

SMITH v. NICHOLS.

[Holmes, 172; 6 Fish. Pat. Cas. 61; 2 O. G. 649.]¹

Circuit Court, D. Massachusetts. Oct. 18, 1872.²

PATENTS—BETTER ARTICLE—HOW
PRODUCED—NOVELTY—ELASTIC FABRICS.

1. The fact that an article is better and more useful in the trade than those previously in use is evidence of novelty; but if the superiority is attained by the application of known means, in a known way, to produce a known result, though a better one, the novelty required by the patent law is wanting.

[Cited in *Boykin v. Baker*, 9 Fed. 704.]

2. Woven elastic fabrics of various degrees of elasticity being old; and the way to increase or diminish the elasticity, by increasing or diminishing the relative proportion of elastic strands to the other threads, being known; a fabric differing from those previously used only in being more tightly woven, and more elastic by reason of having a greater proportion of elastic strands, is not patentable as a new article of manufacture.

[Cited in *Cone v. Morgan Envelope Co.*, Case No. 3,096.]

[Final hearing on pleading and proofs. Suit brought [by William Smith against Nathan Nichols] upon letters patent [No. 9,653] for “improvement in corded elastic fabrics,” granted to William Smith, April 5, 1853, and reissued June 30, 1868 [No. 3,014]. A suit upon the same patent is reported in the case of *Smith v. Elliott* [Case No. 13,041]. The patent was subsequently modified by a disclaimer filed May, 1872.]³

T. A. Jenckes, for complainant.

B. R. Curtis and Benjamin Dean, for defendant.

LOWELL, District Judge. The complainant took out a patent in 1853, in which the claim was for a process of weaving by the combination of central stationary warps with movable warps, and with weft threads passed simultaneously through the two sheds by means of two shuttles. The specification described a loom, and the mode of using it, and declared that

the process was specially useful where the stationary warps were elastic. Whether the patent was for a loom or a process is not important in this case. The evidence tends to show that a fabric was produced by the complainant which was highly elastic and remarkably well adapted to gores for boots and shoes, and that it has taken the place of all other cloths for this purpose. It is further shown that a cloth of like quality in most respects may be made on looms which have not the distinguishing features of the plaintiff's loom. The complainant, however, maintains that he not only improved the process of weaving a known fabric, but invented a new fabric; and his patent, after having been extended in 1867, was reissued in 1868, in three parts,—one for the loom, one for the fabric, and one for the process. The bill is founded on an alleged infringement of the second of these parts,—division B, reissue No. 3,014, dated June 30, 1868, for the fabric; and it is alleged that the defendant makes and sells this fabric. It is not contended that he uses the loom or the process, and it is not denied that he does sell the fabric. The specification of division B describes the loom substantially as in the original patent, and the fabric much more minutely as a corded fabric, in which the central cords or cord warps are griped firmly between two weft threads, each passing half way round the cord, one above and the other below, and the cords are separated from each other by the interweaving of warp threads and weft threads in strips of cloth between the cords only, and not over and under the cords, so that the cords are covered by weft threads only. The claim is for the corded fabric, substantially as described, in which the cords are elastic, and are held between the upper and under weft threads, and are separated from each other by the interweaving of the upper and under weft threads with the warp threads in the spaces between the cords, and only there, substantially as above shown.

The bill was filed November 19, 1868. In January, 1870, the patentee filed a disclaimer of any fabric in which the warp and weft threads are so interwoven between the elastic cords as to form strips of shirred cloth between and by the contraction of the elastic cords, declaring that in his fabric the warp threads are interwoven with the weft threads only for the purpose of binding the latter tightly about the elastic cords. In May, 1872, the complainant filed a second disclaimer of any fabric in which the weft threads are so interwoven with the warp threads which lie between the elastic cords that the former are not brought half way round each of said cords so as to gripe them in such a way as not to permit said elastic cords to slip through between said weft threads in case said cords are cut crosswise or bias. The defendants maintain that the reissue is for a different invention from that originally described, and so is void; and that the fabric is not new. The evidence certainly tends to show, that, until about the time of the reissue, the patentee said to several persons, at different times, that his patent was for the union web, which is faced on both sides, or for the mode of making it; and this is confirmed by the language of his 613 first patent, in which he says that the object of his invention is to furnish means for weaving fabrics formed by a centre warp which is enclosed by a fabric formed on each side of it by filling from two shuttles, one passing above and the other below the centre warp. But if we assume that after making his loom he discovered that the cloth made by it was really a new article, we are not prepared to say that he might not by a reissue enlarge his claim to cover the new article. On this point we give no opinion.

Upon the question of novelty the evidence is that an elastic fabric had been well known for many years before the date of the patent, in which strands or cords of India-rubber were used to give elasticity,

and cotton was woven between these strands in such a way that the latter were covered by weft threads only. This article was used in making suspenders, and kept the market for a long time. In 1844 Mr. Hotchkiss, a manufacturer of suspenders, in making application for a patent, described as his invention a fabric made with cords of India rubber from one-eighth to one-half an inch apart, connected with a filling of cotton, and he distinguished this cloth from others before known by the cords being larger and farther apart in his fabric. The description does not show that the cords were covered by weft threads only; but Hotchkiss swears that the fact was so, and a sample of the cloth is produced from the patent office which confirms it; and, if further confirmation is needed, it is found in the testimony of other witnesses concerning the suspender webbing generally, and the plaintiff's first disclaimer, which was filed soon after these things were put in proof, is of itself enough for the purposes of this case. This application of Hotchkiss was very properly rejected by the patent office, because increasing the size and distance apart of the India-rubber cords was not considered to be invention in the sense of the law. This evidence, and that of other witnesses, establishes that cloth for suspenders was made with cords of India-rubber, covered with weft threads only, the cords being of variable sizes, and placed at variable distances apart, according to the degree of elasticity and other properties that were desired.

Taking this evidence and the plaintiff's disclaimers into consideration, he appears now to claim that his fabric differs from others, known before, by being more tightly woven, so that it can be cut crosswise without danger of the cords slipping back or withdrawing; and by having the cords so near together that they form a greater part of the bulk of the cloth. Now it does not appear to us that these differences

make up a patentable improvement. The fact that an article is better and more useful in the trade is evidence of novelty; but if the superiority is attained by the application of known means, in a known way, and to produce a known result, though a better one, the novelty required by the patent law is wanting. Looking to the evidence, we find a large number of witnesses called to prove that the old webbing used for suspenders would not be suitable for shoe-goring; but when we analyze their testimony, we find, besides mere difference of color and style of finish, that the real objection is the want of sufficient elasticity. Many of the dealers give this as the only defect, and most of the others say that it is wrong in color, width, and elasticity. It is plain that color and width are merely questions of contention, and we think it not less so that the greater elasticity of the complainant's fabric will not support his claim. The old fabrics were of various degrees of elasticity, and the way to increase or diminish the elasticity was perfectly well known; namely, by increasing or diminishing the proportion of the elastic cords. Any manufacturer could have produced an article with greater or less elasticity, as the needs of the trade might require, up to the maximum which was possible to be attained with native India-rubber, the article then in use for the elastic strands. Beyond that maximum it is now easy to go by using vulcanized India-rubber; but this article was discovered and its uses were made known by Goodyear several years before the date of the plaintiff's first patent, and had become a well-known substitute for the native India-rubber in many combinations, so that if the plaintiff had described or claimed the use of the vulcanized gum for his elastic cords, which he does not, it is not probable that he could have supported a claim to invention by that substitution.

The other ground on which the second disclaimer distinguishes the old from the new article is, that in the latter the cords are so firmly grasped by the weft threads, each of which passes half way round them, that the cords can be cut crosswise without injury to the fabric by the withdrawing of the cords. I have read the depositions of all the witnesses who speak of the unsuitableness of the old webbing to the use of the shoe trade, and have found only one of them, William A. Brown, who is asked a question on this point; and he is of opinion that the old fabric would not be imperfect in this particular. "Int. 5. If those goods were sufficiently elastic, but made after the construction of these exhibits, where they were to be cut bias, as for gores to congress boots, would they not be of too loose a texture to hold the stitching when inserted in a boot?" "Ans. If things were different to what they are, it would be very difficult to tell what they would be. To that question I would answer, no." The fair result of the whole evidence is very strongly to prove that the old webbing was wanting only in elasticity, and that the amount of that quality was variable, and could be increased or diminished by the manufacturer. But granting 614 that the old cloth was not so tightly woven that it could be cut crosswise without injury (which we do not think the evidence warrants us in granting), that result, too, would seem to be within the knowledge of the manufacturer. Corded elastic fabrics were made in which the same mode of weaving was employed as in the plaintiff's, and making a closer texture by the old means,—that is, by drawing the weft threads tighter round the cords,—must surely be a matter of construction only. Especially is this seen to be true when we remember that the cords were of various sizes, since the firmness with which they would be gripped by the weft threads would depend much on the relative size of the cords and weft threads.

For my own part, when it is admitted by the first disclaimer that elastic corded fabrics like the complainant's, excepting that they had strips of shirred cloth between the cords, were known before his invention, I should wish to be instructed in what is understood by a strip of cloth,—how much interlocking or interweaving is necessary to remove it from mere binding, and bring it up to a strip. On inspection, I would say that the complainant's fabric has strips of cloth between the cords, as he describes it in his specification; but if not, then it remains to inquire what essential difference there is between fabrics with strips of various sizes, according to the degree of elasticity required, and one which, being woven in a similar way, can be properly said to have something less than a strip between each pair of cords. The evidence is silent on this point. It only goes to show, as we have said, that the closer the cords the greater the elasticity; but that was known before: it does not show that any difference in kind exists at the point where strips end and interlocking begins. The whole argument on this point seems to depend on a supposed distinction between interlocking and interweaving, which is not pointed out in the patent, and is not proved to exist. If it be intended to disclaim only strips of shirred cloth, as distinguished from strips of plain cloth, the like difficulty occurs in distinguishing, without evidence, that the shir or pucker of the strips is of any essential importance in the construction of the fabric.

Upon the whole, we feel constrained to agree with the opinion of the learned circuit judge of the Second circuit, that the old webbing was a fabric of like kind with the complainant's, and that the improvement, important though it is, must be held to be due to the skill and sagacity with which the mode of operation by which that webbing was made has been adapted and applied by the complainant, by the use of better materials and a more careful weaving; but not by the

invention requisite to enable him to claim the product as a fabric before unknown. We have not examined any of the questions of fact or law which exclusively concern the other divisions of the reissued patent. Bill dismissed.

{On appeal to the supreme court, the decree of this court was affirmed. 21 Wall. (88 U. S.) 112.

{For other cases involving this patent, see *Smith v. Glendale Elastic Fabrics Co.*, Case No. 13,050.}

¹ {Reported by Jabez S. Holmes, Esq., and by Samuel S. Fisher, Esq., and here compiled and reprinted by permission. The syllabus and opinion are from Holmes, 172, and the statement is from 6 Fish. Pat. Cas. 61.}

² {Affirmed in 21 Wall. (88 U. S.) 112.}

³ {From 6 Fish. Pat. Cas. 61.}

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