SELLERS *ET AL. V.* COFRODE *ET AL.*[1]

Circuit Court, E. D. Pennsylvania. April 27, 1888.

PATENTS FOR INVENTIONS—ANTICIPATION.

Where a manufacture is indistinguishable in all material respects from a former manufacture, is constructed from the same material, by the same mechanical operations, and by the use of tools which, though called by different names, are similar in general character and manufacture, the claims for the process of making and for the manufacture thus made are void.

This was a bill to restrain the infringement of letters patent No. 236,723 for a sleeve-nut, and method of making sleeve-nut, issued January 18, 1881, to George H. Sellers, assignor to William Sellers and John Sellers, Jr. The bill was filed by said William Sellers and John Sellers, Jr., as owners of the patent, and the Edge Moor Iron Company, licensees. The prayer was for an injunction and account. The specifications in complainant's patent were as follows:

"My invention relates to that class of wrought-iron couplings which connect tension-bolts, such as are used in bridge and roof and other trusses; and it consists of a right-hand nut, a left-hand-nut, and the sleeve proper which unites the two nuts, the length of this intermediate sleeve being proportioned to the amount of adjustment required. Such sleeve-nuts have heretofore been constructed, so far as I know, in two forms: one with the sleeve cylindrical inside and outside, and the nuts hexagonal at the ends, enlarging towards and vanishing in the round sleeve; the other with hexagonal exterior and parallel sides from end to end, and the interior of the sleeve cylindrical. Both these forms have the end sections thickened up to receive the thread. In both of these forms there is a surplus of metal which is necessarily unequally distributed, producing unequal sections longitudinally, so that this surplus gives additional weight without additional strength, and requires a corresponding increase in the other parts of the structure to sustain it. With the cylindrical sleeve the tapered hexagonal ends afford a very insecure hold for the wrench required to adjust the nut, and the hexagonal sleeve, with parallel sides from end to end, gives a clumsy appearance to the structure, with the largest surplus of metal. It is the object of my invention to furnish a wrought-iron sleeve-nut, having the sleeve with a polygonal exterior and a polygonal or cylindrical interior, uniting cylindrical nuts of a diameter less than that of the sleeve, the thickness of metal in the longitudinal section being as nearly uniform as is compatible with proper bearing surfaces for the wrench, thus affording a wrought-iron sleeve-nut with no surplus metal, and with an outline architecturally correct."

As described in the specifications he made the sleeve-nut from a wrought-iron plate. He obtained the desired form for the sleeve by first forging a tube in polygonal dies over a mandrel of the size desired for the interior of the sleeve. He then forged the ends over a smaller mandrel in dies which had the outline of the nut, but which had the center or

sleeve-part cut away, thus securing by one rapid and simple operation the production of accurately shaped ends, of diminished interior diameter while retaining the large interior diameter of the sleeve, and the

uniform thickness of the walls. The answer denied invention and patentability, and alleged anticipation. It did not deny infringement. Samples of the sleeve-nuts made at Phillipsburg were in evidence, and an examination showed that they were in form and material the same as the nuts described by Mr. Sellers in his patent, and claimed as his invention. The proof was that they were invented by Mr. James Christie, then superintendent of the Phillipsburg Manufacturing Company, in the early part of the year 1873, and many thousand of them were made and used in bridge work between that time and the latter part of 1875, when Mr. Christie left that company. These nuts were made, for the most part, by the method and tools described, as follows:

(1) A flat piece of iron was heated and bent around a round mandrel of the size of the desired interior of the nut. (2) The metal, still on this mandrel was then welded and forged to an hexagonal form. (3) One end of the hexagonal tube formed as above was then reheated, a short mandrel, of smaller diameter than the first mandrel, inserted in the heated end, which was then forged down upon it. (4) The other end of the hexagonal tube was then heated, a long mandrel of the same diameter as the short mandrel used in forging down the first end inserted so as to extend through the nut, and the remaining end forged down upon this mandrel. This completed the forging, and the nut was finished by cutting right and left screw threads in the opposite ends thereof, the result being "a wrought-iron sleeve-nut, having the sleeve with a polygonal exterior and a cylindrical interior uniting cylindrical nuts of a diameter less than that of the sleeve, the thickness of metal in the longitudinal section being as nearly uniform as is compatible with proper bearing surfaces for the wrench, thus affording a wrought-iron sleeve-nut with no surplus metal, and with an outline architecturally correct."

H. W. Hare Powell and *Frank P. Prichard,* for complainants.

Francis I. Chambers and *George Harding,* for defendants.

PER CURIAM. The complainant's patent is for "a sleeve-nut, and the method of making sleeve-nuts," and the claims are as follows:

"(1) The process substantially as hereinbefore described of making a wrought-iron sleeve-nut, by forging a tube in polygonal dies, and upon a mandrel of the desired shape, and then forging the ends in cylindrical dies upon a smaller mandrel. (2) A wrought-iron sleeve-nut, made by forging a tube in polygonal dies, and upon a mandrel of the desired shape, and then forging the ends in cylindrical dies upon a smaller mandrel."

The complainant encountered difficulty in procuring it. The principal examiner of the office, upon full investigation, reported against the claims. The board, however, allowed them, assigning the following reasons:

"The references do not disclose the process claimed, consisting of a series of steps or acts upon a given material in regular order of succession, nor do the references positively disclose the product, the result of applicant's invention. Metallic sleeve-nuts having the

general contour and disposition of metal are shown in Cratchfleld's and other patents cited, but there is no declaration or intimation that they are of wrought-iron; and as it does not appear that the

way claimed, or any other way whatever, was ever before known for making wrought-iron sleeve-nuts in this form, we cannot reasonably hold that the sleeve-nuts shown in the references are of wrought-iron. The thing produced is manifestly an improvement upon cast metal, and upon wrought metal of uniform diameters throughout its length, and upon wrought metal of differing diameters with unequal distribution of material. The knowledge of the thing depends, in this case, in a measure upon the knowledge of how to make it. The claims and the parts of the invention have a reciprocal relation with each other, so that each tends to sustain the other."

The office, as well as the complainant, was ignorant of the fact that for sometime previous similar sleeve-nuts had been manufactured at Phillipsburg, N. J., by a process substantially identical with the complainant's. But for this doubtless the patent would have been rejected. The complainant, who is an intelligent machinist, and was familiar with the defects of sleeve-nuts in general use formerly, spent much time and thought on the manufacture of the nut which he constructed. He devised a useful and ingenious tool, which he employs in the manufacture of his nut, whereby a greater degree of uniformity and exactness in some part of the work is secured, and a neater and handsomer finish is obtained. The method employed in the construction is, however, the same as that previously employed at Phillipsburg. Calling the complainant's tools "dies," and the others by a different name, does not tend to distinguish the methods. In both cases the tools are similar in general character and manner of use, and in both the nuts are constructed from a flat wrought-iron plate, by forging and swedgling, and when constructed are indistinguishable in all material respects. If the claims were valid, it could not be doubted, we think, that the method pursued at Phillipsburg, and the nuts there constructed, are an infringement. We have not reached this conclusion without some regret. The result of the complainant's efforts have been beneficial to the public, and seem entitled to some reward. Doubtless, had he or his solicitor at the time been aware of the manufacture at Phillipsburg, the claims would have been narrower or otherwise different.

The bill must be dismissed, with costs.

[1] Reported by C. Berkely Taylor, Esq., of the Philadelphia bar.