BUCKAN AND OTHERS *V.* MCKESSON AND OTHERS.

THE SAME V. HENRY AND OTHERS.

Circuit Court, S. D. New York. December 4, 1880.

- SOAP INCORPORATING CARBOLIC ACID—SEVERAL METHODS OF INCORPORATION—INFRINGEMENT—PROOF.
- Re-issued letters patent No. 5,007, for an "improvement in the manufacture of soap," consisting "in a new soap compound, produced by incorporating carbolic and cresylic acids, either one or both, with ordinary soap," claimed—"(1) A soap made by incorporating carbolic acid, or its equivalent, with ordinary soap, substantially as specified; (2) the combination of carbolic acid, or its equivalent, with the oils and fats to be used in the manufacture of soap; (3) the combination of carbolic acid, or its equivalent, with alkaline solutions to be used in the manufacture of soap." Held, that in order to show infringement it was not necessary to show that some one of the three methods of incorporation was employed, or that any particular method resulting in a chemical union was used; but that it was sufficient if the soap had the carbolic acid in the body of it, in such a way that the useful properties of the carbolic acid would be availed of in the use of the soap, while the useful properties of the soap, as a soap, were at the same time availed of.
- 2. SAME—INCORPORATION OF PURER ACID—APPLICATION TO NEW PURPOSES—INVENTION.

Held, further, that the incorporation in such compound of a purer and more concentrated acid than existed and was used at the time of the prior production of a similar compound, produced by substantially the same means, whereby the later compound was rendered applicable to new purposes, did not constitute invention.—[ED.

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- J. P. Fitch, for plaintiffs.
- S. A. Duncan, for defendants.

BLATCHFORD, C. J. These suits are brought for the infringement of re-issued letters patent No. 5,007, granted to Isabella Eames and Charles A. Seely, July 30, 1872, for an "improvement in the manufacture of soap," the original patent having been granted to Charles J. Eames and Charles A. Seely, May 28, 1867. The specification of the re-issue says that the invention is "a new and improved composition for soap." It proceeds: "The nature of our invention consists in a new soap compound, produced by incorporating carbolic and cresylic acids, either one or both, with ordinary soap. These substances are well known for their useful properties, and we have found that, when combined with soap, the detergent value of the soap is improved, and the properties of the acids are not masked or destroyed. To enable others skilled in the art to make and use our invention we proceed to describe it in detail. By soap we mean any of the compounds of alkali with oil or fat which are known and used in the arts under that name. Our invention is applicable to all kinds of ordinary detergent soap, and to several saponaceous compounds prepared for medicinal use. We employ one of the following ways of incorporating carbolic acid and cresylic acid with the soap: *First*, the acid or acids is dissolved in the alkaline solution before the addition of fat; second, the acids are dissolved in the melted fat; or, third, the acids are mixed in with the finished soap by means of crutching or other mechanical device. From the nature of the case we do not limit ourselves to any specific proportions of the carbolic and cresylic acids to the soap. For a toilet soap, five to fifty drops of the acid to the pound of soap will be found to give satisfactory effects, while as much as ten to twentyfive per cent. of acid may be used with other soaps. We are aware that gas tar and the dead oil of gas tar, containing a small proportion of carbolic acid, have been made into emulsions of a somewhat saponaceous character by means of alkalies and saponifiable fats; and we are also aware that the dead oil of gas tar was formerly sometimes known under 102 the name of crude carbolic acid; but the mixtures so made did not owe their efficiency to the small proportion of carbolic acid contained in them, and they were impracticable for the purposes to which soaps are applied. We therefore disclaim all such mixtures. By carbolic acid and cresylic acid we mean the chemical products known under the names respectively of phenol or phenylic alcohol, and cressol or cresylic alcohol."

The claims are as follows: "(1) A soap made by incorporating carbolic acid, or its equivalent, with ordinary soap, substantially as above specified. (2) The combination of carbolic acid, or its equivalent, with the oils and fats to be used in the manufacture of soap. (3) The combination of carbolic acid, or its equivalent, with alkaline solutions to be used in the manufacture of soap." The persons who were the exclusive owners of the re-issued patent on the third of December, 1879, did on that day, with the consent of the persons who were then the owners of the exclusive right under the patent for the United States east and south-east of the Rocky mountains, file a disclaimer disclaiming the words: "and to several saponaceous compounds prepared for immediate use."

It is claimed that the defendants have infringed the first claim of the patent by selling a soap made by incorporating carbolic acid with ordinary soap. The plaintiffs' specification is not limited to a chemical incorporation of the acid as distinguished from a mechanical incorporation. It describes three ways of making the incorporation, in order to show how the invention is to be practically carried out. But, in order to show infringement, it is not necessary to show that some one of those three methods of incorporation was employed, or that any particular method resulting in a chemical union was used. It is sufficient if the soap has the carbolic acid in the body of it, in such way that the useful properties of the carbolic acid can be availed

of in the use of the soap, while the useful properties of the soap, as a soap, are at the same time availed of. The defendants, in selling the soaps they sold, represented them as containing 10 per cent. of carbolic acid, 103 by printed matter on the boxes enveloping them. This fact, with the affirmative testimony as to their containing carbolic acid, is sufficient to establish the fact, although by the lapse of time and by exposure they may, at a certain date, have so parted with their carbolic acid as to make to impossible appreciably to recognize its presence.

The specification of the patent states that the "new soap compound," which is the invention, is made by incorporating the acid with "ordinary soap." It then defines the word "soap," as used in the specification, to mean "any of the compounds of alkali with oil or fat which are known and used in the arts under that name." It also says that the invention is "applicable to all kinds of ordinary detergent soap," and that, when the acid is combined with soap, the detergent value of the soap is improved, while the properties of the acid are not masked or destroyed. It says that the acids named are well known for their useful properties, but it does not specify the properties. It also speaks of "satisfactory effects," but it does not state what effects are referred to other than such as are elsewhere mentioned. A "detergent" soap is a cleansing soap. "Detergent" means "cleansing." It is the nature of a soap to be detergent or cleansing. If the article is a soap, it is detergent. If it is not detergent, it is not a soap. Whatever is a soap, is a detergent soap.

The defendants contend that the patented invention covered by the first claim of the patent existed before and was described in a patent granted in England to Alexander McDougall, No. 2,510, dated October 15, 1860, and sealed April 12, 1861. The provisional specification, deposited October 15, 1860, states the invention to be for "improvements in materials or

composition for destroying vermin on sheep and other animals, and for protecting them therefrom," and says: "My invention consists in the use of heavy oil of tar or dead oil, or crude carbolic acid, as it is sometimes called, or creosote, obtained in the destructive distillation of carbonaceous substances. These materials I treat with an alkali, and add a saponifiable fatty substance."

The full specification, filed April 15, 1861, says: "My invention 104 consists in the use of the heavy oil of tar or dead oil, or crude carbolic acid, as it is sometimes called, or creosote, obtained in the destructive distillation of carbonaceous substances. These materials I treat with an alkali, and add a saponifiable fatty substance. And, in order that my invention may be fully understood, I will proceed to describe a method by which I carry the same into practical operation. I take crude carbolic acid, or heavy oil of tar, or other products obtained from the distillation of tar, which, like those mentioned, have a greater specific gravity and a higher boiling point than water, and act upon it with caustic soda or potash, so as to render it soluble or mixable with water. This mixture is heated (say to about the boiling point of water) and agitated, so that all the parts may be equally acted upon. I then add to it fat, tallow, or other saponifiable substance, and give it the consistency of a soft paste, in which condition it is suitable for use. The proportions may be varied, but those I prefer are two parts by weight of the carbolic acid, one part by weight of caustic soda of 50 deg. Twaddle, and one part by weight of tallow, fat, or other saponifiable substance. The composition thus prepared, if not to be used for salving, may be dissolved in water and used in a bath, in which the sheep or other animals are to be dipped, or it may be used by 'pouring' or otherwise, as is well known to those acquainted with the management of stock requiring such treatment." The claims are "Firstly, the use of carbolic acid in the preparation of materials or compositions for destroying vermin on sheep and other animals, and for protecting them therefrom; secondly, the use of alkalies and tallow, or other saponifiable substance, in combination with the above products, when used for the purposes above set forth."

The proper interpretation of the McDougall specification seems to be that he speaks of two substances. One is the heavy oil of tar, which is also called dead oil and is sometimes called crude carbolic acid. The other is creosote, obtained in the destructive distillation of carbonaceous substances. He uses an alkali, such as caustic soda or potash. He also uses saponifiable fat or saponifiable tallow, or other saponifiable substance; that is, a greasy substance, which, with the alkali, will saponify or make soap. He acts upon the acid or creosote with the alkali; that is, by the alkali. The acid or creosote is a liquid, and the alkali is to be put into it so as to act upon it, the action being to render it soluble or mixable with water. The mixture of acid and alkali is to be mixed with water. This mixture is to be heated and agitated so that all the parts of it may act equally upon one another. Then the saponifiable fat is to be added. Saponification is to be effected, and the resulting substance is to have the consistency of a soft paste when completed, and is to be a substance which will be dissolved in water. One of the methods of the plaintiffs' patent is to dissolve the acid in an alkaline solution before fat is added. A mixture is thus made of acid, alkali, and water, the water being first mixed with the alkali and dissolving it, and then the alkaline solution dissolving the acid. McDougall makes a mixture of acid, alkali, and water before adding fat, by first putting together the acid and the alkali, and then adding the water. The two methods seem to be the same, so far as dissolving the acid before adding fat is concerned. The language of McDougall indicates that he regarded the carbolic acid which existed in the heavy oil of tar, or in the creosote, or in the analogous products obtained from the distillation of tar, as the efficient agent, the use of which he was availing himself of by the use of those substances. His first claim is to the use of "carbolic acid" in preparing his composition to destroy vermin on animals. Carbolic acid did exist in the substances he names. As pure carbolic acid as that which existed when Seely and Eames made their invention, for which they took their patent in 1867, did not exist when McDougall took his patent in 1860. But the evidence shows that Ure's Dictionary, a standard English work, published in 1860, says that the "creosote of commerce appears to consist of a mixture of carbolic and cresylic acids;" and that, "if only that portion be received which distills at the temperature given by Reichenbach as the boiling point of creosote, it will, if prepared from coal oil, consist almost entirely of cresylic 106 acid." The same work says: "Commercial coal creosote consists almost entirely of cresylic acid." Although the crude carbolic acid or the creosote directed by McDougall to be used did not contain carbolic or cresylic acid as pure or as concentrated as it was afterwards made, there was no invention in using the purer article, provided the prior compound was a true soap, developing the properties of the acids referred to. The advance was only one of degree, so far as the use of the acids was concerned.

The specification of the plaintiffs' patent is not limited to hard soap or to soft soap. It extends to any true soap, made of a compound of alkali with oil or fat, and known and used in the arts under the name of soap. In working out the process of McDougall, and producing the article which such process will produce, a soap is to be looked for. No other conclusion can be drawn from the use of the word "saponifiable" by McDougall. Professor Morton testifies that in carrying

out McDougall's invention, in exact accordance with his directions, a soap is necessarily produced; and that the efficiency, for the purpose named by McDougall, of the compound to be produced under his patent, is essentially due to the carbolic and crysilic acids contained in the crude carbolic acid or dead oil or other equivalent substance employed, because those are the only substances present in any notable quantity in dead oil, which are known to have properties sought for by McDougall in his preparation; that is, the power of destroying those low forms of animal and vegetable life which are injurious to sheep. This evidence is not overborne by any produced on the part of the plaintiffs.

It is satisfactorily shown that by the use of McDougall's formula, as he gives it, employing the "dead oil" he names and caustic soda, a true soap results, in the shape of a soft paste, which, by keeping, becomes a hard soap. It so results, whether the heat is continued to be applied after the fat is added or not. Any one, in practicing McDougall's process, is entitled to use heat and agitation, as used at that time, in saponifying by using alkali and fat, quite as much as in practicing the plaintiffs' process under their patent. The plaintiffs' 107 specification says nothing about using heat at all, or about agitation, except as heat and agitation are implied by the use of such expressions as the specification contains. McDougall speaks of heat and agitation, and acting equally upon all the parts of the mixture, before the fat is added. Then the language is such as to imply necessarily the use, after the fat is added, of such means as were then well-understood means to saponify and to produce an article having the consistency of a soft paste. Heat and agitation were such means. If potash, which McDougall names, as an alkali, be used, a permanently soft soap results. The article resulting from McDougall's process is a soap, whether, as a soft soap, it be used as a salve for animals, or be dissolved in water and be used as a bath for animals, or, as a hard soap, be used as hard soaps are used.

The part of the specification of the plaintiffs' patent which disclaims certain mixtures has not been overlooked. It refers to those mixtures as having in them gas tar and the dead oil of gas tar, containing a small proportion of carbolic acid, and to the dead oil of gas tar as having been formerly sometimes known under the name of crude carbolic acid; and it states, as reasons for disclaiming such mixtures, that they did not owe their efficiency to the small proportion of carbolic acid contained in them, and that they were impracticable for the purposes to which soaps are applied. These reasons are shown by the evidence to be unsound, as applied to McDougall's mixtures. The carbolic acid in them was efficient, and it was efficient to the extent to which it existed in them, and they were soaps. They were not impracticable for the purposes to which soaps were then applied. Soaps made with the purer carbolic acid which existed in 1867 may be applicable to purposes to which soaps made with less pure carbolic acid cannot be applied, but that shows only a difference in degree and not invention.

The bill is dismissed with costs.

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