

EWART MANUF'G Co. v. MOLINE MALLEABLE IRON Co. and others.

(Circuit Court, N. D. Illinois. March 21, 1887.)

1. PATENTS FOR INVENTIONS—NOVEL DEVICE—IMPROVEMENT IN DRIVE CHAINS.
Letters patent were granted October 16, 1877, to one William B. Ewart, for an improvement in drive chains, the object of the same being to improve the construction of the link described in letters patent No. 154,595, previously granted to said Ewart on September 1, 1874, and reissued April 20, 1875. The improvement consisted in casting the link with a hook in permanent form, and also in casting a small projection upon the hook which might be turned down around the end of the link for a fastening. Before the application was made for the patent in question, other patents were granted for cast links, and the mode of casting a projection upon the hook failed to show a novel device. *Held*, that a bill to restrain an infringement of said patent must be dismissed.
2. SAME—NEW PROCESS.
Said patent could not be sustained as a patent for a new process of manufacture, as it in no manner described any process for the same.

In Equity.

Offield, Towle & Phelps, (B. F. Thurston, of counsel,) for complainants.
West & Bond, for defendants.

BLODGETT, J. This is a bill for an accounting and injunction by reason of the alleged infringement of a patent granted October 16, 1877, to William B. Ewart, for "an improvement in drive-chains." The patentee says:

"The object of my invention is to improve the construction of the link described in letters patent No. 154,595, granted to me September 1, 1874, and reissued April 20, 1875. The invention (that is, as I understand, the invention of the patent now in question) consists in casting the link with a hook in permanent form, and also in casting a small projection upon the hook which may be turned down around the end of the link for a fastening. In constructing the link described in my patent of September 1, 1874, I make the piece intended for the hook angular in form, and then bend the end of this piece down, to give the hook the proper form, after casting the links. This bending of the hook after casting, however, weakens it, and I have found, after experiment, that I can cast the link with the hook in permanent form, as shown in the drawings, so that no change is made in the form of the link after the link leaves the mould. As an additional precaution, there may be cast upon the end of the hook a small projection, of soft metal, which may be turned down around the end of the link, clasped by the hook, so as to prevent the links from being detached. The use of this device is optional, however, for without it the attachment of the links is sufficiently secure for ordinary purposes. If desired, the hook of the link may be cast upon a chill by the introduction into the mould of the metallic core. In making the link and hook as described I secure certain valuable results. By casting the hook in permanent form the cost of manufacture is reduced, by saving the labor and time expended in bending, and the waste occasioned by breakage. The links may also be made of metal which will not admit of bending, and the inner surface of the hook may be cast upon a chill, so as to secure a perfectly fitting joint and a hard-wearing surface. The hook may also be cast with ribs, so as to brace it against stretching, which is the principal objection to the use of chains for transporting power. The ribs on the hook also serve to guide the chain upon the

wheels, the sprockets of which may be made to wear entirely between these ribs."

The patent contains three claims:

"(1) A link for drive-chains, having a central opening to receive the sprockets or teeth of the drive-wheels, provided with an open hook cast thereon, and adapted to be coupled to or uncoupled from other centrally-open links without bending the hook, substantially as described. (2) The hook, B, provided with ribs, *bb*, substantially as and for the purposes set forth. (3) A sprocket-link for drive-chains, constructed with an open hook, B, on one end bar, and a small supplementary strip of soft metal, *c*, attached to the hook, so that it may be bent down across the opening of the latter in coupling links together, substantially as described."

The defenses interposed are (1) that the patent is void for want of novelty; and (2) that the defendant does not infringe.

As I understand this patent, stripped of the somewhat vague and misleading terms in which it is described and its devices claimed, it is nothing more nor less than for a link of a sprocket-chain cast with the hook in the form in which it is to be used, with ribs upon the hook portion of the link to strengthen the hook, and a small projection cast upon the end of the hook which may be bent or turned down so as to prevent the links from separating when turned or thrown into any position by the use of the chain. It would hardly seem necessary to introduce proof to establish the fact that there was nothing new in casting the link of the chain, if you could cast it so as to unite or articulate the links together for a working purpose after it had been cast in rigid form. Once given a mode of uniting these links by any method so as to make a working chain, you have nothing more nor less than a series of cast-iron links and hooks, capable of being united into a drive-chain by simply bringing the links and hooks into such a position that they can be articulated or united.

In the Anderson patent, granted May 2, 1865, a cast link is shown, but it is stated they are to be made of malleable iron, so that the hooks may be cast partly in form, and afterwards bent so as to completely grasp the end bars of the links; and in the Ewart patent of September 1, 1874, of which the patent now under consideration is said to be an improvement, it is stated that the links "never need to be bent, riveted, or altered, after they are made. If the links are made of malleable metal, the ends of their hooks will be properly bent after casting the links." In the Le Valley patent of August, 1876, application for which was filed December 3, 1874, a cast link is shown. So that upon the question of novelty it was certainly not new to cast a link for a sprocket-chain in permanent, or substantially permanent, form at the time this patent was applied for. Some of the hooks shown being cast of malleable iron, were partly turned or bent down so as to gripe the end bar more securely after articulation had been effected; and the proof in this case shows that this complainant, in constructing sprocket-chains under the patent now in question, slightly closes the throat of the hook after the links are articulated, so as to prevent their ready separation without the application of some force.

As a patent for a casting by a new process of manufacture, certainly this patent in no manner describes a process by which the casting is made, and must be held void as a process patent for a new article of manufacture for want of specifications as to the process. The casting of ribs, or some additional material, upon the hooks, for the purpose of making them stronger, is certainly not a patentable device. It is simply nothing more than the addition of more material in a particular form, or in the form of ribs, for the purpose of giving additional strength to the hook,—a device as old, perhaps, as the hooks to the old-fashioned chain.

The projections of soft metal covered by the second claim might well be disposed of in the same manner. It is nothing more than to leave a portion of the hook attenuated or drawn out so that it will readily bend under pressure; or, by the application of the hammer, to close up the hook and prevent the retraction of the links. It seems to me, therefore, that from no point of view which has been suggested can this patent be sustained as a new invention. It was old to cast even links for sprocket-wheels; but, if it had not been old to do this, it was old to make castings of cast iron or malleable iron, light and small like these, and which, when as small as these links are, were slightly flexible, and could be bent with care into various forms, especially if the hook was subjected to the process of annealing.

The bill is therefore dismissed for want of equity.

EWART MANUF'G CO. v. MOLINE MALLEABLE IRON CO. and others.

(Circuit Court, N. D. Illinois. March 21, 1887.)

1. PATENTS FOR INVENTIONS—NEW DEVICE—IMPROVEMENTS IN CHAIN-LINKS.

Letters patent were granted to one Sylvanus Locke, February 23, 1875, for an improvement in chain-links and chains, being a method of constructing a chain with links detachable from the adjoining links, and so arranged that the links, when turned into working position, could not become disengaged. The device effected an articulation of the links by thrusting an end-bar with a forward movement into the jaws of a hook, when the links, being turned backward, became safely united for working purposes. The proof showed that a patent was previously granted to one Ewart for a similar device, but the articulation was accomplished by a sidewise movement. *Held*, on a bill filed to restrain infringement, that the device described in the Locke patent was new in art, and said patent was not defeated by the prior Ewart patent, although its scope was limited by the prior state of the art as shown by said Ewart.

2. SAME—IMPROVEMENT IN CHAIN-LINKS—INFRINGEMENT.

The manufacture of links with the use of an end-bar arranged to enter the throat of a hook by a forward movement, the links being slightly fastened together by bending down the point of the hook so as to narrow the throat of the same, the links admitting a severance by a small amount of force, is to all intents such a use of the characteristics of the said Locke patent as will be deemed an infringement of the same.