MULFORD ET AL. V. PEARCE ET AL.

{13 Blatchf. 173; 2 Ban. & A. 190; 9 O. G. 204.}[1]

Circuit Court, S. D. New York. Nov. 3, 1875.[2]

PATENTS—CHAIN FOR NECKLACES—MATERIAL—GOLD TUBING.

1. The claims of the letters patent granted to Lewis J. Mulford and others, February 24th, 1874, for an "improvement in chains and chain links for necklaces, &c.," namely, "(1.) An ornamental chain for necklaces, &c., formed of alternate closed links A, and open spiral links B, substantially as shown and described; (2.) The open spiral links B, formed of coils of tubing, substantially as shown and described," cover new and patentable inventions.
2. The distinctive feature of the invention consists in constructing the open spiral link of annealed gold tubing, such link possessing a peculiar elasticity, and being easily separated and united to another link without any injury to itself or to the solid link into which it is sprung, and constantly preserving its elasticity and shape.
3. The first claim is not a claim for an ornamental chain composed of alternate closed links and open spiral links, without reference to the material of which the spiral link is made, but it is a claim for a chain composed of alternate closed links and open spiral links formed of one or more coils of gold tubing, as shown and described.
4. The process of making gold tubing was well known to manufacturing jewellers, and, therefore it was not necessary to describe in the specification how it has to be made.

{Suit by Lewis J. Mulford and others against Thomas D. Pearce and others for the infringement of reissued letters patent 960 No. 5,774, granted to S. Cottle Feb. 24, 1874, the original letters patent No. 147,045 having been granted Feb. 3, 1874.}

Benjamin F. Lee and Alwyn A. Alvord, for plaintiffs.

Joseph C. Fraley and Henry Baldwin, Jr., for defendants.

SHIPMAN, District Judge. This is a bill in equity, alleging an infringement by the defendants of reissued letters patent which were issued to the complainants on February 24th, 1874, for an "improvement in chains and chain links for necklaces, &c.," and praying for an injunction and an account. The defendants, admitting in their answer the manufacture and sale of the patented article, deny the novelty or patentability of the alleged invention, and further insist that the patent is invalid by reason of the vagueness of the specification. The specification states, that the "invention has for its object to furnish an improved chain for necklaces, &c., having links of peculiar construction, which enable all the links to be finished separate, and then put together to form the chain. The invention consists in an ornamental chain, whereof the links are connected together by open spiral links B, finished before being connected together, the connection being made by springing the finished links into each other in the manner described. A and B represent the links of the chain. The links A are round and closed, and are made and polished or colored separately from the other links. The links B, which constitute the peculiar feature of my invention, are formed of one or more coils of tubing of the proper length, so as to form a double spring link. Into each end of the tube forming the link B is soldered a small shot, as shown in the drawing, which shot gives a finish to the link. The links B may then be colored or polished, and the chain is formed by springing the links into each other. * * * * By this construction, the links may be made and finished in quantities, and the chain formed from the finished links by springing them into each other, to produce any desired combinations of the links of the same or different kinds. Finishing the separate links in this way enables them to be more perfectly

polished or colored, and with a greatly diminished expenditure of labor and time, and enables the links to be put together without injuring them in the least, however highly they may be polished or colored." The claims of the inventor are: "(1.) An ornamental chain for necklaces, &c., formed of alternate closed links A and open spiral links B, substantially as shown and described; (2.) The open spiral links B, formed of coils of tubing, substantially as shown and described."

Ornamental gold chains, formed of alternate closed links and spiral links, or of spiral links alone, have long been known. Chains composed of split rings which are "sprung" into each other, or into a solid link, are familiar articles, and there can be no novelty in the mere shape or form of the chain, or of the link which is shown in the drawings of the patent. The distinctive feature of the invention does not consist in the fact that the link is spiral, but does consist in the construction of the open spiral link from a specified material, viz., gold tubing. The article which is called tubing, in the jeweller's art, is made by drawing a strip of gold through a draw-plate, the gold strip having been placed around a copper wire in such a manner as to encase the wire. The copper wire, with the strip of gold around it, is then wound upon a mandrel and cut into proper lengths. The copper is destroyed by acid, leaving a hollow spiral link, which is bound with wire and annealed. The wire is then unfastened, and the link which is thus made possesses a peculiar elasticity not affected by the annealing, is easily separated and united to another link without any injury to itself or to the solid link into which it is sprung, and constantly preserves its elasticity and shape.

The discovery which led to the invention consisted in the discovery of the fact that links made of tubing possessed a peculiar elasticity which was unaffected by annealing. The invention was the application of this discovery to the production of a new and useful result,

namely, the manufacture from tubing of ornamental chains which possess the following elements of novelty and utility: First. All the links can be completely finished and then put together without injury to the chain, and thereby the article can be produced at a much less expense than had previously been necessary. Gold chains which are constructed in any other manner must be finished or polished or colored after the chain is completely formed, which is a difficult and somewhat expensive part of the manufacture, while, inasmuch as their links are sufficiently elastic to be united together or sprung. Upon a solid link without injury to any part of the chain, the separate links can be made in quantities, and completely finished and polished before being united. Second. The elasticity of the spiral links is such that the chain can easily be separated by the fingers of the owner, and united in different forms and for different purposes, and reunited in the original chain, without detriment to the polish of the links, and with no loss of their elasticity. As has already been suggested, these features of novelty and utility do not result from the fact that the chain is made in part from a spiral link, but from the fact that the spiral link is manufactured from a material which possesses a peculiar quality of permanent elasticity. The invention consists in the fact, that whether the inventor was or was not the first person to discover the peculiarity, he first utilized the discovery, and applied the 961 peculiar property of the material to a useful result in the manufacture of chains.

It being self-evident that chains composed of spiral links have been well known, it was insisted by the defendants that the chains heretofore in use possessed substantially the same qualities which are attributed to the patented article, and that the patented article has no advantage over the chains which were introduced as exhibits, and which were made of gold split rings, or split links, in various forms. But, it was satisfactorily

proved, that the split rings which are manufactured from solid gold wire compressed in dies, and made elastic by hammering, are not sufficiently elastic to permit the chain to be joined without injury to the material into which the split link is sprung, and this injury renders necessary a repolishing or finishing of the completed article. Again, if the chain of split gold links is taken apart, the act of separation causes the coil to spring asunder, so that it loses its shape and its beauty, and, if a necessity of annealing arises, the process of annealing destroys its elasticity. The difference between the patented article and a chain made of split gold rings is clearly marked. It is a difference in kind and not merely in degree.

Testimony was also offered by the defendants to prove that chains of spiral links, made of tubing, had been in use prior to the date of the invention, but the evidence failed to satisfy me that chains of open and unsoldered spiral links, made of tubing, had been manufactured prior to the date of the patent. Links had been made of tubing, which, after being united in a chain, were soldered together, and thus a chain was made which could not be taken apart, and which required finishing and polishing after it was soldered together. The testimony did not show that the plaintiffs' invention of the open spiral link from tubing had been practically anticipated by others.

A large serpentine bracelet, made of a coil of gold tubing, to be worn upon the forearm, and to be kept in its place by pressure, was also introduced as an anticipating device. It manifestly is a very different article from a chain, and the fact that gold tubing was known and used in the manufacture of jewelry was conceded by the plaintiffs.

It was also suggested by the defendants, that the specification does not describe the process of manufacture of the spiral link with the exactness which is requisite. The manner in which gold tubing is

manufactured is well known to all persons skilled in the art. After having been compressed around copper wire, it wound upon a mandrel, the wire is then removed by acid, and the coil of tubing, having been secured with wire, is annealed into the proper shape. This process is thoroughly understood by the manufacturing jeweller. It would have been a waste of words to explain the method of manufacture to a class of persons who are sufficiently informed, when they are told that the link is "formed of one or more coils of tubing of the proper length, so as to form a double spring link."

The first claim is not a claim for an ornamental chain composed of alternate closed links and open spiral links, without reference to the material of which the spiral link is made, but it is a claim for a chain composed of alternate closed links and open spiral links formed of one or more coils of gold tubing, as shown and described. The finish which is given to the chain by the shot at the end of the open link is not a material part of the invention.

There should be a decree for an injunction, and a reference to a master to take and state the account.

{NOTE. This case was subsequently heard upon exceptions to the master's report. The report was confirmed. Case No. 9,908. From the final decree entered an appeal was taken to the supreme court, where the patent was held void. 102 U. S. 112.}

[1] {Reported by Hon. Samuel Blatchford, District Judge; reprinted in 2 Ban. & A. 190; and here republished by permission.}

[2] {Reversed in 102 U. S. 112.}