CROSBY STEAM GAGE & VALVE CO. V. ASHCROFT MANUF'G CO.

Circuit Court, D. Massachusetts. June 30, 1883.

PATENTS

FOR

INVENTIONS—ANTICIPATION—INFRINGEMENT—PATENT NO. 145, 726 VALID.

Patent No. 145,726, for an improvement in pressure-gages, granted to George H. Crosby, December 23, 1873, was not anticipated by patent 23,032, known as the Lane patent, granted in 1859, and is infringed by defendant's gage which unites the ends of a Bourdon tube by a piece of metal, which, as to its operative parts, is the solid V-link of patent No. 145,726.

In Equity.

Before GRAY and LOWELL, JJ.

W. A. Herrick and J. H. Millett, for complainants.

T. W. Clarke, for defendants.

LOWELL, J. The plaintiffs are owners of patent No. 145,726, granted to George H. Crosby, December 23, 1873, for an improvement in pressure-gages. In his specification, the patentee declares the invention to consist of a new mechanism for connecting and transmitting the motion of the arm, or arms, of a Bourdon tube to the rack, or equivalent device, that carries the pointer, or index, in order to utilize, as far as possible, the upward, or vertical, as well as the horizontal movement of said tube, or tubes, which enables him to use a stouter tube for the same pressure.

"To accomplish this result," he says, "I employ two links, connected or jointed together at one end and separately pivoted at their opposite ends, which are spread apart in such manner that the two links constitute the sides of a triangle, of which the point where they are joined or connected together is the apex, and the line drawn between their separately

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pivoted ends is the base. In case two Bourdon tube arms or branches are employed, then one of said links is pivoted to the end of one of the branches, and the other link is pivoted to the other branch. In case but one branch or arm is used, then one of the links is pivoted to the end of this branch, and the end of the other link is pivoted to the case of the gage."

He then describes, with the assistance of drawings, several forms of gage in which his improvement may be used, and concludes:

"In all the modifications represented, it will be seen that there is one feature common to all, of two links jointed together at one end, with their other ends spread apart and pivoted separately, one, at least, of said ends being pivoted to the Bourdon tube, and connected, through their common pivotal point, with mechanism to operate the index-shaft of the gage, said mechanism deriving its movements from the changes of position of said common pivotal point; and, in all the in all the modifications, the vertical movement of tube, or tubes, is fully utilized. In lien of jointing together the two links at the apex, these ends of the links may be solidly united, the two thus forming, in effect, a solid V-link, the legs of which are separately pivoted, as before described."

The defendants make a gage which unites the ends of a Bourdon tube by a piece of metal which, as to its operative parts, is the solid V-link of the plaintiff's patent; and the points taken in defense are so two: that the patent, though it mentions this solid link, does not claim it; and that there was no patentable novelty in the improvement itself.

Taking the latter point first, it seems to us to be proved that a connecting device of the sort described in the patent, that is, a triangular link, is new in form. The instrument described in the Lane patent, No. 23,032, granted in 1859, approaches very nearly to the Crosby gage, and without the test of actual experiment we might not be able to detect any difference; but the experiments tend to show that the plaintiff's link, in some forms of gage, at least, saves some motion which Lane's rack and pinion loses. That the gage possesses this advantage to as great a degree as the patentee supposes, or that he has made a discovery of great importance, or even that the instrument works precisely as he supposes it to work, it is not necessary to say;, but the plaintiff's experimental tests are not met by similar experiments on the other side, but with mathematical reasoning not sufficient to convince us of the fallacious character of those tests.

There is no doubt that Crosby's claim includes the solid V-link. It is in these words:

"In a pressure or vacuum gage, the means herein described for operating the index-shaft by both the upward, or vertical, as well as the horizontal movement of the Bourdon tube or tubes, the same consisting of two links joined or connected together at one end, with their other ends spread apart and pivoted separately, as specified, in combination with intermediate mechanism, transmitting the movement of said links to the index-shaft; the whole constructed and operating substantially in the manner shown and set forth."

The claim follows presently after the statement that the solid V-link may be used instead of the jointed link, and it carefully uses the words "joined or connected," instead of "jointed," to include both modes of joining the ends which made the apex of the triangle.

Connected with this question, there is some evidence which appears to be intended to prove that the operation of the solid link is not, in all respects, and under all pressures, precisely like that of the jointed link; but this is of no consequence, since both are sufficiently described and claimed, and one is infringed. We have not sufficient confidence in the actual superiority of the Crosby gage over that of Lane to order a peremptory injunction, but shall refer the case to a master to ascertain the real value of the improvement, and reserve all other orders until the coming of his report.

Decree for the complainants.

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