the correspondence he said that it was doubtful whether the process was patentable in view of the Walkup patent, but that, if it could be obtained, it would be useful for the pottery to hold such a patent as an obstacle to dishonorable competition by former employés, from which the pottery had already suffered. He proposed, on behalf of the pottery, to pay all the expenses of procuring the patent. Miss Fry, because of her gratitude to Mrs. Storer, then the owner of the pottery, professed entire willingness to have the process patented, and to let the pottery have it, if she could be permitted to use the process herself. When, however, subsequently, Miss Fry was asked to sign the application for the patent, and a paper assigning her interest in the improvement for a nominal consideration to Mr. Taylor for the pottery, she declined to do so, and soon after applied for a patent through counsel employed by her in New York. Correspondence ensued, in which there was some discussion as to what would be a fair consideration for the assignment to the pottery of such an interest in the patent as would give it the right to exclude its competitors from using the process, but the parties were unable to reach an agreement. Miss Fry did not in any of the letters express a wish or claim that the pottery should pay for its own use of the process. There is nothing in all of this to estop Mr. Taylor or the Rookwood Pottery from impeaching the validity of the patent issued to Miss Fry, though there is much upon which it might be claimed, had the question been properly made in the pleadings, and were the patent a valid one, that a license from Miss Fry to the Rookwood Pottery to use her patented process must be implied. v. U. S., 137 U. S. 342, 346, 11 Sup. Ct. 88; McClurg v. Kingsland, 1 How. 202; Lane & Bodley Co. v. Locke, 150 U. S. 193, 14 Sup. Ct. 78; McAleer v. U. S., 150 U. S. 424, 14 Sup. Ct. 160. The bill is dismissed.

## KING et al. v. ANDERSON et al.

(Circuit Court, S. D. New York. December 5, 1898.)

1. PATENTS-PATENTABILITY-SUBSTITUTION OF MATERIALS. Liquid or pasty materials used to restrain the too-rapid setting of plaster of Paris being old, and the use of powdered marble in a dry state being also known, held, that it involved patentable invention to substitute for these materials hydrate of lime in a dry state, to be mixed with the dry plaster of Paris; the difference between the results accomplished being that between a partial and complete success.

2. Same—Infringement.

Infringement is a tort, which must be proved, and cannot rest wholly on conjecture and inference. The fact that a defendant occupied the same office as another whose infringement is proved is insufficient.

3. Same—Compound to Restrain the Setting of Plaster.

The King patent, No. 397,296, for an improvement in compounds to restrain the setting of plaster, held not anticipated, valid, and infringed.

This is a suit in equity by J. Berre King and George R. King against R. Napier Anderson and Enos A. Bronson for infringement of a patent. Charles E. Mitchell, for complainants.

A. Bell Malcomson and Carl A. De Gersdorff, for defendants.

COXE, District Judge. This is an equity suit for the infringement of letters patent, No. 397,296, granted to George R. King, February 5, 1889, for an improvement in compounds to restrain the setting of plaster. The patent is now owned by complainants. The specification points out that it is very desirable to restrain the natural tendency of plaster of Paris and similar materials to set too quickly. complish this result the patentee grinds dry hydrated lime to a powder and mixes it with the restraining substance—preferably glue—dissolved in water, thus forming a pasty mass. For ordinary purposes four pounds of glue may be dissolved in a pailful of water, but more or less of the restraining material may be used according to the desire to make the product strong or weak. The pasty mass is dried and becomes a dry cake or crust-like substance, which, on being ground, produces the powdered "restrainer" ready for use. It is used by being added to the plaster or like material in any desired quantity. The patent contains two claims which are as follows:

"(1) The above-described composition of matter, composed, essentially, of animal gelatinous or vegetable glutinous matter and hydrated lime, substantially as set forth. (2) The above-described composition of matter, composed, essentially, of animal gelatinous or vegetable glutinous matter and hydrated lime combined and reduced to a finely divided condition, substantially as set forth."

In brief, the claims cover the dry product obtained by mixing pulverized hydrated lime with dissolved glue. The first claim covers the product in any form, the second when reduced to a powder.

The defenses are anticipation, lack of patentable novelty and failure

to prove infringement.

It is asserted that, prior to the patent, walls covered with plaster, composed of calcined gypsum and water, would "set" and harden within a few minutes after the water was added, thus preventing further and necessary manipulation by the mason. The inconvenience of this quick setting action of the plaster had long been recognized and for many years the attention of those skilled in the art had been directed to the discovery of some means to prevent it. It will avoid confusion if it be constantly borne in mind that the claims do not cover a process but a product consisting of a dry crust-like or powdered compound capable of being mixed with powdered plaster of Paris, also in a dry state, so that the plaster can be used from the "scratch" coat to the finishing coat of walls and ceilings. Was this product found in the prior art? A statement of what was known before may be summarized as follows:

First. The use of glue as a restrainer was familiar to masons and had been so used in various combinations. "Lime putty," made of slaked lime and water, was formed in a ring on the mortar board. Into this ring water was poured and also a small quantity of strong glue solution forming a miniature pond. The plaster of Paris was then added by being gradually stirred into the water of the pond, until all the ingredients, including the lime putty, became a plastic mass ready for use. This method of restraining the rapid setting of plaster by means of hydrated lime and glue thus combined was used long prior to the patent and is successfully used at the present time.

Second. In April, 1883, a patent was granted to Joel H. Sharpless for a "lime-wash for coating buildings." The object of the patentee was to provide a cheap wash of any desired color for buildings and fences, one that is ready for use by adding a small quantity of water and one that will not scale or rub off. The claim is for "a plastic composition, for lime-washes consisting of pulverized lime and having mixed therewith glue and coloring matter." This compound is preserved in a pasty condition by being hermetically sealed in cans. When used it is taken from the cans and converted into a paint or wash by the addition of water. "This solution of glue," says the patent, "acts as a binder and causes the wash to adhere firmly to the building; while at the same time it imparts a slight gloss to the wash and prevents the same from scaling or rubbing off." In short, the patentee had in view an improved whitewash.

Third. Two years after the Sharpless patent. April, 1885, a patent was granted to George L. Gregory for a plaster compound to be used for "brown-coat" work. The patentee had in mind several existing disadvantages which his compound was intended to cure, among them "too rapid setting." He says,

"To overcome these disadvantages I add lime and hair to the ground and calcined gypsum, and to retard the setting of the compound I use a smaller amount of common glue \* \* \* than has been found necessary in other plaster compounds in which gypsum \* \* \* is an ingredient."

The lime and glue are placed in a box and reduced, by water being added, to the consistency of sweet milk. The wet and washed hair is then added and thoroughly mixed with liquid glue and lime. Next sand is placed in a box, the desired proportion of ground and calcined gypsum is added and the two are mixed in a dry condition. The limeglue-hair liquid is then added with water sufficient to make the compound of the consistency of plastering mortar. The lime is used to facilitate an even mixing and make a compound on which a finishing coat can easily be put. The claims are two, covering the process and the product. The latter is described as "a partially-liquid compound for a foundation coat of plastering."

Fourth. In August, 1887, a patent was granted to George R. King, the patentee of the patent in suit, for a compound to restrain the setting of plaster. Here was the genesis of the dry restrainer. The specification describes a process very similar to that of the patent in suit. It says,

"I take any stone or stone-like material—such as marble, chalk, plaster, or the like (preferably white marble)—and I powder it so that it will pass through, say, a No. 16 bolting cloth."

The stone powder is mixed with glue water to form a pasty mass which is dried, the result being a comparatively hard stone-like mass which is subsequently reduced to powder and produces the restrainer ready for use. The patent contains four claims, the first three covering the process and the last covering the product. The fourth claim is as follows:

"As a new article of manufacture, a restrainer, substantially as herein described, consisting of glue and ground stone, combined in the manner set forth."

These are substantially all of the references relied on to invalidate

the complainants' patent.

It will be noted at the outset that King was the first to produce a restrainer in the form of a dry powder to be mixed with dry plaster He first evolved the idea in the 1887 patent and afterwards improved and perfected it in the patent at bar. Prior to this the restrainer had been in a liquid or pasty form. It is clear that Sharpless in producing his improved whitewash was working on different lines and intended to accomplish entirely different results. He used glue not as a restrainer but as a binder and to add a gloss to his paint. He was not dealing with plaster and was not vexed with its propensity to set too quickly. His hermetically sealed paste was never used as a retarder and it is by no means clear that it could be so used with any hope of practical success. It is argued by the defendants that if more glue were added and the paste allowed to dry it would be the product of the King patent. The presence of the "if" destroys the argument. But assuming that the Sharpless paste was capable of being used as a restrainer there was still room for patentability in the transformation to a dry powder. In Electrical Accumulator Co. v. Julien Electric Co., 38 Fed. 117, the prior art showed that the active layer had been applied to the electrodes of secondary batteries in the form of a fine dry pow-The patent was for an electrode to which the active layer was applied in the form "of a paint, paste, or cement." Invention of a high order was found to reside in the improved method. Reverse the situ-If it be invention to substitute paste for powder in the ation here. Julien Case why is it not invention to substitute powder for paste in the present case? The improvement, considering the limitations of the plasterer's art, is quite as marked. No one thought of the change prior to King, and that it produces better results, for many purposes, is clearly established by the proof. Gregory's compound, too, was in a partially liquid state and was intended only for the "brown" or foundation coat. It contains six ingredients, namely, ground and calcined gypsum, sand, fresh-slaked lime, hair, water and glue. this is not the material of the patent in suit. No one pretends that the Gregory compound, if made for the first time to-day, would infringe the claims of King's patent; and it is thought that there is nothing in the Gregory patent to suggest to the skilled artisan the dry product of King. Gregory, probably, produced a satisfactory "brown" coat with glue as a restrainer. This had been done many times by others employing methods differing from his in some essential and several nonessential features, but neither Gregory nor any one else had in mind a dry crust-like or powdered retainer capable of being mixed dry and used at any time.

If the controversy ended here there can be little doubt that the complainants should succeed. The vital point in the case, in the opinion of the court, is the one suggested at the argument, whether in view of the King patent of 1887, there was room for the King patent of 1889? A fair statement of the former patent is that its product is the same as that of the latter with the exception that hydrated lime is substituted for powdered marble or other similar material. Powdered marble produces a hard stone-like mass; hydrated lime produces

a friable, crust-like cake, which submits readily to the action of water and can be pulverized with the greatest ease. A restrainer thus made is better calculated to mix evenly with the plaster and its action is more uniform, prompt and reliable. In short, the difference between the composition of the two patents seems to be the difference between a partial and a complete success. The commercial and practical advantage of the 1889 product is proved by the testimony of masons and builders and its large and constantly increasing sales. It is hardly too much to say that it was the first actual commercial success. result may not have been broadly new, but that it is a better result produced in a better way is beyond question. It is true that a harsh interpretation of the 1887 patent can convert it into an anticipation, but there is no imperative reason for this illiberalism. If such an interpretation be sanctioned by the court the patentee will be impaled upon a sharp construction of heedlessly selected words and destroyed by his own verbiage—the Actæon of the patent law. If it can be avoided, It is plain that it is the use of hydrated lime this should not be. which makes the restrainer successful; it is plain that its use had not occurred to the patentee in 1887, for if it had he would have used it in preference to the comparatively worthless pulverized stone. pression "stone-like material" may include hydrated lime, but not necessarily so; indeed, it is a strained construction to include within the term "stone-like" the soft, amorphous, artificial substance with which "Limestone" would be within the earlier patthe later patent deals. ent. "lime" might be, but "hydrated lime" cannot be found there unless the patent is seen through unfriendly eyes. The direction to use white marble does not suggest the use of hydrated lime any more than a direction to use wood suggests the use of ashes. Hydrated lime is, indeed, one step further removed from marble than ashes is from wood. The improvement over the earlier patent is marked, and even though it be an improvement only, so that the 1889 restrainer infringes the 1887 patent, there is still room for invention. Cantrell v. Wallick, 117 U. S. 689, 6 Sup. Ct. 970. The finding of a material which produces a new or improved result, even though found by a process of exclusion, may support a patent. Celluloid Mfg. Co. v. American Zylonite Co., That the mere substitution of one material for another 35 Fed. 301. having the same general characteristics, is not invention has been affirmed by the supreme court in a long series of authorities from Hotchkiss v. Greenwood, 11 How. 248, to Brown v. District of Columbia, 130 U. S. 87, 9 Sup. Ct. 437. It will be found, however, on analysis, that they all deal with substitutions which were simple and obvious, involving no novelty in construction or anything substantially new in the resulting product. In each case the adaptability of the substituted material to do the work of the old material was apparent to the most inexperienced tyro; for example, iron for wood in a wagon reach, wood for metal or gutta-percha in chair seats, etc. other hand, the courts have said with the same unanimity that invention is involved where the substituted material possessed new and, theretofore, unknown properties which produce better results and save time, labor and money. In Celluloid Mfg. Co. v. Frederick Crane Chemical Co., 36 Fed. 110, Mr. Justice Bradley says,

"There is no rule of law that the substitution of one material for another is not patentable. In processes of manufacture, and in compositions of matter, such a substitution often effects material changes in the result either as to the product or the expense."

In Smith v. Vulcanite Co., 93 U. S. 486, the court, at page 494, say, of the invention,

"It is evident that this is much more than employing hard rubber to perform the functions that had been performed by other materials, such as gold, silver, tin, platinum, or gutta-percha. A new product was the result, differing from all that had preceded it, not merely in degree of usefulness and excellence, but differing in kind, having new uses and properties. \* \* \* We cannot resist the conviction that devising and forming such a manufacture by such a process and of such materials was invention. More was needed for it than simply mechanical judgment and good taste. \* \* \* The case of Hotchkiss v. Greenwood, 11 How. 248, does not decide that no use of one material in lieu of another in the formation of a manufacture can, in any case, amount to invention, or be the subject of a patent. If such a substitution involves a new mode of construction, or develops new uses and properties of the article formed, it may amount to invention. \* \* \* The result may be the production of an analogous but substantially different manufacture. \* \* \* If the result of the substituted material into an old process was patentable as an invention. \* \* \* These cases rest on the fact that a superior product has been the result of the substitution,—a product that has new capabilities and that performs new functions."

To the same effect are Magowan v. Packing Co., 141 U. S. 332, 12 Sup. Ct. 71; Wood-Finishing Co. v. Hooper, 5 Fed. 63; Dalton v. Nelson, 13 Blatchf. 357, Fed. Cas. No. 3,549; Potts v. Creager, 155 U. S. 597, 15 Sup. Ct. 194; Edison Electric Light Co. v. United States Electric Lighting Co., 3 C. C. A. 83, 52 Fed. 300; Perkins v. Lumber Co., 51 Fed. 286, 291.

As to the defendant Bronson infringement is established beyond a serious doubt. He was dealing in a restrainer having all the characteristics of the patented material. A sample of this restrainer was obtained at the defendant's place of business together with a circular evidently prepared by him. This circular has Bronson's name printed thereon as manager of the "Peerless Restrainer Works," and enumerates the merits of the restrainer which he offers to the public. The circular was "dictated by E. A. B." The sample was in the form of a dry powder, and when analyzed was found to contain the ingredients of the patented product. That it contained other nonessential ingredients is immaterial.

Regarding the defendant Anderson the proof of infringement is wholly insufficient. Bronson occupied Anderson's office at No. 63 Fifth avenue, and the latter at one time went so far as to investigate the value of the restrainer with a view to placing his son in the business. The report of the plasterer with whom he consulted being adverse to the plan, it was abandoned and his interest in the matter ceased, except that he helped Bronson to prepare a circular and assisted him in writing a few letters. Infringement is predicated solely of these acts. Proof that Anderson either made, used or sold the "Peerless Restrainer" is wholly absent. The argument for the complainants is based upon suspicion and inferences drawn from the fact that the two defendants occupied the same office. But infringement is a tort which

must be proved, it cannot rest wholly on conjecture. Electric Light Co. v. Kaelber, 76 Fed. 804. One may occupy the same room, or, indeed the same bed, with an infringer, and yet not be guilty of infringement. Infringement is not contagious. As to Anderson the bill must be dismissed, and as no good reason is discovered for making him a defendant it must be dismissed with costs.

The complainants are entitled to a decree for an injunction and an accounting against the defendant Bronson, with costs.

## THE DEL NORTE.

(District Court, D. Washington, N. D. November 29, 1898.)

1. MARITIME LIENS-STATE STATUTE-WORK OR MATERIALS FURNISHED CHARTERER.

The effect of the statute of Washington (2 Ballinger's Ann. Codes & St. § 5953; 1 Hill's Code, § 1678) which makes every contractor, subcontractor, builder, or person having charge in whole or in part of the construction, alteration, repair, or equipment of a vessel an agent of the owner for the purpose of contracting debts on the credit of the vessel, is to relieve persons who extend credit for work done or material furnished in that state for the alteration, repair, or equipment of a vessel, at the instance of a charterer having possession, from the necessity of making inquiry as to the authority given by the charter party; and, unless they have actual knowledge of its provisions, their right to hold the vessel liable is not affected thereby.

2. Same—Validity of State Statute—Vessels Engaged in Interstate or Foreign Commerce.

Local statutes subjecting vessels to liens for debts contracted in equipping and fitting them for service are not regarded as amendments of the general maritime law, and, in the absence of legislation by congress establishing a uniform rule, are upheld as applied to vessels engaged in interstate or foreign commerce, and owned in other states, as being in aid of commerce, by enabling such vessels to obtain credit for necessaries when away from their home port.

John E. Humphries, for libelants.

L. C. Gilman, for claimant.

Clarence S. Preston, J. H. Powell, C. E. Remsberg, and J. B. Metcalf, for interveners.

HANFORD, District Judge. The steamship Del Norte, of San Francisco, having been chartered by her owner, a corporation of California, to the Seattle & Alaska Transportation Company, a corporation of the state of Washington, was brought to Seattle to engage in the transportation of passengers and freight between Seattle and ports in Alaska; and, while at Seattle, the charterer caused additional structures of a temporary character to be put on her deck, so as to fit the vessel for carrying live stock, and furnish additional accommodations for passengers, and purchased supplies and materials necessary for the equipment of the vessel. The bills for said supplies, materials, and work have not been paid, and these suits are being prosecuted in rem by the suppliers, material men, and workmen, to enforce liens against the vessel which they claim for the amounts due to them respectively. The crew of the