

ROOT AND OTHERS V. LAMB.

Circuit Court, D. Massachusetts. February 24, 1881.

1. INVENTION—CONSTRUCTION—WORDS.

The ordinary signification of the words used by a patentee in describing his invention must have their weight when seeking for his meaning.

2. CLAIM—CONSTRUCTION—STATE OF THE ART.

A claim should be limited to the specific improvement described, where the state of the art does not admit of a great original discovery

3. LETTERS PATENT No. 96,037—SHEET-METAL TUBES.

Held, therefore, that a patent for “the improved method, herein described, of making tubes by rolling the skelp with longitudinal ridges and furrows on its alternate edge-faces, and lapping the same in a spiral direction to form a lock in the manner specified”, was not applicable to the subsequent production of *sheet-metal tubes* with a continuous folded outside seam, made by a machine subsequently invented and used for that purpose.—[ED.

In Equity.

Samuel A. Duncan, Causten Browne, and Robt. H. Duncan, for complainants.

John A. Loring and W. H. Drury, for defendant.

LOWELL, C. J. J. B. Root, assignor of the plaintiffs, obtained his patent, No. 96,037, now in suit, October 13, 1869. He begins by saying that his invention consists in a spirally-lapped metal tube, formed with a lock following the direction of the spiral, by constructing the skelp, of which the tube or tubing is made, with a tongue and groove, or locking ridge and furrow, on reverse sides of its opposite edges; so that, on spirally wrapping the skelp around the mandrel, its edges not only lap one over the other, but also establish a lock by the fit of the two tongues in the grooves of the skelp; after which the tubing may be welded, or the spiral joint closed by soldering, or

otherwise. He then describes and draws a skelp with grooves and furrows on each side, which he says may be made by rolling the heated skelp in one operation; and that the same heat will serve to effect the spiral twist of the skelp around a rotating mandrel, in doing which the edges of the 223 skelp will form a lock, etc.; and he explains its advantages. He then suggests a modification of form, by which the skelp should have wholly, or mainly, a ridge on one face and a furrow on the other. The patent-office refused to grant him a claim for a spirally-formed tube, with a lock following the direction of the spiral; but gave him “the improved method, herein described, of making tubes by rolling the skelp with longitudinal ridges and furrows on its alternate edge-faces, and lapping the same in a spiral direction, to form a lock in the manner specified.”

Ritchie began to experiment upon the machine in 1870, which was patented to him in 1872, for winding sheet metal into a spiral tube with a continuous folded seam on its outside. Besides the patent for the machine, he received one for the pipe, as a new article of manufacture. Some years later, Root invented a machine for making similar pipe; and both parties are now diligently engaged in making what may be called the Ritchie pipe, which has proved to be a valuable articles for many purposes. The only question is, who invented it? The plaintiff insists that he invented a spirally-wound tube, with a locking seam, as a new and original idea, with one practical application, and can cover all tubes which come within that broad description. The defendant says that the patent of Root gives no instruction in the art of making pipes of sheet metal with folded seams, in making which no fire is used, and none of the particular processes described or referred to by Root are employed; and that such a pipe or tube required invention, not only beyond but entirely apart from the process of Root. The patent-office appears to have been of this opinion.

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Mr. Root testified that after he had made his invention for application to welded tubes, it occurred to him that the mode of operation might be applied to tubes of sheet metal, and that he then drew the "modification clause," and caused it to be inserted in the specification. This he repeated several times 224 in the course of his deposition. He and his experts further testify that a good welded tube could not be made by following his modified description, and therefore it must have been intended for something else, and that there is nothing else but sheet metal to which we can reasonably refer it.

It came out, at the end of the cross-examination of Mr. Root, that he had preserved the rough draft of some earlier forms of his specification, and this paper being put into the case shows upon its face that the modification clause was not an after thought, but the original form of the specification; and that it was not intended to refer to sheet metal, but distinctly and solely to plate metal. The respondent's counsel commented with great severity upon Mr. Root's earlier evidence, thus contradicted, as being intentionally false; but it is not necessary to impute anything but forgetfulness to the witness. His readiness in producing a paper which he might have suppressed, ought to weigh very much in his favor upon the moral issue, if there were such in the cases. The fact is damaging enough without epithets, for it destroys the

whole argument from a supposed intent; and destroys the value of Mr. Root's memory on other points.

The state of the art, as shown by the English patents of Burr & Childs, is that spiral welded tubes had been made by Burr with a rabbeted seam, and by Childs with a scarfed seam, besides the very old and well-known butted seam, by which spirally-wound gun barrels had been made. Towards the close of Childs' specification are found these words: "Although I have only described the ribbons, or strips, as having even or plain scarf edges, I do not confine myself to such plain edges, as it will be obvious that they may be of any such irregular form that when two edges are brought together they will lock into each other." It was upon this patent, I suppose, that the office refused the very broad claim originally asked for by Root. Almost as much argumentative evidence has been given to prove that Childs says what he does not mean, when he speaks of the edges of a piece of metal locking, as is adduced to show that Root means what he does not say, when he speaks of a modification of a lap-welded tube.

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The state of the art of making tubes, or pipes of sheet metal, was somewhat different. They were not made in a spiral form, though straight pipes were joined by a folded seam like that of Ritchie.

In this state of the two arts, the specification of Root appears to be addressed to persons who are acquainted with spiral tubes. He does not tell how to make them, but how to make the skelp from which they are to be made. I understand that the difficulty in making the Ritchie pipe is not in making the strip, but in winding it up spirally so as at the same time to make a folded seam.

There are many reasons for saying that Root's specification does not, upon its face, appear to refer to that sort of metal used by tinsmiths. The fact

that it was not intended to refer to them would not have been admissible, but for certain inadmissible statements of the plaintiff. The words, as construed in view of the art, are the important things. The word "skelp" is never used in the art of the tinsmith, and Ritchie's strip of sheet metal is not a skelp. To be sure, a patentee may misuse a word, but when we are seeking for his meaning, the ordinary signification of the words which he uses must have its weight. He speaks of the heated skelp and the saving of fuel, and of other things applicable to tubes of a certain class, and not applicable to the Ritchie tube. It is said that some of these words and phrases are not found in the modification. This is true; but no new process is referred to or hinted at in that clause. It is merely to save repetition that the phrases are left out. The skelp referred to is the same sort of skelp, excepting in the form of the ridges and furrows, and they are intended to be rolled upon the heated skelp. The brevity of the clause is strong evidence that it does not refer to a different subject.

If the patentee had suggested that a pipe or tube of sheet metal might be made by winding it spirally with a folded seam, it is very doubtful whether he could have patented that pipe without showing the world how to make it. I do not understand it to be seriously contended on his behalf that the Ritchie pipe could be made by following his specification. He 226 himself was obliged to invent a machine before he could manufacture such pipe. If, then, he had attempted to monopolize such a pipe, he ought not to have been permitted to do so; for he had not made it. His contention, as I have said, is that the invention is so great and new that it covers later inventions, and monopolizes the future. But in view of the state of the art, spiral welded tubes being old, and the folded seam in straight tubes or pipes of sheet metal being old, there was no opportunity for a great original discovery.

His claim, therefore, should have been limited, precisely as it is limited in the patent, to the improved method which he has described. He says he has described spirally-wound tubes of every possible kind, if they are made by locking the seam continuously in the course of making the pipe. But I find that he has not described a Ritchie pipe, nor anything from which a skilled mechanic could make one, and that the Ritchie pipe does not infringe his patent.

Bill dismissed.

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