

MCMURRY, LANG & BURNHAM v. D. D.  
MALLORY & Co.*Circuit Court, D. Maryland.*

February 2, 1881.

## 1. PATENT—INFRINGEMENT—SOLDERING IRON.

*Held*, that the “Barker” patent No. 103,125, re-issue No. 8,781, and the “Bostwick” patent No. 104,412, re-issue No. 8,466, for improvements in soldering irons, are not infringed by the device known as the “Tillery Soldering Tool,” as exhibited in this case.

In Equity.

594

*Benjamin Price*, for complainants.

*Brown & Smith*, for defendants.

MORRIS, D. J. Infringement of patent. This is a bill in equity filed by the complainants for alleged infringement by the defendants of two letters patent for improvement in soldering irons, the title to which the complainants have acquired by assignment. The first is the “Barker” patent No. 103,125, granted May 17, 1870; re-issued January 11, 1876, No. 6,846; second re-issue July 1, 1879, No. 8,781. The second is the “Bostwick” patent No. 104,412, granted June 21, 1870; re-issued October 29, 1878, No. 8,466.

The original Barker patent contains the following description and claim: “In constructing this machine I make the disk or casting of sufficient thickness to retain the heat, and of suitable size to cover the lid of the can with the recess, B, in the under side, to give room for the convex lid of the can, and to confine the soldering process to the outer edge of the lid or cover. To this disk I connect the handle, C, of sufficient length to hold when heated. At the side of and parallel with the handle I connect the small rod or wire, D, with a loop or ring connecting it with the handle at the top and the bottom, passing through the disk, A, so as to allow it to slide up and down.” He then describes

the process of sealing a can by the use of his invention. The rod, D, is pushed down through the disk, and placed upon the center of the cover to hold it. The heated disk is then pushed down in contact with the solder or sealing material till it is melted, then turned back and forth till the solder is spread evenly around the lid. The disk is then to be withdrawn with the rod, D, still pressed upon the lid till the solder or sealing material sets or hardens, when the operation is completed. What he claims and desires to secure by letters patent is "the disk, A, with the recess, B, in the under side, as set forth, in combination with the movable rod or wire, D, to hold the lid while sealing or closing."

It is conceded that there was nothing new in the annular soldering iron. The claim, therefore, of Barker in this original patent was substantially for the rod or wire so combined 595 with the annular or disk-shaped iron as to hold the lid or cap in place during the process of soldering. The handle by which the disk is operated is in the drawing placed in the center of the disk, and the rod or wire for holding the lid or cap passes through the disk a little to one side of the center, and at the top is connected with the handle by a loop or ring. It seems apparent that the inventor did not intend that the disk should be revolved about the rod as the axis of its motion. Constructed as shown by the drawing, the rod can firmly hold the lid in its place, and the heated disk can be turned back and forth sufficiently to spread the melted solder; but it is obvious that a completed revolution of the disk was not contemplated or practicable; and even if the hole for the rod had been made in the center of the disk, and the handle put to one side, an entire revolution of the disk would not have been really practicable without great changes in every particular of the combination claimed. The difficulty which the inventor sought to obviate was a difficulty arising from

the use of a disk-shaped iron. In using a disk which covered the whole lid or cap there was no way of holding the cap down firmly in its place while lifting off the iron; and it was to remedy this difficulty that Barker put a hole through the disk, and a wire through the hole by which the cap could be held down while the iron was being raised, and until the solder hardened. The wire rod did just what the workman using the old straight soldering iron did with his finger or rod of solder. I think that the invention was the combination of the rod with the annular disk-shaped iron, and that the inventor had no thought of claiming generally the device of a rod which should hold the cap in place while the iron was being removed, as applied to any other form of soldering iron. In his original patent he claims nothing of the sort, and he gives no intimation that the rod could be applied to a tool of any other shape. It seems to me that the form in which he made his device is of the essence of the invention, and that he only invented what he described and claimed; that is to say, the movable rod for holding the cap in combination with an annular or disk-shaped soldering iron.

The Bostwick patent was said by the inventor to be an invention for soldering metallic caps and other *projecting* pieces on metallic vessels. He contrived it for use in his business on oil cans, which have a projecting mouth-piece somewhat like a pill box, and which are closed by a cover which fits down over the mouth-piece like the cover of a pill box. He describes a soldering iron made of such a shape as to fit over the cap, whether round, square, oval, or of what-ever shape the cap might be. The iron is to be made thick, so as to retain the heat, and hollow, so as to fit over and enclose the projection; its inner diameter at its lower end being somewhat greater than the external diameter of the cap. The

interior of this hollow iron above the cap is to receive and embrace loosely a guiding rod to be placed on the cap to be soldered, to hold the latter down firmly until it has been secured by the solder, and at the same time to guide the iron to its proper place upon or against the rim or edge of the cap. This guiding rod, also, as well as the iron, is to conform to the shape of the projection and cap. The iron is provided with a handle, which is fastened near the upper edge, and projects in the drawing at right angles to it. He thus describes the use of the device: "After the iron has been heated it is slipped over the rod, and the rod, being then placed upon the cap, is held thereon firmly, while the lower rim of the heated iron, duly supplied with solder, bearing upon the joint of the cap with the vessel, will instantly solder and secure the same about its entire circumference. By lifting the rod, a shoulder engaging with an offset within the iron will take up the iron with it in readiness to be placed upon another cap, and thus a number of caps may be quickly and thoroughly soldered at one heat of the iron." He claims as his invention, "the hollow iron having a handle and beveled rim in combination with the rod, substantially as set forth." In the drawing, the soldering iron is represented about an inch in diameter, and about an eighth of an inch in thickness, and the guiding rod fills the remaining space, showing that the inventor intended the rod to be of considerable thickness,—sufficient to cover the 597 top of the cap,—and of sufficient weight to hold the cap firmly in its place.

The complainants contend that this invention covers any device in which there is a central pivotal rod on which a soldering iron may turn, and in which the rod is inclosed, but is separable from the iron. This general application of the invention is not claimed in the original patent, and I am unable to see that it was suggested or indicated in any way by the specifications

or drawings. The turning of the iron on the rod as a pivot is nowhere suggested, and would indeed have been impossible if the rod or iron had been made of any of the shapes suggested by the patentee except circular; and as the iron was to surround the projecting mouth-piece and cap, they constituted, if circular, a fixed pivot, and the rod as a *pivot* was useless. Considering its great proportionate weight and very considerable surface resting on and covering the cap, the only use of this central rod in connection with the *rotating* of the iron would seem to be to prevent the cap from rotating with the iron while the iron was rotating on the projecting mouth-piece and cap as an axis. Altogether, the Bostwick tool, in shape, operation, and principle, appears to me to be different from defendants' tool, and in no manner suggestive of it. The soldering tool used by defendants is known as the "Tillery Soldering Tool." For our present purpose it may be sufficiently described as consisting of a rod, the point of which is to be placed upon the center of the cap of the ordinary oyster or fruit can. Attached to this rod, so as to revolve around it, is an arm much the shape of a carpenter's brace. In place of the bit of a carpenter's brace an ordinary straight soldering iron is to be inserted. The point of this iron in the exhibit is curved so as to represent a very small arc of the circumference of a small circle. When revolved the arm carries the iron around at such a distance from the pivotal rod which has been placed upon the center of the cap, that it describes a circle identical with the edge of the cap and the crease in the can made to receive it, and melts and spreads the solder in that crease. The arm is so constructed as to slip up and down on the pivotal rod, so that 598 the workman can keep the rod pressed upon the cap while he raises the iron and allows the solder to harden.

After a careful examination of the models of all these tools, it does not appear to me that either the

Barker or Bostwick models, drawings, or descriptions could ever have suggested to any mechanic the construction of the tool which is complained of as an infringement. I rather incline to think that so far as the complainants' devices would have any influence, it would be to lead the mind of a mechanic or an inventor away from the Tillery tool, and suggest devices based upon the annular or disk-shaped iron. To take the old-fashioned soldering iron, and, instead of shaping its end into a blunt point, to shape it into the are of a circle for use in soldering a circular crease, could hardly be said to require invention; and such a shaping of it cannot, I think, be made out to be, in any fair sense, the equivalent of an annular iron, such as is used in either the Barker or the Bostwick patent; nor could either of those patents be operated with a soldering iron of any such shape as the one used in the Tillery tool.

The conclusion to which I have come is that the two patents on which the complainants base their claims are for combinations in which the form of the instrument is of the essence of the invention, and that the complainants are entitled only to substantially that form of instrument which, in his specifications and drawings, the patentee under whom they claim has shown. *Werner v. King*, 96 U. S. 230; *R. Co. v. Sayles*, 97 U. S. 556.

With regard to the validity of the claims of the re-issues of complainants' patents, I do not propose specifically to decide, further than may be necessarily involved in deciding that the present defendants have not been shown to have been guilty of infringement. If the construction contended for by the complainants is to be put upon these re-issues, it must be said, in view of all the proof, that they savor of a purpose to enlarge the claims to cover improvements not even suggested in the original patents. The Tillery tool was contrived and had gone into use long before

the re-issues were obtained, and the 599 remarks of Mr. Justice Bradley, delivering the decision of the supreme court in the case of *The Swain Turbine Co. v. Ladd*, speaking of the expanded claims now so frequently sought after by re-issues, would seem very pertinent to this case. 19 O. G. 62, December 13, 1880. But putting upon the claims of the re-issues that restricted construction necessary to bring them within the invention clearly and accurately described in the drawings and specifications of the original patents, I do not find that the defendants, in using the Tillery soldering iron, constructed as shown by the exhibits in this case, have been guilty of infringing any of the exclusive rights to which the complainants have become entitled as the assignees of either the Barker or Bostwick inventions.

The complainants' bill must be dismissed.

This volume of American Law was transcribed for use  
on the Internet

through a contribution from [Larry Hosken](#). 