power does not exist even pending the partnership, did not find it necessary to consider the effect of a dissolution upon it.

In Alabama, where a law was passed making service of process on one partner binding upon all, it was expressly decided, after quite an elaborate argument, that such service was not sufficient after a dissolution of the partnership, and that acknowledgment of service by one partner on behalf of all was also inoperative as against the other partners. *Duncan* v. *Tombeckbee Bank*, 4 Port. 184; *Demott* v. *Swaim's Adm.*, 5 Stew. & Port. 293.

In the case of *Loomis & Co.* v. *Pearson & McMichael*, Harper (S. C.), 470, it was decided, that, after a dissolution of partnership, one partner cannot appear for the other; although it is true that it had been previously decided by the same court, in *Haslet* v. *Street et al.*, 2 McCord, 311, that no such authority exists even during the continuance of the partnership.

But the absence of authorities, as before remarked, is strong evidence that no such power exists.

In our judgment, the defendant Lybrand had a right, for the purpose of invalidating the judgment as to him, to prove the matter set up by him in his offer at the trial; and for the refusal of the court to admit the evidence the judgment should be reversed, with directions to award a *venire de novo*.

Judgment reversed.

MR. CHIEF JUSTICE WAITE, MR. JUSTICE STRONG, and MR. JUSTICE HUNT, dissented.

SEWALL *v.* JONES.

1. Patents No. 34,928, dated April 8, 1862, and No. 35,274, dated May 13, 1862, issued to Isaac Winslow for a new and useful improvement in preserving Indian corn, are void for want of novelty.
2. To entitle a party to recover for the violation of a patent, he must be the original inventor, not only in relation to the United States, but to other parts of the world.
3. When a patentee recommends in his specifications a particular method, he does not thereby constitute it a portion of his patent.

APPEAL from the Circuit Court of the United States for the District of Maine.

This suit was brought by Jones, assignee of Winslow, against

Clark, and revived after his death, against Sewall, his administrator. Jones alleged that Clark had infringed certain patents for an improvement in preserving Indian corn, granted to Winslow; and he prayed for an injunction and an account. A decree was rendered for the complainant. The defendant appealed.

Four patents were granted to Winslow; but it is only necessary to set forth two which were held good in the court below. The principal defence relied on was that they were void for want of novelty.

These two patents of Winslow and the specification of Durand's patent, which is mentioned in the opinion of the court, are as follows: —

"No. 34,928.

"*The United States of America, to all to whom these letters-patent shall come:* —

"Whereas Isaac Winslow, of Philadelphia, Penn., has alleged that he has invented a new and useful improvement in preserving green corn (he having assigned his right, title, and interest in said invention to John W. Jones of Portland, Me.), which he states has not been known or used before his application; has made affirmation that he is a citizen of the United States; that he does verily believe that he is the original and first inventor or discoverer of the said invention, and that the same hath not, to the best of his knowledge and belief, been previously known or used; has paid into the treasury of the United States the sum of thirty dollars, and presented a petition to the Commissioner of Patents, signifying a desire of obtaining an exclusive property in the said invention, and praying that a patent may be granted for that purpose: —

"These are, therefore, to grant, according to law, to the said John W. Jones, his heirs, administrators, or assigns, for the term of seventeen years from the eighth day of April, one thousand eight hundred and sixty-two, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said invention, a description whereof is given in the words of the said Isaac Winslow in the schedule hereunto annexed, and is made part of these presents.

"In testimony whereof, I have caused these letters to be made patent, and the seal of the Patent Office has been hereunto affixed.

"Given under my hand, at the city of Washington, this eighth day of April, in the year of our Lord one thousand eight hundred

and sixty-two, and of the independence of the United States of America the eighty-sixth.

"CALEB B. SMITH, *Secretary of the Interior.*

"Countersigned, and sealed with the seal of the Patent Office.

"[L. S.] D. P. HOLLOWAY, *Commissioner of Patents.*"

The schedule referred to in these letters-patent, and making part of the same, is as follows: —

"*To all whom it may concern:* —

"Be it known that I, Isaac Winslow, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful improvement in preserving Indian corn in the green state; and I hereby declare that the following is a full and exact description thereof: —

"In my first attempt to preserve Indian corn in the green state, without drying the same, I did not remove the kernels from the cob. The article thus obtained was very bulky, and, when used, the peculiar sweetness was lost, the same being absorbed, as I suppose, by the cob. After a great variety of experiments, I have overcome the difficulties of preserving Indian corn in the green state without drying the same, thus retaining the milk and other juices and the full flavor of fresh green corn until the latter is desired for use. Instead of a hard, insipid, or otherwise unpalatable article, I have finally succeeded in producing an entirely satisfactory article of manufacture, in which my invention consists. I have employed several methods of treatment of the green corn with good results. My first success was obtained by the following process: The kernels, being removed from the cob, were immediately packed in cans, and the latter hermetically sealed, so as to prevent the escape of the natural aroma of the corn, or the evaporation of the milk or other juices of the same. Then I submitted the sealed cans and their contents to boiling or steam heat about four hours. In this way the milk and other juices of the corn are coagulated, as far as may be; boiling thus preventing the putrefaction of these more easily destructible constituents. At the same time, the milk and other juices are neither diluted nor washed away, as would be more or less the case if the kernels were mixed with water and boiled. By this method of cooking green corn in the vapor of its juices, as it were, the ends of the sealed cans are bulged out, as though putrefaction and the escape of the resulting gases had commenced within the cans. Consequently, strong cans are required; and dealers are

likely to be prejudiced against corn thus put up. I recommend the following method: Select a superior quality of sweet corn in the green state, and remove the kernels from the cob by means of a curved and gauged knife, or other suitable means. Then pack these kernels in cans, and hermetically seal the latter so as to prevent evaporation under heat or the escape of the aroma of the corn. Now expose these cans of corn to steam or boiling heat for about one hour and a half; then puncture the cans, and immediately seal the same while hot, and continue the heat for about two hours and a half longer. Afterwards the cans may be slowly cooled in a room at the temperature of seventy to one hundred degrees Fahrenheit. Indian corn thus packed and treated may be warranted to keep in any climate. Being preserved in its natural state as near as possible, it retains the peculiar sweetness and flavor of fresh corn right from the growing field. It is only necessary to heat this preserved corn, and season the same, in order to prepare it for the table, as it is fully cooked in process of preserving. Other methods of treatment may be adopted without departing from my invention, so long as the hermetical sealing and use of the heat are so managed as to secure the aroma and fresh flavor, and prevent putrefaction; thus producing the new article of manufacture substantially described.

"Having thus fully described my invention, what I claim and desire to secure by letters-patent from the United States is the above-described new article of manufacture; namely, Indian corn when preserved in the green state, without drying the same, the kernels being removed from the cob, hermetically sealed and heated, substantially in the manner and for the purpose set forth.

"ISAAC WINSLOW."

"No. 35,274.

"*The United States of America to all to whom these letters-patent shall come:*—

"Whereas Isaac Winslow, of Philadelphia, Penn., has alleged that he has invented a new and useful improvement in preserving green corn (he having assigned his right, title, and interest in said improvement to John W. Jones of Portland, Me.), which he states has not been known or used before his application; has made affirmation that he is a citizen of the United States; that he does verily believe that he is the original and first inventor or discoverer of the said improvement, and that the same hath not, to the best of his knowledge and belief, been previously known or

used; has paid into the treasury of the United States the sum of thirty-five dollars, and presented a petition to the Commissioner of Patents, signifying a desire of obtaining an exclusive property in the said improvement, and praying that a patent may be granted for that purpose: —

"These are, therefore, to grant, according to law, to the said John W. Jones, his heirs, administrators, or assigns, for the term of seventeen years from the thirteenth day of May, one thousand eight hundred and sixty-two, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said improvement, a description whereof is given in the words of the said Isaac Winslow in the schedule hereunto annexed, and is made a part of these presents.

"In testimony whereof, I have caused these letters to be made patent, and the seal of the Patent Office has been hereunto affixed.

"Given under my hand, at the city of Washington, this thirteenth day of May, in the year of our Lord one thousand eight hundred and sixty-two, and of the independence of the United States of America the eighty-sixth.

"CALEB B. SMITH, *Secretary of the Interior.*

"Countersigned and sealed with the seal of the Patent Office.

"[L. S.] D. P. HOLLOWAY, *Commissioner of Patents.*"

The schedule referred to in these letters-patent, and making part of the same, is as follows: —

"*To all whom it may concern:* —

"Be it known that I, Isaac Winslow, of Philadelphia, in the county of Philadelphia, and State of Pennsylvania, have invented a new and useful improvement in preserving green corn; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon: —

"It has long been common to boil green or unripened Indian corn, or maize, and then dry the same for winter use. But corn thus dried, when prepared for the table by again boiling, is more or less hard and insipid, having lost the fine flavor of fresh green corn.

"If ears of corn be boiled, and then hermetically sealed in cans, the cob seems to absorb the sweetness of the kernels; or if the kernels are removed from the cob after boiling, and then preserved, the finest flavor of the natural corn is lost. After many and varied

attempts to preserve green corn without drying the same, finding that I did not obtain a satisfactory result, I finally conceived the idea of first removing the corn from the cob, and then boiling or cooking the kernels thus separated, and preserving them. But this was met by a new difficulty. The kernels of corn being somewhat broken by removal from the cob, the milk and other juices were dissolved out in the process of boiling; and thus the corn was left insipid and unpalatable. I then attempted to cook the corn without contact with water, by exposing the cans containing the corn to boiling water.

"This mode of preserving I found unsatisfactory. The milk of the corn was evaporated, and the corn more or less dried, whilst a long time was requisite to cook the corn sufficiently for preservation. Finally I adopted the process of removing the corn from the cob, packing the kernels in cans, hermetically sealing the same, and then boiling the cans until the corn contained therein became completely cooked. The result of this process was extraordinary, the corn being of finer flavor than corn fresh from the field when boiled upon the cob in the usual way. Since this discovery, I have adopted the practice of boiling or steaming the cans containing the corn-kernels thus sealed about four hours, though a shorter time may answer for most purposes.

"The cans should be very strong, to prevent their bursting by heat. I have sometimes practised puncturing the cans after they are well heated, — say for ten minutes. This allows the air to escape; when I immediately reseal the cans, so as to prevent the evaporation of the juices of the corn or the loss of the natural aroma.

"This puncturing has two advantages: it prevents the possible bursting of the cans; and allows the heads of the cans to press inward when cool, so that dealers can see by this test that the corn is perfectly preserved. When the cans are not punctured, their ends will remain pressed outward after cooling, and yet the corn is perfectly preserved. The above-described process of removing the corn from the cob, and then preserving the kernels, affords several advantages over any method of preserving corn heretofore known. Among these advantages are the following: 1st, The peculiar sweetness and excellent flavor of the corn thus preserved, these qualities being consequent upon retaining all the milk and other juices, together with its fine natural aroma; 2d, The economy of space in boiling and packing, and convenience of handling, transportation, and sale. Having thus fully described my improved

process, what I claim, and desire to secure by letters-patent of the United States, is the above-described process of first removing the corn from the cob, and then preserving the kernels substantially in the manner and for the purposes set forth.

"ISAAC WINSLOW."

"Witnesses:

"SAMUEL C. OGLE.

"WILLIAM OGLE."

Preserving Animal and Vegetable Food.—Durand's Specification.

"*To all to whom these presents shall come:*—

"I, Peter Durand, of Hoxton Square, in the county of Middlesex, merchant, send greeting:—

"Whereas his most excellent Majesty King George the Third did by his letters-patent, under the great seal of the United Kingdom of Great Britain and Ireland, bearing date at Westminster the twenty-fifth day of August, in the fiftieth year of his reign, give and grant unto me, the said Peter Durand, my executors, administrators, and assigns, his special license, full power, sole privilege and authority, that I, the said Peter Durand, my executors, administrators, and assigns, during the term therein mentioned, should and lawfully might make, use, exercise, and vend, within England, Wales, and the town of Berwick-upon-Tweed, an invention communicated to me by a certain foreigner residing abroad, of the method of 'preserving animal food, vegetable food, and other perishable articles, a long time from perishing or becoming useless;' in which said letters-patent there is contained a proviso, obliging me, the said Peter Durand, by an instrument in writing under my hand and seal, to cause a particular description of the nature of the said invention, and in what manner the same is to be performed, to be enrolled in his Majesty's High Court of Chancery within six calendar months after the date of the said recited letters-patent, as in and by the same, relation being thereunto had, may more fully and at large appear:—

"Now know ye, that, in compliance with the said proviso, I, the said Peter Durand, do hereby declare that the nature of the said invention, and the manner in which the same is to be performed, are particularly described and ascertained as follows; that is to say:—

"*First*, I place and enclose the said food or articles in bottles or other vessels of glass, pottery, tin, or other metals or fit materials; and I do close the aperture of such containing vessels, so as completely to cut off and exclude all communication with the external

air; and as to the method of closing, I do avail myself of the usual means of corking, airing, luting, or cementing; and in large vessels I make use of corks formed of pieces glued together in such a manner as that the pores of that substance shall be in a cross-direction with regard to the aperture into which such corks are to be driven; and I do also, in such vessels as may admit of or require the same, make use of stoppers fitted or ground with emery or screw-caps, with or without a ring of leather or other soft substance between the faces of closure, and also of cocks or cross-plugs or covers of leather, cloth, parchment, bladder, and the like.

"*Secondly*, When the vessels have been thus charged and well closed, I do place them in a boiler, each separately surrounded with straw, or wrapped in coarse cloth, or otherwise defended from striking against each other; and I fill the said boiler so as to cover the vessels with cold water, which I gradually heat to boiling, and continue the ebullition for a certain time, which must depend upon the nature of the substances included in the vessels, and the size of the said vessels, and other obvious circumstances, which will be easily apprehended by the operator without further instructions. Vegetable substances are to be put into the vessel in a raw or crude state, and animal substances partly or half cooked, although these may also be put in raw. The food or other articles thus prepared may be kept for a very long time in a state fit for use, care being taken that the vessel shall not be opened until their said contents shall be wanted for consumption.

"And, *lastly*, I do declare, that although the application of the water-bath, as hereinbefore described, may be the most commodious and convenient, I do likewise avail myself of the application of heat by placing the said vessel in an oven, or a stove, or a steam-bath, or any other fit situation for gradually and uniformly raising the temperature of the same, and suffering them to cool again; and, further, that I do, as the choice of the consumer or the nature of the said food or other articles may render preferable, leave the aperture of the vessel, or a small portion thereof, open until the effect of the heat shall have taken place, at which period I close the same.

"In witness whereof, I, the said Peter Durand, have hereunto set my hand and seal the thirtieth day of August, in the year of our Lord one thousand eight hundred and ten.

"PETER DURAND. [L. S.]

"And be it remembered, that on the thirtieth day of August, in

the year of our Lord one thousand eight hundred and ten, the aforesaid Peter Durand came before our said lord the king in his chancery, and acknowledged the specification aforesaid, and all and every thing therein contained and specified in form above written; and also the specification aforesaid was stamped according to the tenor of the statute made for that purpose. Enrolled the thirtieth day of August, in the year of our Lord one thousand eight hundred and ten."

Mr. E. N. Dickerson for appellant.

The process claimed is substantially described in specifications of Durand and Gunter published in the United States and England before the application for the patents in question. The original discovery was by Appert, a scientific Frenchman.

Mr. W. H. Clifford, contra.

The English patent of Durand was the invention of Appert; but the process described in Durand's patent does not cover the invention of Winslow.

MR. JUSTICE HUNT delivered the opinion of the court.

Jones, as assignee of four several patents for a new and useful improvement in preserving Indian corn, brought his action against Clark, the original defendant, alleging infringements of the same. These patents were issued to Isaac Winslow, and were as follows: viz., No. 34,928, dated April 8, 1862, "for a new and useful improvement in preserving Indian corn;" No. 35,274, dated May 13, 1862, "for a new and useful improvement in preserving green corn;" No. 35,346, dated May 20, 1862, and No. 36,326, dated Aug. 26, 1862.

The two patents last above mentioned were declared and adjudged by the court below to be void; and from this judgment no appeal has been taken. They are no longer elements in the case before us, and are dismissed from further consideration.

The patent first mentioned is for an article of manufacture, — a result. The second one is for a process by which a result is obtained. The first is the more full, and embraces all that is contained in the second.

The first objection made to the patents is the want of novelty. It is contended that they were anticipated by the Appert process embodied in the Durand patent of 1810; also by the patent of Gunter of 1841, and by that of Wertheimer of 1842. It is

an elementary proposition in patent law, that, to entitle a plaintiff to recover for the violation of a patent, he must be the original inventor, not only in relation to the United States, but to other parts of the world. Even if the plaintiff did not know that the discovery had been made before, still he cannot recover if it has been in use or described in public prints, and if he be not in truth the original inventor. *Dawson* v. *Follen*, 2 Wash. C. C. 311; *Bedford* v. *Hunt*, 1 Mas. 302.

Durand's patent is described in his specification, enrolled in the English Court of Chancery, as based "upon an invention communicated to him by a certain foreigner, residing abroad, of the manner of preserving animal food, vegetable food, and other perishable articles, a long time from perishing or becoming useless."

In describing the nature of the invention and the manner in which the same is to be performed, he says, —

"*First*, I place the said food or articles in bottles of glass, pottery, tin, or other metals or fit materials, and I close the aperture so as completely to cut off or exclude all communication with the external air;" and he describes the various means of effecting that purpose.

"*Second*, When the vessels are thus charged and well closed, I place them in a boiler, each separately surrounded with straw or wrapped in a coarse cloth, or otherwise defended from striking against each other. I fill the boiler so as to cover the vessels with cold water, which I gradually heat to boiling, and continue the ebullition for a certain time, which must depend upon the nature of the substances included in the vessels, and the size of the vessels, and other obvious circumstances which will be readily apprehended by the operator. Vegetable substances are to be put into the vessel in a raw or crude state, and animal substances partly or half cooked, although these may also be put in raw."

The specification then declares that the inventor did avail himself of the application of heat by placing the vessel in an oven, stove, steam-bath, or other fit situation for gradually and uniformly raising the temperature and suffering it to cool again, and that as the choice of the consumer or nature of the said food or other articles may render preferable, leave the aperture of the vessel, or a small portion thereof, open until the effect of the

heat shall have taken place, at which period the same is to be closed.

The points following are embraced in this patent: —

1. It is for the purpose of preserving for a long time animal or vegetable food.

2. The articles thus to be preserved are to be placed in tin or other vessels, so arranged as to exclude communication with the external air.

3. An aperture may be left in the vessel, at the choice of the operator, until the effect of the heat shall have taken place, when it is to be closed.

4. The vessels thus prepared are placed in a boiler filled with cold water, which is heated to a boiling point, which boiling shall be continued for such time as shall be required by the substances contained in the vessels.

5. Although a water-bath is preferred, the inventor declares that he avails himself of heat through an oven, stove, steam-bath, or any other situation fit for gradually raising the temperature and suffering it to cool again.

6. Vegetables are to be put into the vessels in a raw or crude state; animal substances raw or partly cooked.

7. The invention is general in its terms, embracing all vegetables and all animal substances capable of being thus dealt with.

Winslow's patent of April 8, 1862, No. 34,928, is declared to be for an improvement in preserving Indian corn in the green state.

The letters-patent declare that the first "success of the inventor was obtained by the following process: The kernels, being removed from the cob, were immediately packed in cans hermetically sealed, so as to prevent the escape of the natural aroma of the corn or the evaporation of the milk or other juices of the same. I then submitted the sealed cans and their contents to boiling or steam heat for about four hours. . . . By this method of cooking green corn in the vapor of its juices, the ends of the cans are bulged out. Strong cans are required, and dealers are likely to be prejudiced against corn thus put up. I recommend the following method: Select a superior quality of green corn in the natural state; remove the kernels from the

cob by means of a curved and gauged knife, or other suitable means; then pack in cans, hermetically seal the cans, expose them to steam or boiling heat for about an hour and a half; then puncture, seal while hot, and continue the heat for about two hours and a half." At the close, the inventor says that what he claims to secure by the patent is the new article of manufacture; namely, Indian corn preserved in the green state without drying, the kernels being removed from the cob, hermetically sealed, and heated as described.

Let us now state the points embraced in this, the plaintiff's patent, and compare them with the points heretofore stated as included in the Durand patent.

1. Winslow's declared object is the preservation of Indian corn in the green state.

Durand's is for preserving Indian corn not only, but all vegetable substances in their raw or crude state.

2. Winslow recommends removing the kernels from the cob before the process of preservation is commenced, placing the kernels in cans, sealing them, and exposing them to heat.

Durand, not limiting himself to the article of corn, provides that the articles to be preserved shall be placed in cans, and subjected to heat in the same manner. He does not stipulate or recommend that the article shall be first removed from the cob, the vine, the twig, or whatever may be the natural support of the vegetable to be preserved, as the corn from the cob, the pea from its pod, the grape or the tomato from its vine, the peach from its stem, the berry from its stalk. Neither does he recommend that it shall not be so removed. His process embraces the article in whatever form it may be presented. It is for the preservation of raw or crude or uncooked vegetables in whatever form they may be presented, and necessarily includes a case where they have been previously removed from their natural support. A prior removal from the stalk would be the natural, and, in many cases, a necessary proceeding.

3. Winslow directs that the kernels shall be subjected to the heat for a period of about one and a half hours before puncturing, and for about two and a half hours after the puncturing. The double use of the word "about" indicates that the time is not to be considered as precisely specified.

Durand directs that the boiling shall continue for such length of time as shall be required by the particular substances contained in the vessel. Corn, pease, tomatoes, peaches, berries, asparagus, may very likely require great difference in the time in which the heat shall be applied to produce the required effect. In each case, that is to be the measure of the time.

4. Winslow says other modes may be adopted so long as hermetical sealing and the use of heat are so managed as to secure the aroma and fresh flavor and prevent putrefaction.

Durand declares that he intends to include in his patent heat through an oven, stove, steam, or any other situation by which the temperature is gradually raised and suffered to cool again.

The same idea is put forth at the close of Winslow's specification, where he declares that what he claims by his patent is the manufacture of Indian corn in its green state, the kernels being removed from the cob, hermetically sealed, and heated.

We are of the opinion that the substance of all that is found in Winslow's patent had, nearly half a century before he obtained his patent, been put forth in Durand's patent. If Durand's patent were now in force in this country, and a suit brought upon it against Jones, the claimant under Winslow, for an infringement, the right to recover could not be resisted. Durand would show a patent intended to effect the same purpose, — to wit, the preservation of vegetables for a long time; employing the same process, — to wit, the effect of heat upon vegetables placed in a metallic vessel, the gradual cooling of the same, hermetically sealed after puncture to allow the escape of gases. This is also Winslow's process.

To constitute an infringement, the thing used by the defendant must be such as substantially to embody the patentee's mode of operation, and thereby to attain the same kind of result as was reached by his invention. It is not necessary that the defendant should employ the plaintiff's invention to as good advantage as he employed it, or that the result should be the same in degree; but it must be the same in kind. *Winans* v. *Denmead*, 15 How. 330.

To infringe a patent, it is not necessary that the thing patented should be adopted in every particular. If the patent is adopted substantially by the defendants, they are guilty of

infringement. *Root* v. *Ball*, 4 McLean, 177; *Alden* v. *Deney*, 1 Story C. C. 336.

In an action for infringement, the first question is, whether the machine used by the defendant is substantially, in its principle and mode of operation, like the plaintiff's. If so, it is an infringement to use it. *Howe* v. *Abbott*, 2 Story C. C. 190; *Parker* v. *Haunth*, 4 McLean, 370.

If he has taken the same plan and applied it to the same purpose, notwithstanding he may have varied the process of the application, his manufacture will be substantially identical with that of the patentee. Curtis, sect. 312.

Erskine, J., says, in *Walter* v. *Potter*, Webs. Pat. Cas. 585, 607, the question of infringement depends upon whether the plan which the defendant has employed is in substance the same as the plaintiff's, and whether all the differences which have been introduced are not differences in circumstances not material, and whether it is not in substance and effect a colorable evasion of the plaintiff's patent.

When a party has invented some mode of carrying into effect a law of natural science or a rule of practice, it is the application of that law or rule which constitutes the peculiar feature of the invention. He is entitled to protect himself from all other modes of making the same application; and every question of infringement will present the question, whether the different mode, be it better or worse, is in substance an application of the same principle. Curtis, sect. 320.

It is said, however, that a distinction exists in this, — that Winslow's patent provides that the corn shall be removed from the cob before the process begins, and that Durand does not specify this idea. If this be conceded, it does not alter the case. Although he may preserve Indian corn by removing it from the cob more advantageously than by letting it remain on the cob, he does it by using the Durand process. He still applies Durand's process of heating, puncturing, and cooling, and no more takes the practice out of Durand's patent than if he should specify that pears or peaches would be the better preserved if their outer coating should be first removed, or that meat could the better be preserved if the bones were previously extracted. Whether the improvement or combination could be the subject of a patent, it is not material to consider.

It is said again, that "instead of packing the kernels in the vessels selected for the purpose, in their crude state, as suggested in the English patent, the process patented by the assignor of the plaintiff directs that the kernels should be cut from the cob in a way which leaves a large part of the hull on the cob, and breaks open the kernels, liberating the juices, to use the language of the patentee, and causing the milk and other juices of the corn to flow out and surround the kernels as they are packed in the cans, in such a mode that the juices form the liquid in which the whole is cooked, when the cans are subjected to the bath or boiling water."

This argument is based upon an error in fact. There is no such language in the patent. The sole expression of the patent is to provide, first, that the corn shall be removed from the cob; and, second, that it shall be subjected to heat in vessels hermetically sealed. Thus Winslow recites that difficulty had been encountered by him in preserving the corn upon the cob. This produced an insipid article; and accordingly he says, "My first success was obtained by the following process: The kernels, being removed from the cob, were immediately packed in cans and hermetically sealed, so as to prevent the escape of the aroma, and submitted to heat," &c. There is not a word in the patent to the effect that the kernels shall be cut off in a particular way, or that a large part of the hull shall be left on the cob, nor, indeed, that the kernels shall be cut off at all. It is simply provided that the corn shall be removed from the cob. The means are not specified.

Farther on, the patentee, Winslow, says, "I recommend the following method." This is not of the substance of the patent. A recommendation is quite different from a requirement. The latter is a demand, an essential, a necessity. The former is a choice or preference between different modes or subjects, and is left to the pleasure or the judgment of the operator. He may adopt it. He will do well if he does. But he may reject it, and still accomplish his object by means of the patent.

The principle is this: The omission to mention in the specification something which contributes only to the degree of benefit, providing the apparatus would work beneficially and be worth adopting without it, is not fatal, while the omission

of what is known to be necessary to the enjoyment of the invention is fatal. Curtis, sect. 248.

An excess of description does not injure the patent, unless the addition be fraudulent. Id. sect. 250.

Accordingly, when the inventor says, "I recommend the following method," he does not thereby constitute such method a portion of his patent. His patent may be infringed, although the party does not follow his recommendation, but accomplishes the same end by another method.

But the patentee does not even recommend that the kernels shall be cut off in such manner that a large portion of the hull shall remain upon the cob, nor does he distinctly recommend the cutting off of the kernels in any manner. His recommendation is simply that the kernels be removed by any convenient and suitable method. His language is, "I recommend the following method: Select a superior quality of sweet corn in the green state, and remove the kernels from the cob by means of a curved and gauged knife or other suitable means." Any means that are suitable for removing the kernels, whether by knife or any other method, are within this language.

That the simple removal of the corn from the cob, before it is subjected to heat, without reference to cutting it off in such manner as to leave a portion of the hull on the cob, or without reference to cutting at all, is the claim of Winslow's patent, is clearly shown by another consideration.

The first patent of Winslow and his second patent, as stated in the opinion of the court below, are intended to effect the same purposes; the one being a patent for the article, the other for the process by which the article is produced. "Both patents (it is there said) may be considered together, as all the proofs applicable to one apply equally to the other; and the positions taken in argument are the same in both, without an exception."

Now, it is quite significant of the intent of the claimant, and of the meaning of the first patent, that his second patent, which is for the process, and would properly be more specific as to every essential mode, makes no claim that the corn shall be removed from the cob by cutting, much less that it should be cut in any particular manner, or with a view to any particular

effect. After describing his disappointment in the result when he merely cooked the corn, and in attempting to preserve it when packed, without removal from the cob, or where it was removed after having been boiled on the cob, he says, "Finally I adopted the process of removing the corn from the cob, packing the kernels in cans, hermetically sealing the same, then boiling the cans until the corn contained therein became completely cooked." The word "cutting" is not to be found in this patent. Removal from the cob before commencing the preservation, without reference to the manner or means, except only that they should be suitable, is the plain intent of both patents. In this respect they are identical with each other, and are not inconsistent with Durand's patent.

The discovery in question has been of immense benefit to mankind. By means of food preserved in a compact and nutritious form, protected from its natural tendency to decay, deserts are traversed, seas navigated, distant regions explored. It is less brilliant, but more useful, than all the inventions for the destruction of the human race that have ever been known. It is to France that the honor of this discovery belongs, and to Appert, a French citizen. It does not belong to America or to Winslow. Appert's process presents all that we now know upon the subject. It contains absolutely every thing of value that is contained in Winslow's patent.

Other grave questions are presented by the record before us. We are satisfied, however, to place our decision upon the ground that the want of novelty in the patents of Winslow is fatal to the plaintiff's right of recovery. We do not discuss the other questions.

The decree must be reversed, and a decree ordered in favor of the defendant below.

MR. JUSTICE CLIFFORD dissenting.

Damages are claimed in this case by the complainants for an alleged infringement of two certain letters-patent, which are fully described in the bill of complaint. Those letters-patent are as follows: (1.) No. 34,928, dated April 8, 1862, for a new article of manufacture; namely, Indian corn when preserved in the green state, without drying the same, the kernels being

removed from the cob, hermetically sealed, and heated, substantially in the manner and for the purpose set forth in the specification. (2.) No. 35,274, for a new and useful improvement in preserving green corn.

Two other patents were included in the bill of complaint; but they were held to be invalid in the court below, and are not in issue in this investigation.

Both the patents in issue were introduced in evidence at the hearing; and the repeated decisions of this court have established the rule, that a patent duly issued, when introduced in evidence by the complainant in a suit for infringement, is *prima facie* evidence that the patentee is the original and first inventor of what is therein described as his invention.

Much consideration need not be given to the question of infringement, as the respondent admits that his foreman put up seven hundred cans of green corn, preserved by the same process substantially as that described in the letters-patent of the complainants.

Viewed in the light of these suggestions, it is clear that the decision of the case depends upon the defences set up in the answer. Of the separate defences pleaded, it will be sufficient to examine the first, as the decision of the court is placed chiefly on the defence set up in that part of the answer; which is, that the assignor of the patentee is not the original and first inventor of the improvements described in the respective letters-patent.

Defences involving the validity of a patent cannot be satisfactorily examined or their sufficiency or insufficiency determined without first ascertaining what the inventions are which are the subject-matter of the controversy. Beyond doubt, the invention secured by the first patent is for a new and useful manufacture described as Indian corn preserved in the green state. What the inventor desired to accomplish was to preserve the unripe corn in the green state for table use, without drying the same; and he states, that, in his first attempt to accomplish the desired result, he did not remove the kernels from the cob, but that the product manufactured in that mode was not satisfactory, as the article obtained was very bulky, and failed to retain the peculiar sweetness of green corn cooked in

the ordinary way, the same being absorbed, as the patentee supposes, by the cob.

Experiments of various kinds were made to overcome the difficulties attending the effort to preserve the corn without drying the same, which were also unsuccessful, as the kernels when preserved did not retain the milk and other juices of the corn, leaving the product hard, insipid, and unpalatable, and without the full flavor of fresh green corn. All such experiments were, therefore, abandoned; but he finally succeeded in producing an entirely satisfactory new article of manufacture, which is the one described in the specification and claim of the first patent.

His description of the method he adopted in manufacturing the product is substantially as follows: Select a superior quality of sweet corn when in the milk or green state; remove the kernels from the cob by means of a curved and gauged knife or other suitable means; pack the kernels with the juices of the same in cans, and hermetically seal the cans, so as to prevent evaporation under heat, or the escape of the aroma of the corn. Other suitable means are such means, and such *only*, as will perform the same functions. When packed, the cans with their contents are to be exposed to steam or boiling heat for an hour and a half; then take the cans out of the steam or boiling heat and puncture the cans, and immediately reseal the same while hot, and continue the heat for two hours and a half longer.

Exposure to heat in the manner stated is for the purpose of cooking the contents of the cans; and, when that is accomplished, the cans may be taken out of the boiling heat, and be slowly cooled in a room at the temperature of seventy to a hundred degrees Fahrenheit. Green corn thus packed and treated, the patentee states, may be warranted to keep for an indefinite period in any climate. Being preserved in its natural state as near as possible, it retains the peculiar sweetness and flavor of fresh green corn right from the growing field; and it is only necessary to heat the corn in order to prepare it for the table, as it is fully cooked in the process of preserving.

Argument to show that the commissioner may grant a patent for a product or new manufacture and one for the process is quite unnecessary, as that question is now firmly settled in

favor of the power by the unanimous decision of this court. *Goodyear* v. *Rubber Co.*, 9 Wall. 788; 2 Cliff. 371; *Seymour* v. *Osborne*, 11 Wall. 559; *Goodyear* v. *Railroad*, 2 Wall. C. C. 356; Curt. on Patents, 4th ed., sect. 269.

2. Pursuant to that rule, the second patent of the complainants was issued, which embodies an invention for a new and useful improvement in preserving green corn; or, in other words, the patented invention is for the process of manufacturing the new product described and secured to the inventor in the other letters-patent.

Applicants for a patent are required to describe their respective inventions; but an invention for a product and an invention for the process to produce the product bear so close a relation to each other, that it is difficult even for an expert to describe the latter without more or less reference to the former. Defects of the kind, however, are of no importance, if the patent for the product contains no claim to the invention for the process.

Separate applications may be made in such a case; or the inventor, if he sees fit, may describe both inventions in one application. Accordingly, the patentee in this case presented only one application in the first place for both patents; but, pending the hearing in the Patent Office, he filed separate specifications, the second containing some of the same phrases as those employed in the specification describing the invention of the new manufacture. Among other things, he admits that it has long been common to boil green or unripened corn, and then to dry the same for winter use; but he adds that corn thus dried must be boiled again when prepared for the table, and that it is more or less hard and insipid, as it loses the fine flavor of fresh green corn. Ears of corn also, he says, are sometimes boiled, and hermetically sealed in cans: but the cob seems to absorb the sweetness of the kernels; or if the kernels are removed from the cob after boiling, and then preserved, still the fine flavor of the natural corn is lost.

Many and varied attempts were made by the patentee to preserve green corn on the cob without drying the same; but all his efforts in that behalf were unsuccessful, as they left the article dry and unpalatable, as the sweetness of the green corn was absorbed by the cob. Experiments of the kind having all

failed, he conceived the idea of first removing the corn from the cob, and then boiling or cooking the kernels, and preserving them as separated from the cob.

Some benefit, it seems, resulted from that new conception; but a new difficulty arose, from the fact, that, the kernels of corn being more or less broken in being removed from the cob, the milk and other juices of the corn were dissolved and diluted by the water in the process of boiling, leaving the product insipid, unpalatable, and comparatively tasteless.

Unable to overcome the difficulty in that mode, he next attempted to cook the corn without allowing it to come in contact with the water, by exposing the cans containing the corn to boiling water; but he soon found that that mode of preserving the corn was unsatisfactory, as a long time was required to cook the corn sufficiently for preservation, and the corn became more or less dried and hard.

Sufficient has already been remarked to show that both patents may be considered together, for the reason that all the proofs applicable to the patent for the product are equally applicable to the patent for the process, and the positions taken in argument are the same in both, without an exception.

Want of novelty is the principal defence set up in the answer; and the court decides that the respective patents are invalid, chiefly upon the ground that the foreign invention secured to Peter Durand is prior in date. Before examining that defence, it becomes necessary to refer somewhat more fully to the nature and peculiar characteristics of the respective improvements, in order that the evidence introduced may be correctly understood and properly applied.

Unripe ears of corn may be boiled and hermetically sealed in cans without infringing the inventions of the patentee; but the difficulty with that product is, that the cob absorbs the sweetness of the kernels, and the article becomes insipid and unpalatable, and consequently it is not salable to any considerable extent. Sales of such a product do not infringe the patents of the complainants; and it is clear that the kernels may be removed from the cob, and then preserved in cans in the ordinary mode, without any conflict with the improvements embodied in the complainants' patents: but the product which such a process

produces is comparatively valueless, as the fine flavor of green corn cooked in the usual way for table use is lost in the process of manufacture.

Indian corn may also be preserved when in a green state by removing the kernels from the cob, and boiling or cooking the same before the kernels are packed in cans hermetically sealed, without subjecting the manufacturer to the charge of infringing the patents described in the bill of complaint; but the decisive objection to that process is, that the kernels, or many of them, in being removed from the cob, are broken, and consequently the milk and other juices of the corn in that state are dissolved out in the process of boiling or cooking, and the natural aroma of green corn cooked in the usual way is lost, and the product becomes of little or no value as an article of commerce.

Attempts were made by the patentee in this case to remedy that difficulty by packing the kernels in cans not sealed, and exposing the cans containing the kernels to boiling water; but the experiments were not satisfactory, as it required a long time to cook the corn, during which the milk and other juices of the corn evaporated, and left the kernels dry and hard. All such experiments having failed, the inventor adopted the process of removing the corn from the cob by means of a curved and gauged knife, and packing the kernels with the milk and other juices of the same in cans hermetically sealed, and then boiling the cans with their contents until the same became completely cooked: but he states that the cans containing the corn must be very strong, or the internal pressure will cause them to burst; and, to prevent that, he practised puncturing them after they became well heated, to allow the air to escape, immediately resealing the same to prevent the evaporation of the juices of the corn and the loss of its natural aroma.

Sealed cans, if sufficiently strong, it would seem, may be used to complete the process without the necessity of puncturing during the period they are exposed to the boiling bath; but, unless the cans are very strong, the recommendation is to puncture them, in order to relieve the internal pressure and to prevent them from bursting. Other advantages result from puncturing the cans which deserve consideration. Even if the cans when not punctured do not burst, still the air contained

in the same and the vapor become more or less expanded by the heat, so as to press the heads of the can outward, giving the can the appearance of cans which contain gaseous products of decomposition; and the statement is, that such appearances, even when the corn is perfectly preserved, diminish the value of the product as an article of commerce, and show that it is better to puncture and reseal the cans during the process of boiling.

Looked at in any light, it is clear that the purpose of the invention secured by the second patent, as evidenced by the language of the description, is to preserve not only the farinaceous elements of the kernels, but also the milk and juices of the same which give the peculiar aroma or flavor to green corn when cooked for the table in the usual way, during the season when the kernel is full, but before the milk and juices of the kernel become concrete, as in ripe corn.

Beyond all doubt, the patented process, if the directions are properly followed, will accomplish the purpose for which it was invented, and will enable the manufacturer to preserve the kernels of the green corn, with all the milk and juices which the kernels contain, without any chemical or other change except what is produced by the cooking, which is effected by putting the sealed cans containing the kernels with their milk and other juices, just as the same were removed from the cob by the curved and gauged knife, into the boiling water for the periods specified in the description of the specification.

Proof to that effect of the most satisfactory character is exhibited in the record; and the fact that the product of the patented process, to the extent that it has become known, has driven the product of all other processes intended to effect a like result out of the market, attests its accuracy and truth. Suffice it to say, that the remarks made are sufficient to explain and describe what the inventions are which give rise to the present controversy; and, having accomplished that purpose, the next inquiry is, whether the assignor of the complainants was the original and first inventor of the respective improvements.

Examined merely in the light of the pleadings, the affirmative of the issue is upon the complainants; but, the complain-

ants having introduced the respective patents in question, the rule is well settled that the burden of proof is changed, and that it is incumbent upon the respondent to show by satisfactory proof that the alleged inventor was not the original and first inventor of the respective improvements, as they have alleged in their answer.

Ample time was given to both parties in the Circuit Court to prepare for a hearing, and the respondents attempted to meet the issue in two ways: —

Suppose it be true that the assignor of the complainants was the first person in the United States who practised the patented process, and preserved green corn even in that mode of operation: still it is contended that the alleged inventor was not the original and first inventor of the improvement, because the process had been previously known and used in a foreign country: but the Circuit Court ruled and determined that the mere previous knowledge or use of a thing patented in a foreign country was not sufficient to defeat a patented invention granted under the Patent Act; that no evidence of the kind could have that effect, unless it appeared that the same invention had been previously patented in some foreign country, or been described in some public work, anterior to the supposed discovery thereof here by the alleged inventor; that it is well-settled law, that the mere introduction of a foreign patent or a foreign publication, though of a prior date, will not supersede a domestic patent, unless the description or specifications or drawings contain or exhibit a substantial representation of the patented improvement in such full, clear, concise, and exact terms as to enable any person, skilled in the art or science to which the invention appertains, to make, construct, and practise the invention to the same practical extent as he would be enabled to do if the information was derived from a prior patent issued in pursuance of the Patent Act. *Seymour* v. *Osborne*, 11 Wall. 555.

Unable to controvert those propositions, the respondent next refers to the English patent granted to Durand, and insists that it supersedes both of the patents of the assignor of the complainants. His patent bears date the 30th of August, 1810; and the specification states, in substance, that he encloses the

food or articles to be preserved in bottles, or other vessels of glass, pottery, tin, or other metals or fit materials, and closes the apertures of the vessels so as completely to cut off and exclude all communication with the external air. When the vessels have been thus charged and well closed, he places them in a boiler, each separately surrounded with straw or wrapped in coarse cloth, or otherwise defended from striking against each other. He then fills the boiler so as to cover the vessels with cold water, and gradually heats the water till it boils, and continues the ebullition for a certain time, which, as he says, must depend upon the nature of the substances and other obvious circumstances.

Vegetable substances, the specification states, are to be put into the vessels in the raw or crude state. Animal substances are to be partly or half cooked, although these may be put in raw; and he adds that articles thus prepared may be kept for a very long time and in a state fit for use; and no doubt is entertained that unripe corn prepared in that way may be kept for a long time, as it is evident that the kernels would be dried by the heat, but they would necessarily cease to have the flavor of fresh green corn when cooked in the usual way for table use. Confirmation of that is found in what immediately follows in the specification, which shows that the patentee also claims the application of heat in other modes, as by placing the vessels in an oven or a stove, the effect of which, beyond all doubt, would be to dry the kernels, and make it necessary to reboil the contents of the vessel in order to fit the same for table use.

Certain vegetable substances may, perhaps, be preserved to advantage in that way; but it is clear that the application of high heat to the vessels containing green corn, unless the kernels were surrounded by water or some other suitable liquid, would necessarily dry the kernels, and render them unfit for table use without soaking or reboiling. Doubtless the term "vegetable substances" is comprehensive enough to include green corn: but the patentee, in enumerating the articles to be preserved, does not mention green corn; and, of course, the specification contains nothing to indicate whether the kernels are or are not to be removed from the cob before they are placed in the bottles or other vessels; or, if to be removed, in what man-

ner the removal is to be effected; nor whether the kernels are to be left whole or broken, as in the mode of operation described in the patents in question.

Corn at that period was unknown in England, and it is not probable that the patentee had ever heard of such an article, and it does not appear that a can of green corn has ever been preserved in that mode of operation to the present time. Patented inventions must be described so that those skilled in the art or science may be able to make, construct, and practise the same; and yet it is plain that no amount of study or examination of the foreign specification would ever enable any person to preserve green corn in the mode of operation employed by the assignor of the complainants.

Study it as you will, and the conclusion must be that the vegetable substance, whatever it may be, is to be placed in the bottles or other vessels in the raw or crude state, without any previous preparation, and without any liquid to prevent the substance from drying. Indian corn on the cob, or unbroken kernels of green corn, cannot be preserved in that way so as to possess any commercial value.

Instead of packing the kernels in the cans in their crude state, the process patented by the assignor of the complainants directs that the kernels should be cut from the cob in a way which leaves the coarser part of the hull on the cob, and breaks open the kernels, liberating the juices, to use the language of the patentee, and causing the milk and other juices of the corn to flow out and surround the kernels as they are packed in the cans, in such a mode that the milk and juices of the kernels form the liquid in which the whole is cooked when the sealed cans are subjected to the bath of boiling water. Water is never added to the mixture to be preserved; nor is it necessary, as the liquid composed of the milk and juices of the kernels is sufficient to prevent the heat from drying the vegetable substance to be preserved; and, if water should be added, it would dilute the milk and other juices, and render the product insipid and valueless.

Evidently much is due to that feature in the patented mode of operation in preserving the product in its natural state, and causing it to retain the sweetness, peculiar flavor, and natural

aroma of green corn fresh gathered from the field, and boiled in the usual way for table use. Nothing of the kind is suggested in the foreign patent; and it is clear that a careful comparison of the description of the complainants' patents with that of the Durand patent fully justifies the opinion of the learned expert examined by the complainants, that the two patented processes are essentially and substantially unlike, and confirms the conclusion already expressed, that persons having no other knowledge of the complainants' process than what they can derive from perusing the specification of the foreign patent would never be able to preserve green corn by the complainants' mode of operation.

Palpable as those differences are, they ought not to be overlooked in determining the issues between these parties. Meritorious inventors are entitled to protection; and the proofs are full to the point that the product, manufactured by the process of the complainants, is far superior to that preserved in any other mode; which, beyond all question, is the cause that induced the respondent to abandon other methods, and to practise the patented process at the risk of a suit for infringement.

Other vegetables, such as beets and carrots, or pease and beans, may be packed in cans in a crude state under the foreign process, as they retain their juices, and may perhaps be tolerably well preserved in that mode of operation if entirely secluded from the atmosphere, as by packing ripe vegetables in hermetically-sealed cans; but the chemical composition of such vegetables is very different from green sweet corn, which is much more difficult to preserve in its natural freshness without loss of its peculiar flavor and aroma, as accomplished by the complainants' process. When the kernels are cut from the cob, they are opened, and the milk and other juices flow out, and become the liquid in which the kernels are to be cooked, and the milk and the other juices become a constituent part of the vegetable substance to be preserved.

Prompt action is required to accomplish the object; for, if the mixture is exposed to the air for any considerable time before the cans are filled, the chemical relations of the constituents will be changed, and the whole substance will become sour and unwholesome. Exposure to heat, if seasonable, will prevent that tendency, as the relations of the constituents of which the

mixture is composed will become fixed, and the danger of putrefaction or souring will be greatly diminished, or be entirely averted.

Throughout the experiments, the aim of the patentee was to perfect the process of preserving green corn without losing any of the flavor of the milk and natural juices of the cereal in its green state, and to discover the method or means of fixing the constituents or elements of the corn when in the milk, so that, when packed in vessels to be preserved, the chemical relations of the constituents of the substance to each other would never change, unless the vessels containing the mixture were opened. Such a purpose, it is obvious, could not be accomplished by packing the corn in cans in the crude state, or before the kernels were removed from the cob, as the juices of the kernels would be absorbed by the cob in the cooking: nor could he accomplish his object by cutting the kernels from the cob and boiling them in water before they were packed in the cans, or by cooking the kernels in open vessels without water; as in the one case the milk and other juices would be washed out of the kernels, and with that operation all the peculiar flavor of the cereal in the green state; and, in the other case, the aroma and juices of the kernels would be lost by evaporation.

His process includes the mode of preparing the mixture for filling the cans, as well as the mode of cooking and preserving the same; for, if it did not, the great aim he had in view would not be accomplished. Preserved green corn, unless it is packed and cooked in its own milk and juices, is of very little value, as it is only in that mode of operation that the preserved articles will retain the peculiar flavor and sweetness which the cereal possesses when fresh gathered from the field and cooked in the usual way.

No doubt the kernels may be removed from the cob without cutting, and may be preserved in that form under the process described in the foreign patent: but the decisive answer to that concession is, that that process is not the process of the complainants; and the product preserved in that mode of operation is of a very inferior quality, as appears by the concurrent testimony of all the witnesses. Sweet corn in the green state is a peculiar substance, differing in material respects from any other cereal or vegetable used for food. Its constituents are such, that

it is singularly susceptible to fermentation, decomposition, and change, — more so than any other vegetable that has been successfully preserved in hermetically-closed vessels for any considerable length of time. Such liability to rapid change is not due to any one particular constituent, but to the presence of several, such as gluten, sugar, fat, and starch, in such proportions as are calculated to promote fermentation and action upon each other. As compared with sweet pease, for instance, the kernels of sweet corn are much more delicate, and liable to change, as they contain a much larger proportion of milk, juice, or sap, which itself contains more sugar, starch, and oil than the juice of sweet pease, and the glutinous constituents which act as the ferment or primary cause of change are much more active in the juice of sweet corn than in that of sweet pease.

Equally instructive support to the same view is derived by comparing sweet corn with such fruits as peaches, as the juice of the peach contains no oil and more water than the corn, besides other differences of an equally important character; showing that such fruits as peaches are much less liable to ferment than sweet corn, and that they are much more easily preserved.

Examined in the light of these suggestions, as the case should be, it is clear that the mode of operation described in the complainants' specification differs widely from every process which preceded it, and that it effects a new and highly useful result. Wide differences in the mode of operation from any thing which it is proved ever existed before is shown in every descriptive feature of the complainants' specification; and so palpable and marked are those differences, that it would create astonishment and surprise if any competent expert can be found who would now venture to testify that the foreign process given in evidence is the same as that practised by the complainants.

Great injustice, in my opinion, is done to the appellees in this case: but they may still enjoy the satisfaction to know, that, while courts of justice may alter the names of things, they cannot change the things themselves without exercising positive invention; nor can they obliterate the relation between cause and effect, for the reason that the law which regulates that relation is irrepealable.