SMITH & EGGE MANUF'G CO. v. BRIDGEPORT CHAIN CO.

(Circuit Court, D. Connecticut. May 25, 1891.)

1. PATENTS FOR INVENTIONS-INFRINGEMENT.

Claim 1 of letters patent No. 202,528, dated April 16, 1878, to Frederick Egge, for an improvement for manufacturing chain from sheet-metal by machinery, by forming the partially shaped flat links from a plate, bringing these links (flatwise or with their broad surfaces horizontal) to the point at which they are to be connected with each other, successively threading the separate flat links through the eyes of the previously bent and partially formed links, the broad surfaces of which are vertical or at right angles to the sides of the flat links, etc., is not infringed by letters patent No. 368,275, dated August 16, 1887, to Richard A. Bruel, in which the element of an automatic feed or delivery of the blanks or flat links to the receiver which conducts them to the threading device, is wanting.

2. SAME.

The turning device of the Egge machine, consisting of two auxiliary springs, against which the blanks strike, whereby they are partially turned, as the threading is being performed, the turn being completed by the feeding forward of the chain which pulls or draws the broad side of the link blank against the front of the bending cavity, is infringed by the Bruel machine, in which the turn is entirely performed by the pull or feeding forward of the chain, dispensing with the two springs.

In Equity. On bill for infringement. Frederick W. Smith, Jr., for plaintiff. Morris W. Seymour, for defendant.

SHIPMAN, J. This is a bill in equity, based upon the alleged infringement of letters patent No. 202,528, dated April 16, 1878, to Frederick Egge, assignor to the plaintiff, for improvements in apparatus for manufacturing sheet-metal chains. Sheet-metal chains are composed of links, each one of which is cut from sheet-metal. The blank of each link consists of a narrow central body having an eye at each end, the width of the eye being somewhat greater than the width of the body. These blanks are doubled at the center of the body so as to bring the two eyes together, the eves forming one end of a link, while the loops produced by doubling forms the other end. Each successive link is threaded through the eyes in the previously bent link. Previous to the Egge patent, chains of this general class had been made exclusively by hand, or partly by hand and partly by machinery. In the machines described in the Bellaire and Poirrot French patent, dated April 15, 1869, and in the English patent of January 1, 1870, to Clark, as a communication from David, of Paris, the blanks were bent into a U shape by machinery and were threaded by hand. In the English patent, the bent blanks, after having been threaded by hand, are closed by machinery. The French patent to David, dated March 26, 1875, describes a machine in which each straight blank is threaded by hand through the eyes of a previously bent link. Each link is bent by machinery. The E. Weissenborn United States patent of December 11, 1855, describes a hand machine, so far as threading is concerned. The links of the machine are of a different character from those of the patent in suit. The French patent to Murat, dated June 30, 1871, is for making a flat wire chain in which the links are bent by machinery, and are supposed to be automat-

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ically interlooped with each other. Nothing can be learned from the specification as to the mechanical means by which the interlooping is performed. From the drawings the expert for the defendant believes that the eyes of the already doubled blank are mechanically laterally enlarged to receive the next flat blank in a plane parallel with the plane of the previously bent link. This method of threading, if it is the method of the machine, would not make chains from ordinary sheetmetal. The metal of the chain must be of so fine a character as not to split when the punch passes through the eye. Ordinary sheet-metal could not endure that operation. The state of the art shows that before the date of the Egge patent no machine existed for automatically both bending, threading, and interlooping the links of chains of any kind of metal, unless it might be done by the Murat machine, which was not designed for and could not manufacture a sheet-metal chain. An automatic machine for the complete construction of sheet-metal chain did not exist until the invention of Egge. His machine consisted of mechanism for blanking out the flat links from a plate, for bringing these links (flatwise or with their broad surfaces horizontal) to the point at which they are to be connected with each other, successively threading the separate flat links through the eyes of previously bent links, (the broad surfaces of which are vertical or at right angles to the sides of the flat links,) turning the flat links, bending them to interloop and unite with previously bent links, and subsequently shaping the links. These successive steps require appropriate mechanism for effecting each step which is fully described in the patent. The machine is an exceedingly useful one, and has effected great economy in, as well as an enlargement of, the manufacture of sheet-metal chains. Such chains are now extensively used, instead of ropes, to hold the weights which are attached to windows. An automatic machine must both bend, thread, and interloop or unite. It was necessary to thread each blank flatwise, and then turn it into such a vertical position that it could be bent and interlooped, and no previous machine had either done this, or had indicated how it might be done. The peculiarity and the novelty of the invention consists in the manner and in the mechanical means by which the links are threaded flatwise and then turned preparatory to bending, whereby all the steps of the manufacture are enabled to be performed automatically and in combination. The turning of the flat blank so that it comes into a vertical plane after it has passed through the eyes of the previously bent link is the most vital part of the invention. The blanking and bending and finishing, separately considered, had been done before, but, by reason of his threading and turning devices, the inventor was enabled to unite in one machine the groups of instrumentalities or the appropriate devices which were adapted to produce in succession each requisite result. The object of the draughtsman of the patent was to make it as broad as possible, and to attempt to cover an art or process, and also methods of threading, turning, and interlooping, irrespective of mechanism, and next the mechanism or combinations of mechanism. The first three of the seventeen claims, and the only ones which are now said to be infringed, are as follows: 1.1

"(1) The hereinbefore described improvement in the art of manufacturing chain from sheet-metal by machinery, which improvement consists in forming the partially shaped flat links from a plate, bringing these links (flatwise or with their broad surfaces horizontal) to the point at which they are to be connected with each other, successively threading the separate flat links through the eyes of previously bent and partially formed links, (the broad surfaces of which are vertical or at right angles to the sides of the flat links,) turning the flat links, bending them to interloop and unite them with the previously bent links, and subsequently completely shaping the links and forming the finished chain, substantially as set forth.

"(2) As an improvement in the art of manufacturing chain from sheetmetal by machinery, the hereinbefore described method of automatically adjusting a flat link in a previously bent link preparatory to bending, which consists in feeding forward the flat link endwise, threading it through the eyes of the bent link intersecting its forward line of travel at right angles, and turning it as it is fed along after its forward widened end has passed through said eyes, substantially as set forth.

"(3) As an improvement in the art of manufacturing chain from sheetmetal by machinery, the hereinbefore described method of connecting and uniting the links, which consists in feeding forward the flat and partially shaped links flatwise, or with their broad surfaces horizontal in a path intersected at right angles by that traversed by the previously connected links, threading the flat links successively through the eyes of the previously bent and united links, the broad surfaces of which are vertical and at right angles to the sides of the flat links, giving a partial turn to the flat links, and then bending them at their middles to respectively unite them with the previously bent and united links, substantially as set forth."

In view of the primary character of the machine as a whole, the construction which was adopted in *Morley Mach. Co.* v. *Lancaster*, 129 U. S. 263, 9 Sup. Ct. Rep. 299, is the proper one for these claims. This construction excludes the idea that the claims are for a result, or for a process or for methods of accomplishing a result, irrespective of the machinery by which the work is accomplished, but they are for sets of mechanism, and are infringed by another machine in which the same sets of mechanism are combined, provided each mechanism, individually considered, is a proper equivalent for the corresponding mechanism in the Egge patent. But, inasmuch as Egge was the first person who produced an automatic machine for the entire manufacture of sheet-metal chain, he is entitled to a liberal construction of those claims which are not for described details. The following language from the decision in the *Morley Case* describes the manner in which the first three claims of the Egge patent are to be considered:

"Those claims are not for a result or effect, irrespective of the means by which the effect is accomplished. It is open to a subsequent inventor to accomplish the same result, if he can, by substantially different means. The effect of the rule before laid down is merely to require that, in determining whether the means employed in the Lancaster machine are substantially the same means as those employed in the Morley machine, the Morley patent is to receive a liberal construction, in view of the fact that he was a pioneer in the construction of an automatic button-sewing machine, and that his patent, especially in view of the character and terms of the four claims in question, is not to be limited to the particular devices or instrumentalities described by him, used in the three main elements of his machine, which, combined together, make it up."

The defendant's machine is made under letters patent No. 368,275, dated August 16, 1887, to Richard A. Bruel. Bruel was foreman in the tool-room of the plaintiff, and had special charge of its chain machinery. He voluntarily left its employment, and, in about three months thereafter, applied for his patent. His machine bears a general likeness to the Egge machine in its various features, contains the same system of instrumentalities in the same groups and order, and, broadly considered, performs the same functions in substantially the same way as the corresponding mechanism in the Egge machine, and with the same result. The differences between the two machines, so far as the first three claims are concerned, are two in number. The defendant's machine, as actually in use, has an ordinary press for cutting the blanks, which are then delivered by hand to the receptacle which receives the column of blanks. It is, as used, not strictly an automatic machine for delivering the blanks from the punch to the receiver. There is, I suppose, no difficulty in making the connections automatic, but the Egge patent is for an automatic machine in the various steps of the manufacture, and the operations were designed to be connected and continuous. Inasmuch as the defendant's machine, as used, has not an automatic delivery of the blanks, there is not an infringement of the first claim. The turning mechanism of the two machines differs in the following respect: In the Egge machine there are two auxiliary springs, against which the blanks strike, whereby they are partially turned, as the threading is being performed; then the turning is completed by the feeding forward of the chain, which pulls or draws the broad side of the link blank against the front of the bending cavity. In the defendant's machine the turning is entirely performed by the pull or the feeding forward of the chain. Bruel dispensed with the two springs, and relied entirely upon the Egge means for completing the turn. The phraseology of the second claim is "turning it as it is fed along after its forward widened end has passed through said eyes." If this claim is confined to the springs which partially turn the blank as it is being threaded, then the defendant does not infringe. I think that the mechanism for turning which is included in this claim includes that which completely turns the blank, as it is being brought along, into the position for bending, and consequently the defendant's machine is an infringement of the second claim. The third claim includes mechanism for "giving a partial turn to the flat links" after they had been threaded. The Bruel machine omits part of these devices, and retains the residue. As this claim does not require that all the specific devices for turning should be necessarily included in it, the defendant infringes this as well as the preceding claim. Let there be a decree against infringement of the second and third claims, and for an accounting.

DIEFENTHAL et al. v. HAMBURG-AMERIKANISCHE PACKETFAHRT ACTIEN-GESELLSCHAFT.

(District Court, E. D. Louisiana. April 20, 1891.)

ADMIRALTY-JURISDICTION-MARITIME CONTRACTS.

A contract with the owners to supply their vessels for the period of a year with all the provisions they might require while in the port where the supplies are to be furnished, is not a maritime contract, and a court of admiralty has no jurisdiction of a suit for damages for its breach by the ship-owners.

In Admiralty.

J. R. Beckwith and Jos. N. Wolfson, for libelants. Farrar, Jonas & Kruttschnitt, for respondents.

This is a suit in admiralty, brought by process in per-BILLINGS, J. The question submitted is presented by a plea to the jurisdicsonam. tion. The suit is brought to recover damages for a breach of a contract. The question, therefore, is whether the contract which has been violated is maritime. The contract is fully described in the libel. The respondents were owners of a number of steamers running between New Orleans and various European ports. They made a contract, whereby it was agreed that the libelants would, for the period of one year, furnish and deliver to the respondents on board of their several vessels all the meat, eggs, and vegetables required as supplies for the passengers and crews of The libel further propounds that the numsaid boats at fixed prices. ber of respondents' boats departing within the year from New Orleans was 43; that the execution of the contract was entered upon, and two boats had been furnished with supplies, which, at the agreed prices at that season of the year, caused a loss to the libelants; and that the respondents, refusing to carry out thereafter the said contract, have caused a loss to the libelants of the full sum of \$10,000. The contract, therefore, was a contract whereby the libelants agreed to sell and deliver, and the respondents, who were owners of vessels engaged in foreign commerce, agreed to purchase and receive, at enumerated prices, the supplies which such vessels might require at the port of New Orleans for the period of one year. In Insurance Co. v. Dunham, 11 Wall. 1, at page 26, the court define a maritime contract as one having reference to maritime service or maritime transactions. At page 31, the court says:

"Perhaps the best criterion of the maritime character of a contract is the system of law from which it arises, and from which it is governed."

In The Paola R., 32 Fed. Rep. 174, the circuit court held, confirming the judgment of the district court, that the compressing of cotton, though done for the purpose of condensing the cotton as a preparation for the affreightment by reducing its bulk, was not a maritime contract. So, too, in this circuit it is held that the services of the stevedore are not maritime. In *Pritchard* v. *The Horatia*, Bee, 167, Judge HOPKINSON held that the court of admiralty had no jurisdiction when the transaction was on land, and the contract was for repairs, the vessel not being on a voy-