

COES v. THE COLLINS Co.

Circuit Court, D. Connecticut. January 16, 1882.

1. LETTERS PATENT—WRENCHES—INFRINGEMENT.

The first claim of reissued letters patent No. 3, 483, granted to Loring Coes, June 1, 1869, for an "improvement in wrench," which is a claim to an improved Coes wrench, so constructed that the thrust or back strain of the rosette screw, when the wrench is used, shall be borne by the shank instead of the handle of the wrench, substantially as described, is not infringed by a wrench made in accordance with the description in letters patent No. 50, 364, granted to Jordan & Smith, October 10, 1865, for an "improved wrench."

2. SAME—SAME.

To remedy the difficulty experienced in the use of the Coes wrench of 1841, the plate and the ferrule being often broken or bent and pushed out of place, and the wooden handle split or crushed, George C. Taft substituted in place of one rosette three parallel rosettes, with narrower peripheries, revolving at right angles to the line of motion of the adjustable jaw in three parallel grooves in the adjacent face of the main bar, each groove bearing against both faces of its rosette, so as to prevent the rosette and the screw from being carried bodily towards the fixed jaw, and to cause the back-thrust to be received by the side of the groove furthest from the fixed jaw, instead of as before, by the plate. To effect the same result, the defendant put underneath the plate a screw nut, in the extension of the main bar, a screw thread being cut in the extension, and this screw nut is screwed up tight against the bottom of the screw nut by a screw nut at the extreme end of the extension below the handle. The rosette is the same as the Coes rosette of 1841, and always maintains the same position relatively to the handle. *Held*, that the means employed by the defendant are different from those employed by Taft, and are not the mechanical equivalent.

In Equity.

George L. Roberts, for plaintiff.

William E. Simonds, for defendant.

BLATCHFORD, C. J. This suit is brought on reissued letters patent No. 3, 483, granted to Loring Coes, the plaintiff, June 1, 1869, for an "improvement

in wrench,” the original patent, No. 40, 590, having been granted to Thomas H. Dodge, as assignee of George C. Taft, 906 the inventor, November 10, 1863, for an “improvement in wrenches.” The specification of the reissue is signed by Loring Coes, and is as follows, including what is inside of brackets and what is outside of brackets, omitting what is in italics:

“Figure 1 represents a prospective view of [a ‘Coes wrench’ having the said Taft’s improvements applied thereto] *my improvement*, and figure 2 represents [sections of detached parts of the wrench shown in figure 1] *a detached view of the ‘rosette’ and therewith connected*. Similar letters of reference indicate like parts in the drawings. * * * [The nature of the said Taft’s invention relates to a mode of constructing the Coes wrench patented April 16, 1841, in such a manner that the handle shall be relieved from the back-thrust or strain of the rosette screw, when the wrench is used. In my said wrench the rosette presses against the ferrule, and the ferrule, in turn, against the front end of the handle, whereby the handle was often split and broken. In the drawings] A is the shank of [the] *my* wrench; B the stationary jaw; and B the sliding jaw, through the part B” of which the operating screw, C, works. D is the rosette, formed in one piece, *as shown*, with the screw, C, [as shown,] and journalled, at *a* to [the] ferrule, E. Parallel grooves, *d, d, d*, [in this instance] are cut in the shank, A, [at right angles to the line of motion of the movable jaw, B”.] in which [grooves] projections *e, e, e*, of the rosette turn. The projections *e, e, e*, are made parallel to each other, and are bevelled on one side, as shown, to lessen the friction of the rosette [in] upon turning. The operation is as follows: To adapt the opening between the jaws to the size of the object to be clasped thereby, the operator turns the rosette to the right or left, as the size of the object [may require] *will indicate*, which will turn the screw in the

part, B", of the sliding jaw. B', thereby increasing or diminishing, as the case may be, [and, as to the way turned, will increase or diminish] the distance between the jaws, as required. The [advantage] *advantages of having a rosette* of this [improvement] *form* is that *it sustains* the pressure which [would otherwise] *otherwise would* come [upon] *on* the [handle is transferred to the shank of the wrench, thus obviating one and really the only serious objection to the said Coes wrench,] *ferrule, E, which pressure is often so great as to break it off, or displace it, thus rendering the whole wrench useless. Having thus described my improved wrench,* I am aware that the [rosettes] *rosette* of screw wrenches [have] *has heretofore been* constructed with [screw threads] *a screw thread*, and [such devices are not claimed] *I do not claim such device*, but what [is claimed as the invention of the said George C. Taft, and desired to have secured] *I claim and desire to secure* by letters patent is:"

Reading in the foregoing what is outside of brackets, including what is in italics, and omitting what is inside of brackets, gives the text of the specification of the original patent. There are three claims in the reissue, as follows:

"(1) An improved Coes wrench, so constructed that the thrust or back strain of the rosette screw, when the wrench is used, shall be borne by the shank. instead of the handle of the wrench, substantially as described. (2) A notch 907 formed at right angles to the line of motion of the movable jaw, in the shank of a Coes wrench, for relieving the handle from the back strain of the rosette screw, substantially as described. (3) The combination of two or more parallel grooves, *d*, in the shank, *A*, with two or more corresponding projections, *e*, on the rosette, *D*, the same not being spiral, but running at right angles to the line of motion of the jaw, substantially as described."

There was only one claim in the original patent, as follows:

“The combination of the parallel groove, *d, d, d*, in the shank, A, with the corresponding projections, *e, e, e*, on the rosette, D, the same not being spiral, but running at right angles to the line of motion of the jaw, thus relieving the ferrule from all strain, while retaining the rosette in the same relative position as respects the handle of the wrench, substantially as and for the purposes set forth.”

The defendant’s wrench which is alleged to infringe claim 1 of the reissue is made in accordance with the description in letters patent No. 50, 364, granted to Jordan & Smith, October 10, 1865, for an “improved wrench.”

The plaintiff’s wrench and the defendant’s wrench both of them contain improvements engrafted upon the form of wrench shown in letters patent No. 2, 054, granted to Loring Coes, the plaintiff, April 16, 1841, for an “improvement in the method of constructing screw wrenches,” and reissued to him, No. 139, June 26, 1849, for an “improvement in screw wrenches.” The main feature of the Coes wrench of 1841 was the moving of the adjustable jaw, by a screw placed at the side of, and parallel with, the main bar, which carried the permanent jaw at one end of it and the handle at the other end, the screw taking into an attachment to the adjustable jaw, and working that jaw to and fro without itself moving otherwise than by rotation, and having on its end furthest from the fixed jaw a rosette or milled head, which never approached to nor receded from the fixed jaw, and could therefore be rotated, so as to rotate the screw, by the thumb of the hand which held the wrench, because the rosette always retained the same position relatively to the handle of the wrench. A wooden handle was slipped over the handle end of the main bar, and a screw nut on that end bearing against the adjacent

end of the wooden handle held the other end of the wooden handle against a ferrule and that against an iron plate and that against a shoulder on the main bar. The iron plate projected out on the same side with the rosette and next that face of it furthest from the fixed jaw. The plate carried the revolving end of the screw, the bearing point projecting beyond the face of the rosette, 908 such revolving end rosette and screw being practically one piece and revolving together. In order to prevent the screw and the rosette from being carried bodily towards the fixed jaw by the sliding of the adjustable jaw on the main bar, a notch as long as the width of the periphery of the rosette was cut in or out of the substance of the main bar opposite the place intended for the permanent position of the rosette, and the periphery of the rosette turned within the notch so that the edge of the rosette face nearest to the fixed jaw would catch against the edge of the notch, the angle of the notch being towards the fixed jaw. But while this Coes wrench of 1841 had advantages, it had difficulties. There was a pressure against the plate by the rosette face furthest from the fixed jaw and by the end of the screw in its bearing, and thus the back strain or thrust from the bite of the jaws was communicated through the adjustable jaw, its attachment, the screw and the plate, to the ferrule, and so to the wooden handle, before it reached the main bar through the screw nut at the handle end. The plate and the ferrule were often broken or bent and pushed out of place and the wooden handle was split or crushed. It became desirable, therefore, to devise a way of taking off this back-thrust before it could reach the plate or the ferrule and thus the wooden handle, and of bringing it against the resisting strength of the main bar itself between the plate and the fixed jaw. Taft did this by his invention of 1863. He took the Coes wrench of 1841, with its main bar, fixed jaw, adjustable jaw, attachment thereto, screw,

bearing, plate, ferrule, wooden handle, screw nut, and extension of main bar, all as they were, and, in place of one rosette, he put in three parallel rosettes, with narrower peripheries, revolving, at right angles to the line of motion of the adjustable jaw, in three parallel grooves in the adjacent face of the main bar, each groove bearing against both faces of its rosette, so as not only to prevent the rosette and the screw from being carried bodily towards the fixed jaw, but to cause the back-thrust to be received by the side of the groove furthest from the fixed jaw, instead of, as before, by the plate. The grooves being cut in the main bar, the back-thrust was intercepted by them, and the plate and the ferrule and thus the wooden handle were relieved from all liability to injury from the back-thrust, while the rosette was retained in the same relative position to the handle which it had in the Coes wrench of 1841. In the original patent of 1863 the plate and the ferrule together are called the ferrule, E, and it is stated that by the new arrangement the pressure which would otherwise come on the ferrule is taken off from it, such pressure being “often so great as to break it off, 909 or displace it, thus rendering the whole wrench useless.” The claim in that patent states that the arrangement relieves the ferrule from all strain, while the rosette is retained in the same relative position as respects the handle of the wrench. The reissue states that the nature of the invention relates to a mode of constructing the Coes wrench patented in 1841 in such a manner that the handle shall be relieved from the back-thrust of the screw, the arrangement of the wrench of 1841 being that the rosette pressed against the ferrule, (the ferrule E being the plate and ferrule together,) and the ferrule against the front end of the handle, whereby the handle was often split and broken. It is not said, in the reissue, that the rosette continues to maintain always the same position relatively to the handle, but that is necessarily

implied in speaking of the wrench improved upon as the Coes wrench patented in 1841, and is a necessary result of what is described in the text and shown in the drawings. The reissue also states that the advantage of the improvement is that the pressure which would otherwise come upon the handle is transferred to the shank of the wrench.

In the monkey-wrenches used before the Coes patent of 1841, a screw nut on the body of the main bar moved the movable jaw, a screw being cut on the body of the main bar, as shown in figure 2 of the Coes patent of 1841. In that form the direct linear or columnal strength of the main bar was availed of to resist the back-thrust. When the Coes improvement of 1841 was introduced that advantage was thrown away. The improvement of Taft in 1863 was an effort to restore that advantage and yet retain the Coes improvement of 1841. In the defendant's wrench the Coes wrench of 1841 is taken, with its main bar, fixed jaw, adjustable jaw, attachment thereto, screw, rosette, bearing, and plate. But underneath the plate a screw nut is put on the extension of the main bar, a screw thread being cut in the extension, and this screw nut is screwed up tightly against the bottom of the plate so that the back-thrust comes against the extension at the screw thread. The wooden handle is slipped over the end of the extension, and is held up against the bottom of the said screw nut by a screw nut at the extreme end of the extension below the handle. The rosette is the same as the Coes rosette of 1841, and always maintains the same position relatively to the handle.

The first claim of the reissue, which is the only claim alleged to have been infringed, is a claim to “an improved Coes wrench so constructed 910 that the thrust or back-strain of the rosette screw, when the wrench is used, shall be borne by the shank instead of the handle of the wrench, substantially as described.” Mr. Waters, an expert for the plaintiff, testifies that

the defendant's wrench is, in his judgment, the same in its construction and mode of operation as the wrench described in the reissue and referred to in the first claim, because the essential novelty of the wrench described in the reissue consists in a mode of construction to relieve the Coes wrench of the difficulty described in the reissue; that this is done in the reissue by bringing the back-thrust to bear against projections on the main bar, running across it, against which the rosettes on the screw act; that in the defendant's wrench the end-thrust is taken on the plate, and then, through the screw nut, comes on the shank by means of the threads inside of the screw nut and the threads on the shank, which bear against the former threads; and that this is only an equivalent for the projections on the main bar, in the reissue, against which the rosettes bear. Another of the plaintiff's experts, Mr. E. S. Renwick, states that the two wrenches obtain by substantially the same means the result of sustaining the strain of the movable jaw and of the rosette screw by the shank or bar of the wrench, in this: that in the defendant's wrench the rosette and the screw are combined with the rectangular part of the shank, or its equivalent, by a notch, which limits the movement of the rosette and screw in both directions, without the intervention of the handle, the notch having its upper shoulder formed by a portion of the rectangular shank itself, and its lower shoulder formed by the upper surface of the plate, which plate is rigidly secured to the shank; and that holding the lower shoulder of the notch to the shank by the screw nut in the defendant's wrench is a well-known substitute for the Taft method of holding the lower shoulders of the grooves to the shank by the substance of the material of which they are composed.

It is entirely clear, as is testified to by Mr. H. B. Renwick, the defendant's expert, that if, in the Coes wrench of 1841, the back-thrust of the screw reaches

the plate it is transmitted through it and the wooden handle, and the nut at the end of the shank, which is an extension of the main bar, to the shank, so that it is borne by the shank. It comes back thus to the column formed of the main bar and shank as one piece. If the plate bends, or the ferrule is displaced, or the wooden handle is broken, those are incidents of the pressure, and those incidents happen only because the thrust is being 911 resisted by the shank. Taft brought the pressure back to the main bar by taking it off by the grooves and rosettes, before reaching the plate, thus relieving not only the wooden handle and the end nut, but also the plate. He did this by right-angled grooves and rosettes, interposed before reaching the plate. If the first claim of the reissue claims any more than this it cannot be maintained. As a claim to so constructing a Coes wrench of 1841 that the back-thrust shall be borne by the shank ultimately, through the plate and the handle and the end nut, it would cover the Coes wrench of 1841. As a claim to having the shank bear the thrust at some points before the handle is reached, without reference to the mechanical means, it is invalid. It must be regarded as a claim to the means shown "substantially as described." As such it is not infringed. Taft left the plate and the handle and the end nut outside of the course of the back-thrust. The defendant's wrench does not leave the plate outside of such course. In it the thrust acts fully on the plate, and a screw nut is interposed between the handle and the plate, having on it and on the shank the usual spiral threads. The two inventions are inventions in different directions, though both have a common ultimate object and design. The wooden handle is relieved in both; but that is not sufficient to make out infringement. The plate is relieved by Taft and not by the defendant. Claim 1 of the Taft reissue must be read as a claim to an improved Coes wrench, constructed substantially as described. What is said in

it about the bearing of the thrust by the shank instead of the handle is merely a statement of a result which the construction will affect, and is not a statement of means or mechanism. It is a claim to means, to the mechanism described, which effects the result stated. The means employed by the defendant are different, and are not a mechanical equivalent for the means in the reissue.

The bill is dismissed, with costs.

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