BLISS v. HAIGHT et al.

Case No. 1,548.

{7 Blatchf. 7;[1] 3 Fish. Pat. Cas. 621.}

Circuit Court, S. D. New York. Sept. 3, 1869.

PATENTS—IMPROVEMENT IN HOSE COUPLINGS.

1. The specification of the patent granted to Robert B. Lawton and William H. Bliss, February 22d, 1859, for an "improvement in hose coupling," explained.

2. The claim of that patent is: "The two thimbles C D, attached to the ends of the hose A B, the thimble C being provided with the shoulder b, and ground seat or packing c, and the thimble D provided with the groove e, with inclined sides and fitted within thimble C, the above parts being used in connection with the conical roller or rollers g, fitted in the screw caps i, and the whole arranged to operate as and for the purpose set forth." To be within this claim, there must not only be a pin with a conical face at its inner end, but the pin must have the capacity of rotating as a roller.

3. The specification of the patent granted to William H. Bliss, February 25th, 1862, for an "improvement in hose couplings," explained.

4. The second claim of that patent is: "The lug G, within the butt A, when used in connection with the pin F, and the groove g of the butt B, substantially as and for the purpose set forth." To be within this claim, the pin must be a rotating pin, with a bevelled inner end.

{5. Where a patent is granted for a mere combination of old devices to produce a new result, such a patent is not infringed by a production of the same result without using all the devices which are included in the patented combination.}

{Cited historically in Bliss v. Gaylord Patent Coupling & Manuf'g Co., Case No. 1,547. Cited in Waterbury Brass Co. v. Miller, Id. 17,254.}

In equity. The bill in this case was founded on two letters patent One {No. 23,033} of them was granted on the 22d of February, 1859, to Robert B. Lawton and the plaintiff {William H. Bliss}, for an "improvement in hose coupling," and Lawton's interest in it was assigned by him to the plaintiff on the 2d of June, 1866 {and reissued to him December 21, 1869 (No. 3,768)}. The other patent was granted to the plaintiff on the 25th of February, 1862, for an "improvement in hose couplings." In regard to both of the patents the answer {of the defendants William H. Haight and others} set up the defence of non-infringement In regard to the Bliss patent, it set up the further defence, that, for upwards of two years prior to the application by Bliss for that patent, he made and sold, or caused to be made and sold, large numbers of couplings containing the improvements contained in that patent, or substantial and material parts thereof, and that such couplings were used by others with his knowledge and allowance for more than two years before he made such application. The defence that Bliss abandoned to the public the inventions covered by the Bliss patent, was not setup as a distinct defence. {Bill dismissed.}

George Gifford, for plaintiff.

Charles M. Keller, for defendants.

BLATCHFORD, District Judge. The defence of non-infringement in respect to the Lawton and Bliss patent will be first considered. In order to determine that question, it is indispensable to determine what is the nature and scope of the invention claimed therein. The specification states the object of the invention to be "to connect hose together in such a manner that a swivel joint will be attained, and at the same time certain provision made for compensating for the wear attending such connection; so that the coupling may always be kept water tight by the mere act of adjusting or connecting the parts together." It then states that the invention consists "in having a metal thimble or tube attached to each end of the hose to be connected, one thimble fitting within the other, and the inner one grooved circumferentially to receive one or more taper or conical rollers, that are adjusted by screw caps, so as to secure the two thimbles together and also keep the end of the innermost one against a packing or ground seat at the inner side of the outermost one, whereby the desired object is attained, as hereinafter described." It then describes the manner of attaching and securing the thimbles to the hose, which is unimportant. It then says: "The thimble D, its outer portion beyond its hose B, is smaller than the corresponding portion of the thimble C; so much so that D may fit within C, and the end of D abut against a packing or ground seat c, placed on a shoulder d, which is formed within C by it's enlargement, it being understood that the inner ends of the thimbles within the hose are equal in diameter. The thimble D is grooved circumferentially, as shown at e,

the sides of the groove being bevelled or inclined, so that the outer part is wider than the inner part, and on the thimble C tubular flanches f are cast, one or more, the openings or interior of the flanches passing through the thimble O and having conical metal rollers g placed within them, said rollers being provided with stems h, which pass into caps i, and are secured therein by pins or small screws j, which pass laterally into grooves in the stems, as shown at k. The roller stems h are allowed to turn freely within the caps i, and the caps i screw on the flanches f, as plainly shown in the drawing. From the above description it will be seen, that, by fitting the thimble D within C, and screwing down the rollers g into the groove e in thimble D, the ends, A B, of the hose will be connected, and a swivel joint obtained, that is to say, the hose A B may be turned or rotated, and consequently prevented from being twisted in handling. The roller or rollers g rotate in the groove e, and thereby prevent friction, and favor the easy turning or rotation of the hose. It will also be seen, that, as the roller or rollers g are screwed down into the recess e, said roller or rollers will, by their conical form, and in consequence of bearing against the outermost bevelled edge of recess e, provision being made for such result, force the outer end of thimble D against the packing or seat c, and thereby form a water-tight joint, and, as the roller or rollers g may be screwed down more or less, as occasion may require, the wear attending the turning of the coupling may be compensated, and a water-tight joint always obtained." Then comes a disclaimer, as follows: "We do not claim connecting the two parts or thimbles O D together by means of a screw or pin passing through one thimble and fitting in a groove in the other, for such coupling or connection is well known and has been used, if not for the same, for analogous purposes." Then follows the claim, in these words: "The two thimbles C D attached to the ends of the hose A B, the thimble C being provided with the shoulder b and ground seat or packing c, and the thimble D provided with the groove e, with inclined sides and fitted within thimble C, the above parts being used in connection with the conical roller or rollers g, fitted in the screw caps i, and the whole arranged to operate as and for the purpose set forth."

It is apparent, from the description in the specification, that the conical roller is endowed with two functions. The conical face of the roller will, by bearing against the bevelled or inclined side of the groove, when the roller is screwed into the groove or recess, force the end of one thimble against the ground seat or packing in the other thimble and thus form a water-tight joint. This function of making pressure, by the wedge-like action between the conical face of the roller and the bevelled side of the groove, has relation solely to the production of a water-tight joint between the two thimbles. In this particular, the fact that the roller is a roller, capable of rotation, and not a pin, incapable of rotation, is of no importance. A pin with a conical face, incapable of rotation, and such face bearing against the bevelled side of the groove, would be in all respects the same as a roller with a conical face, so far as the wedge-like action between such conical face and

the bevelled side of the groove, to press together the parts where the water-tight joint is to be formed, is concerned. But the roller, in addition to having a conical face, is a roller; and this introduces the second function of the conical roller. That is, that, after the roller is screwed into the groove, and the connection is formed between the two pieces of hose, they can be turned or rotated easily and without much friction, by means of the rotation of the roller in one thimble, as its face bears against the side of the groove in the other thimble. As the two pieces of hose are turned, the movement of the end of one thimble against the packing or ground seat in the other thimble is favored and assisted by the rotation of the roller. This is what the specification calls, obtaining a swivel joint. It is an incident of this function, that compensation is made for the wear attending the turning of the hose, by the fact that the roller may be screwed down further into the groove as the conical face of the roller or the bevelled side of the groove becomes worn. With this view of the mechanism we are prepared to consider the disclaimer and the claim. The patentees disclaim connecting the two thimbles together by a screw or pin passing through one thimble and fitting in a groove in the other. By these words "a screw or pin," as used in contradistinction to what the patentees describe as their invention, must be understood a screw or pin without a conical face, and without the capacity of rotating as a roller. They then claim the two thimbles attached to the ends of the hose, the one thimble provided with the shoulder and the ground seat or packing, and the other thimble provided with the groove with inclined sides and fitted within the first thimble, "the above parts being used in connection with the conical roller or rollers g, fitted in the screw caps i, and the whole arranged to operate as and for the purpose set forth." To be within the claim, the thimbles, constructed as specified, must be used in connection with the conical roller, and the whole must be arranged to operate for the purpose set forth. The pin, which screws through one thimble and into the groove in the other, must have a conical face, and must also have 'the capacity of rotating as a roller, and the whole must be arranged so as to operate to accomplish the purposes which are set forth in the specification as the purposes to be ac complished by the mechanism. Those purposes,

as has been shown, are two—pressing the end of one thimble against the ground seat or packing in the other thimble, and procuring the swivel joint. To accomplish these purposes requires the employment of a conical roller, and of both of the functions of such roller—the bearing of the conical face of the roller, as a pin, against the bevelled side of the groove, and the capacity of the roller to rotate. A non-rotating pin is not the conical roller of the patent, even though it has a conical face at its inner end, unless it also has the capacity of rotating as a roller.

Some question was made on the hearing as to whether the patentees intended to convey the idea that the thimbles could be swivelled upon each other after they were coupled or connected by the screwing down of the conical roller into the groove, and while the mechanism was set ready for use. But, the specification, as has been seen, is too clear on this point to admit of a doubt. In addition, the plaintiff, in the specification to his patent of February 25th, 1862, before mentioned, states that the invention described in that patent relates to improvements in the hose coupling patented to Lawton and Bliss by the patent of 1859, and describes the conical roller of both patents as a pin having a bevelled or taper inner end, and as being free to rotate, to prevent friction, when the thimbles are turned, after the connection is made, and as thus making a swivel joint.

Such being the proper construction of the claim of the Lawton and Bliss patent, it is manifest that the defendants have not infringed it. Their couplings have the two thimbles, the one with the seat and the other with the circumferential bevelled groove, but, instead of a conical roller, they have a non-rotating pin with a conical face. It is true they secure the wedge-like action between the conical face of the pin and the bevelled side of the groove, but they have no swivel joint resulting from the rotation of the pin after and while the apparatus is set. Both of these features must be found in an apparatus, before it can be an infringement of the claim of the patent. It may be that the patentees have a patentable invention in the action between the conical face of a pin and the bevelled side of a groove in two thimbles, in a hose coupling, to make a water-tight joint between the end of one thimble and a seat in the other, irrespective of Any capacity in the pin to rotate after the thimbles are set, to allow a swivelling action; but, if they have, they have failed to secure it by their claim, as at present worded. The defendants have been called upon to meet and defend against the claim as it. is, and the most liberal interpretation will not warrant the court in striking out from the claim the feature of rotation which makes the pin a roller, and which the claim states is a part of the whole, and must operate to effect the purpose which the body of the specification sets forth as the purpose to be effected by such rotation. The defendants' coupling has no substitute or equivalent for such feature of rotation in the pin, and it does not infringe the patent.

We come now to consider the Bliss patent As before stated, that patent is for improvements in the hose coupling patented to Lawton and Bliss by their patent of February 22d,

1859. There are two claims in the Bliss patent, but only the second of them is alleged to have been infringed—the one relating to the lug. The specification states the object of the invention to be, "to obtain a more secure or a firmer connection of the two butts, with but a single pin." The butts are the thimbles of the Lawton and Bliss patent, and the pin is the conical roller of that patent It is described as a cylindrical pin, with a bevelled or taper inner end, and as being forced into the groove in the innermost butt by means of the improved mechanism claimed in the first claim of the patent The front side of that groove is described as inclined outward from its inner to its outer edge. The specification says: "Within the butt A, and at a point opposite to the pin F, there is a lug G, which is simply a projecting piece of metal having inclined surfaces at its outer and inner edges, as shown in figure 1.* * *. The butt B is so formed that its outer part a* will fit within the butt A, and an annular packing e* is placed within the butt A, against a shoulder f, for the end of the butt B to bear against, and form a water-tight joint—see figure 1. The part a* of the butt B has a groove g made in it circumferentially. This groove extends en? tirely around the part a,* and It receives the inner end of the pin F, when the latter is forced inward. * * * The pin F, it will be seen, has a bevelled or taper inner end, and the front side of the groove g is inclined outward, from its inner to its outer edge, as shown in figure 1. Hence, when the pin F is forced within the groove g, the end of the butt B will be brought in close contact with the packing e* and a close or water-tight joint obtained. The lug G, in consequence of having its inner edge inclined, also has the same tendency to press the butt B against the packing e,* the lug fitting in groove g. The outer edge of the lug is inclined, in order to facilitate the insertion of the part a* of the butt B within A. This mode of connection, it will be seen, affords a swivel joint, as the butts are allowed to turn freely after the connection is made, the pin F being free to rotate, thereby preventing friction. The lug G is very essential, as it forms a bearing directly opposite the pin F, and ensures a firm connection of the two butts. Without the lug G, a plurality of pins F would be required, and that would considerably augment the cost of construction and also add materially to the manipulation in connecting and disconnecting the butts." The claim in

regard to the lug is as follows: "The lug G, within the butt A, when used in connection with the pin F, and the groove g of the butt B, substantially as and for the purpose set forth." This is, in substance, a claim to a combination of the lug on one butt with the groove in the other butt and the pin F. Now, the specification states that the pin F not only has its inner end bevelled or tapering, but is free to rotate, so as to allow the butts to turn freely after the connection is made, and thus afford a swivel joint. This rotating pin with a bevelled inner end is, as such, made by the patentee an element in the combination claimed in the second claim. The language of the claim is, "the pin F," that is, such a rotating pin as the specification describes the pin F to be. A non-rotating pin is not within the description or the claim. The purpose, referred to in the claim, for which the combination is made, is, among other things, as stated in the specification, to allow the butts to turn freely after the connection between them is made by means of the lug, the rotating pin and the groove in the inner butt, such freedom of turning being stated to be due to the fact that the pin F is free to rotate. The defendants have, in their coupling, no capacity of rotation in the pin which enters into the groove in the inner butt The specification of the patent states that the mode of connection by means of the lug opposite to the pin F affords a swivel joint. This mode of connection is the combination claimed in the second claim; and the swivel joint must be regarded as a part of the purpose spoken of in the claim as to be effected by the combination of which the rotating pin F is made an element The swivel joint means nothing more than such freedom of turning in the butts, after they are connected, as is due to the capacity for rotation of the pin F. This second claim of the Bliss patent is open to the same objection as the claim of the Law-ton and Bliss patent, that is, making a pin with the capacity of rotating after the apparatus is set, so as to allow freedom of turning in the butts, after they are connected, an element in the combination claimed. Although the defendants' coupling has a pin with a conical face, and a groove with a bevelled side in the inner butt, and a lug on the outer butt opposite the pin, yet, as the pin is not a rotating pin or a roller, such coupling does not infringe the second claim of the Bliss patent.

This conclusion makes it unnecessary to consider the question, before stated, which is raised in the answer, as to the validity of the Bliss patent.

The bill must be dismissed, with costs.

{NOTE. Patent No. 34,476 was granted to William H. Bliss, February 25, 1862. For other cases involving this patent, see Bliss v. Brooklyn, Cases Nos. 1,544 and 1,545. Patent No. 23,033 was granted to Robert B. Lawton and William H. Bliss, February 22, 1859, and reissued December 21, 1869, to William H. Bliss (No. 3,768). For other cases involving this patent, see Bliss v. Gaylord Patent Coupling & Manuf'g Co., Case No. 1,547, and Same v. Brooklyn, Id. 1,546.}

[1] {Reported by Hon. Samuel Blatchford, District Judge, and here reprinted by permission.}