1FED.CAS.-31

### Case No. 225.

#### ALLEN V. HUNTER.

 $[6 \text{ McLean}, 303.]^{\frac{1}{2}};$ 

Circuit Court, D. Ohio.

April Term, 1855.

# >PATENTS FOR INVENTIONS—WHO ENTITLED TO—SPECIFICATIONS—EXPERT TESTIMONY—EXPERT TESTIMONY—ANTICIPATION—CAVENT.

1. A Patent is prima facie evidence of the right of the patentee.

#### [Cited in Hoffheins v. Brandt, Case No. 6,575.]

- 2. The thing invented or discovered must be so clearly described as to enable a person well skilled in the subject matter of the invention to construct or make it.
- 3. In a matter of science, no individual can be a fit expert, who does not understand the science involved.
- 4. And a jury in such a matter will give weight to the witnesses as they may be competent to speak on the subject.
- 5. A specification in regard to a chemical compound is not addressed to persons who are ignorant of chemistry.
- 6. A specification must be construed according to the true import of the words used, rather than by their grammatical arrangement.
- 7. In a case of a prior invention, a patent is not to be superseded unless the thing patented was invented before the invention patented.
- 8. Nothing more than experiments being made before the emanation of the patent, although such experiments resulted in the invention or discovery subsequently patented, the first patent must stand.
- 9. A caveat is intended to give notice of an invention or discovery, and prevent a patent from being granted to another for the same thing.

[At law. Action by John Allen against William M. Hunter for damages for infringement of letters patent No. 8,621, granted to J Allen, December 23, 1851. Tried by jury. Verdict for defendant.]

Stanbery, Coffin & Newton, for plaintiff. Mr. Mathews, for defendant.

#### Instruction of the Court.

This, gentlemen of the jury, is an action for the infringement of a patent. The plaintiff, who is the patentee, "claims to have invented a new and useful mode of setting mineral teeth on metallic plates," and the describes as follows the composition and mode of application: "The cement may be formed of any of the known fluxes, combined with silex, wedgewood and asbestos intermixed with gold and platinum scraps, which form a metallic union with the plate upon which the teeth are set. The compound which I prefer is composed of silex 2 oz., white of fluid glass 2 oz., borax 1 oz., wedge wood 1½ oz., asbestos 2 drums., feldspar 2 drms., haolin 1 drm. This compound should be intermixed or underpaid upon the plate, with gold or platinum scraps. The gum colour consists of

feldspar ½ oz., white glass 1 oz., oxyd of gold 1½ grs.: moisten and apply with a brush." After describuring how the application is to be made, the patentee says; "I claim as my invention, and desire to secure, by letters patent, a new mode of setting mineral teach on metallic plates by means of a fusible siliceous cement, which forms an artificial gum, and which also unites single teeth to each other, and to the plates on which they are set." "I also claim to be the inventor of said cement or compound, a full and exact description of which is herein given." "also claim the combination of asbestos with plaster of paris, for covering the teeth and plates for the purpose of sustaining them in their proper position, while the cement is being fused."

A caveat was entered by the plaintiff, in the office of the commissioner of patents, the 29th of April, 1851. This notice to the office that the plaintiff was the first inventor, for which he claimed a patent, was to answer a double purpose. First, to give notice of his claim as inventor, and, second, to prevent a patent from issuing to another for the same thing. The patent issued to the plaintiff bears date the 23rd of December, 1851. Under the law, before this patent could be issued, a thorough examination of the claim was made by examiners of the patent office, who were appointed, it is to be presumed, on account of their knowledge and experience in matters of science, mechanism, chemistry and natural philosophy, which enables them to judge of the feasibility and utility of inventions and discoverers apply for a patent. A claim which has thus been examined and sanctioned by the granting of a patent, gives to the patentee a prima facile right to the invention or discovery claimed. And the individual who disputes the right must produce evidence to counterbalance the legal presumption of right in the plaintiff from his patent. On the subject of patents.

we are governed by the law, and not by our own notions of policy. Some individuals who prefer their own theories to the practical results of society, which have been established and sanctioned by the wisdom of ages, hold that there can be no property in a discovery or an invention. And these notions may have an influence on their judgment, when they are called to act on the subject of patents. Such an influence should be regarded as unjust and against law. You are sworn, gentlemen, to act on the subject before you according to the law and the evidence.

The defenses made to the right claimed by the plaintiff are: 1. That the patent is void upon its face, for want of certainty in its specifications. The law requires "every inventor to swear that he does verily believe that he is the true inventor or discover of the art, machine, or improvement for which he solicits a patent; and he shall deliver a written description of his invention, and of the manner of using or process of compounding the same, in such full, clear and exact terms as to distinguish the same from all other things before known, and to enable any person skilled in the art or science of which it is a branch, or with which it is most nearly connected, to make, compound and use the same," In requiring this particularity, the law has two objects in view: 1. That the invention or discovery claimed may be clearly distinguished from all other invertions or discoveries. 2. That when the patent shall expire and the invention or discovery shall become public property, any one skilled in the art or science may construct or compound it.

Patentees are not monopolists. This objection is often made, and it has its effect on society. The imputation is unjust and impolitic. A monopolist is one who, by the exercise of the sovereign power, takes from the public that which belongs to it, and given to the grantee and his assigns an exclusive use. On this ground monopolies are justly odious. It enables a favored individual to tax the community, for his exclusive benefit, for the use of that to which every other person in the community, abstractly, has an equal right with himself. Under the patent law this can never be done. No exclusive right can be granted for anything which the patentee has not invented or discovered. If the claim anything which was before known, his patent is void. So that the law repudiates a monopoly. The right of the patentee entirely rests on his invention or discovery of that which is useful, and which was not known before. And the law gives him the exclusive use of the thing invented or discovered, for a few years, as a compensation for "his ingenuity, labour, and expense in producing it." This, then, in no sense, partakes of the character of monopoly. Inventors are often great benefactors. And how ill are they generally rewarded! If the invention or discovery be of great value, a system of piracy is commenced, not so much to injure the patentee, as to benefit the actors. And it cannot be denied that this cause of action is made popular in the community by the charge of monopoly against the patentee, and his realization of large profits. His expensed are not considered, the benefit he has conferred on society, not the shortness of seven of fourteen years, to which his exclusive

right is limited. For the maintenance of his right he is subjected to legal controversies, which, not unfrequently involve him in an expenditure beyond the amount of his profits. Inventors and discoverers are provability poor. It is said that the man, by the operations of whose genius the streets of the city of London were first lighted, was a wanderer and a beggar in those streets. The gas company, who were made rich by his invention, eventually made some provision for him. What have inventors done for our country? The application of steam to the propulsion of vessels upon the water, and carriages upon the land, have advanced our country a century in commercial intercourse, in civilization and in everything which constitutes a great nation. And look at the numberless labor-saving machines, the cotton gin, the planning machine, the reaping machine, and many other machines and inventions, which by the force of machinery accomplish wonderful results. It then appears that patentees, so far from being monopolists hanging as dead weights upon the community, are the benefactors of their country.

By the law an extension of a patent can be given only where it is made clearly to appear that by the profits from the term of the grant the patentee has not been remunerated for his ingenuity, labour and expense, in bringing his invention into operation.

In this case the patentee says that the cement may be formed of any of the known fluxes; and it is argued that as this includes all fluxes, "If there be any which cannot be so used, the patent is void." The words of the specifications are to be taken together, and they are to be so construed as to give effect to the meaning and intention of the person using them. Words are not to be distorted from their meaning, so as to effect what may be supposed to have been the intention of the person using them. But they are to have a reasonable construction, as connected with the sentence in which they are used. The words, "known fluxes" belong to chemistry, and non but those who understand the science of chemistry should have weight as experts on this subject. A dentist who extracts and fills teeth, or who sets teeth, may be expert in what he professes, and yet be ignorant of chemistry. This has been verified in the present case. As the invention is claimed to be a new and useful mode of setting teeth, &c., it seems to be supposed that dentists are proper experts to define the meaning of chemical terms. But if they

have not a scientific knowledge of chemistry, they are not experts in the application of chemical terms. The law says the description shall be such as to enable any person skilled in the art of science, of which it is a branch, or with which it is most nearly connected, to make, compose, and use the same. If the person called be not skilled in chemistry, he cannot be considered as an expert in regard to chemical affinities. A mechanic may as well be called as an expert on this subject, as a practical dentist who has no knowledge of chemistry. The same may be said in regard to the term borax. The making up of the compound or the manufacture of teeth is not necessarily connected with dentistry. The sepcifications must be so full and clear as to enable a competent person to make the compound without experiment. And the enquiry for the jury is, has this been done in the plaintiff's patent? In passing upon this point, the jury will be governed in matters of science by the opinion of experts.

Doctor Clark, of New Orleans, has practiced dentistry fourteen years, and now has the largest practice in that city. He has received his composition for setting teeth from Doctor Allen. He says he could make the compound from the patent. Dr. Samuel Hazlett, of New York, says he could make the compound and the teeth from the patent. Dr. Stockton says a dentist properly informed would be at no loss to make the compound from the formula of Dr. Allen. Doctor Barlow says that Dr. Allen's plan requires mechanical skill. He has made the compound and set the teeth under Dr. Allen's director. Doctor Chapman says, from Doctor Allen's formula, he constructed the work. And Dr. Kingsly, who is a dentist, says a manufacturer of teeth would know borax cannot be used in a crude state, but must be fritted before use under Doctor Allen's plan. Doctor Wardle manufacturers teeth, and he put up the work by Dr. Allen's plan; and he thinks that a man of ordinary skill could make the gum from the directions given. Professor Silliman says borax is usually prepared, which is done easily.

Several witnesses in behalf of the defendant were examined. Doctor White, a manufacturer of teeth, says, without the knowledge he now has, he would have been at a loss how has, he would have been at a loss how borax was to be used according to Doctor Allen's formula. Doctor Semple, dentist, purchased a right of Doctor Allen, with special instructions how to use the compound. Doctor Rochart made an experiment on Doctor Allen's formula, put the teeth in eleven times in all. Doctor Babcock made the experiment on Doctor Allen's formula, but could not make the compound, and he considers the recipe of no practical utility. Doctor Portner says the formula of Doctor Allen is not practicable. Doctor Smith tried the formula of Doctor Allen, and found it impracticable. Doctor How purchased a right of Doctor Allen, but could not set the teeth, to do well, without back plates. Doctor Doughty tried Doctor Allen's formula without success, on a gold plate or silver. Doctor Talbert tried Doctor Allen's formula without success. Doctor Maine says, from Doctor Allen's specification, he would have used, in making the gum,

the borax of commerce. And Doctor Hays says that from the specifications to Doctor Allen's patent he could not make the compound of Dr. Allen. This is substantially the evidence in regard to the specifications of the plaintiff. Whether they are sufficient is a mixed question of law and fact. The opinions of the experts who have been examined are in conflict; and so far as my personal knowledge goes, this has been uniformly the case where experts have been examined. This may show, however honestly withnesses called by the respective parties may swear, that slight circumstances, imperceptibly or otherwise, influence the opinions of men, even in matters of science. The fact to be established by the plaintiff was whether his compound and the setting of teeth were so described as to enable a person of competent knowledge to make the compound and set the teeth.

In regard to the compound, no one can be competent to testify as to it, who is not acquainted with chemistry. He must know something of the affinities of the constituent parts of the compound, and of its strength and durability. A mere mechanical dentist is no more competent to judge of this matter than the ordinary mechanic whose skill consists in applying the materials made ready to his hands, for the structure of a machine, without knowing by what process these materials were formed. It is, therefore, gentlemen, you duty, in considering the testimoney, to give weight to it in proportion to the competency of the witnesses to judge of the matters sworn to. In this view, no one may be supposed to have misrepresented the facts, speaking from the lights of his own knowledge; and yet the statement of one witness who has a thorough knowledge of chemistry, and speaking on that subject, should be relied on more than the statement of any number of witnesses, who speak without the requisite knowledge.

Some of the witnesses say that, in making the compound by the formula of Doctor Allen, they would use borax in its crude state, or what is called the borax of commerce. The most, if not all of these witnesses do not profess to have a knowledge of chemistry; while other witnesses say, who are acquainted with the science, they would know that borax was not referred to by Doctor Allen in its crude state. And these are the men who can be confided in as experts, and to whom, under the patent law, the specifications are addressed. The description must be such, the law says, as "to

enable any person skilled in the art or science of which it is a branch, or with which it is most nearly connected, to make, compound, and use the same." The objection that, as all the fluxes are claimed in making the compound, if any one can be found which cannot be used for that purpose, the patent is void, cannot be sustained.

The word "flux" is derived from the Latin word "flus," to flow, and is applied in chemistry to substances which are in themselves very fusible, or which promote the fusion of other bodies. Any substance or mixture used to promote the fusion of metals or minerals, as alkalies, borax, tartar, or other saline matter, are called fluxes. Now, in the first place, it is not shown that there is any one flux which may not be used to make the compound; and if this were made to appear, it could not affect the validity of the patent, as the reference to fluxes was general, and should be held to include those which are in general use, and which will overcome, by their chemical attractions, the opposing powers of the other ingredients of the compound. This, all chemists would understand, and to such persons is the description addressed. Formerly, a strict construction was given in this country and in England to the claims of a patentee, but a more liberal and favorable view is now taken of his claim. He must describe it within the law; but courts do not go be youd the law for technical objections to defeat it.

The next question for your consideration, gentlemen of the jury, is whether defendant has infringed the plaingiff's patent. An infringement consists in constructing a machine, or making a compound, substantially in the same mode as that for which a patent has been obtained. Certain publications have been made in the "Dental Recorder," in New York, and the "Dental Register," in this city, which show the formulas, the plaintiff alleges, are claimed by the defendant, and which are similar to those claimed in the patent. Doctor Slack, one of the oldest and most experienced chemists in this country, says that the formula of defendant is in substance the same as that claimed by the plaintiff. And he strongly illustrates his opinion by saying "they are as much so as two and two make four, or that three and one make four." Doctor Locke, Jr., who is a professed chemist, and who analyzed the formulas of Doctors Allen and Hunter, says there is no substantial difference. Other wintnesses called by the plaintiff corroborate the statement that the two formulas are substantially the same. But on the part of the defendant several witnesses have been examined, who give their opinion that the formulas are different. This with most of them is supposed to consist in the mode of combining the ingredients, that the finer particles of the pulverized ingredients were separated by a sieve, by the defendant, which left the larger particles granulated, which on being fused make a stronger gum.

It will be for you, gentlemen, to determine the fact of infringement, from this conflict of testimony. I have only to refer you to the rule before stated, of giving weight to such witnesses as were best qualified to judge of the matter about which they have testified. A further remark on this point is not only justified, but called for by the justice of the

case,—that one of the two chemists who have sworn that the formulas were in substance the same, has analyzed the ingredients of both, and he finds them substantially the same. His testimony then is given, not as matter of opinion, but as a fact clearly demonstrated. That is the only mode by which the human judgment can rest upon absolute certainty. There are but few questions which may be decided by the power of analysis, chemically or mathematically. But where this is done satisfactorily, truth is attained. An unsubstantial or colorable alteration in a machine or a compound does not protect an individual from the character and consequence of an infringer. Where the machine is constructed, or the compound formed, on the same principle, however varied in form, there is an infringement, In a machine where the same powers are employed, with only formal alterations as to the size or position of the machinery, to produce a certain result, the principle of the machine remains the same. And so of a compound, where the ingredients are the same, and the change is merely in the mode of combining them. Or where there is a substitute of one ingredient, having the same qualities and producing the same result, being within the scope of the claim.

The next point for your consideration will be whether the discovery was useful. Of this there can be no doubt, if the claim of the plaintiff shall be sustained. Doctor Jobson, of London, England, considers the improvement the greatest in dentistry of the present age. He is corroborated by many other witnesses who speak from experience. It is unnecessary to advert to the testimony on this point, as there is no conflict in it. Every invention or discovery must be useful, to entitle the party to a patent.

Whether the plaintiff was the first and original inventor of what he claims is the subject of your next inquiry. To sustain his patent, the plaintiff must show that he was the first and original inventor or discovered. That he was neither is strongly urged in the defense. It is contended that a work published by Doctor Fitch, of New York, on dental surgery, which was a translation from a French work by Delabarre, was substantially the same as the plaintiff's. If this be so, it bars the plaintiff's right. So cautiously does the law guard the public rights, that if the thing invented or discovered has been described in any foreign publication,

it is declared to be fatal to the patentee. This provision goes upon the presumption, if such foreign publication has been made, the patentee may have acquired a knowledge of it. And this presumption is not rebutted by proving, as far as a negative can be proved, that the inventor has no knowledge of it. The publication may be proved, as to its contents, and the fact of publication by the production of the book, or by parol testimony. Doctor Clark, of New Orleans, says that Delabarre's formula was somewhat like that of the plaintiff's, but that it was different, and was impracticable, and has been long since abandoned. Doctor Fitch, the translator, says Delabarre's system was never brought, into practical use. Doctor Jobson, evidently eminent in his profession, was personally and intimately acquainted with Delabarre, in Paris. And while in France, the Doctor became acquainted with the most eminent dentists in Paris, and he says that they all considered the plan of Delabarre as a failure, and that it had been abandoned by him; but although abandoned, yet if the published substantially the formula of the plaintiff, it is fatal to his right. Several other witnesses speak of Delabarre's formula, as having been abandoned in this country. On the right of the defendant, a set of teeth was given in evidence to the jury said to have been made on Delabarre's plan, and which were worn by the famous Aaron Burr. The teeth in this specimen were very irregular, some inclining one way and some another, so as to form no continuous and even circle. Doctor Jobson, on examining it, said the teeth may have been set on Delabarre's plan, as their irregularity was the defect in his system. Several of the witnesses called by the defendant considered the plan of Delabarre as similar, or very much like the plaintiff's. To defeat the plaintiff's patent on this ground, Delabarre's plan must be shown to be substantially the same as Doctor Allen's.

It is further alleged that Steamer communicated to the plaintiff his alleged discovery. If this be true, the plaintiff's right cannot be supported, as he could not, if the supposition be true, be the original inventor or discoverer. Steamer states that he was employed by the plaintiff, and sold to him, in 1851, a formula for an enamel; and also, that he prepared in Allen's laboratory the gum used by him, for which he agreed to pay thirty dollars. This witness seems to have been a worker in metals. It is proved, however, that he took back the facts stated, in a publication under his signature. The equivocations and inconsistencies of the witness, do not recommend his statements to the confidence of the jury. Mr. Thonin, who is a maunfacturer of porcelain teeth, says, that Doctor Allen proposed to pay witness what Steamer's signature to a certain paper. At the same time Doctor Allen observed that he had paid Steamer a hundred dollars for his services. It does not appear, however, what the paper was, which Doctor Allen was anxious Steamer should sign. Doctor Darling is a dentist, and he says that Doctor Allen called on him, and advised him not to purchase a formula for setting teeth from Steamer, as the Doctor alleged Steamer procured it from his laboratory, and he threatened to sue Steamer. Ellias Wildman, who has been a dentist since 1836, considers the formula of Delabarre sufficient, and that it is

substantially the same as Doctor Allen's. Doctor Lane says, that in 1845 he became acquainted with a continuous gum for setting teeth, as practiced by Doctor Dodge of New York, who not long afterwards died, and no further account of his plan has been given.

These facts, disconnected and certainly not very satisfactory from their nature or the manner of relating them by the witnesses, are left with the jury, with the remark that the plaintiff's patent ought not to be avoided in this particular, except on clear and undoubted evidence.

But the defendant claims to have discovered the same thing as contained in the formula of the plaintiff, before the made the discovery. If this be so, the plaintiff cannot recover. Mr. Aldrich states that Doctor Allen, in the fall of 1847, made an upper set of teeth with the gum, for his wife. Witness is the brother-in-law of Doctor Allen, who, to the knowledge of the witnesses, has been engaged, for several years in making experiments on the subject of setting teeth. Mrs. Aldrich says the wore the set of teeth first made by Doctor Allen, four or five years. Then a full set were made, which she now wears alternately with another set. Doctor Wickersham knows, that in April, 1847, Doctor Allen was experimenting to find how to set teeth by a continuous gum on a platina plate. Doctor Curtis states, that Doctor Allen made for him a full set of teeth in 1849, having the continuous gum. These lasted until 1853, when a new set was made, which the witness now wears. He thinks, in 1843 Doctor Allen informed him that he was experimenting to fasten teeth on a plate. The last set of teeth made for the witness had a back plate. This was done at his own request. Doctor Ward; Ten years ago Doctor Allen was working night and day, to make an improvement in setting teeth. Doctor Bacharjin, is a manufacturer of teeth, and he says that Doctor Allen was experimeting to set teeth by a continuous gum on a place, in 1843. The wintness saw a specimen similar to what is called for in his patent. Doctor Taylor, was at the convention in Louisville in September, 1851. Several sepcimens of Doctor Allen's work were presented to the convention. In April, 1851, a paper was published in Cincinnati, in which the editor speaks of the improvement of Doctor Allen, which will supersede block work. In July,

1851, Doctor Allen showed witness a specimen somewhat improved from the one he had before seen, and of which he spoke in terms of high approbation in the dental paper of which the witness was editor. He says that Doctor Allen, some two years before his patent, exhibited to him a specimen of work similar to the one described in his patent. He saw Doctor Hunter's improvement, which he supposed was block work, in April, 1852. The work of Hunter is like that of Allen's in many respects. He says Hunter's work was block work, up to 1851, and he supposed Hunter's work was intended to be an improvement on block work. He thinks, in principle the improvement of Hunter, as claimed, and Allen's, are the same; Hunter's mode of fastening is different from Allen's. The report of the convention of physicians at Louisville, in the fall of 1851, spoke in high terms of the improvement of Doctor Allen, and the convention voted him a gold metal. Hugh McCullum says, two or three years after 1841, Doctor Allen said he was making improvements to fasten teeth on a plate with a continuous gum, but that he had not yet perfected his improvement. Professor Wood states that in the college session of 1851-2, Doctor Allen made a specimen in which the teeth were fastened to the plate by a continuous gum. Several unavailing efforts were made to break the teeth from the gum; at length one of the teeth was broken. Mr. Colburn, dentist, says, that Doctor Allen's method of setting teeth is the best, and that the old plan has been abandoned. The platina plate is used. Peter Van Emmon, dentist, was eleven years in company with Doctor Allen, and he says the improvement of Allen has superseded the other modes of setting teeth. Between five and six years ago, he saw the first specimen. A dentist accustomed to block work could make the work of Doctor Allen, and would know how to use borax. Doctor Putnam is a dentist, has manufactured teeth, made fluxes, &c., and practiced under Doctor Allen. Doctor Robinson, of London, England, has been a dentist twenty-three years, and he considers Doctor Allen's plan as new and useful. Doctors Stockton, Chapman, Barlow, Kingby, Harlet, Wilson, Halman, Shope and Smith, all speak of Doctor Allen's plan as the best, &c. Mrs. Bartlett, lives in Covington. In 1846 or 7, Doctor Allen made for her a temporary set of teeth, then a set with springs, at her request, with a gum like the set she now wears, which was within five months of the time her teeth were taken out. C. E. Allen, is not the inventor; he heard Steamer say that he regretted injustice had been done to Doctor Allen through his instrumentality. C. Buchart regrets that Doctor Allen was unjustly dealt with. Mr. Monter, dentist, was employed by Doctor Allen in 1852. Was acquainted with Steamer, who had no knowledge of dentistry. Doctor Darling says, Steamer's enamel was of no value for dental purposes. Has been working on Doctor Allen's plan three years and finds it good. Dr. Irwin: Allen's plan is new and very useful. Doctor Miller, has treated between two and three hundred cases on Doctor Allen's plan, which is best; thinks Hunter's plan would be better for block work. Doctor Wardle, says

he is a manufacturer of mineral teeth. He makes the compound from Doctor Allen's formula; thinks a man of ordinary skill could make the gum by the formula.

Defendant's evidence as to his priority of invention or discovery.

Mrs. Guilford: In January, 1851, Doctor Hunter made her a set of teeth which she has worn ever since, and on which the continuous gum was used. In 1848 he made a set for her, somewhat different. Her present teeth are better than the natural teeth. Doctor King, in November, 1850, saw a specimen of upper teeth which Doctor Hunter said he had prepared for the World's Fair. Mr. Toland: Doctor Hunter frequently purchased teeth of him. In the fall of 1850, he showed the witness specimens which he intended to send to the World's Fair. This was three months before the fair. The witness saw the teeth after they were returned from the fair. Mr. Jones says, prior to 1848, in 1846 or 7, Hunter stated to him his object was to set teeth on a plate by a continuous gum. In the fall of 1850 he saw the experiments, now exhibited, three or four months before the World's Fair. Doctor Crane has known Doctor Hunter for twelve years, and knows that he was experimenting on continuous gum work. In 1847 Doctor Hunter said he had succeeded so far as to convince himself that he would succeed in setting a full set of teeth in a continuous gum. In the fall of 1850 he saw the specimens now exhibited. Mr. McKinney saw at the Crystal Palace in London the specimens before the jury, connected together. Doctor Lesley: In 1846 he knew that Doctor Hunter was making experiments to overcome shrinkage. He stated his object was to unite the teeth singly on a plate by a gum. At the Louisville convention, being one of the committee to whom the paper presented by Doctor Allen was referred, in regard to his invention, he differed from the other members of the committee and made a counter report to that which was made by the other members of the committee. Doctor Locke, sen., says, in 1844 or 6, he knew that Doctor Hunter was experimenting, and about a year before October, 1851, Doctor Hunter said to him that he had succeeded in making a gum in which to set teeth. Doctor Taliaferro has known Doctor Hunter ten years, and knows that he experimented to improve teeth. In 1848, he made a set of teeth for witness, perhaps block work. The teeth were soldered to a back plate. Mr. Wayne says, in 1847 Doctor Hunter was experimenting,—object was to make a compound to fasten teeth. Doctor

Maise says, in 1846 a lady got him to insert a tooth in an artificial set, and the teeth appeared to have been set in a gum body. The witness saw the work of Doctor Dodge in New York, could see no other fastening than the gum. This was prior to July, 1850. Doctor Brown says, in the fall of 1850, Doctor Allen enquired of the witness what kind of work Hunter was getting up. Witness replied that he was getting up a gum work. Doctor Hamlin says the teeth in Hatch's mouth looked like Levatt's enamel; but Allen showed a plan with a gum that adhered to it. Doctor Crane says, five or six years ago, Levatt's enamel was the same as Doctor Allen's work in Hatch's mouth. That a gum body cannot be made out of it. In Doctor Hunter's specifications, he says, "the teeth are first arranged on the plates according to the knowledge of the manipulator and state of the patient, after which the gum is applied, which does not shrink in the fire, and the whole brought up to the proper degree of heat in a muffle, and suffered to cool, when they will be ready for soldering to the plates, without having changed by working or otherwise in the fire, thereby enabling any dentist who cements single teeth well, to make block work with a greater degree of certainty, and much more accuracy than by carving, and without that act."

In the Dental Register of the West, published in this city, October, 1852, there was published a "new method of supplying artificial teeth and gums," by Doctor Hunter, parts of which were read as rebutting evidence by the counsel. He says, 15th page, "Where is the new principle in the patent claim now made? A flux is combined with what is technically termed a body or base, and the application is in every respect similar." "I stand upon the ground that I have perfected a body, (as applied to certain bodies and enamels made into artificial teeth. by Jones, White and McCurdy,) which does not materially contract in the fire, and possesses more strength than any other body known to me, and which, with skillful handling, requires but one heart, independent of the soldering of the teeth to the plate, to make perfect work." "It is applicable, he says, to the ordinary gold plate as used by dentists, generally, in the form of block work, and is made by me in continuous arches where a full dentare is required, and it is equally applicable to cases where a few teeth are required, and can be fastened to the plate by soldering, riveting, or any other known method now in use."

In regard to the first inventor, gentlemen, it is not sufficient to defeat a patent that another person has conceived the possibility of effecting what the patentee has accomplished. To constitute a prior invention, the party alleged to have entitled himself to a patent in case he had made an application. And you will apply this test to the work of the defendant. The cavent of the plaintiff was filed in the patent office the 29th of April, 1851, and bears date at Cincinnati, 7th of April, 1851. In this paper the plaintiff says, "What I claim as my invention is a fusible cement of which an artificial gum is formed, applicable to artificial teeth, by means of which mineral teeth are firmly united to each

other, and also to the metallic plate upon which they are set." And he says, "The mode of applying the cement is as follows: When the teeth and plate are properly arranged upon a cast of plaster of paris, and the teeth covered with the plaster, I use the cement under, between, and around the teeth. This cement is composed of silex, oxide of tin, oxide of lead, manganese, potash and wedgewood. The teeth, being thus arranged, are put into a furnace, and other cement is used; the cast is then removed, and when cooled, the outside plaster is taken off. I then use a preparation of the oxide of gold, so combined with the cement and so applied, as to produce, when finished, a true gum color. Again the cast is put into the furnace until the latter preparation flows; it is then removed, cooled slowly, and is ready for the mouth."

The caveat, which is in evidence, shows beyond controversy how far the plaintiff had progressed with his invention on the 29th of April, 1851. When the caveat was filed in the patent office; and as it bears date, at Cincinnati, on the 7th of that month, it may be presumed that it was prepared at that time to be forwarded to Washington. This peculiarity of the plaintiff's invention and discovery [is] supposed to exist [consist] in the mode of fastening his teeth on the plate, with or without back straps and without rivets, by the consistence and strength of the paste he uses, which keeps the teeth firmly in their places, and lessens the weight and size of the work in the mouth. The patent of the plaintiff bears date the 24th of December, 1851. From that time his specifications became public, and every one had a right to inspect them, and for proper purposes to obtain a copy of them.

The question arises under the caveat and the patent of the plaintiff, whether he is protected from the experiments and invention of the defendant. He is protected by the law, unless the defendant's invention entitled him to a patent before the plaintiff applied for his patent. If both the plaintiff and defendant are inventors of the thing claimed by them respectively, the one who perfected his invention first is protected by the law. A general remark that he had accomplished his object, without particularizing what he had invented or discovered, is not satisfactory. But a statement of the thing invented or discovered should be considered as evidence, so far as it agrees with the patent subsequently obtained, or with the work claimed to have been perfected. One of the specimens exhibited by the defendant

in the fall of 1851, and which he expressed an intention of sending to the great Fair, was block work; the other is alleged to be a continuous setting of the teeth, to fit the mouth, and not consisting of parts put together, as block work. These specimens, or at least one of them, some of the witnesses saw at the World's Fair, in 1852. The defendant has made no application for a patent; and it would seem, from his publication in the "Dental Register" above referred to, he contests the fact of any discovery having been made by the plaintiff. In page 14, he says, "to Delabarre must be given the credit of having first conceived and executed the union of artificial teeth already baked, with an artificial gum and plate." "To Adibran," he says, 15th page, "must we give the credit of having first made the claim, so far as I am informed, of having overcome the shrinkage of material, which claim was made in his published work, and was contested twenty years after [by] Lefoulon, but which principle is claimed by no other author." "Desirabode and Lefoulon both gave Delabarre credit for having done this kind of work, and published his formula, the principle of which consisted in uniting a flux with the material used as an ordinary base or body, that it might fuse at a less heat than the teeth then in use." And the defendant then asks, "Where is the new principle in the patent claim now made?" This publication, as before stated, was made in October, 1852.

Several witnesses have been examined by both parties, to show that each, for a number of years, has been experimenting to obtain what both of them, as they allege, have accomplished. The caveat and the patent show what the plaintiff has attained, and the defendant's work is shown by the evidence. The evidence of the plaintiff has shown the work done by him on his principle before his patent was obtained. The acrimony excited in the course of this controversy, as shown by the testimony, is much to be regretted. The subjects involved are interesting to the cause of science and the arts, to the public at large, and especially to the parties in this suit. The plaintiff claims no more than nominal damages, as he is desirous only of sustaining his claim under his patent. Neither the court nor the jury can enter into the feelings of the parties in any cause. It is their duty to consider and decide every case on its merits, as the law requires. There should be no other solicitude felt than to attain this result. And having attained this, in the careful exercise of their best judgments, they have nothing to apprehend.

After being out a short time, the jury returned with a verdict for the defendant. A motion for a new trial was made, which remains undecided.

[NOTE. No other cases involving patent No. 8.621 have been found in the Reports prior to 1880.]

ALLEN, The STEPHEN.
[See The Stephen Allen, Case No. 13,361.]
ALLEN v. ALLEN.
[See Allen's Heirs v. Allen's Ex'rs, Case No. 211.]

<sup>1</sup> {Reported by Hon. John Mclean, Circuit Justice.}

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