Syllabus.

I put some of their improvements into my drills, I got them off their patterns to try them. I got off their tubes a couple of sets. I also got them wheels off their patterns. The fact is, I got all the castings off their patterns. I used the wheel marked *H* from July, 1850, with Mr. Jenkins' permission and with Custer's permission. I supposed that the wheel *H* was patented when I bought the right from Israel" (agent of Daniel Custer).

Although, as I said before, it does not appear from the face of the assignment that the witness bought the improvement, yet he seems to have understood that the use of it formed a part of the consideration; and the use of it, with the consent and permission of Custer, creates an equitable right. If, then, Custer succeeds in defeating Cressler in this case, the witness certainly had a right to expect that the use would be continued to him. On the other hand, if Cressler succeeded, the right would be withdrawn.

I am of opinion, therefore, and do so decide, that the said James Campbell was an interested and incompetent witness, and that his testimony ought to be rejected.

A. B. Stoughton, for the appellant.

PATRICK O'REILLY, APPELLANT,

vs.

CHARLES E. SMITH, ASSIGNEE OF J. DUTTON STEELE, APPELLEE. INTERFERENCE.

MOTION TO EXTEND TIME—ESSENTIALS THERETO.—On a motion to extend the time of taking testimony in an interference proceeding in the Patent Office, the affidavits should state the names, competency, and materiality of the witnesses to be examined.

SM—DECISION OF COMMISSIONER NOT APPEALABLE.—The decision of such a motion is wholly within the discretion of the Commissioner, and will not be reviewed upon appeal to the court.

EVIDENCE—TESTIMONY OF PARTY WHO HAS ASSIGNED HIS INTEREST.—While the natural interest which an inventor may be supposed to retain in his invention, after he has parted with all pecuniary interest in the same, will

not render him an incompetent witness for his assignee in an interference with a rival inventor, the circumstance should be allowed due weight in considering the credit to be given to his testimony.

INTERFERENCE—BRIDGE RAILS—DIFFERENCE OF THE DEVICES.—Two inventions are not necessarily the same because they have a common purpose. So an interference held to have been improperly declared, it appearing that the common purpose of strengthening bridge rails at the joints was effected in one case by using a two-part rail and sliding the upper part upon the lower, the two parts thus reciprocally breaking joint and supporting each other throughout their length, while, in the other case, a short additional piece of splice-plate was fitted in a similar manner to and placed beneath the adjoining ends of the rails, which were otherwise unaltered, and extended a short distance only from the joint in either direction.

Before MORSELL, J., District of Columbia, April, 1853.)

MORSELL, J.

Patrick O'Reilly filed his application on the 17th of April, 1851 (afterwards patent No. 9703; see Patent Office Report, 1853, vol. 1. p. 188, for diagram). His specification applicable to this issue states in substance that his improvement consists in dividing the ordinary "bridge" rail, or other rail having a flanged base, by a longitudinal division or joint, (parallel, or nearly so, to the top of the flanges and the arch, and to the sides which join the arch and flanges,) into two layers, plates, or half rails of nearly equal thickness and weight. By sliding the upper plate or layer over the under one until the end of one is opposite the middle of the other, and then riveting or otherwise fastening them together in this position, they will reciprocally break joint with and support each other, and thus give greatly increased stiffness and strength to the track. The specification sets forth the advantages of this construction, the saving of metal, in reducing the expense of repairing, and the increased usefulness of the device.

He claims as his invention the divided or double-plate rail, as described, composed of a flanged arch or bridge-rail of the usual form, and about half the usual thickness and weight, with another rail of similar external form, thickness, and weight, on which it rides, the under side of the arch of the upper rail or rider forming a groove to fit over and rest upon the arch or tongue of the lower rail; the flanges of the upper rail resting upon and fitting those of the under rail, and the spike-holes of the two corresponding, so

that the same bolts or spikes will secure them firmly together and to the foundation. The compound rail thus formed and proportioned has a double bridge and a double base, the two portions of which reciprocally support and strengthen each other. He also claims the method described of strengthening the joints of the ordinary bridge-rail while leaving its middle, of adequate strength, by moving a longitudinal section of its inside, equal to about half the weight of the rail, half its length endwise, so as to break joint with the outside; or, again constructing the rail in two parts to correspond in form and position with the two parts of the device before described, whereby the joints of the upper rail are rendered as capable of supporting the load as its middle, and the whole made stronger, with a given quantity of material, than by any mode of construction before known.

The application which was held to show a prior invention of the same improvement, and with which O'Reilly's application interferes, was filed by the said J. Dutton Steele, and was sworn to on the 27th day of July, 1852, by him, (afterwards patent No. 9704—see Patent Office Report, 1853, vol. 1, p. 188, for diagram). It prays in the usual form that letters-patent may be granted to him. The assignment was made on the 27th of July, 1852, and was recorded in the Patent Office on the 9th of August, 1852.

Steele in his specification states, in substance, that he has invented certain new and important improvements in rails for railroads, which he terms the "bridge-rail and splice-plates." He says: "The nature of my invention consists in making a rail of two parts, and which is composed of a flanged bridge or V-shaped rail of the usual form, resting on an interior rail or splice-plate of similar external form, the under side of the arch of the exterior rail forming a groove to fit over the arch or tongue of the splice-plate, and the flanges of the one resting upon the flanges of the other, said flanges being fastened together with rivets, as shown in the drawings, or otherwise, as may hereafter be found the most desirable. This rail has a double bridge and double base so far as the interior rail or splice-plate extends." The invention is intended to obviate the yielding of the rail at the joints and the consequent "jumping" of the cars when running at high velocities; and it is intended to be so arranged and proportioned as to make, as nearly as possible, a continuous rail

of uniform strength and stiffness, and at the same time to so effectually secure the rails in their places that they will not lose their correct juxtaposition at the joints. It is stated that this end will be attained more economically by using the interior rail simply as a splice-plate, of sufficient length to bear upon three sills or cross-ties directly under and adjacent to the joint of the exterior rail, thus perfectly breaking and securing the joint, and also by making the tongue or arch of the splice-plate solid and of such height as experience may show to be necessary to secure to the rail-tracks uniform stiffness and strength throughout their length. Again, the applicant says: "It is obvious that this form of double rail may be varied from the two herein described and represented without departing from the general principle, and that the under rail may be used simply as a splice-plate, as above described, or it may be extended to the full length of the exterior rail, and made to break joint with it, as may hereafter be found the most desirable, without departing from the general principle here laid down." The specification concludes with the following claim: "What I claim herein, and desire to secure by letters-patent, is the construction of a rail in two parts, and which is composed of a flange-shaped or bridge-rail of usual form, with another rail or splice-plate of similar external form on which it rides—the under side of the arch of the upper rail forming a groove to fit over the arch or tongue of the lower rail or splice-plate, and the flanges of the one overlaying and resting upon the flanges of the other; and the flanges may be riveted together, or the spikes or bolts fastening the rail at large to their bearings may be made to pass through the said flanges, and thus perform the double office of fastening them together and to their bearing; and the interior rail may have a solid or hollow tongue or rib, and it may have a length sufficient to give it a bearing on three sills or cross-ties directly under and adjacent to the joint; or it may be equal in length to the upper or main rail and break-joints with it, as may hereafter be found the most desirable."

On the day this paper-writing bears date it appears that J. Dutton Steele, for the consideration therein stated, assigned all his claim in the invention to Charles E. Smith. On the 9th of August following, the application was filed in the Patent Office, with the accompanying drawings, but without any models, the

box containing which was not opened until the 18th of December following—nearly four months after an interference had been declared, and about two months after the expiration of the time appointed for hearing the issue between the parties, and nearly a month after the decision against the appellant was made. The application being so filed, the interference above alluded to was declared, the parties notified, and the day of hearing appointed for the second Monday in February, 1852; a few days previous to the expiration of which time a motion was made by the counsel for O'Reilly, grounded on his affidavit, to the Commissioner, for an enlargement of the time, stating his failure to obtain the attendance of his witnesses within the time appointed, although he had made reasonable efforts to that end. This motion was refused, and the issue was tried on the testimony taken by the appellee, and without any testimony on the part of the appellant. On the 20th of November, 1852, the Commissioner, in declaring his opinion, says: "This case came up for hearing on the second Monday of October, 1852, the day appointed for that purpose; and from the testimony then duly on file in the Office it is considered that J. Dutton Steele is the prior inventor of the improvements in controversy." From this decision the present appeal was taken. The reasons assigned for the appeal are, first, that the appellee neither filed a model, specification, nor drawing of the invention in the Patent Office with his application for a patent, and therefore could not have an application pending with which an interference with said O'Reilly's could legally exist; second, that they are not the same invention—to show which a very particular comparison is made between the two; third, that appellee's rail and O'Reilly's differ essentially in the form, proportion, and arrangement of their parts, which include every point in which iron rails can differ from each other—the inventions are distinct and independent; fourth, that the Commissioner refused to grant an extension of the time for taking of testimony, when by the rules and practice of the Patent Office he should have done so; fifth, that the Commissioner gave a liberal, instead of a strict, construction to Steele's testimony in his own favor, and, further, gave an erroneous construction to the Franklin Institute letter, where he decides that the paragraph respecting the extension of the height of the rib of the splice-plate means the adapting and

fitting of it to the under surface of the arch of the rail, as in the case of O'Reilly's rail.

In the first part of the Commissioner's report, in answer to the aforegoing reasons, he gives a brief historical account of the proceedings in the case, all of which, so far as they are material, have now been recited. He proceeds to give an analysis of the testimony, showing the grounds upon which he based his action. He finds upon the testimony that Steele made his invention in 1848 of a bridge-rail with splice-plate; that a model (Exhibit "O") was made in the month of September of the same year, from which a model (Exhibit "D") was made under the direction of Steele in the same year, a section of which shows the space at the top; that the first of these models remained in the office of the Philadelphia and Reading Railroad Company, while the other was sent to the Franklin Institute, with a letter, on the 14th of October, 1849, which letter states that the splice-plate may be extended; that the expediency was considered at that time of adopting either a continuous compound bridge-rail or a continuous compound double-base bridge-rail (Exhibit "B"). The Commissioner further states that Steele had no interest in the patent; that he had made a proper legal assignment to Charles E. Smith; that O'Reilly introduced no testimony to show priority of invention; that the drawings and Steele's testimony show that the following forms were contemplated by Steele, *i. e.*, the lower rail, solid or hollow, and of varying height, either leaving a space or touching at the top, the extension of this rail or splicing-plate in length, so as to make a continuous break-joint double rail. Only one of these forms—that is, the hollow rib—is claimed by O'Reilly as his invention. The Commissioner proceeds to give a more particular answer to the reasons of appeal.

He answers to the first that the files of the Office, now before the judge, show that the requisitions of the law were complied with.

To the second, that the testimony shows that among the various forms proposed by Steele there is one identical with that of O'Reilly's. The fitting of the upper rail closely upon the lower was the first form of Steele's invention, and the other form—not fitting closely—was preferred on account of the greater ease of the manufacture.

Opinion of the court.

To the third, that it merely reiterates the second with respect to the part in which the reason states that "O'Reilly has made a new rail, and that Steele has added to the old rail a splice-plate," the Commissioner answers "that O'Reilly's new rail is a double rail, and so is Steele's in one of its forms, and there is no difference between them."

To the fourth—as to the extension of time—"that the rules and practice of the Patent Office were strictly adhered to."

To the fifth, that Steele had no interest, and therefore that his testimony could not be in his own favor. That the interpretation of the Franklin Institute letter was not wrong, is shown by the first model of Steele, which does closely fit it at the top, and thereby shows his invention. In this letter Steele states not only that the splice-plate may be extended the full length of the rail, and a two-part break-joint rail thus made more economically in its proportions, possibly, than the model now presented, but also that its vertical strength may be increased by increasing the height of the rib. There can be no doubt that under this, at that time, he might have constructed precisely such a rail as O'Reilly's.

The substance of the testimony alluded to in the aforegoing report is first, that of Solomon Stout.

[Statement of the testimony by the Commissioner is omitted.]

The various questions raised by the reasons of appeal made it necessary for me to make a full statement of the case as laid before me by the Commissioner, according to law, and upon which the respective parties, on due notice of the time of hearing being given, have offered their arguments in writing, and upon a full and careful examination of all which, I have come to the conclusions which I will now proceed to state:

With respect to the first reason of appeal, the Commissioner states that the requisites of the law were complied with. As a decision of this question either way would not affect the opinion upon the merits which will be given in this case, it is not deemed necessary to take further notice of it.

The fourth reason of appeal is because of the refusal to grant a postponement. The affidavit offered to that end is entirely insufficient, in that it does not state the names, competency, or materiality of the witnesses, and, furthermore, the whole subject is

within the discretion of the Commissioner, and it ought to be presumed that it was soundly exercised.

The fifth reason of appeal is on the subject of Mr. Steele's testimony and the full credit which was given to it. Although Mr. Steele may not be a regular party to this proceeding, or affected by pecuniary interest or advantage to render him incompetent, yet, from the relation in which he stands to the subject in controversy, he must in the nature of things be supposed to view most favorably the success of Mr. Smith and his side of the question, and to feel no small degree of prejudice towards the other side. The objection will be allowed its due weight when the testimony is considered.

The third reason, and the latter part of the one already partly considered, are upon the subject of the differences between the invention of O'Reilly and that of Smith, assignee of Steele, in which there is a particular comparison made between the two. On this subject I have already stated the Commissioner's answer and his illustrations, to show that one of the four forms of Steele's rail is identical with the one for which O'Reilly is applying for a patent in this case. It is supposed that the testimony shows that these rails were made by Steele prior to that invented by O'Reilly.

Being about to consider the force and weight of the testimony, I desire to say that very great deference is certainly due to the learned decisions of the Commissioner, made with his discriminating mind and judgment, in discovering, in all their bearings, the analogy, or the want of it, between inventions presented to his view by different inventors; and I shall always, whenever occasion offers, consistently with my duty, most cheerfully render that respect; and it would be with much more hesitation that I bring myself to think there is error in this case, if it had not been a matter in which I supposed the Commissioner might have misapprehended some of the legal principles by which the testimony is to be governed and applied.

It is certainly true that the great purpose of both parties was to give sufficient strength to the rail at its weakest part—*i. e.*, the joints. Both parties have invented improved means which are supposed to be adequate for the purpose. Are these means substantially the same? That is the first question. It is probable

that the specification of Smith, assignee of Steele, is, in some of its terms, broad enough to cover some of the forms of O'Reilly's invention; and it has been argued by counsel that such is the case, and that the identity is already established. This, however, is not conclusive. It is true that the usual oath required by law to the specification has been made—that Mr. Steele was the first inventor, and the Commissioner has so decided; but the like oath is attached to the specification of O'Reilly, so that there is oath against oath, and the question must depend entirely upon the evidence taken under the rules and authority of the Commissioner.

In order to understand the force and application of the evidence as applicable to O'Reilly's invention, it will be proper to keep that invention immediately under the eye. He claims, as before stated, that his improvement consists of a continuous, double-bridge rail. In particularly describing its features, he says the improvement consists in dividing the ordinary bridge, by a longitudinal division, into two parts, plates, or layers, of nearly equal thickness and weight, and sliding the upper one over the under one until the end of one is at the middle of the other, in which position they are riveted together, the two parts thus reciprocally breaking joint and supporting each other by a new arrangement and disposition of the same material. The ordinary rail is strengthened by a new and improved disposition of its parts, thus increasing its strength without increasing the quantity of metal employed in its construction, and augmenting its strength and value in the same manner that bars of iron are increased in strength and value by refinement. The rail has no need of extraneous support. The forms, proportions, and arrangement of a common rail are changed without addition, bringing the superabundant strength of the middle to the support of the end of the rail, yet leaving that middle at the highest standard of efficiency. The inventor, in other words, divides the mass of iron sufficient for a common rail into two nearly equal parts; one of these he forms into the outside layer or division of his rail, and the other into the inner part; he brings a portion of the middle to the ends; he increases the width and height of the groove or arch of the bridge-rail by removing half the thickness of the metal from the concave or inside. There are some other features not material here to notice. His construction

of the rail involves, of necessity, the close fitting of the top of the under part against the under side of the upper part, because the arch of the upper part rail, being divested of all surplus material throughout, requires the support of the lower rail as much in the middle as at the ends. There are further differences in the saving of material, in construction, and repair in favor of O'Reilly's invention.

The substance of the testimony on the part of the appellee is, that the models *C* and *D* were made by the machinist for Mr. Steele—in the year 1848 one of them, and the other in the same or the next year—and that Exhibit "F" was put into one.

Mr. Steele himself testifies that the model *C* was invented by him in September, 1848; that it was a splice-plate, bearing upon three sills, with the rib of the splice-plate equal in height to the interior groove of the rail. The object of the splice-plate is to give the rail increased stiffness at the joint, and to make a track as nearly as practicable of uniform stiffness. In 1848 or 1849 he improved that plan by changing it, as shown in model *D;* it differs from the first model in the respect that the rib of the splice-rail does not extend up to the top of the groove of the rail; this simplifies the manufacture of the rail and splice; it also differs in having the flanges of the rail and splice-plate riveted together. During the progress of his invention, the subject of extending the splice-plate to the full length of the rail was considered; but the object being to obtain the best result with the smallest expenditure of money, the splice-plate, extending over only three bearings adjacent to the joint of the rail, was preferred. * * *

And now, supposing Mr. Steele, in giving his testimony, to have been perfectly indifferent, what is its value, and what effect ought to be given to it, in sustaining this issue on the part of the appellee?

In all the various plans and forms which Mr. Steele has thought of or devised, he has never omitted to make the improvement principally, if not wholly, to consist of the splice-plate at the joint of the rails, by means of additional material. To use his own language, "there was added a splice-plate upon three sills, or to be extended over three bearings adjacent to the joint of the rail, with a rib along its upper surface at the ends of the bridge-rail."

That, certainly, is the great principle of his invention. Changes in the form of his rail appear from time to time, in the course of maturing his design, to have been made; but under no form has he ever omitted to have the splice-plate as the prominent leading feature. This, then, is the first substantial difference between the two inventions: O'Reilly's invention has no such joints, and, of course, no occasion for a splice-plate, and therefore entirely saves the additional material and expense without increasing the weight or size of the structure.

According to Mr. Steele's construction, with the exception just stated, the whole of the rail is the same as that in common use. The middle and arch of the rail are not changed in material or strength, but are both left as they were before the invention. They must be strong enough of themselves without additional support. I can see nothing to satisfy me that Steele ever invented the two-part rail, or, if he did invent anything of the kind, it did not correspond to any feature in O'Reilly's invention. It would be doing great injustice, I think, to Mr. Steele to suppose that he could, according to his plan, as I understand it, think that the splice-plate might advantageously be extended the whole extent of the rail for the purpose of performing the duty of an under rail; that would be to strengthen a part that had already sufficient strength, if not too much, by adding additional costly material. It is true, he says, in describing one of his forms of rail, that the rib of the splice-plate was equal in height to the interior groove of the rail; but this form of his invention was not devised with any view, or in accordance with any principle conceived by him, to support the arch or crown throughout. It would have proved entirely insufficient for that purpose. Even this in a short time after was changed and abandoned in the progress of perfecting his invention, and the rib of the splice-plate made shorter, so that it did not extend to the top of the groove. Now, these are also radical features entirely different from O'Reilly's invention, for the great matter of O'Reilly's improvement consists in making the rib on the lower part exactly fit the under side of the upper part, and in extending the under part with its rib the whole length of the rail. These are surely features entirely foreign to any that can be found in Mr. Steele's. The rib must exactly fit, crown and sides, or the structure would be crushed. The under side

must give full and perfect support to the upper, or the invention is nothing.

I think, therefore, it is clear that although Mr. Steele, in the course of maturing his invention, from time to time thought of, considered, and spoke of various other additions or contrivances, yet he abandoned them all, and adopted only the one described in his own words: "But my object being to obtain the best result with the smallest expenditure of money, the splice-plate extending over only three bearings, adjacent to the joint of the rail, was preferred." This is then the only invention with which that of O'Reilly's could be said to interfere in this issue. I am decidedly of opinion, and do so adjudge, that there is no interference in the claims of the said applicants in relation to the matters contained in their respective specifications, and that the said Patrick O'Reilly is entitled to a patent for his said improved invention of rails for railroads, as stated in his specification.

Watson & Renwick, for the appellant.

MOSES MARSHALL, APPELLANT,

vs.

JOHN MEE, APPELLEE (TWO CASES.) INTERFERENCE.

PRIORITY OF INVENTION—FIRST TO CONCEIVE—REASONABLE DILIGENCE.—He who first conceives of an invention, and uses reasonable diligence in perfecting the same, and does perfect it, is entitled to the patent as against an inventor who was later to conceive but first to reduce the invention to practice.

EVIDENCE—CREDIT OF WITNESS—IMMATERIAL MISTAKE.—A mistake by a witness in an immaterial fact ought not to discredit him. The maxim *falsus in uno falsus in omnibus* only applies where there is a willful, corrupt falsehood in one particular amounting to perjury.

ORIGINAL INVENTOR—SUGGESTIONS BY ANOTHER MERELY AUXILIARY.—Where an inventor has conceived of the improvement and its principle, and is using reasonable diligence to perfect the mechanical details, he will not be deprived of his patent by the fact that another, during the construction