for a box strap, composed of a metal band having a series of bosses of the same shape raised in the band on each side, equidistant from each other each way, so that, in splicing, those on the under piece will fit into those of the upper piece, and strengthen the joint; and has been heard on a motion for a preliminary injunction. The defendant admits making and selling box straps which clearly contain Cary's patented invention, although the bosses are shaped differently from those shown in the drawings, but brings forward patent No. 59,097, dated October 23, 1866, and granted to Henry C. Tweddle, for barrel hoops, with bosses to prevent them from slipping off; No. 171,882, dated January 4, 1876, and granted to Robert Stokes for a stud fastening for busks, having a head raised in the metal; No. 349,150, dated September 14, 1866, and granted to Ira S. Elkins, for a box strap having bosses with a depression in the center for the nail head; and No. 367,892, dated August 9, 1889, and granted to John K. Chase, for a box strap having single bosses fitting together to help make a joint; and various manufactures having raised bosses for various purposes, made before Cary's invention, against the validity of the plaintiff's patent.

While several of these things point in the direction of Cary's invention, none of them has his arrangement of a series of bosses in the metal equidistant from each other, so as to interlock whenever necessary in forming a joint; and his patent appears to have been acquiesced in by others engaged in that manufacture and trade until the defendant infringed.

The defendant insists, however, that a preliminary injunction should not be granted until the plaintiff's patent has been established by an adjudication. But this is not absolutely necessary; the right should be clear, but it may be made to appear so otherwise than by a judgment or decree. Blount v. Societe, etc., 3 C. C. A. 455, 53 Fed. 98. This invention is not great, but the right to it, such as it is, and the infringement, seem to be clear. An injunction will not deprive the defendant of anything else.

Motion granted.

COLUMBIA CHEMICAL WORKS v. RUTHERFORD et al.

(Circuit Court, E. D. New York. December 6, 1893.)

1. PATENTS-LIMITATION-INFRINGEMENT-AMMONIACAL DETERGENTS.

The fundamental idea of the Parsons patent, No. 267,455, for ammoniacal detergent compounds, is a thorough drying of the ammoniacal salts and of all other ingredients before they are mixed, so that no chemical action can take place whereby the ammonia will be set free; and there is no infringement if the ingredients are mixed in their ordinary state.

2. SAME-LIMITATION-DISCLAIMER.

The Parsons patent, No. 382,322, is limited by specific disclaimer to an ammoniacal detergent containing ammoniacal salts, saponaceous bodies, and alkali additional thereto, and is not infringed by a detergent which contains no additional alkali.

8. SAME-INVENTION.

The discovery of a method of utilizing the detergent properties of ammonia in a successful commercial compound,—a result long vainly sought by practical and scientific men,—the same being accomplished by the isolation of the ammoniacal salts from the alkaline bodies by a coating of protecting material, which prevents chemical action, constitutes invention.

4. SAME.

Patent No. 382,323, issued May 8, 1888, to Charles C. Parsons, for an ammoniacal detergent compound, is valid as to the first and third claims.

In Equity. Bill by the Columbia Chemical Works against James Rutherford and Almon W. Barnes for infringement of patents. Decree for complainant.

Edmund Wetmore and Edward Goldschmidt, for complainant. Rowland Cox, for defendants.

COXE, District Judge. This is an equity suit for infringement of three letters patent for ammoniacal detergent compounds and the process of making the same. These patents are numbered, respectively, 267,455, 382,322 and 382,323. They were all granted to Charles C. Parsons and are now owned by the complainant. Parsons sought to make a commercial detergent of which ammonia should be a component part. Ammonia, as is well known, is exceedingly volatile. Attempts had previously been made to use it for soap but without success. The difficulty was to make the ammonia stay. It was this problem which Parsons solved.

No. 267,455. In this patent, which is dated November 14, 1882, the patentee states, in substance, that in the known methods of preparing detergents, of which ammonia was a part, there were serious defects. The liquid compounds were expensive and bulky, and the loss of a considerable part of the ammonia always took place. In the solid detergents there was sufficient water to dissolve the salts of ammonia and thus produce a reaction between it and the alkali of the soap thus causing the ammonia to evaporate. These were the obstacles in the path of a successful ammoniacal detergent when Parsons commenced his experiments. His process, in brief, is to dry thoroughly, both the ammoniacal salt and the other substances with which it is to be compounded before mixing and to keep them entirely free from water during the process of mixing and until ready for use. As soon as this compound is brought into contact with water as a detergent it at once gives up its ammonia.

The claims alleged to be infringed are the third, fourth and fifth. They are as follows:

"(3) The process of preparing a permanent mixture of an ammoniacal salt with any caustic or carbonated alkali or alkaline earth, or any mixture of two or more of them, and a soap or other cleansing body, by making all the component parts of the mixture so free from water that no chemical action can take place between them until water is applied, substantially as set forth. (4) The above-described detergent compound, consisting of any carbonate or caustic alkali or alkaline earth, or any mixture of two or more of these, and an ammoniacal salt, the whole being so free from water that no chemical action will take place between the component parts until water is applied, substantially as set forth. (5) The combination of the above-described am moniacal detergent compound with soap or any other cleansing body, the whole being so free from water that no chemical action will take place between the component parts until water is applied, substantially as set forth,"

The other two patents are for improvements upon the first.

No. 382,322. This patent is dated May 8, 1888. The patentee ex plains that the difficulty with the former process was, first, that the ingredients were too expensive for ordinary use, and, second, if the mixture were exposed to a damp atmosphere for any considerable time the ammonia was lost through a decomposition of the ammoniacal salt. These objections are obviated and the preliminary dehydration of the ingredients is dispensed with by interposing between the grains of the ammoniacal salt and the alkali some protecting material to prevent or lessen contact between them. In this way chemical action and decomposition with resultant waste of ammonia is prevented. The protecting substance must be of such a nature that while on the one hand it will protect the ammoniacal salt during ordinary exposure it will on the other permit the ammonia to be set free during use. It may be applied directly, as a coating, either to the particles of salt or to the alkaline bodies, or to both. Heavy paraffine oil, resin oil, resinous varnish, glue, etc., are mentioned as suitable protecting substances. A satisfactory way of applying them is to reduce the protecting material to a liquid and stir the salt or the decomposing body, as the case may be, into the liquid until thoroughly coated. It is then taken out and dried.

The essential feature of the invention "is the isolation of the ammoniacal salt from the alkaline bodies in a soap by the use of a protecting coating applied as above described, by which means I secure the permanency of the ammonia in the detergent."

The claims of this patent which are involved are the second and fourth. They are:

"(2) A detergent compound containing an ammoniacal salt, one or more saponaceous bodies, and sufficient additional alkaline or equivalent substance or substances to set free the ammonia, in which compound the loss or waste of ammonia is prevented during manufacture and until use by a coating of protecting material placed between the granules or particles of the ammoniacal salt and the alkaline or other ingredients of the compound which might cause decomposition of said salt, substantially as set forth." "(4) A detergent compound containing a soap powder and ammoniacal salt and sufficient additional alkaline or equivalent substance or substances to set free the ammonia, in which compound the loss of ammonia is prevented during manufacture and until use by a coating of protecting material placed between the granules or particles of the ammoniacal salt and the alkaline or other ingredient of the compound which might cause decomposition of said salt, substantially as set forth."

No. 382,323. In the prior patent (No. 382,322) appears the following statement:

"I do not herein claim that part of my invention above described which relates to the production of a saponaceous detergent without additional alkali and embodying my invention."

Under the rulings of the patent office the patentee was required to file another application for the above-described feature and No. 382,323 was granted, May 8, 1888, covering this part of the invention only. The claims involved are the first and third. They are: "(1) A detergent compound containing an ammoniacal salt and one or more saponaceous bodies, in which compound the loss of ammonia is prevented during manufacture and until use by a coating of protecting material placed between the granules or particles of the ammoniacal salt and the saponaceous bodies, substantially as set forth." "(3) A detergent compound containing a soap powder and an ammoniacal salt, in which compound the loss of ammonia is prevented during manufacture and until use by a coating of protecting material placed between the granules or particles of the ammoniacal salt and the alkaline or other ingredients of the compound, which might cause decomposition of said salt, substantially as set forth."

The defenses are lack of novelty and invention, noninfringement and uncertainty of description.

Infringement of No. 267,455. Is this patent infringed? This question is surrounded with unusual embarrassment for the reason that after a careful study of the briefs I am unable to determine with exactness the position of counsel pro and con upon the subject. In the complainant's brief the infringement of the other two patents is treated under a separate head, but the infringement of this patent is not discussed except in a general way. It is true the brief contains the statement that the defendants admit infringement, but the references to the proof hardly sustain the asser-The complainant's expert clearly states his opinion upon tion. this subject in his preliminary statement, but it was based upon an assumed method of manufacture as he believed it to exist after an examination of the defendants' compound. When called in rebuttal, after the defendants' process had been elaborately described, he reiterated his former conclusion in a general way, but his attention was directed mainly to the other patents. I am unable to find anywhere in the record as clear an exposition of this subject as the other matters in controversy have received. In these circumstances it is not unlikely that in dealing with an abstruse and unfamiliar art the court may fall into error. It would certainly seem improbable, after the conceded defects in the method of the 1882 patent, that it should be adopted by any one in 1888. The patentee abandoned its use after a short and unsatisfactory His reasons for doing this are plainly set out in the later trial. In brief, the process would not accomplish what he patents. needed, it would not make a commercially successful ammoniacal Starting with this presumption we come to a more detergent. careful examination of the patent. The description is not entirely clear, but, if I understand it at all, the fundamental idea of the patent is the use of well-dried ingredients. Not one, or two, but all of the ingredients must be dried. One who mixes these substances in the condition in which they ordinarily exist does not use the process of the patent. It must be the ordinary condition plus the thorough drying. The language of the specification seems The patentee says: "I avoid these obvery clear on this point. jections by carefully and thoroughly drying both the ammoniacal salts and the other substances with which it is to be compounded, before mixing them." The description almost invariably alludes to the various substances as "well dried" or "thoroughly dried" and the claims speak of all the component parts as being so free

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from water that no chemical action can take place. That the dehydration of all the substances previous to mixing was an essential feature of this patent is fully recognized in the later patents. It is there specifically stated that this previous dehydration was a defect and was not necessary in the improved process. That it was necessary in the old process seems plain. It is also plain that the claims are not infringed unless all of the ingredients of the detergent are previously dried. If there is a failure to dry one of the ingredients there is no infringement.

Turning now to the proof we find the witness who is best acquainted with defendants' methods testifying as follows:

"Q. Do you dry or desiccate any of the ingredients you employ before using them? A. We do not dry any of them. Q. How about the ammoniacal salt, the muriate of ammonia: do you dry it by artificial means before using it? A. No, sir. We use it in exactly the same condition in which we get it."

The same thing, substantially, is sworn to by two other witnesses and it is not contradicted. I do not lose sight of the fact that it elsewhere appears that defendants' soap is prepared by a process which makes it thoroughly dry and that ammonia as now sold in the market is drier than in 1882; but, convinced as I am, that a broad construction is inadmissible, I am not satisfied that this patent has been infringed.

Infringement of 382,322. The disclaimer before quoted limits the claims of this patent to detergents other than saponaceous detergents. The latter are fully provided for in No. 382,323, but not in No. 382,322. It is manifest that the latter patent deals with a compound in which additional alkali is supplied as a separate ingredient. The claims do not cover, therefore, a saponaceous detergent to which no additional alkali has been supplied. As the defendants use only the alkali contained in their soap and do not use any additional alkali it is clear that they do not infringe the claims of No. 382,322.

The foregoing considerations leave to be considered only the validity and infringement of No. 382,323. The prior art shows two facts which can hardly be questioned. First. For years prior to this patent a large number of practical and scientific men had sought to utilize the detergent properties of ammonia in a success-Second. Parsons was the first to make ful commercial compound. That the soap powder produced by Parsons such a compound. was novel does not seem to be disputed, and in view of the repeated failures which preceded, it can hardly be said that its production did not involve invention. True, the component parts of this compound were all known, but this is true of many combinations. The prior art nowhere shows the ingredients of the patented detergent assembled as in the Parsons combination. He was the first to prevent the escape of ammonia from a detergent by interposing a coating between it and the other decomposing ingre-To this extent he accomplished a new result and he did dients. it in a manner never attempted before.

Do the defendants infringe? In the first place their ammonia

stays. What makes it stay? Upon the evidence in this cause is there any possible answer to this question except one-the use of a coating? Do the defendants suggest any other? According to their testimony, as before stated, they do not use the process of drying the ingredients pointed out in the 1882 patent. Even if they had done so it would not have prevented the escape of the ammonia. In these circumstances would not a chemist expect to find precisely what Prof. Chandler testifies, in unqualified terms, he did find, viz. a protecting coating? If the defendants' account of their method is entirely correct it appears that Prof. Chandler, basing his opinion solely upon his analysis, was mistaken as to the precise stage when the oily substance was applied. He thought it was before the ammoniacal salt was mixed with the soap; but whether before or at the same time can make no difference so long as the fact remains that the coating exists. I cannot doubt this fact without doubting Prof. Chandler's word supported as it seems to me by a strong presumption.

It follows that the complainant is entitled to a decree upon the first and third claims of No. 382,323 for an injunction and an accounting, but without costs.

THE JOHN G. STEVENS.¹

In re THE JOHN G. STEVENS.

(District Court, E. D. New York. September 13, 1893.)

MARITIME LIENS-PRIORITY-NEGLIGENT TOWAGE-SUPPLIES.

A lien for supplies, and a lien arising out of the neglect of some duty assumed by a voluntary agreement between the parties, are equal in point of merit, and priority will be given to that one which first accrued. Loud v. The R. S. Carter, 40 Fed. 331, distinguished.

In Admiralty. On application for distribution of proceeds.

Geo. A. Black, for Loud and others.

Alexander & Ash, for colibelants Gladwish and others. Wing, Shoudy & Putnam, for the J. G. Stevens.

BENEDICT, District Judge. This is a controversy in regard to priority, between Loud and others, as owners of the schooner Flint, and Gladwish, Moquin & Co., coal dealers, each having a lien upon the tug John G. Stevens. The tug having been sold under the order of this court, and the fund being insufficient to pay both the claims, the question arises as to which of these parties is entitled to be paid first out of the fund in court. The claim of Loud and others, owners of the schooner Flint, arises out of injuries to the schooner Flint caused by negligence on the part of the John G. Stevens while performing a contract to safely tow the schooner Flint. The claim of Gladwish, Moquin & Co. arises out of coal furnished by them

¹ Reported by E. G. Benedict, Esq., of the New York bar.