

CLARKE, TRUSTEE, v. JOHNSON.

Circuit Court, E. D. New York. November 17, 1880.

1. RE-ISSUE No. 3,579, issued August 3, 1879, to Nathaniel Jenkins, for a certain form of disc used for valve seats in steam joints, *held not infringed*.
2. EQUIVALENTS.—One substance does not constitute the equivalent of the other, when each produces a different product under the same conditions.

In Equity. Decision on final hearing.

Thomas William Clarke, for complainant.

B. F. Lee and Gilbert & Cameron, for defendant.

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BENEDICT, D. J. This is an action for an account, and an injunction to restrain the defendant from making a certain form of disc used for valve seats in steam joints, upon the ground that such manufacture infringes a patent issued to Nathaniel Jenkins, August 3, 1869, known as re-issue No. 3,579, and now owned by the plaintiff.

Various issues are raised by the pleadings, of which it will be necessary on this occasion only to consider the one relating to the infringement.

The character of the article complained of is not in dispute. It consists of discs intended to be used as valve seats for steam joints, composed of bone black, mixed with gutta percha and India rubber, made vulcanizable by an admixture of sulphur, and then vulcanized; the proportions of the compound being either Para rubber, 10 lbs.; gutta percha, 5 lbs.; sulphur, 4½ lbs.; bone black, 22½ lbs. Or, Para rubber, 14 lbs.; gutta percha, 7 lbs.; sulphur, 6 lbs.; bone black, 28 lbs.

The main question of the case, as I view it, is whether such an article is covered by the Jenkins patent.

The Jenkins patent was construed by this court on a former occasion, (16 Blatchf. C. C. R. 495,) and no reason is seen for any modification of the opinion then expressed, that it is not possible, in view of the language of the specifications, to uphold the plaintiff's contention that the Jenkins patent is for a packing composed of four-tenths of refractory material, vulcanized, no matter what the vulcanized material may be, if it contained rubber; and that the patent must be considered to be limited to a compound consisting of at least four-tenths of refractory, earthy, or stony matter, mixed with rubber prepared for vulcanization by using less than 25 per cent. of sulphur and then vulcanized, whence results a material composed of 40 per cent. and over of refractory matter held together by a skeleton of soft rubber. So understanding the patent, I am at loss to discover any ground upon which to base the conclusion that the patent is infringed by a packing which consists of refractory matter held together by a skeleton of vulcanite.

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Evidence has been given at this hearing to show that at the time of Jenkins' invention it was well known that both soft rubber and vulcanite became soft about the temperature of steam heat. And from this fact it has been argued that inasmuch as the packings in question were intended to be used at the temperature of steam heat, the employment of vulcanite instead of soft rubber, as the skeleton of the packing, was simply the use of a known equivalent in place of the soft rubber which forms the skeleton of the Jenkins packing. But such a conclusion by no means follows from the fact proved, when it also appears that a packing, the skeleton of which is vulcanite instead of soft rubber, when used at the temperature of steam heat, displays properties not possessed by a packing, the skeleton of which is soft rubber.

The testimony clearly shows that at the temperature at which these packings were intended to be used, the Johnson packing does not lose its toughness or close grain; does not flake or crumble, as the Jenkins packing does; resists pressure and the action of steam in a manner that the Jenkins packing does not; is more durable and far more efficient than the Jenkins packing. This difference in the action of the two packings, when used at the temperature for which they are intended, shows that the employment of the vulcanite in place of the soft rubber, is not the substitution of one substance for another without change of results, but that, on the contrary, a different product is obtained. Such a state of facts leaves no room to contend that the Johnson packing is obtained by simply employing a known equivalent in place of the soft rubber which forms the skeleton of the Jenkins packing.

The evidence also contains expressions of an opinion entertained by some persons of experience that all the sulphur in excess of about 2 per cent., used in the vulcanization of rubber, is simply mechanically mixed with and not chemically combined with the gum. And, from the evidence, it has been argued that vulcanite is soft rubber, or, as it is expressed, vulcanite is soft rubber *plus* mechanical sulphur; and consequently the Johnson compound does not differ in substance 440 from the Jenkins compound. But, as has been seen, the Johnson packing possesses properties not displayed by the Jenkins packing. A substantial change in the character of the article is produced by using a proportion of sulphur not contemplated by Jenkins; indeed, excluded from his invention by the terms of his patent. Whether excess of sulphur be mechanically mixed or chemically combined with the same can make no difference, for the fact remains that the result is a product possessing new and valuable qualities.

In view of the circumstances that the patent here sued on has been sustained on two occasions by distinguished judges, it is proper to add that the question presented by this case is one entirely different from that raised in the two prior cases set up in the bill. The valve seats complained of in the case decided by Judge Shepley March 22, 1872, (1 O. G. 359,) were claimed to have been made under the Frink patent. They contained lead or litharge and brass filings, which are sulphur absorbents; and it was there proved that these absorbents combined with the sulphur in vulcanizing, and so made another comparatively refractory ingredient, sulphureted metal. Upon this proof it was held that the valve seats then in question were substantially the same article as the Jenkins valves.

In *Jenkins v. Johnson*, 9 Blatchf. C. C. R. 516, the valve seats brought to the consideration of Judge Blatchford were a still different article, and in that case it was shown that the composition contained oxides of lead and iron, and that the excess of sulphur, beyond the amount taken up by the process of vulcanization to form a soft-rubber skeleton, united with the iron and lead, and formed refractory mineral matter. Consequently, it was in that case concluded that the Jenkins patent had been infringed.

Here the facts are different. The defendant's compound contains no sulphureted metal. There are no oxides of lead or iron, nor any other substance which combines with the sulphur to make refractory matter; but the excess of sulphur used, which by itself certainly is not refractory, is in such proportion that when the compound is submitted to a vulcanizing 441 heat there results from the sulphur and the gum the substance called vulcanite. Accordingly, it has not been claimed in this case that the excess of sulphur employed in the manufacture of the defendant's discs goes to make refractory matter, as was found to be the

fact in the two cases referred to. Here the contention has been that the excess of sulphur used is a mere adulterant; but, as already stated, this position is not supported by the evidence.

For these reasons, it must be held that the plaintiff has failed to prove infringement, and the bill is dismissed, with costs.

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