseph, could not possibly tell from this construction of Sullivan's third claim whether or not he was infringing it. Nor could any court tell whether he was using the structural peculiarities referred to by Knight, or only using what had been known before the Sullivan invention. "As a matter of fact the only structural peculiarities shown in Sullivan's patent are those covered by the first and second claims [thereof,] and which are not used by the defendants, if they use the Hale patent." In short, the position taken by the complainants in this controversy can only be maintained upon the theory that any suspension of any part of the entire harness by ropes or straps and pulleys over the horse, so as to be let down upon him in position at the pole, would be an infringement of the Sullivan patent. For, as already shown, the Sullivan device does not accomplish the complete suspension of the entire double harness, as does the Hale device. The very attitude of the complainants is that the suspension of additional parts, though by different appliances and mechanical structure in the suspending machinery, is but the application of the already discovered idea of such suspension. In view of what had preceded, we do not attach so much importance as do the learned counsel for complainants to the fact that

as a result of the Sullivan device the facilities for harnessing horses have been greatly increased, and the time occupied in reaching conflagrations materially lessened. For any such improvements on the prior known methods Sullivan was entitled to a patent; but it does not follow

that such improvements give him a claim as the inventor of the idea for such suspending harness, so as to exclude others from employing any method of suspension without using his improvements "The prior machine may have been inferior to the subsequent one, and may not have performed its work so well, but so long as it is substantially the same, and was a perfected invention, it anticipates the latter." Curt. Pat. § 87a. While the fact may be conceded that the improvement made by Sullivan is so superior to any of its character which had preceded it that no one using it would return to the older methods, this does not necessarily establish the material fact of the novelty in principle of the Sullivan device. There are almost innumerable improvements in the application of old devices and discoveries in mechanical art which no one would willingly surrender for their predecessors, yet no claim could be set up for the latter beyond their improvement upon the conception and application which had preceded it. Manifestly no one would exchange for practical use the Hale devices for suspending harness and harnessing the horses for Sullivan's. The superiority of the Hale method and appliances, in most important particulars, was virtually conceded at the hearing.

The history of Sullivan's application for his patent shows that his assertion of a prior right in the field of invention for a suspended harness, per se, is an after thought. In his application he merely stated: "That your petitioner has invented an improved harness for fire-engines and other apparatus." The statute (Rev. St. § 4892) requires that such applications shall be accompanied by the oath of the applicant that he verily believes himself to be the original inventor or discoverer of the art for which he solicits a patent, and that he does not know, and does not believe, that the same was ever before known or used. This oath is an essential prerequisite to the exercise of jurisdiction on the application by the commissioner; and the courts assign the making of this oath as a part of the groundwork for the rule that the letters patent are prima facie evidence of the requisite novelty and utility. Alden v. Dewey, 1 Story, 336; In re Fultz, 1 MacArthur, 178; In re Wagner, Id. 510. In the only oath ever made by him, either in the original application or in the amended application, he simply stated "that he verily believes himself to be the original and first inventor of the within described and claimed improvements in harness for fire-engines and other apparatus; and that he does not know or believe that the same was ever known before his discovery and use." In his fifth specification of claims, which referred to the suspension of harness, he limited it to the means of suspension by the spring barrel and a coil-spring capable of sustaining the weight of the harness. A patent granted conformably to this claim would have been restricted to a harness suspended by the means and appliances described, and there would have been no infringement of it in suspending by other means. "A patent, like a contract, must be so construed as to effectuate the intention of the parties. So where, in the specifications for a patent bed bottom,

the patentee described the framework as wooden, it was held that the intention of the patentee was to claim a wooden frame to the exclusion of other material, and that the

use of an iron frame for the same purpose is not an infringement." *Harris* v. *Allen*, 15 Fed. Rep. 106. This fifth claim was rejected on the ground that "it should be for the mechanism." Thereupon the third claim, at the instance of applicant, was substituted therefor. In 1873, the commissioner of patents, with the approval of the secretary of the interior, as authorized by Rev. St. § 483, adopted among its rules of practice the following rule:

"(2) In case the applicant by amendment seeks to introduce any claim not substantially embraced in the original affidavit, he will be required to file a supplemental oath relative to the invention as covered by such new or enlarged claim or claims; and such supplemental oath must be upon the same paper which contains the proposed amendment."

The evidence shows that no such supplemental oath accompanied the amendment. Without undertaking here to say that such omission vitiated the third claim, it is sufficient to say that this fact gives strong color to the inference that in rejecting the fifth claim on the ground that it should be for the mechanism only, and allowing the substitution of the third claim without the additional oath, the commissioner did not regard the third as an enlargement of the original claim, but as "substantially embraced in the original affidavit," which, as we have seen, was only for "improvements in harness." And from the phrase-ology of the third claim it would seem that the applicant himself had more in mind the matter of suspending his particular harness than the suspension generally of any harness, for it is "a device for suspending said harness." Be this as it may, giving to the claim a broader construction, so as to make it apply to the suspension of any harness, and it follows that to deny that it would not conflict with the priority Of such devices as are disclosed by the evidence, had they been patented, is to affirm that the Hale device is no infringement of Sullivan's. Decree for respondents, dismissing the bill.

BREWER, J., (concurring.) In this case I have carefully examined the testimony as to the Pendigrast harness and its use in Louisville prior to Sullivan's application for a patent, and am very well satisfied that a complete harness was suspended, as claimed by defendants. For that reason I concur fully in the conclusion reached by my Brother Philips, that the defendants are entitled to a decree dismissing the bill. I may also add that given, as is conceded by complainants, the known idea of suspending a portion of the harness, it seems to me very doubtful whether the extension of this suspension to the entire harness can be considered as the product of inventive skill, or entitled to a patent for anything more than the mere mechanism by which the suspension is accomplished. I deem it unnecessary to express any further opinion in this case, nor have I had time to carefully examine the testimony as to the other cases of alleged prior use.