

THE DOUBLE-POINTED TACK COMPANY V.
THE TWO RIVERS MANUFACTURING
COMPANY AND OTHERS.

Circuit Court, E. D. Wisconsin. —, 1880.

1. INVENTION—COMBINATION.—A patent, for a combination composed of a mere aggregation of parts which have no common function, is void for want of invention.
2. SAME—STAPLES.—In the present state of the art, a staple having its points run at a certain angle, and both points beveled on the same side, so that they incline or bend in the same direction when driven into wood, and adapted for use upon pails, is not such an invention as will sustain a patent.

In Equity. Infringement of Patent.

Murphy & Goodwin, for complainant.

Finches, Lynde & Miller, for defendants.

DYER, D. J. Complainant's rights depend upon the validity of a patent issued February 10, 1874, for an improvement in bail ears used upon pails. One Purches Miles was the alleged inventor of the device in question, and filed an application for a patent November 11, 1873, but the grant of letters patent was made to complainant, Miles having assigned to it his right, title, and interest in said invention. In his specifications the inventor makes this admission: "Wire staples have been employed to form the fastening eyes for bails, and these have been driven into the wood with the penetrating points nearly at right angles to the surface, and in use they are liable to pull out by the weight." He then describes his invention as follows: "My invention consists in a bail-fastening staple made of wire, with the penetrating ends cut at such an angle that, in driving them into the wood, they will assume an upward inclination, so that the weight will tend to force such points inwardly,

rather than to draw them out, and the bending of the ends in clinching will always be upwardly, thus making a much better and more reliable article than heretofore; and I combine with such fastener a convex metallic washer, to keep the bail from contact with the wood or the paint thereon.”

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The claims of the patent are as follows:

“1. The compound staple-fastening D, for bails, made with the diagonally-cut penetrating points 2 and 3, loop 4, and body 5; said diagonally-cut points being positioned as set forth, so as to bend upwardly in driving into the wood.

“2. The convex metallic washer E, in combination with the compound bail-fastening staple D, having upwardly penetrating points 2, 3, and loop 4.”

Drawings of the device annexed to the specification show a staple fastening with two penetrating points or prongs, the upper prong being longer than the lower. The lower prong runs at an acute angle, and the upper prong at an obtuse angle, from the body of the staple; the prongs, as shown in the drawings, having an upward inclination. The points are beveled, or cut diagonally on the lower sides, so as to cause them, when driven into the wood, as it is claimed, to turn upwardly and clinch as they are being driven. The washer used in combination with the staple, to keep the bail from contact with the wood, is an ordinary convex metallic washer. The patent as to the first claim is attacked for want of novelty, and as to the second, because it is, as claimed, for a mere aggregation of parts.

Concerning the second claim I have no doubt. As we have seen, that claim is for the convex metallic washer in combination with the staple. It is not perceived how the washer can be said to co-operate with the bail ear in the production of a common result. It may give greater finish to the pail, and prevent

the bail from rubbing and disfiguring the wood at the point where the bail is fastened to the ear, but the union of the two devices does not contribute necessarily to one or the same result, and does not involve invention. The bail ear and the washer perform separate and distinct functions, the distinct office of neither being changed or affected by the operation of the other. The function of the bail ear is to afford a staple fastening for the bail. The presence of the washer does not contribute to nor aid the completeness of the connection between the bail and the bail ear, nor the attachment of the bail ear to the pail. The addition of the washer, ²⁸ which is an old device, makes a mere aggregation of parts, in which each device performs its separate function, without producing anything new in operation or result by the combination. In other words, the bail ear performs the same function without the washer as with it.

The point is well put in *Gidden v. Copeland*, 15 O. G. 921, where it is said: "The fact that the knives, the rake, and the binder are respectively subordinate combinations, performing distinct operations, is not fatal to the patentability of a combination of these devices in a harvester, for they all co-operate to produce one definite result. But the combination of a tool chest or feed box with these other elements would not be a patentable combination, because, whatever these appendages may contribute to the production of a convenient or useful harvester, they would not co-operate with the other devices in the production of any one precise result."

Plainly, no invention was necessary to combine the washer with the bail ear, and I regard complainant's patent as to the second claim void, because it is for a mere aggregation of parts which have no common function. In passing upon the first claim in complainant's patent it is essential that we ascertain precisely what the patented invention is. The proofs

clearly show that prior to complainant's patent wire staples were employed for the purpose of attaching the handles to pails, and that the use of such staples for that and other purposes was old. In view of the state of the art it is unquestionably necessary, in order to support complainant's patent, that it be shown that his device presents a feature not before in existence, and which it required invention to produce. As showing the state of the art defendants have introduced in evidence numerous samples of staples and various patents granted both before and subsequent to complainant's patent. The Walton patent, granted in 1868, shows a bail ear constructed of wire, bent so as to have an eye, in which the bail is fastened, and two prongs of equal length. This device is unlike complainant's, as plainly appears on the face of the specifications and claim, because the prongs are intended to be inserted in holes in the sides of the pail, passing 29 entirely through the same and clinched upon the inner side. Nor does the device, as I understand it, show beveled prongs; certainly, not prongs both beveled on the under side. This patent was re-issued in 1876, and the claim in the re-issued patent is—*First*, as a new article of manufacture, a bail ear for pails, made of wire, bent to form a loop, and having two prongs that are clinched; *second*, the combination of the staple with the bail ear; *third*, a bail ear made of wire and having an eye for the bail between the two prongs.

The Krichbaum patent, granted in 1869, discloses a staple having two prongs or points one above the other; but these prongs are not beveled on their lower sides, and evidently are not made to penetrate in an upward direction, nor are they intended to be driven into the wood, as complainant's device is. The specifications in the patent state that "these ears are secured to the pail by first boring holes therein, in which the prongs are inserted, which being done they

are then clinched down upon the inside.” This device, therefore, does not exhibit the characteristic of the Miles invention, viz., upwardly penetrating points, both arranged to turn in the same direction in the wood in driving.

Miller’s patent, granted in April, 1874,—a caveat for his device having, however, been filed in the patent-office in August, 1873,—shows a staple with two points projecting at directly right angles to the bail ear, each of which points is notched; and in the specifications of the patent it is stated that “the ears are attached to the opposite sides of the bucket, keg, or cask, by driving the projecting portions through the bucket, the top one being near the rim of the other, a short distance down the side, and the projecting ends clinched or swaged, the notches facilitating this operation.” The claim in this patent is a broad one, since it is for an article of manufacture, being “the combined bucket, bail and ears, described, the latter constructed of flat iron, with its lower end rounded to pass through the side of the bucket, and the other end rounded and bent upon itself to form a loop, and terminating in the prong constructed to pass through the side of the bucket.” This patent was re-issued in 1877, and the claim in the re-issued 30 patent is for “bail ear and bail, and, as an article of manufacture, the combined bucket, bail, and ear.” A prominent feature of the Miller device is the notch in the end of the prongs, and it is plain that the patent does not show a staple having the lower sides of the prongs beveled, and so adapted as to give the points, when driven into the wood, an upward inclination.

There is also in evidence the rejected application of one Collins for a patent for an improved bail and tub ear, which application was filed in 1868. A drawing of this device shows a diagonal cut at the point on the upper side of the upper prong of the ear, and a diagonal cut at the point on the lower side of the

lower prong. From the description of this device, given by the inventor in his application for a patent, it is evident that it is intended that the two prongs are to be driven entirely through the stave, and then clinched on the inside of the pail, the diagonal cut of the points, as described, being evidently made to facilitate such clinching. Collins' application was rejected because it was found that his device was anticipated by the patent of Walton, the prongs of both devices being, as before stated, intended to pass entirely through the side of the pail, and clinch on the inner side.

Now, it is probably true that in the particulars in which all these devices, including complainant's, have features in common, complainant's patent, if valid, is subordinate to one or more of the patents referred to; but none of these various devices show a construction in form like that of the complainant's, and none show the lower sides of both points of the staple leveled or cut away so as to cause them to bend upwardly and clinch within the wood when being driven, and this I regard the essence of the Miles invention, if that characteristic of his device can be said to be an invention, and this, I take it, is the whole point of complainant's case. The proof is abundant that the use of wire staples to form the fastening eyes for bails is, and was at the time complainant's patent was granted, old. Samples of staples used for various purposes many years have been put in evidence, among which 31 is the staple used on the thill of a wagon for the purpose of holding the saddle strap and the back breeching strap, and also the staple used on harness hames, both of which are similar in form to complainant's device, except that the prongs do not run from the body of the staple at the angle shown in complainant's staple, nor are the points of the wagon thill and the hames staples beveled on any particular side, but are somewhat flattened on each side, or made pyramidal at the points, so that they may be driven

with facility through the wood, or inserted in holes made through the wood and swaged down upon the under side. Samples of other common loop staples are shown, some of which appear to have diagonal cuts at the points, but it is perhaps a curious circumstance that none of them show the diagonal cut on the same side of each point, particularly on the lower side of both points.

Now, it is claimed by counsel for defendant that such a state of the art, and such common knowledge with reference to wire staples, existed at the time complainant's patent was granted, as deprives the patentee of the Miles device of the right to insist that his device was the result of invention; and it is especially urged that, as the Collins device shows one of the points of the staple beveled on the lower side, there was no invention on the part of Miles in making both the points of his staple beveled on the lower side; and since we find that wire staples for bail ears were old when Miles conceived his device, and since, therefore, his invention cannot relate broadly to all kinds of staples, nor even to the simple cutting of a penetrating point diagonally, it becomes a question whether it was invention to devise and make a staple fastening for bails with both points cut diagonally on the under side, so as to accomplish the purpose designed, viz., to bend the points upwardly in the act of driving. Plainly, if there is anything patentable in complainant's device, it is the diagonal cut on the same side of the two points. A claim of novelty based upon the form of the body of the staple is not well founded, because a staple of substantially the same form of body is old, as is shown by exhibits in evidence. A mere reduction in 32 size of an old device, so as to make it small enough for a new use, cannot support a claim to a patent. The wagon-thill staple is very similar in form to complainant's, the differences, as before remarked, being in the relative length of the lower prong, the

angle at which the prongs run from the body of the staple, and the beveled points. As stated by one of the witnesses, the effect of driving the staple in question into wood would be to incline the points upward, while the thill staple, if pointed straight, would pass perpendicularly through the wood. That the effect of the bevel is to force the beveled point in an opposite direction from the bevel, and that this is common knowledge in mechanics, cannot be regarded as open to dispute. The principle is constantly illustrated and shown in the use of the chisel. Although witnesses for defendant have, on cross-examination, testified that they have not known of a double-pointed tack or staple cut with the bevel cut on the same side of both points, the evidence clearly shows that double-pointed staples, with diagonal cuts on different sides of the points, were old when complainant's device was patented.

The principal witness for complainant, who procured for Miles the patent in question, says, in his testimony: "In the said letters patent of complainant the second paragraph makes a very broad admission, to the effect that wire staples have been used for fastening the eyes of bails to pails, and that these staples have been driven into the wood, with penetrating points, nearly at right angles to the surface. I am also aware, and was aware before preparing the papers for said patent, that the penetrating points of staples had been formed in a variety of manners, among which I name the cutting of the wires diagonally, the diagonal cut generally being on the flat side of the staple."

Other testimony and exhibits in evidence show single-looped staples in use anterior to complainant's device, with diagonal cuts on the opposite sides of the two points, so that, in driving them, one point would be forced in one direction and the other in an opposite direction. All this shows that the idea of a diagonal cut on the penetrating points of staples was

not new with Miles, and that all that he can claim as new with him ³³ is the diagonal cut on the same sides of the two points, and the angle at which the points run from the body of the staple, as shown in his device. This is what Miles invented, and nothing more; and since we find that the form of the body of his staple, and the diagonal cut of the penetrating points, were old when he devised his staple, I am of the opinion that the angle at which the prongs run from the body of the staple, and the fact that in his device both points are cut diagonally on the under side, do not give to the device such originality and novelty as are essential to patentability; nor, in my judgment, can the mere fact that it is so constructed as to be adapted to use upon pails make it patentable. The leading feature of complainant's device, though it may give to it utility and value, seems to have been produced rather by mere change of form from that of devices which preceded it, than by originality of construction. The adjustment of parts is purely mechanical, and in the previous state of the art required only the exercise of mechanical skill. A staple with one point beveled on one side, and the other point beveled on the opposite side, was old. It was common knowledge that, as the points should be driven into the wood, they would be forced in different directions, because each point would be pushed in an opposite direction from the bevel. Now, the construction of a staple so that both points should be beveled on the same, that is, the under side, thereby causing both points, when driven into the wood, to incline or bend in the same direction, that is, a direction opposite the bevel, would seem to be, in the language of the supreme court, "but the carrying forward, or new or more extended application, of a thought original with others," or well known in mechanics, and not such an invention as will sustain a patent.

The learned counsel for complainant, in argument, relied strongly on the case of *Rogers v. Sargent*, 7 Blatch. 507, which involved the validity of a patent for a wire staple with corrugated or indented backs or ends. In that case the patent was sustained, and counsel have argued that the invention was merely a corrugated staple, the mere use of a piece of corrugated wire, such as every one had seen long before, but which 34 when bent into a staple, produced a particular and novel effect. But an examination of the opinion of the court shows that the decision of the case was made to rest upon peculiar and special grounds. The patentee's staple was formed by compression between dies, and it appeared that his claim was granted by the patent-office "as a claim to a staple, the shanks of which were to have a rounded edge in the direction of their width, a sharpened edge in the direction of their thickness, and transverse indentations, *when those three qualities were produced by compression between dies, as contradistinguished from forging the points and cutting the barbs by a chisel.*" And it was this difference, leading to the production of the article at a cheaper rate by the new method, which was regarded by the patent-office as a patentable difference. And it is evident, from the opinion of Judge Blatchford, that he sustained the patent upon that ground, for he says: "The evidence shows that the patented staple could not be made by hand at a price which would admit of its profitable manufacture; that the sale of it made by dies, by machinery, has been very great, and that it has altogether superseded the nonserrated staple before used for blinds. In view of these facts I think the re-issued patent is valid, and the claim sustainable in law. The words 'constructed substantially as abovedescribed, in the claim, cannot be regarded as having reference solely to the construction of the staple into a staple with transverse corrugations, and so

formed as to penetrate wood easily and be withdrawn therefrom with difficulty. * * * * *

They mean not only staples of such a shape that they can readily be inserted into wood and with difficulty be withdrawn from it, *but staples made into such shape by the action of dies, which form the corrugations by swaging. To this idea of the use of dies, enabling the article to be made by machinery, is to be attributed the utility and success of the invention. This use of dies to make the corrugations, and not merely the reduction in size of the spike, forms part of the adaptation of the spike for use in blinds. And the article, when so made by dies, is a new commodity or article of manufacture.*”

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So it clearly appears that the patent was sustained for the reason that the corrugations were, under the patentee’s claims, to be made by the use of dies, thus enabling the article to be constructed by machinery, so that it should become a new article of manufacture. This is the special ground upon which the opinion proceeds in establishing the patentee’s rights; and, therefore, I do not regard the case as one in which it is unqualifiedly held that a patent which merely covers a staple having indentations of equal depths, and over the whole surface, is valid. The particular features of the patentee’s invention, to which attention has been called, evidently controlled the decision of the case.

Without pursuing the case at bar further, I am of opinion that complainant’s patent must fall, because of the want of patentability of the device in question.

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