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

of the machine, suggested a merely auxiliary and mechanical device to improve its operation, not requiring the exercise of invention, and capable of being made and applied by any skillful machinist.

(Before DUNLOP, J., District of Columbia, April, 1853.)

DUNLOP, J.

On the 17th of May, 1851, John Mee filed in the Patent Office his application for a patent for his invention of an improved knitting-loom, and on the 24th of May, 1851, his application for a patent for his invention of an improved warp-knit fabric (afterwards patents Nos. 9718, 9719).

The Commissioner being of opinion that the patents thus applied for would interfere with patent for similar inventions sought by Moses Marshall, gave notice thereof to the parties; and upon a hearing before him, decided that John Mee was the original and first inventor in both cases, and entitled to patents therefor.

From this decision Mr. Marshall has appealed, and the question is now submitted to me by the parties upon written argument.

Both cases have been heard together by consent. The Commissioner has furnished a certificate in writing of his opinion and decision, and the reasons in support of it, and Mr. Marshall has filed his reasons of appeal, with the written arguments of his counsel. The cases were finally submitted to me on Saturday, the 26th of March, 1853.

There are two reasons of appeal in each case; the first of which in each case has been abandoned by the appellant, leaving only the second reason of appeal in each case, which in substance is that Marshall, and not Mee, was the original and first inventor, in the sense of the patent laws, of the improvement in each case as to the loom. The specifications, drawings, and models of the two parties show that the machines are identical in those parts upon which their interfering claims are founded. The counsel of Mr. Marshall, "for the purposes of his argument, assumes that the two machines and the two fabrics are identical." Those parts embrace only the double-thread guides and two sets of needles and their relative motion in respect to each other.

Both machines have two sets of thread-guides and two sets of needle-bars whose movements are the same. As one set of needle-bars is raised for the purpose of being acted on by the

two sets of thread-guides, the other set is covered; and as the second set of needle-bars is raised to receive the thread from the thread-guides, the first set is depressed. The movement of these thread-guides in forming the loops around the needles is the same in both machines, and each is capable of like variation in order to change the width of the ribs in the fabric manufactured.

The Pepper loom, on which this is an improvement, had one guide and two needle-bars. The two needle-bars were bolted so as to operate together.

The principle of improvement admitted to be valuable and patentable, as I understand it, is the application to this Pepper loom of two separate guide-bars or thread-guides in combination with two separate and independent needle-bars, one working at a time, and the guide-bars reversing each other.

Assuming Mr Mee and Mr. Marshall to be both original inventors of the improvement on the Pepper loom—Mee the first to conceive and describe it, and Marshall the first to embody it in a working machine; Mee using reasonable diligence to perfect his invention and to reduce it to practice, and succeeding in doing so after Marshall, but before a patent was granted to either—what are their rights, and to which of them should the Commissioner award the patent?

It is contended by the learned counsel for Marshall that Marshall, under such circumstances, has the right; that although not the first to conceive, still, if he first reduced the conception to practice and use, he is the first inventor, in the sense of the patent laws, and that Mee must be excluded. The language of his argument is, that "in the race of diligence between rival inventors, he 'who first perfects his invention and reduces it to practice' is entitled to a patent." It will not be contended that if Marshall surreptitiously obtained a knowledge of Mee's invention, and applied for a patent, that he would be entitled, because he would not be the first or even an original inventor. But suppose him to have been an original contriver of the thing claimed, and not to have surreptitiously obtained a knowledge of it from another, then he can only be defeated by Mee's showing that he had previously conceived the idea, and that he had also carried the idea into practical operation;" that is to say, in other words,

that Mee had not only first conceived the idea, but had also first reduced it to practice.

The case of Reed *v.* Cutter, 1 Story, 591, is cited to sustain this position; but a reference to that case shows that the doctrine laid down by Judge Story is the reverse of the position maintained by the counsel. Judge Story, in delivering his opinion in that case, at page 599, uses this language: "The passage cited from Mr. Phillips' work on patents, in the sense in which I understand it, is perfectly accurate. He there expressly states 'that the party claiming a patent must be the original and first inventor, and that his right to a patent will not be defeated by proof that another person had anticipated him in making the invention, "unless such person was using reasonable diligence in adopting and perfecting the same."' These latter words are copied from the fifteenth section of the act of 1836, and constitute a qualification of the preceding language of that section; so that an inventor who has first actually perfected his invention will not be deemed to have surreptitiously or unjustly obtained a patent for that which was in fact first invented by another, unless the latter was at the time using reasonable diligence in adapting and perfecting the same. And this I take to be clearly law; for he is the first inventor in the sense of the act, and entitled to a patent for his invention, who has first perfected and adapted the same to use; and until the invention is so perfected and adapted to use, it is not patentable. An imperfect and incomplete invention resting in mere theory, or in intellectual notion, or in uncertain experiments, and not actually reduced to practice, and embodied in some distinct machinery, apparatus, manufacture, or composition of matter, is not, and indeed cannot be, patentable under our patent laws, since it is utterly impossible under such circumstances to comply with the fundamental requisites of these acts. In a race of diligence between two independent inventors he who first reduces his invention to a fixed, positive, and practical form would seem to be entitled to a priority of right to a patent therefor. The clause of the section now under consideration seems to qualify that right by providing that in such cases he who invents first shall have the prior right if he is using reasonable diligence in adapting and perfecting the same, although the second inventor has in fact first perfected the same and reduced the same to prac-

tice in a positive form. It thus gives full effect to the well-known maxim, that he has the better right who is prior in point of time, namely, in making the discovery or invention. But if, as the argument of the learned counsel insists, the text of Mr. Phillips means to affirm (what I think it does not) that he who is the original and first inventor of an invention so perfected and reduced to practice will be deprived of his right to a patent in favor of a second and subsequent inventor, simply because the first invention was not then known or used by other persons than the inventor, or not known or used to such an extent as to give the public a full knowledge of its existence, I cannot agree to the doctrine, for, in my judgment, our patent laws justify no such construction."

The same law is laid down by Judge Cranch in the cases of Heath *v.* Hildreth (*ante*, p. 12) and Perry *v.* Cornell (*ante*, p. 66).

The case of Bedford *v.* Hunt, 1 Mason, 302, decided by Judge Story in 1817, is explained and modified by the case of Reed *v.* Cutter, which was decided by the same judge in 1841.

There is no proof that Marshall conceived the idea of the improvement on the Pepper loom before November, 1850, while the witnesses Davis, Wallis, John Pepper, and others testify that Mee had conceived and described it in 1849 and early in 1850, months before Marshall, and had in fact knit the fabric.

John Pepper, in his answer to the sixth interrogatory, says Mee so described the extra guide-bar that he (Pepper) could have put it on the loom if he had chosen to do so.

Mee never abandoned his conception or failed in the use of reasonable diligence to perfect and adapt it to use. It was known early in 1851 to the Cranes and J. Pepper that he was engaged in preparing his model, and his applications for patents for the machine and fabric were filed in the Patent Office on the 17th and 24th of May, 1851.

Marshall and Mee's machines are admitted on both sides to be identical in principle, and the fabric, the product of them, the same.

It seems to me, therefore, wholly immaterial, upon the authority of Reed *v.* Cutter, above cited, whether Marshall first reduced the improvement to use in a working machine or not. If Mee first conceived it, and used reasonable diligence to perfect it, and did

perfect it, though subsequent to Marshall, he is entitled to the patents claimed by him, even if Marshall was an original subsequent inventor, first perfecting and reducing the invention to use.

But upon the proof I do not think Mr. Marshall was an original inventor.

If Mee's witnesses are to be credited—confirmed, as I think, to some extent, by Harmon—Marshall is in no sense an original inventor, as he borrowed his ideas of the improvement from Mee. The testimony of Wallis in his answers to the seventh, eighth, and thirteenth interrogatories-in-chief is full to this point. So is the answer of Samuel Adams to the third interrogatory.

Wallis, in his answers to the seventh, eighth, and thirteenth interrogatories-in-chief, says: * * *

The force of this evidence is felt; and it is attempted to discredit him, first, by the testimony of Crane, who denies that he was present or even heard such conversation. If Crane were a competent witness, the testimony of the two would be balanced. Even if Crane was not present, it would only show that Wallis was mistaken in an immaterial fact. Whether Crane was present or not, does not alter the other facts testified to. A mistake by a witness in an immaterial fact ought not to discredit him. The maxim *falsus in uno falsus in omnibus* does not apply. That can only apply where there is willful corrupt falsehood in one particular, amounting to perjury; in which case all the other testimony of the witness is to be rejected. It has no application to a case of mistake. The most honest witness may not be found correct in some particulars; and if those particulars are immaterial, they should not discredit him in material matters. But Crane, for the reasons hereinafter given, is himself disqualified as interested; so that Wallis is, in law, uncontradicted.

The learned counsel for Marshall next ingeniously endeavors to destroy the force of this evidence by arguing that the conversation occurred before November, 1850, when the new-improved loom was commenced by Marshall, and that it must have related to some other loom—to a then "late-improved loom."

The conclusive answer to this suggestion of counsel is, that Wallis, in the beginning of his answer to the seventh interrogatory, says: "I heard something about an improvement that could be made on the Pepper loom." It did not relate to what had

been done or was then doing on an improved loom, but to what could be done. No person can read the evidence without so understanding the witness, according to the natural import of his words, or being satisfied that Mr. Marshall must have so understood him.

But Wallis is not alone and unsupported in bringing home to Mr. Marshall the knowledge of Mee's conceptions for improving the Pepper loom in the identical particulars in which it was afterwards improved. Adams corroborates him in his answer to the third interrogatory of his deposition. John Pepper, in his answer to the twelfth interrogatory, corroborates him. John Pepper says: "Jasper Crane wrote that the invention was none of mine, but that it belonged to John Mee. The invention I mean is the new ribbed loom with the double guide-bars." Jasper Crane was then a partner of Marshall, and Marshall is bound by his admissions. These three witnesses are unassailed in general reputation for veracity, and there is nothing in their testimony in the record to justify me in concluding that they have not spoken the truth.

Next, as to the witnesses examined on the part of Mr. Marshall, the Messrs. Crane (J. G. and Hosea) are not in law competent witnesses, being interested. It is proved by John Pepper, and admitted by them, that they were each interested one-third with Marshall in the machine built by him at Lowell and in the patents he expected to obtain for the improvement on the Pepper loom and the fabric made by it. Though they say they sold out about a month before they testified, J. G. Crane on his cross-examination, in answer to the fifty-second interrogatory, says: "I am informed and believe that in case the machine is successful in a pecuniary view, part of the proceeds are to be applied to the payment of certain debts due from me and my brother to Aldritch & Tyne."

The money value of the machine depends upon Marshall's getting a patent for it. J. G. Crane says, in his answer to the forty-seventh cross-interrogatory, "Aldritch & Tyne were substituted in our place, and they have now the interest that we had." For the interest, then, they were to pay the debts referred to.

The last cross-interrogatory put to Hosea Crane is in these words: "Do you not expect any benefit to result to you pecuni-

arily in case Marshall succeeds in getting a patent for this loom?" His answer is, "I may or may not." He does not venture to deny his interest, and he thus disqualifies himself.

As to the testimony of Harmon. The fifteenth interrogatory, put to him on his examination-in-chief by Mr. Marshall's attorney, is in these words: "So far as you know, who claimed to be the inventor of the improved machine?" Answer. "Marshall, as far as I know anything about it. I can't say I am right about that, after all, because after awhile I knew there was another one claiming to have a part in it. It was but little I knew about it any way; what I knew I got from talk about the shop."

Harmon does not say who that other one was who claimed part of the improvement, but he no doubt meant Mee, because, in answer to a cross-interrogatory specifically to this point, he admits that Mee did set up a claim to the invention. The thirty-third cross-interrogatory is in these words: "Did you ever hear Mee claim an interest in this improved loom?" His answer is, "I don't recollect anything definite about it through Mee; only by some incidental talk about it. In regard to Mee, as I recollect now in some conversation, he said that he had something to do with this, and that they were not willing to pay him for it, or something of that kind."

Upon the testimony of Mr. Marshall's own witness (Harmon), then, so much relied on by his counsel, what becomes of their argument that Mee could not be the inventor of the improvement because he stood by and saw Marshall spending his time and labor in perfecting the improvement without any assertion of right in himself?

What becomes of the charges of bad faith to his employers (the Cranes), in suffering them to expend their money upon the understanding hat Marshall was the inventor? It can hardly be thought that Marshall did not know what was talked of in his own shop, or knew less than his own witness (Harmon). Besides, the witnesses on the part of Mee before referred to fully prove Marshall's knowledge of Mee's claim, and also that the Messrs. Crane knew it.

The Cranes "were not willing to pay Mee." They may have concluded he was too poor to perfect his improvement, which seems to have been attended with considerable expense; and as

Marshall agreed to take them in as joint partners in the machine and patent, it was more to their interest to employ Marshall than Mee to construct the machine.

If Mee's witnesses are to be believed, there can be no doubt that the Cranes and Marshall were well aware that Mee claimed the invention as his own.

It is certainly of great weight that their statements on this point are to some extent confirmed by Harmon, Mr. Marshall's own witness.

Great reliance is placed by Marshall's counsel on the evidence of Harmon in relation to the cams. These cams, they say, were perfected by Marshall after a failure by Mee, and without them the machine was imperfect and made defective work, and the invention was not reduced to practice so as to be patentable.

If the cams were of the essence of the invention, and constituted its principle, it is strange, as testified by Harmon, that Mee should have been intrusted by Marshall (the inventor) with the supervision of their construction. Harmon says that the cams, as made by Mee's order, failed to make a perfect ribbed fabric, and that Mee said "the defect could not be remedied." Harmon admits, however, that Mee on the same day, four or five hours after, said "he could remedy the defect."

Marshall suggested the proper alterations in the cams, and then the machine performed its office and made a perfect ribbed fabric.

From the explanations made to me on the hearing by the examiner, I do not understand that the cams form any part of the principle of the improved Pepper loom. That principle consists in the application to the old Pepper loom of a double set of needle-bars, working separately and independently, one set of needle-bars being up while the other set is down, in combination with a double set of guide-bars or thread-guides reversing each other.

The cams form no part of the principle of the improvement; are merely auxiliary; a mechanical device requiring no invention, and capable of being made and applied by any skillful machinist.

If it was true, therefore, that Marshall had first perfected this mechanical device, and thereby caused the machine first to make the perfect fabric, still, if Mee first conceived the improvement

and its principle, and was using reasonable diligence to perfect the mechanical details, he cannot be deprived of his patents.

He did perfect his model in a reasonable time. No such delay occurred as to amount to abandonment of his right. His application to the Patent Office was previous to Marshall's. No patent in fact has yet been granted to anybody; and if he is the first original inventor, and has now reduced his invention to practice, he must prevail over any subsequent original inventor reducing it to use before him, and *a fortiori* over Mr. Marshall, not an original inventor at all, but borrowing his ideas of the improvement from Mee.

The patents for the loom and for the fabric, the fruit of the loom, must therefore be awarded to the assignees of John Mee, unless some person other than Marshall can show a better right. John Pepper asserts that the double needle-bars, working independently, was his original idea; but all the other evidence shows it to be Mee's; and Pepper has entered no caveat, nor set up any adverse claim in the Patent Office, nor alleged that he made known his invention to Mee, and he is self-concluded.

Upon the whole, therefore, I am of opinion, and do now this 20th of April, 1853, order and adjudge, that the decision of the Commissioner of Patents of the 12th of January, 1852, in favor of Mee, Rourke, and McKennon, assignees of John Mee, in the cases of improvements in the knitting-loom and knit fabric, be, and the same is hereby, affirmed.

CYRUS H. McCORMICK, APPELLANT,

vs.

RUFUS L. HOWARD, ASSIGNEE OF WILLIAM F. KETCHUM, APPELLEE. INTERFERENCE.

DEPOSITIONS TAKEN IN FORMER CASE—WHEN MAY BE USED.—Depositions taken in a former interference may be read at the trial when the subject-matter at issue in the former case was the same and the parties in interest, assignors of the entire right, were the same, so that the party against