Case No. 5,841.

GROSJEAN v. PECK, STOW & WILCOX CO. ET AL.

{11 Blatchf. 54; Merw. Pat. Inv. 342.}[1]

Circuit Court, S. D. New York. March 19, 1873.

PATENTS—VALIDITY—ANTICIPATION—DOUBLE USE.

1. The second claim of the reissued letters patent granted to Florian Grosjean, July 16th, 1867, for an "improvement in spoons and forks," the original patent having been granted to him January 28th, 1862, for an "improvement in sheet-metal spoons," and again reissued to him July 7th, 1863, for an "improvement in sheet-metal spoons," and again reissued to him July 12th, 1864, for an "improvement in spoons and forks," namely, "A sheet-metal handle, having a central corrugation, or hollow ridge, which extends along the narrow part of the handle, and vanishes into the bowl, (or its substitute,) by tapering sidewise and flatwise, substantially as before set forth," is valid.

2. Such claim is not anticipated by the prior use of sheet-metal candle-wick snuffers, such as are described in letters Datent granted to O. W. Stow and Augustus Barnes, November 24th, 1857, for an "improvement in candle-snuffers," having a central corrugation.

3. The question of double use, in the employment, in the spoon, of the method of corrugation found in the snuffers, considered.

{This was a bill in equity by Florian Grosjean against the Peck, Stow & Wilcox Company and others, praying for an injunction to restrain the alleged infringement of a patent.}

Keller & Blake, for plaintiff.

Benjamin F. Thurston, for defendants.

BLATCHFORD, District Judge. This suit is founded on reissued letters patent {No. 2,682} granted to the plaintiff, July 16th, 1867, for an "improvement in spoons and forks," the original patent {No. 34,252} having been granted to him January 28th, 1862, for an "improvement in sheet-metal spoons," and reissued to him July 7th, 1863, for an "improvement in sheet-metal spoons," and again reissued to him July 12th, 1864, for an "improvement in spoons and forks." The specification says: "The object of my invention is, to produce, from sheet metal, spoons and similar articles, with handles which have not only the requisite stiffness for practical use, but are, at the same time, of good shape

and finish, so that they resemble, in rigidity and appearance, the solid thick handles which are usually found upon silver and plated table-ware. To this end, my invention consists of a sheet-metal handle, having one or more of the following characteristic peculiarities, viz: First. A central corrugation or hollow ridge, extending along the central part of the narrow portion of the handle, and vanishing or ending in the central part of the broad portion, or palm, of the handle, by tapering sidewise and flatwise, in contradistinction to spreading sidewise to the rim of the said palm; Second. A central corrugation, or hollow ridge, extending along the central part of the narrow portion of the handle, and vanishing or ending in the central part of the bowl, (or the substitute thereof,) by tapering sidewise and flatwise, in contradistinction to spreading sidewise to the rim of the said bowl, or its substitute. Third. Two lateral corrugations, or hollow beads, extending into the palm of the handle, and along the narrow part of the handle, with a space between them, which may be occupied by one or the other-of the central hollow ridges above described, or by a central hollow ridge having the terminal peculiarities of both those above described." The spoon is described as shaped out of a blank piece of sheet metal, by swedging it into shape in suitable dies, the bowl being of ordinary shape, the narrow part of the handle having a central corrugation or hollow ridge, which gradually vanishes into the central part of the broad portion, or palm, of the handle, by tapering sidewise and flatwise, and also vanishes into the central part of the bowl in the same manner, and there being formed, on each side of this central corrugation, near the edges of the handle, two other smaller corrugations, or hollow beads. The specification proceeds: "These hollow beads, for good appearance, may continue around the whole edge of the spoon handle, and be united, as represented; and they should extend far enough down into the bowl (where they should also be united), to insure the requisite strength where the handle and bowl unite. This addition of the beads is advantageous, as it greatly increases the strength at the bowl. The outer hollow beads also give a better and handsomer form to the whole spoon. The improvement is obviously applicable to forks formed out of sheet metal, as well as to spoons. It enables spoons and forks, of durability and good shape, to be made in the cheapest manner known. I do not claim mere beads or ornaments formed on the surface of spoon and fork handles made of rolled or cast metal, * * * nor do I claim broadly a corrugated or swedged handle for a spoon or similar article; but what I claim as my invention, and desire to secure by letters patent is: A sheet-metal handle, having a central corrugation, or hollow ridge, which extends along the narrow part of the said handle, and vanishes into the broad portion or palm thereof, by tapering sidewise and flatwise, substantially as before set forth. I also claim a sheet-metal handle, liaving a central corrugation, or hollow ridge, which extends aiong the narrow part of the handle, and vanishes into the bowl (or its substitute), by tapering sidewise and flatwise, substantially as before set forth. I also claim a sheet-metal handle, having two lateral beads, or corrugations, which extend, with

a space between them, longitudinally, along the narrow part of the handle, into the palm thereof, substantially as before set forth. I also claim a sheet-metal handle, having the central hollow ridge, combined with the lateral hollow beads, substantially as before set forth."

The defendants Wilcox and Walkley, as agents, in the city of New York, of the defendants the Peck, Stow & Wilcox Company, a Connecticut corporation, have sold, in that city, spoons, manufactured by that company, which spoons are made of sheet metal, and have, as one of their characteristics, a corrugation, or hollow ridge, which extends along the central part of the narrow portion of the handle, and does not spread sidewise to the rim of the handle, and vanishes into the central part of the bowl, by tapering therein sidewise and flatwise, and does not spread sidewise therein to the rim of the bowl. Another of the characteristics of such spoons is, that the handle is so applied to the bowl, that the flat surface, or palm, of the metal of the handle corresponds flatwise with the plane of the rim of the bowl. Another of the characteristics of such spoons is, that the central corrugation, in its extension into the bowl, crosses the rim of the bowl, and greatly strengthens the handle at its junction with the bowl, in the direction in which a strain is generally applied to bend the handle. The tendency, during such strain, is to bend in a line at right angles to the length of the handle, at its place or junction with the bowl, and the walls of the corrugation, being very much in the line of direction of the strain, cause the metal to offer a greater resistance to such strain, than it would if the surfaces of the handle, at its place of junction with the bowl, were flat planes. This strengthening is aided by the extension of the corrugation into the bowl. All these features and characteristics of the defendant's spoon are found in the spoon described and shown in the plaintiff's patent both in arrangement and mode of operation.

The idea of corrugating the handle of a sheet-metal spoon by swedging, in order to stiffen it against strains, was old; and the handle of a spoon was, before the plaintiff's invention, corrugated by a longitudinal ridge, the central line of which lengthwise was the central line of the width of the entire handle, the ridge spreading, on both sides, to the

rim of the handle, and the flanks of the ridge uniting with the rim of the bowl, and the ridge vanishing, after crossing the line of junction of the handle with the bowl, by spreading sidewise, in the bowl, to the rim of the bowl, instead of vanishing into the bowl by tapering therein sidewise and flatwise. In spoons of equal size of handle and bowl, and equal weight, made of equal thickness of metal, the difference in strength between a spoon corrugated like the plaintiff's, and one corrugated in the old form, just described, is greatly in favor of the plaintiff's spoon. The modes of operation of the two systems of corrugation, in resisting strains on the handles at their junction with the bowl, are different. In the plaintiff's spoon, the flanks of the ridge do not unite with the rim of the bowl, but the corrugation runs into the bowl, like a tongue.

The defendants are charged with violating, in making and selling their spoons, the second claim of the plaintiff's patent, and a provisional injunction is asked, to restrain such infringement. There can be no doubt of the great utility of the improvement in question. By the aid of it spoons and forks of comparatively great strength can be cheaply made, by swedging in dies, out of sheet metal. The only defence set up is, that the improvement covered by the second claim of the plaintiff's patent was before known and used in candle-wick snuffers, made of sheet metal. In 1836, Orson W. Stow and Augustus Barnes, at Southington, Connecticut, made and sold a large number of sheet-metal snuffers, one of which is produced in evidence. The snuffers consist of two pieces only, each cut from sheet metal. One piece forms the bowl piece, and has a bowl closed on five sides, a leg beyond the bowl, a finger ring, and a leg on the finger ring. The other piece forms the wing piece, and has an upright wing, to close the sixth, or open side of the bowl, a finger ring, and a leg on the finger ring. The two pieces fcross each other, and are united by, and work on, a pivot. The lower part of the side of the bowl nearest the pivot is cut away far enough to permit the portion of the wing piece immediately adjacent to the wing to pass under such side of the bowl, and thus allow so much of the wing piece as lies between the pivot and the wing to entirely cover so much of the bowl piece as lies between the pivot and the bowl, and so carry the wing into the bowl, to perform the operation of cutting off the wick. The metal which forms the bottom of the bowl is neither wider nor narrower than the width of the metal in the bowl piece, which lies between the pivot and the side of the bowl that is nearest to the pivot As the snuffers stand on the legs, the bowl piece has a central longitudinal ridge or corrugation, which is concave, as you look down upon it and extends from the pivot to beyond the nearest side of the bowl, and to nearly half way of the length of the bowl. The distance between the pivot and the side of the bowl nearest to the pivot is not quite as great as the length of the bowl lengthwise of the snuffers. About two-thirds of the length of the corrugation is outside of the bowl, and about one-third of the length of it is inside of the bowl. This corrugation does not extend sidewise to the rim, at any part of its length, on

the side which, when the bowl is open, is nearest to the wing. On the other side, the corrugation does extend sidewise to the rim, up to the bowl. The corrugation becomes gradually narrower in width, as it passes on beyond the outside of the bowl, and vanishes, within the bowl, into the metal along which its course has proceeded, by tapering into the same sidewise and flatwise, and not by spreading to a rim, in any direction, within the bowl. As the snuffers stand on the legs, the wing piece has a central, longitudinal ridge or corrugation, which is convex, as you look down upon it, and extends from the pivot to beyond the nearest edge of the wing, and to half way of the length of the wing. The distance between the pivot and the edge of the wing nearest to the pivot, is about the same as the length of the wing lengthwise of the snuffers. About one-third of the length of the corrugation is along the face of the wing, and about two-thirds of the length of it is between the wing and the pivot This corrugation does not extend sidewise to the rim, at any part of its length. It becomes gradually narrower in width, as it passes on beyond the line of the edge of the wing, and vanishes into the metal along which its course has proceeded, by tapering into the same sidewise and flatwise, and not by spreading to a rim, in any direction. Calling the bottom of the bowl, that side of the bowl which, when the snuffers stand upon the legs, is parallel with the plane of the ground, the flat surface of the metal of the bowl piece, outside of the bowl, corresponds flatwise with the plane of such bottom.

Sheet-metal snuffers, of substantially the same construction, have continued to be made and sold at Southington, in large quantities, and are still made and sold there. From 1857 to the present time, the form has been varied from that of 1856, only by making the length of the corrugation within the bowl about one-fourth of the entire length of the corrugation, and about one-fifth of the length of the bowl, and by making the corrugation in the bowl piece entirely central, so that it does not spread to a rim, on either side, and by not continuing the corrugation in the wing piece any further than to the edge of the wing. On the 24th of November, 1857, letters patent of the United States were granted to O. W. Stow and Augustus Barnes, for an "improvement in candle snuffers." The specification of this patent describes, and the drawings represent, snuffers

constructed like the form of 1857, before mentioned, with the corrugation in the bowl piece extending to within the bowl. The specification states, that "the corrugations give the necessary stiffness to the sheet metal."

Orson W. Stow testifies, that, before the corrugated form of 1856 was made, he and Barnes made a pair of snuffers of plain, un-corrugated sheet metal, for experiment, but found that the metal was not stiff enough to resist the strain which the parts would be likely to encounter in use, especially if a portion of unburned wick should be jammed between the two cutting edges, and that the metal they had used was too expensive; and that they then used thinner metal, and introduced the corrugations referred to. He states, that the object they had in view was to use light stock, and, at the same time, to streng then the article in the direction in which strains were applied to it.

It is contended, on the part of the defendants, that the strain to which a pair of snuffers is subjected, in use, is especially applied at the junction of the bowl and of the part lying between the bowl and the pivot, and at the junction of the wing and of the part lying between the wing and the pivot, and is occasioned by the interposition of unburned, or not easily cut, wick between the two cutting edges; that the direction of this strain on the bowl piece is in a line more or less perpendicular to the plane of the flat surface of the bowl piece, and would, unless the corrugation crossed the line of junction of the bowl with the part lying between the bowl and the pivot, tend to bend down the bottom plate of the bowl piece at some point between the pivot and the point where the wick is interposed between the cutting edges, and, notably, at the point of junction between the bowl and the part lying between the bowl and the pivot; that such latter part is substantially the same part as the handle of the spoon; that the object, in the snuffers and in the spoon, is, to strengthen a weak place found at such point where the tendency to bend exists; and that the relations, structure, arrangement, and mode of operation, of the parts, including the corrugation, are the same in the snuffers as in the spoon. From these premises the conclusion is maintained, that the plaintiff has only applied to a spoon or fork a means of stiffening which had before been applied to snuffers; and that such application involved no invention, and was a mere double use of a known thing, accompanied by no new or distinctive result, in the spoon or fork, beyond what was developed in the snuffers.

It is obvious, that the bowl piece of the snuffers, with the bowl on it, would not, if used as a spoon, be the plaintiff's spoon; and that the bowl piece of the snuffers, divested of the bowl part, could not be used as a spoon or fork. The use of the plaintiff's spoon is, therefore, not a double use of any part of the snuffers, in the condition in which such part is found, ready to the hand.

It is not contended that the existence of the snuffers suggested to the plaintiff the construction of his spoon, or that the existence of the snuffers suggested to Stow and Barnes, or to any other person, the construction of a spoon like the plaintiff's. The plaintiff

invented his spoon without having heard of the snuffers, so far as appears; and it was from his invention, and not from the snuffers, that spoons constructed like the plaintiff's spoon found their way into use. Comparing the plaintiff's spoon with the best form of corrugated spoon, made from sheet metal, which existed before, there are evident marks of thought, skill and design in its structure; and so there are if it be compared with the snuffers. The change and its consequences, from the former sheet-metal spoon, as well as from the snuffers, were considerable and important. A spoon, of sheet metal, with a corrugation, was found in existence, but the species of corrugation was not such as to develop in the spoon the properties and results desired by the plaintiff, as expressed by him in-his patent, that is, that the handle should have not only the requisite stiffness for practical use, but should be, at the same time, of good shape and finish, so as to resemble, in rigidity and appearance, the solid, thick handle of a silver or plated spoon, and be capable of being formed of one piece with the bowl of the spoon, by swedging in dies. These properties and results were capable of being derived from applying to the handle of the spoon the species of corrugation suggested by the snuffers. But, this species of corrugation in the snuffers was not applied to what can properly be called a handle, in the snuffers, in the sense in which the part of a spoon which is not the bowl of the spoon is called the handle of the spoon. In the snuffers, the part outside of the line of junction crossed by the corrugation is of equal width with the part inside of such line of junction. In the spoon and fork, the part outside of such line of junction is very much narrower than the part inside of such line of junction. The wide-spread metal outside, in the snuffers, of such line of junction, had to be narrowed in width very considerably, not only absolutely, but so as to be very narrow compared with the width of metal inside of such line of junction; and it is very difficult to say that it did not require experiment and invention to determine, by a practical test, whether it was possible to apply usefully, in the narrow part of the handle of the spoon, the species of corrugation found in the snuffers. It is true, that the object of the use of this species of corrugation in the snuffers was, to resist a strain, and to counteract a tendency to bend or break, and to strengthen weakness; and that the same object exists in the use, in the spoon, of the same species of corrugation. But, the object of every corrugation of thin metal, applied as in the snuffers

and the spoon, is to resist strains, and to counteract tendencies to bend or break, and to strengthen weakness. The existence of this common purpose in the corrugations, in the snuffers and in the spoon, does not advance us at all in the solution of the question at issue.

I cannot resist the conclusion, that the new application, in the spoon, of the method of corrugation found in the snuffers is not merely a double use, and that it involves something beyond the mere skill of a constructor, in adapting such method to a new occasion, and that the new occasion or purpose to which such method is applied, in the spoon, is not a mere analogous occasion or purpose to the former occasion or purpose, in the snuffers, to which such method was previously applied. There is a new mode of operation, as well as a new effect, developed, in the spoon, as compared with the snuffers, in applying to the spoon the method of corrugation found therein. The surface of the bottom of the bowl, in the snuffers, is flat with the part outside of the bowl, and the corrugation runs, in its whole length, along a flat plane. But, in the spoon and fork, the corrugation runs through a curving handle on one side of the line of junction, and into a curving part on the other side of such line of junction. The relations to each other of the two parts through which the corrugation extends in the snuffers, is, thus, different from the relations to each other of the two parts through which the corrugation extends in the spoon and fork. A principle of bracing is developed, by the combination of the corrugation with the curvature in the handle, and the reverse curvature in the other part, of the spoon or fork, which introduces a new mode of operation in the combined action of the corrugation and the two curvatures, and produces a new effect, as compared with the mode of operation and the effect found in the snuffers, where no such curvatures exist. The plaintiff's patent extends only to spoons and forks and "similar articles." At the date of the patent the silver and plated spoons and forks which the plaintiff's articles are, as he states in his patent designed to imitate, had a defined and understood shape, and embodied two reverse curvatures on the two respective sides of the line of junction between the handle and the part not embraced in the handle. It was to this structure that he applied the species of corrugation referred to. There is nothing that tends to the conclusion that it did not require experiment to ascertain whether such species of corrugation could be successfully applied, by swedging in dies, to articles having such reverse curvatures, and especially to articles with such a narrow part on one side of the line of junction between the two curvatures.

Being entirely satisfied that the second claim of the plaintiff's patent is valid, I must grant the injunction prayed for.

[1] {Reported by Hon. Samuel Blatchford, District Judge, and here reprinted by permission. Merw. Pat. Inv. 342, contains only a partial report.}

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