

FRICKE *v* HUM.

*Circuit Court, W. D. Pennsylvania.*

November Term, 1877.

1. PATENTS FOR INVENTIONS—FRICKE  
COPPER—CABLE LIGHTNING—RODS  
CONSTRUED.

Letters patent No. 112,137, dated February 28, 1871, for an improvement in copper-cable lightning-rods, granted to Joseph R. Fricke, construed, and *held* to be restricted to the peculiar form of manufacture therein particularly described.

2. SAME—CLAIMS.

If the patentee meant to assert a right to the exclusive use of coreless strands, he should have indicated that intention with reasonable clearness, and not left the claim to rest upon what, at the best, is but a doubtful implication.

In Equity.

*W. S. Wilson* and *Bakewell & Kerr*, for complainant.

*S. C. Schoyer*, for defendant.

ACHESON, J. The plaintiff is the grantee of letters patent No. 112,137, dated February 28, 1871, for an improvement in copper-cable lightning-rods. The object and nature of his invention are set forth succinctly and clearly in his specification. The purpose, as therein stated, is to produce a copper-cable lightning-rod of greater flexibility than those theretofore made, of an equal mass of material, and having a superior conducting capacity, and so made as to admit of the convenient increase of the size and conducting power of the cable conductor by adding to one that is already made one or more additional layers of wire or “strands of wire.” The usual mode of making copper-cable lightning-rods, the specification states, has been “to unite a number of Brands of copper-wire, as a ‘cable-laid’ rope is made.” That “form

of manufacture,” it is alleged, necessarily gives great rigidity to the copper cable, and makes it less convenient to coil for transportation, or to turn neatly at the angles of buildings to which it is applied. These objections, it is claimed, are obviated by the plaintiff’s invention, which also produces a cable of better and more merchantable appearance, and secures the further economic advantage that the machinery required to make any size of cable need only be adapted to work one size of wire. To secure the specified results, says the patentee in his specification,—

“I make my improved cable as follows: Around a central wire, strand of wire, or wire rope, I wind a number of parallel wires or strands of wire, and 303 around these another series, and again another, until I have the desired thickness. These succeeding layers *may* be wound in the same or in alternate directions, at the same or different angles to the axis of the core or central strand, and will give the desired flexibility and smoothness of appearance, and a conducting power equal to the best old-style cables of equal weight and surface.”

The claim is in these words:

“I claim, as an improved article of manufacture, a copper-cable lightning-rod or conductor, when constructed as herein described and shown.”

The defendant has not manufactured but has sold copper-cable lightning-rods (specimens of which are before the court as exhibits in the case) which, it is claimed, are an infringement of the plaintiff’s patent. According to the plaintiff’s testimony, prior to his invention there were several different kinds of copper-cable wire lightning-rods in use, the most common being constructed out of what is known as 49 wire cable, which is made by twisting together in the form of a cable seven strands, each strand consisting of seven wires. A specimen of such cable is one of the

exhibits in the case. In each strand of seven wires one of them assumes a central position relatively to the others, and upon this central wire as a core the other wires bed. The witnesses state that all strands of more than four wires have such central wire core, while strands of two, three, and four wires have no core.

The lightning-rods sold by the defendant are made of four wire strands twisted together in the form of a cable; one specimen containing six strands and the other seven. Do they infringe the plaintiff's patent? If so, it must be because of the use of four wire strands in their manufacture, for, beyond question, they are "cable-laid." It is shown by the testimony, and indeed is quite apparent upon inspection, that in form of construction they do not differ in anywise from the 49 wire cable lightning-rod. Clearly, in the lightning-rods sold by the defendant the strands are united or twisted together "as a cable-laid rope is made." Moreover, comparing the specimens of lightning-rods sold by the defendant with specimens of the patented article exhibited to the court, a great dissimilarity in outward appearance is observable. The specimens of the plaintiff's cable are remarkable for smoothness, herein differing as much from the defendants lightning-rods as they do from the 49 wire cable.

The plaintiff, however, maintains that the use of strands without cores is a peculiar feature of his method of construction, as described in and covered by his patent; but certainly no explanation is given in the specification that the absence of a core from the strand is material; nor, indeed, is that subject mentioned at all. "Around a central wire, strand of wire, or wire rope, I wind a number of parallel wires or *strands of wire,*" etc., is the language employed in describing the mode of making the plaintiff's improved cable. Here is no intimation that the practice of the invention involves the use of strands 304 limited to four wires or

less. In an earlier part of the specification we are told that the usual mode of making copper-cable lightning-rods has been to unite a number of "*strands of copper wire,*" etc. The plaintiff's invention, as described by him, is not at all distinguished by the number of wires to the strand, but has relation to the peculiar construction of his cable, which is formed by winding around a central wire strand of wire, or wire rope, a number of wires or strands in parallel spiral order, and around these another series, and again another, until the desired thickness is attained. This, in my apprehension, is the point of the plaintiff's invention, and herein his method differs from the old mode of twisting together "a number of strands of copper wire as a 'cable-laid' rope is made." It is, indeed, true that, after describing his peculiar form of manufacture, the patentee, in his specification, uses the following language:

"By using, as my invention enables me to do, strands of three or four (say No. 18) copper wire in the formation of my improved cable, I secure the advantage of a very fine appearance, greater flexibility, and a greater conducting surface in large cables than can be obtained with the same weight of metal if larger wires or larger strands are used, and the cable is laid in the usual manner."

But here, again, the manner of laying the cable is treated as an essential thing, and the patentee no more limits himself to the use of three and four wire strands than he does to the use of No. 18 wire. He merely shows how the best results are attainable by his special method of construction. If the patentee meant to assert a right to the exclusive use of coreless strands he should have indicated that intention with reasonable clearness, and not left the claim to rest upon what at the best is but a doubtful implication. Had the patentee claimed the exclusive use of two, three, and four wire strands in the making of copper-

cable lightning-rods, it may well be doubted whether the claim would have been allowed, or sustained by the courts if allowed. I am by no means prepared to admit that there was any patentable novelty in the manufacture of three and four strand copper-wire cable, for such cable differs in material only from ordinary hemp rope. *Phillips v. Detroit*, 111 U. S. 604; S. C. 4 Sup. Ct. Rep. 580.

However, upon a fair and reasonable construction, the patent in suit must be held to be restricted to the peculiar form of manufacture therein particularly described; and as the defendant has neither practiced that method of manufacture, nor sold lightning-rods so made, he has not infringed the plaintiff's rights under his letters patent.

Let a decree be drawn dismissing the bill, with costs.

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