

CELLULOID MANUF'G CO. ET AL. V. AMERICAN ZYLONITE CO. ET AL.  
v.35F, no.6-27

Circuit Court, S. D. New York.

June 26, 1888.

1. PATENTS FOR INVENTIONS—NOVELTY—CELLULOID COLLARS AND CUFFS.

Letters patent No. 200,939, granted to Albert A. Sanborn, Charles O. Kanouse, and Rufus H. Sanborn, March 5, 1878, describe a fabric for collars and cuffs having outer sheets or layers of celluloid and an interlining of textile or fibrous materials. Parkes (English patent No. 2,359, of 1855) made sheets of collodion, (gun-cotton dissolved in alcohol,) and also cemented together sheets of different substances, as alternate sheets of collodion and cloth. But as soon as the solvents were evaporated, the collodion became brittle and flaky, and was useless as a material for collars and cuffs. In the Ray & Taylor United States patent No. 48,239, for a paper collar or cuff enameled with a composition of collodion and gelatine, the surface of collodion is made to adhere to paper by means of an intervening layer of gelatine, but is not substantial, liable to unevenness, and to have air-bubbles, and to be imperfectly attached to the paper, and is not water-proof. *Held*, that the Sanborn patent' is not void for want of novelty.

2. SAME—INVENTION.

Such patent being for a new material, and an original invention, and not for a collar, the principle of *Gardner v. Here*, 118 U. S. 180, 6 Sup. Ct. Rep. 1027, that a patent cannot be taken for an old article when made for the first time out of an Old material, merely because the idea of its suitability has occurred, has no application.

3. SAME.

A sheet of celluloid being of itself unsuitable for collars and cuffs, and there having been no previous knowledge that its combination with an interlining would render it suitable for such purpose, the fabric is not merely a new article of commerce without invention.

4. SAME—INFRINGEMENT.

Upon one side of a fabric of two layers of muslin with an intervening layer of paper, furnished by one defendant, the other defendant attached a layer of zylonite, and returned it to the first, with knowledge that it was to be made into collars and cuffs. The latter then cut out the blanks somewhat larger than the finished article, and turned over the fabric at the edges, having cut away the muslin surface so as to make the edge thinner. The edges are secured with paste, and thus two outer sheets of zylonite with an interlining of muslin and paper are produced. Defendants claim that they simply make a collar by turning a hem upon an unpatented fabric. *Held*, an infringement. Following 30 Fed. Rep. 437.

In Equity.

Bill by the Celluloid Manufacturing Company and the Celluloid Novelty Company against the American Zylonite Company, the Standard Collar Company, and the Taylor & Tapley Manufacturing Company, to

restrain the infringement of a patent. The last-named defendant was not served.

*Frederic H. Betts and J. E. Hindon Hyde*, for plaintiffs.

*Welmore & Jenner*, for the Standard Collar Company.

*Horace M. Ruggles*, for the American Zylonite Company.

SHIPMAN, J. This is a bill in equity to restrain the defendants from the alleged joint infringement of letters patent No. 200,939, granted to Albert A. Sanborn, Charles O. Kanouse, and Rufus H. Sanborn, March 5, 1878, for an improved fabric for collars and cuffs. The novelty of the fabric, and the validity of the patent, were sustained by Judge COXE in the case of *Manufacturing Co. v. Chrolithion Collar & Cuff Co.*, which was tried in this district in 1885. The patent, and the facts which the court found in regard to the state of the art at the date of the invention, are contained in the opinions which were given in that case. 23 Fed. Rep. 397, 25 Fed. Rep. 482. The facts which constitute the alleged infringement in this case are given in the opinion of the court upon a motion for an injunction *pendente lite*. 30 Fed. Rep. 437. The history of the progressive discovery of the art of making celluloid or zylonite from and after the date of Spill's improvement, in 1869, upon Parkes' previous inventions, is contained in the opinions of this court in *Manufacturing Co. v. Zylonite Co.* 26 Fed. Rep. 692, 28 Fed. Rep. 195. So much has been heretofore written upon this patent, and upon the patents relative to the manufacture of celluloid, that the duty of explaining at length the character and position of the patent in suit is not imperative; but it is insisted that the record contains pre-existing patents and facts which were not in the *Chrolithion Case*, and the knowledge of which ought to modify or change the result which Judge COXE reached. It is therefore necessary to consider with care the points which are claimed to have been presented with new force upon this hearing; The patented article is succinctly described in the claim, as follows: "A fabric for collars and cuffs or other similar articles, having outer sheets or layers of celluloid, and an interlining of textile or fibrous material, substantially as and for the purposes specified." The defendants deny both the novelty and patentability of the fabric and the infringement of the patent. In reply to the question, "In which single one of the defendants' exhibits, patents, or publications do you find, in your opinion, a fabric for collars and cuffs, having outer sheets or layers of celluloid and an interlining of textile or fibrous material?" the very competent expert for the defendant, answered, "Parkes' English patent, No. 2,359, of 1855," and further said that it was the only one which contained the precise thing of the Sanborn patent, The services which Mr. Parkes rendered in the development of pyroxyline were great and important, but they are not contained in the patent of 1855. The object of the second part of this patent was to employ collodion or its compounds for manufacturing purposes. Collodion was and is gun-cotton dissolved in alcohol and ether, and Parkes was endeavoring to utilize it for other than photographic and surgical purpos-

es. He says in the patent that he made sheets or other forms by using as little of the solvent

as possible; so as to obtain a stiff, plastic compound, which maybe colored or combined with other substances, and this he worked up with any suitable machinery, until well blended or incorporated, when it may be rolled or pressed into sheets or other forms. He further says that he made sheets by pouring the solution upon glass plates, and, if required, several coats of collodion or dissimilar substances could be used to strengthen the sheet, and, also, that he manufactured thick sheets of a compound nature by cementing several sheets together, which may be of dissimilar substances,—thus, a sheet of collodion, then a sheet of cloth, then another sheet of collodion; or he saturated felted goods with his preparation of gun-cotton. The use of the word “sheet” by Parkes has been the cause of much of the confusion that seems to exist upon the subject of novelty, inasmuch as it is assumed that this sheet of Parkes was “Parkesine,” and furthermore, was substantially the same thing which now instantly presents itself to the mind when the term a sheet of celluloid or of zylonite is employed, whereas Parkes’ sheet of 1855 was not the thing which he afterwards manufactured, and which was known as “Parkesine,” and was wrought, like celluloid, into a variety of articles, and had no resemblance to the sheet which is now known by the name of “celluloid.” His sheet of dry collodion, after the solvents had evaporated, was a different thing from either Parkesine or the subsequent pyroxyline compounds. As soon as the solvents which help to form a film of collodion upon a plate of glass have evaporated; the collodion crumples up, is full of bubbles, and becomes a distorted, brittle, and useless piece of pyroxyline. The plastic mass which Parkes desired to have remain, after dissolving the gun-cotton in a small portion of the solvent, cannot be successfully rolled into sheets; for as soon as the solvents have evaporated, the residue becomes flaky and without coherence, and breaks to pieces under pressure. The compound sheet which he mentions, whether it is made from his rolled sheets or from his collodion films, is a thick product, which contains between the layers of cloth dry, brittle pyroxyline, and is useless for the purposes which are now under discussion.

The defendants also find the patented fabric outlined or prefigured in sundry patents, of which the Ray & Taylor United States patent No. 48,239 is the one upon which they most rely, which is the best of its class, and was not in the *Chrolithion Case*. The patent is for a paper collar or cuff, when enameled with a composition of collodion and gelatine. The collodion is flowed over glass previously treated with nitric acid, and then left until dry. The gelatine is dissolved in water, and poured over this substance. Sheets of paper, thoroughly moistened, are placed upon the top of the mass, which is caused to adhere to the paper by the gelatine, and, when dry, can be removed with the paper from the glass. The enameled paper is then manufactured into collars and cuffs. The object of the enamel is to resist the action of water or perspiration, and to make a collar which can be quickly cleansed, without being sent to the laundry. Recent specimens of such a fabric

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were presented in evidence, which had a good appearance, and can occasionally be made for exhibition; but the fabric, or any other fabric merely having a film of collodion

upon its surface, is a failure for water-proof or for wearing-apparel purposes. The surface will rumple and crack, its wearing capacities are unsubstantial, it is liable to, cover the paper unevenly, to have minute air bubbles, and not to be perfectly attached to the paper. This patent and its predecessors, such as the Granger, the Rollason, and the Berard patents, were a groping after a fabric, having a water-proof covering of collodion, which was never found, because the peculiarities of a dried film of collodion will not make a permanent and substantial surface which can endure wear.

Upon the patentability of the invention, the defendants invoke the principle of *Gardner v. Herz*, 118 U. S. 180, 6 Sup. Ct. Rep. 1027, that a patent cannot be taken for an old article when made for the first time but of an old material, merely because the idea has occurred that it would be a good thing to make the article out of that material. This patent is not for a collar, but for a new material from which to make a collar, and the decision in *Gardner v. Herz* has no application if the material, having peculiar, novel, and useful qualities, was the original invention of the patentee.

It is next, and with more confidence, urged that it is simply a new article of commerce, and is without invention, because, when a sufficiently thin sheet of collodion was produced in the course of the development the manufacture of that material, its adaptation to the requirements of a collar was well known or obvious. This alleged fact is not self-evident, but requires proof, and the testimony does not support the defendants' position. The efforts of inventors had long been ineffectually directed to find an elastic fabric which should make a water-proof collar having continuously the appearance of freshly starched linen, which should preserve its whiteness, smoothness, and neatness without being sent to the laundry, and be capable of continuous, prolonged, and pleasant use. The problem was by no means analogous to that which was the subject of study in the alleged invention which is described in *Collar Co. v. Van Dusen*, 23 Wall. 563. It was not simply to make a suitably thin sheet of celluloid, and, when, the manufacturer's skill had produced the sheet, the invention was accomplished; because neither previous knowledge nor a train of reasoning from known facts showed that such a sheet could be so combined with anything as to produce the required fabric. Experiment proved that, the thin sheet, was not itself such a fabric, and no existing knowledge declared or pointed out that its combination with an interlining would make a fabric which would not refuse to regain its shape and proper stiffness, both when worn and when not worn, or to endure continuous wear and repeated cleansing and to preserve its untarnished whiteness, and therefore would not be a failure. The patentees, conceived the idea that the desired fabric could be furnished by the use of the new thin sheets of celluloid. It is not probable that they intuitively knew that the thing could be done, but they wrought out and proved the truth of the idea, which they had taken hold of, by patient experiments with their materials; and in that way, they created the fabric.

The last question, and the one of most difficulty, is that of infringement. Upon one side of a fabric of two layers of muslin with an interposed layer of paper, which is furnished by the Taylor & Tapley Company, the Zylonite Company attached a layer of zylonite, and sends it back to the Taylor & Tapley Company, with knowledge that it is to be made into collars and cuffs, and the method of its manufacture. The Taylor & Tapley Company then cuts out the blanks somewhat larger; than the finished article, and turns over the fabric at the edges, having cut away the muslin surface, so as to make the edge thinner. There is a surface of zylonite upon both sides at all the edges of the collar, except at the neck-band. The edges are made secure with paste. Thus, double or two outer sheets of zylonite are produced, with an interlining of muslin and paper. The defendants say that they simply make a collar by turning a hem upon an unpatented fabric. The question in the case is whether the unpatented fabric has been intentionally changed into a patented one, and not whether the change has been affected by a method which has long been familiar to the seamstress. I can add, upon, this point, nothing to the suggestions which were made in 30 Fed. Rep. 437, and which led me, upon the motion for preliminary injunction, to the conclusion that the defendants infringe. Let there be a decree in favor of the plaintiffs for an injunction and for an accounting.