

LEE *v.* UPSON & HART CO. *ET AL.*

*Circuit Court, D. Connecticut.*

June 11, 1890.

PATENTS FOR INVENTIONS—INFRINGEMENT—HOLLOW KNIFE HANDLES.

Letters patent No. 365,819, July 5, 1887, to Horatio Jordan, for an art of welding the ends of metal tubes, had particular reference to the manner of shaping and bending the oval or round ends of the hollow handles of steel cutlery, so as to but-weld the handles, and make a perfect seam, which would not leak. The improvement consisted in shaping the blank so as to form at the end of the tube double lips or projections, which were adapted to be bent inwardly, and welding them together by these of dies. *Held*, that the patent was not infringed by the use of a similar plan of turning the ends of the tube inward, and but-welding them, since before the patent was issued such a plan was known and practiced, though it was not carried out well enough to be a commercial success.

In Equity. Bill for infringement of letters patent.

*Edward S. Beach* and *J. E. Maynardier*, for complainant.

*John P. Bartisit*, for defendants.

SHIPMAN, J. This is a bill in equity Which is based Upon the alleged infringement of two letters patent, the first being No. 365,819, dated

July 5, 1887, to Horatio Jordan, assignor to William W. Lee, for an improvement in the art of welding the ends of metal tubes, and the other being No. 365,829, dated July 5, 1887, to the said Lee, for an improvement in the art of making hollow handles. Nothing need he said in regard to the Lee patent, as it is conceded that its infringement was not proved. The improvement described in the Jordan patent had particular reference to the manner of shaping and bending the oval or round ends of the hollow handles of steel cutlery, so as to but-weld the handles, and make a perfect seam, which would not leak. Great difficulty had been experienced in the manufacture of this kind of knives, because the ends of the handles could not be made perfectly watertight, either by brazing or by lap-welding. No difficulty had been experienced in but-welding the side seam of the handle. The Jordan improvement consisted in shaping the blank so as to form at the end of the tube double lips or projections, which were adapted to be bent inwardly towards each other, in bending these projections towards each other, and afterwards in welding between dies so shaped as to force the inwardly bent portions together. The particular form which is given to the end of the tube by turning the edges inwardly towards each other is the distinctive feature of the improvement. The claim is as follows:

“The improved art herein described of but-welding the ends of metal tubes, consisting in first shaping the end to be welded, then closing the end of the tube sufficiently to bring the edges each opposite to the other, and then heating and welding between dies shaped to force the inwardly bent portions of the end of the tube together, and form a but-weld, substantially as and for the purposes set forth.”

Before the date of Jordan's improvement, the handles of hollow handled cutlery had been made by but-welding the side seams, and by soldering, brazing, and lap-welding the end seam, and all these methods of uniting the edges of the tubular blank were well known. The fact that side seams were but-welded is not important, for there is an important practical difference between but-welding a longitudinal seam, where very little fin is formed, and but-welding the end portions of a tube where the metal is contracted into a cup-like form, and flows out more than it does at the sides. The flat or “square” ends of the handles of the Beecher and Patterson patents were lap-welded. The Jeralds and Lawton patent of 1884 showed a tubular metallic blank for a hollow handle, having at one end projecting lips which were bent inwardly, edge to edge, and brazed together. The lips of the blanks were very like the Jordan blank, were bent towards each in the same way, but nearer together than in that blank, for the purpose of being cemented by the brazing process. A Jeralds and Lawton blank, of the proper thickness, was capable of being but-welded by the use of the appropriate dies, and a skilled forger of metals could have but-welded such a blank before the date of the Jordan invention, if he had been told to do it. Under this state of facts, without other testimony in regard to the history of

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the art, it would seem to be an advance not amounting to invention, to bring the inwardly inclined ends of the Jeralds and Lawton

blank together by welding instead of by brazing; but an inspection; of the various patents in the case, and the testimony of the expert mechanics, other than the two Messrs. Hart, who are connected with the defendant company, indicate that, as a matter of history, much time and thought had been ineffectually spent by experts in groping for success in the manufacture of hollow handles. A study of the history or the art will lead to the conclusion that the idea of but-welding the end of a Jeralds and Lawton blank was the fruit of an inventive mind. It is established by the testimony that this idea had been carried out, and hollow handled table cutlery had been manufactured in a small way by the Messrs. Hart, in the defendant's shop, in and prior to 1881, who but-welded blanks which were made substantially after the Jeralds and Lawton, pattern; that the knives were used, and were given away; and that samples were sent to the plated cutlery establishments in the neighborhood. They were made from too thin steel, were probably not well made, and were unfavorably received. I think that but very few were sold. The fact that the officers of the different factories for the manufacture of plated cutlery to which these samples were sent, and who have testified, do not recollect their existence, is unimportant; for the receipt at the respective factories of samples of actual or alleged improvements is not so unusual an occurrence as to impress itself upon the minds of the witnesses.

The complainant at this point of the case urges that the Jeralds and Lawton blank and the Jordan blank are different things, because the edges of the earlier blank are brought close together for the purpose of brazing, while there is a considerable space between the edges of the later blank. It is said, with a good deal of earnestness, that if the ends of the Jordan blanks were bent together, as is the case with "Hart's Oval Handle," (which is substantially like the Jeralds and Lawton blank,) there would be metal in a space which ought to be empty, and that such metal would be surplusage, and would either form a fin which would prevent the dies from coming together and interfere with the perfection of the weld, or would be driven within the hollow space which would tend "to crippling of the surface of the hollow handle." It is thus contended that the invention consisted in part in so arranging the lips with reference to each other that there would be no surplusage of metal, and only a small fin, and that, there fore, merely but-welding a Jeralds and Lawton blank was far from the Jordan invention. The difficulty in the circumstances referred to is rather the difficulty of making an article with commercial success, than the impossibility of making, with the use of proper dies, a but-weld; for it is testified by the plaintiff, who is an expert upon the subject, that, under favorable conditions of dies, the end should but-weld, and it seems most plain that if the handles, made after the pattern of "Hart's Oval Handle," were not properly but-welded, and too much fin was created, the Cause would be apparent to the skilled mechanic, who would make his dies of the proper shape, and would, from the knowledge gained by experience, regulate-the space between the edges, which were to be brought together

and thoroughly welded by the dies. It may be added that the patent places no stress upon the particular distance between the edges of the tubular blank. After the idea had been reached that but-welding the end of a tubular blank could be beneficially obtained by inwardly bending the edges of the blank towards each other, the shape of the dies and the separation of the edges by the blank were matters of detail, to be wrought out by the mechanical, rather than by the inventive, mind. The defendant's testimony is to the effect that, after the oval handle had been made, and before the date of the application for the patent, it manufactured the round stub and handle, the blank for which is conceded to be like the Jordan blank, from which the plaintiff supposes that the round handle was copied. I am inclined to the opinion that the round handle was a modification of the oval handle, and was not copied from the Jordan invention; but I do not place the decision upon that ground, but upon the prior invention of the oval handle, which was manufactured in accordance with the distinctive characteristic of the Jordan method, although with little commercial success. The bill is dismissed.