

Finch application, which that company was trying to defeat under the interference with the Bailey & Talbot patent of 1881, which it owned. The Finch Manufacturing Company then became a bona fide owner of the patent in suit, without notice of any prior outstanding equitable interest, and the title it thus obtained is good as against such equity in the hands of subsequent purchasers, even if they had notice. *Rogers v. Lindsey*, 13 How. 441, 446. It is unnecessary, therefore, to discuss the subsequent assignments by which the legal title to the Finch patent passed to complainant.

The decree of the circuit court is affirmed, with costs.

ECLAUBERT v. APPLETON et al. (two cases).

(Circuit Court of Appeals, Second Circuit. April 22, 1895.)

Nos. 74, 75.

1. PATENTS — CONCLUSIVENESS OF PATENT-OFFICE DECISION IN INTERFERENCE PROCEEDINGS.

A decision of the patent office in interference proceedings, upon the question of priority, must be accepted as controlling upon the question of fact in any subsequent suit between the same parties, unless the contrary is established by testimony which, in character and amount, carries thorough conviction. *Morgan v. Daniels*, 14 Sup. Ct. 772, 153 U. S. 120, followed.

2. SAME—PRIORITY OF INVENTION—ABANDONED EXPERIMENT.

One who conceives an idea, embodies it in a means by which it can be carried out, and proceeds to use it in the production of the article for which it was designed, must be recognized as the real inventor, as against one who conceived the idea at an earlier period, but, after making experiments, abandoned any attempt to make his idea practically available.

3. SAME — SUIT TO CANCEL PATENT — EFFECT OF ASSIGNMENT OF PLAINTIFF'S PATENT PENDING LITIGATION.

In a suit brought under Rev. St. § 4918, to obtain the cancellation of a patent, an assignment pending the litigation of all complainants' right in the patent cannot be allowed to affect injuriously the defendant's right to affirmative relief under a cross bill; and hence such an assignment will not justify an immediate dismissal of the bill, before the question of priority has been determined.

4. SAME.

Pending a suit to obtain the cancellation of an interfering patent under Rev. St. § 4918, the complainants assigned all their interest in their patent. Defendant had filed a cross bill asking similar relief with respect to complainants' patent, but the question of priority was determined against him. While the cause was pending upon appeal, defendant first learned of complainants' assignment of their patent; and he thereupon moved the appellate court to remand the case with directions to dismiss the bill, but without prejudice to the right of the assignee to apply for leave to file an original bill in the nature of a supplemental bill. The motion was denied, and, the case having been heard upon the merits, defendant's right to affirmative relief was denied by the appellate court. *Held*, that the motion to dismiss was properly denied, but that, after the decision on the merits, it was proper to remand the case, with directions that if the assignee, within such reasonable time as might be designated, should file an original bill in the nature of a supplemental bill, and make proof of its interest, a decree should thereupon be entered in its favor, and also dismissing the cross bill. Distinction between effect of assignments pendente lite by plaintiff and by defendant considered.

5. SAME — ADMISSIBILITY OF EVIDENCE — TESTIMONY IN PATENT-OFFICE PROCEEDINGS.

In a suit to cancel an interfering patent under Rev. St. § 4918, testimony taken in the patent office upon interference proceedings between the same parties, in respect to the same invention, *held* to have been properly excluded, where it was not offered because any of the witnesses were dead or unavoidably absent, but was presented in bulk, and as being admissible as a whole.

6. SAME—OPINION OF THE COMMISSIONER.

The opinion of the commissioner of patents rendered in an interference proceeding is not admissible in a suit under Rev. St. § 4918, to cancel a patent issued to one of the contestants.

7. SAME.

In a suit under Rev. St. § 4918, to cancel a patent which was issued notwithstanding a decision against the patentee in interference proceedings, it is not permissible to introduce in evidence either certain charges filed in the patent office, accusing the examiner who passed the application, and the solicitor who presented it, with fraud or gross negligence, and asking the dismissal of the one and the disbarment of the other, or the commissioner's decision upon such charges.

8. SAME.

Where a patent was issued to a contestant in interference proceedings, notwithstanding the decision of the commissioner against him, and a suit was subsequently brought under Rev. St. § 4918, to cancel the same, *held*, that it was competent to prove by patent-office officials that the patent was issued either fraudulently, or through gross negligence.

9. SAME—EVIDENCE AS TO PRIOR STATE OF THE ART.

In a suit to cancel an interfering patent, oral evidence showing the prior state of the art is not legally objectionable, although such prior state of the art is stated with sufficient clearness in the specifications of the patents in controversy.

10. COSTS ON APPEAL—IRRELEVANT MATTER IN RECORD—TAXATION OF COSTS.

Where a large mass of irrelevant matter is introduced into the case by the complainant, and carried into the record on appeal, the defendant, though unsuccessful, will not be condemned to pay the costs in the appellate court, or the costs of the circuit court which were caused by the irrelevant evidence.

Appeal from the Circuit Court of the United States for the Eastern District of New York.

This was a suit in equity by Daniel Fuller Appleton and others against Frederic Ecaubert, under Rev. St. § 4918, to procure the cancellation of patent No. 434,539, granted to defendant August 19, 1890, for a method of ornamenting watch-case centers and other like articles. Defendant filed a cross bill to procure the cancellation of the patent upon which complainants based their rights, being No. 435,835, issued September 2, 1890, to Adolph W. Hofmann. The circuit court found that Hofmann was the original inventor, decreed that the Ecaubert patent was void, and dismissed the cross bill. 62 Fed. 742. Ecaubert appeals.

Arthur v. Briesen and Francis Forbes, for appellant.
M. B. Philipp and Melville Church, for appellees.

Before WALLACE, LACOMBE, and SHIPMAN, Circuit Judges.

SHIPMAN, Circuit Judge. On December 31, 1887, Adolph W. Hofmann, assignor to Robbins & Appleton, the complainants, filed in the patent office his application for a patent for an improved

method of ornamenting watch-case centers, and other like articles. The state of this particular art of ornamentation which needed improvement is plainly described in the specification of the interfering patent to the defendant, Frederic Ecaubert, as follows:

"Watch-case centers have been ornamented with regular patterns,—such, for instance, as straight, transverse ribs or diagonal ribs, known as 'rope knurls or ornaments,' and also with diamond shaped projections, known as 'barley-corn knurls and patterns.' These ornaments have been applied to the watch-case center by a circular, ornamented wheel, known as a 'knurl'; and the watch-case center has been mounted upon and revolved by a chuck and mandrel to a lathe, and this has been revolved continuously after the knurling tool is applied in such a manner to the center that the pattern thereon properly meets at the end of a complete revolution. In this operation the ornamentation is applied by a continuous movement, and where the watch-case center, or similar article, is convex the knurling tool has sometimes received a lateral or rocking motion, in order that the surface of the knurl may be pressed properly against the convex edge of the watch-case center. In knurling watch-case centers with leaves, buds, scrolls, commonly called 'vermicelli,' and ornaments similar to engraved work, it is found impracticable to produce highly-finished work by a continuously revolving movement, because the patterns made use of are sufficiently arbitrary and various to prevent their perfect repetition around the periphery of the knurling roll."

Another process was the "spinning process," which was invented and patented by Ecaubert.

"In practicing it a matrix die was used, having a design or pattern upon its inner circumference. Into this matrix the watch-case center was placed, and then, by a small pressure roller revolving upon the inner face of the center, the latter was 'spun' or expanded outward so as to take the impression from the pattern on the inner circumference of the die. The matrix die was made in parts, so that it could be removed after the ornamentation was produced."

The invention consisted, in the language of the Hofmann patent, as follows:

"In presenting the article to be ornamented to a rotary embossing roll, having on its periphery the design ornamentation to be applied, and reversely rotating said article, or, in other words, rotating it first in one direction, and then in the opposite direction; the contact between the roll and article being continuously maintained during the entire operation, so that during each successive pass the roll will deepen the indentations formed by it during the preceding pass."

A reciprocating motion of the lathe spindle imparted a reciprocating or reverse movement to the surface of the watch-case center, or, which would be equivalent, of the knurl, or to both surfaces, as might be most desirable or convenient, and in this reciprocating movement lay the entire invention.

On February 13, 1888, Ecaubert filed in the patent office an application for a patent for the apparatus by which this process was to be used. The two applications were put in interference on January 11, 1889. The matter in issue was "the priority of the invention of the improved method of ornamenting the peripheries of watch-case centers, or other like articles; the same consisting in holding the surface of an embossing die in contact with the surface of the article to be ornamented; imparting a reciprocating or reversing rotary movement to one of said surfaces, and at the same time laterally moving the point of contact of the die with the surface being orna-

mented, as set forth." The decision of the board of examiners in favor of Ecaubert was reversed by the commissioner of patents, and adjudication of priority was made in favor of Hofmann, on August 3, 1890. *Ecaubert v. Hofmann*, 52 O. G. 2107. On July 27, 1889, Ecaubert filed in the patent office an application for a patent for his improved process for ornamenting watch-case centers. On August 19, 1890, letters patent No. 434,539, for this process, were issued; the application having been passed and allowed by the examiner without putting it into interference, and without consultation with the commissioner. On September 2, 1890, as the result of the interference, patent No. 435,335, the subject of this suit, was issued to the complainants, as assignees of Hofmann; and on September 10, 1890, the bill of complaint herein was filed in the circuit court for the Eastern district of New York by Appleton and others, as the owners of the Hofmann patent, against Ecaubert, praying that the Ecaubert patent should be declared void, in accordance with the provisions of section 4918 of the Revised Statutes. Ecaubert filed a cross bill on June 17, 1891, for the cancellation of the Hofmann patent, and subsequently brought a suit in the Southern district of New York against Appleton and others for infringement of his patent, No. 434,539. By stipulation of February 10, 1892, it was agreed that the testimony taken in each suit could be used in the others, subject to all proper objections noted at the time of taking the testimony, and that the three bills should be heard together by the same judge. On July 30, 1892, Appleton and others assigned their patent to the Brooklyn Watch Company. All the testimony, except the complainants' rebuttal testimony in the interference suit, was completed on May 7, 1892. The circuit court found that Hofmann was the original inventor of the invention described in said two letters patent, decreed that No. 434,539 was void, dismissed the cross bill, and dismissed the bill of Ecaubert *v. Appleton* in the Southern district of New York for infringement. This appeal is from the decree of the court for the Eastern district upon the bill and cross bill for interference. The two claims of the Hofmann patent are as follows:

"(1) The improved method, hereinbefore described, of ornamenting the peripheries of watch-case centers, or other like articles; the same consisting in holding a portion of the surface of an embossing die in contact with the surface of the article to be ornamented, said portion being less in width than the entire width of the ornamenting surface of the die, imparting a reciprocating or reversing rotary movement to one of said surfaces, and at the same time laterally moving the point of contact of the die with the surface being ornamented, thereby laterally extending or widening the area of ornamentation, as set forth. (2) The improved method, hereinbefore described, of ornamenting the peripheries of watch-case centers, or the like articles; the same consisting in holding the surface of an embossing die in contact with the surface of the article to be ornamented, imparting a reciprocating or reversing rotary movement to one of said surfaces, and at the same time laterally moving the point of contact of the die with the surface being ornamented, as set forth."

The four claims of the Ecaubert patent are as follows:

"(1) The method herein specified of ornamenting watch-case centers, and similar articles, consisting in pressing against the article to be ornamented a

circular ornamenting roll or knurl, having the designs to be produced upon the periphery thereof, and communicating to the respective parts a rotary, or partially rotary, motion, first in one direction, and then in the other, while the ornamenting knurl is pressed against the article to be ornamented, so that the ornaments are applied by a progressive action to the periphery, substantially as set forth. (2) The method herein specified of ornamenting watch-case centers, and similar articles, consisting in pressing against the article to be ornamented a roll or knurl having upon its periphery the desired ornaments, communicating to the respective parts a rotary, or partially rotary, motion, first in one direction, and then in the other, and moving or rocking the knurling tool laterally to bring the surface of the roll into contact with the surface of the article to be ornamented, substantially as set forth. (3) The method herein specified of applying ornaments to the surface of watch-case centers, and similar rounding articles, consisting in pressing a knurling tool having the counterpart of the design against the said center or similar article, and imparting a partial or complete rotary motion in first one direction, and then the other, to the article, and to the knurl, to bring the knurl into action against the desired portion of the periphery of the article, and also giving to the knurl a movement to vary the position of the axis of the knurl to the axis of the center, or similar article, substantially as specified. (4) The method herein specified of applying ornaments around a watch-case center, back, or other circular article, consisting in pressing against the article to be ornamented a knurling tool having upon its surface the pattern to be impressed, and giving to the parts a circular, or partially circular, movement, first in one direction, and then in the other, and changing the direction of the axis of the knurl to the axis of the article during the operation, to cause the pattern on the knurl to be rolled into the round article, substantially as specified."

It will be perceived that the second claim of each patent is, in terms, for the same invention; the only difference being the immaterial one that in the Hofmann patent the reverse movement is imparted to one of the surfaces of knurl and watch center, and in the Ecaubert patent the rotary motion is communicated to the respective surfaces. These claims state the method customarily used, and accurately express the matter in issue in the interference. The rule upon the subject of the weight to be given in a subsequent suit between the same parties to the decision of the patent office upon the question of priority has been recently stated by the supreme court in *Morgan v. Daniels*, 153 U. S. 120, 14 Sup. Ct. 772, as follows:

"Upon principle and authority, therefore, it must be laid down as a rule that where the question decided in the patent office is one between contesting parties, as to priority of invention, the decision there made must be accepted as controlling upon that question of fact in any subsequent suit between the same parties, unless the contrary is established by testimony which, in character and amount, carries thorough conviction."

It is manifest that Ecaubert has not borne the weight which the adverse decree of the patent office required him to sustain, and, indeed, if the patent office had not spoken, we should have reached the same result, under the established principles applicable to questions of priority. Hofmann made the invention in the latter part of December, 1887. An attempt has been made to show that he caught the idea from Ecaubert, in a conversation with him; but the conversation, if it occurred, will not sustain the inference attempted to be drawn from it. Ecaubert made in 1879 some experiments, admitted to have been abandoned. These trials he renewed in 1885, with a lathe which he made for Alfred Humbert, of Philadelphia,

upon an order received in May, 1885, and with a knurling quadrant, which he says he made to obviate the difficulties which he experienced in 1879, and to use in connection with these experiments, but which he did not send to Humbert, but retained himself, and took to pieces. The lathe was an ordinary lathe, used for knurling by a continuous process, and had no distinctive features about it. We think he did make, with this lathe, before it was sent to the purchaser, attempts to ornament brass rings or brass centers by means of a back and forth motion of the object to be ornamented, but these experiments resulted in nothing but experiment. The idea was never worked out so as to be practically used. No center intended for actual use was ornamented. The idea was not developed, so as to be practically useful, but lay in the theory, imperfectly tested, not a completed invention, and put aside until a knowledge, somehow attained, of Hofmann's development of the same idea, brought it again to activity, and he took measures to prepare an application for a patent. Between 1885 and 1887 he was developing his spinning process, and was actively engaged in bringing it to the notice of manufacturers. He reduced that process to practice, and endeavored to make it an actual and permanent benefit to himself. Ecaubert having thus abandoned any attempt to make his idea practically available and to develop his theory, in fact, Hofmann conceived the idea, embodied it in means by which it could be carried out, proceeded to make watch centers, and thereby first perfected it, and is entitled to be recognized as the real inventor. *Woolen Co. v. Jordan*, 7 Wall. 583; *Whitely v. Swayne*, Id. 687; *Reed v. Cutter*, 1 Story, 590, Fed. Cas. No. 11,645; *Howe v. Underwood*, 1 Fish. Pat. Cas. 166, Fed. Cas. No. 6,775.

It is next contended on the part of Ecaubert that the first, third, and fourth claims of his patent described a different invention from that described in the second claim, and that, therefore, the two patents do not interfere, as to those claims. The first claim of the Ecaubert patent does not, in terms, include in the process the lateral or rocking movement of the knurl, which brings its surface into universal contact with the surface of the watch center. This rocking movement of the knurl is admitted in the Ecaubert specification to have been old at the date of the invention. The great majority of watch-case centers are rounding or convex on their edges, and the Ecaubert specification states that this lateral movement of the knurl is necessary, where the center has a rounded edge. The invention solely consisted, in fact, in the backward and forward motion, and the process of the first claim is that motion, with a lateral movement of the knurl when necessary, and the necessity is almost universal. The attempt to create a distinct and separate invention out of the first claim, and to differentiate it from the actual invention of the second claim, has the fault of adherence to technicality without regard to substance. The application for this patent was filed six months after the interference had been declared, and was made in the hope that a patent which should have the semblance of greater breadth might be able to escape the effect of an adverse decision upon the issue then pending.

The third claim gives to the knurl a movement to vary the position of its axis to the axis of its center, and it is said that this applies to a concave knurl. The fourth claim says that the direction of the axis of the knurl to the axis of a circular article changed during the process of ornamentation to cause the pattern on the knurl to be rolled into the round article. This language in each claim is intended to describe a rolling or lateral movement. The form of the knurl does not prevent the necessity of the rocking motion, which the specification abundantly recognizes.

The fact of the assignment of the Hofmann patent *pendente lite*, and of all rights thereunder to any claims for profits or damages, was not known by the circuit court. The defendant definitely learned of this assignment on November 28, 1894, and thereafter, and before the argument upon the appeal, moved this court to remand the case to the circuit court with directions to dismiss the bill, but without prejudice to the rights of the assignee to apply for leave to file an original bill in the nature of a supplemental bill. This motion was properly denied. A peremptory dismissal of the bill, as will be seen hereafter, was not permissible; and furthermore, while Appleton and others were complainants, Ecaubert was seeking affirmative relief against them by his cross bill, and his right to relief, if any he had, could not be injuriously affected by the complainants' assignment. If the court should decree adversely to the validity of the Hofmann patent, its assignees would be bound by the decree, because, irrespective of the question whether they had become the actual parties, they, being assignees, "were charged with notice of the suit, and bound by its results." Thus, where a plaintiff—who, as owner of a patent, had brought suit for infringement, and had assigned his interest in the patent *pendente lite*—asked the court to dismiss his bill, after an answer praying for affirmative relief, it was held that a possible right in the defendant to have a decree in his favor could not be defeated by such an assignment, and by permission to dismiss the bill. *Electrical Accumulator Co. v. Brush Electric Co.*, 44 Fed. 602.

The argument upon the appeal having been had, and Ecaubert's right to affirmative relief having been decided adversely to him, but the owners of the Hofmann patent being entitled to a decree, if properly before the court, the question recurs as to the effect of an absolute assignment *pendente lite* by the plaintiff of his entire interest in the subject-matter of the suit, his assignee being the only person entitled to relief. The equity rule, apart from statutory or code provisions, is not the same with respect to the effect of assignments *pendente lite* by plaintiff and by defendant. "An assignment by a defendant of his interest in a litigation does not necessarily defeat a suit. The assignee may, at his own election, come in by an appropriate application, and make himself a party, so as to assume the burden of the litigation in his own name, or he may act in the name of his assignor." *Ex parte Railroad Co.*, 95 U. S. 221. If a sole plaintiff, suing in his own right, assigns his whole interest to another, he is no longer able to prosecute the suit, because he is without interest in the litigation. *Story, Eq. Pl. §*

348; *Hoxie v. Carr*, 1 Sumn. 173, Fed. Cas. No. 6,802; *Ross v. City of Ft. Wayne*, 11 C. C. A. 288, 63 Fed. 466. But this does not mean that the bill must be dismissed. The effect of the assignment is stated by Judge Story not to be "necessarily a destruction of the suit, like an abatement in law, where a judgment quod cassetur is entered. It is merely an interruption to the suit, suspending its progress until the new parties are brought before the court, and if this is not done at a proper time the court will dismiss the suit." *Hoxie v. Carr*, supra. Section 756 of the New York Code of Civil Procedure provides as follows:

"In case of a transfer of interest or devolution of liability, the action may be continued by or against the original party; unless the court directs the person, to whom the interest is transferred, or upon whom the liability is devolved, to be substituted in the action, or joined with the original party, as the case requires."

Inasmuch as the practice act, now embodied in section 914 of the Revised Statutes, does not include equity practice in its provision in regard to conformity with code practice, it is proper to direct that the Brooklyn Watch Company should become a complainant, and, when the cause is remanded to the circuit court, to instruct that court that if the assignee of the Hofmann patent files its original bill, in the nature of a supplemental bill, within such reasonable time as may be designated, and proof of its interest is made, and the validity of its title is not successfully attacked, that a decree should be thereupon entered in its favor, in accordance with the principles of the decree heretofore made, and dismissing also the cross bill. No new proofs in regard to priority should be taken.

The defendant took, during the examination of the witnesses, and presented before the circuit court, sundry objections to various items of testimony, and has included in his assignment of errors his exceptions to the ruling of the circuit court which practically overruled the objections, and denied the motions to strike out the testimony objected to. This record is a sample of the expensive practice which now prevails in patent causes, of stuffing the record with prolix cross-examinations and irrelevant testimony. It also became unwieldy by the stipulation that the evidence taken in either of the two suits could be presented in each of said suits. The printed copy of the testimony in the interference proceedings before the patent office was properly objected to upon the grounds of irrelevancy. This suit is an independent one, although between the same parties as in the patent-office proceeding. The testimony of the various witnesses was not offered because they were dead, or unavoidably absent, but the whole volume containing the testimony of the witnesses who had been also examined in this suit was presented, as if it was admissible in bulk. The opinion of the commissioner of patents was also properly objected to as irrelevant. The record of the judgment or decree in the interference proceeding would have been admissible, but the opinion of the commissioner was not a decree, and was not the finding of facts which a court is frequently called upon to make. It was the argument and recital of the considerations which led the commissioner to his conclusions, and a statement of

the effect of the testimony upon his mind, and was not a part of the judgment record. *Buckingham's Appeal*, 60 Conn. 143, 22 Atl. 509. The owners of the Hofmann patent, after the Ecaubert patent was issued, presented to the commissioner charges against the examiner who passed the application, and against the solicitor for Ecaubert, and asked for the dismissal of the one, and the disbarment of the other. Upon these charges the commissioner made a written decision. The charges and the decision were offered by the complainants, and were properly objected to as irrelevant. These proceedings were *res inter alios actae*, and were of no value in this case.

The oral testimony of two officials in the patent office was taken for the purpose of proving the averment in the bill that the Ecaubert patent was issued either fraudulently, or through the gross negligence of the examiner, and was objected to. The issuance of the Ecaubert patent about two weeks after the decision upon the subject of interference was apparently a singular procedure, and a court would naturally inquire into the reason for the existence of the patent, and why the patent office had changed its mind. The complainants' explanation was founded upon the alleged fraud or misconduct on the part of the examiner, and the testimony of the two witnesses was for the purpose of showing the truth of this theory, and was admissible.

The expert testimony of Robertson, and the accompanying exhibits, which were for use and of use in the infringement case, ought not to have been in this record. His testimony in regard to the state of the watchmaking art was admissible, though unnecessarily cumulative, but the bulk of his testimony was of no importance upon the question which of the two patentees was the prior inventor.

The testimony of Searing and of Hofmann in regard to what may be called, in general, the state of the art, including the spinning process, and the efforts to improve the art, and the cost of old and new methods, was admissible. It was necessary for the court to know the point from which each inventor started, and thus to know in what the invention consisted; and, although this is stated with sufficient clearness in the specification of each patent, there is no legal objection to an oral reproduction of the history.

The remaining objections are to divers questions in the lengthy cross-examination of Ecaubert. The examination was unnecessarily voluminous, and called for too much minutiae; but it was within the line of examination for the purpose of showing errors or inconsistencies in his testimony, and of testing the accuracy of his memory. The questions were too abundant, but we cannot say that they were inadmissible. This irrelevant testimony was unimportant with respect to the result. The relevant testimony alone contained more than enough to show Hofmann's priority, in view of the principles of law in regard to questions of this sort, which have now become elementary. *Clark Thread Co. v. Willimantic Linen Co.*, 140 U. S. 481, 11 Sup. Ct. 846. The relevant testimony proves the correctness of the decision of the circuit court. There was, however, so much irrelevant matter introduced into the case as to make it inequitable that the defendant should pay costs in this court, and he should not

be compelled to pay the costs in the circuit court which were caused by this class of evidence.

The cause is remanded to the circuit court, without costs in this court, with instructions to take further proceedings therein in accordance with the foregoing opinion, and, in the event of a decree in favor of the assignees of the Hofmann patent, to enter such decree, with costs of the entire cause, but without including any costs which may have arisen by reason of immaterial testimony.

KINZEL v. LUTTRELL BRICK CO. et al.

(Circuit Court of Appeals, Sixth Circuit. May 7, 1895.)

No. 268.

1. PATENTS—INFRINGEMENT—COMBINATION CLAIMS.

To constitute infringement of a combination, the alleged infringing device must include every element of the combination as claimed; and it is immaterial that certain elements which are claimed, and which are omitted from defendants' device, are not of the essence of the real invention. *Water-Meter Co. v. Desper*, 101 U. S. 332, applied.

2. SAME—BRICKKILNS.

The Kinzel patent, No. 471,769, for a brickkiln in which the bricks are both dried and burned by coal fire, without the usual preliminary drying by wood or coke fire, *held* not infringed.

Appeal from the Circuit Court of the United States for the Eastern District of Tennessee.

This was a bill by John C. Kinzel against the Luttrell Brick Company, M. R. Grace, F. J. Leeland, and E. A. Hamilton for the alleged infringement of letters patent No. 471,769, issued March 29, 1892, to the complainant for an improvement in brickkilns. The circuit court dismissed the bill, on the ground that the patent was invalid because of prior public use authorized and encouraged by the complainant for more than two years previous to filing his application for a patent. Complainant appealed.

This was a bill to restrain the infringement of a patent. The complainant, the patentee, was John C. Kinzel, of Knoxville, Tenn. The patent was granted the 29th of March, 1892, and was for a brickkiln in which the brick are both dried and burned by coal fire, and the usual preliminary drying by wood or coke fire is dispensed with. The patent describes the kiln as follows: The base or floor of the kiln is constructed of dirt suitably banked up above the level of the ground. At the sides of the kiln are two brick walls, seven or eight feet in height. Through these walls are openings into furnace pits. The pits are lined with brick walls, which extend upward to the level of the floor. There is a grate bar in each pit at least one foot below the level of the base of the kiln, and below the grate bars are the ash pits. There are doors closing the openings into the furnace pits through which the furnace may be fed, and openings are also provided to which access may be had to the ash pits. The furnaces extend inwardly from both walls towards the longitudinal center of the kiln, and may be of any desired depth or length. The brick to be burned are built up between the side walls in the usual manner, tunnels or flues being formed transversely in the kiln directly over the furnaces. Two furnaces are arranged opposite each other, so that one tunnel or flue will serve to connect two of the furnaces. In piling the brick in the kiln, the individual bricks are so arranged in relation to each other as to admit the passage of the flame and combustion in the usual way. The brick, hav-