

ADAMS & WESTLAKE MANUF'G CO. V.
WILSON PACKING CO. AND OTHERS.

Circuit Court, N. D. Illinois. August 9, 1884.

1. PATENTS FOR INVENTIONS—SOLDERING
PROCESS—NOVELTY.

Patent 191,405, granted to George M. Clark and Arthur Harris, May 19, 1877, for an “improvement in soldering process,” *held* void for want of novelty.

2. SAME—INFRINGEMENT—SOLDERING TOOL.

Patent No. 194,519, granted to Clark and Harris, as assignee of Arthur Harris, August 27, 1877, for an “improvement in soldering tools,” *held* infringed by soldering tool used by defendant.

In Equity.

Coburn & Thacher, for complainant.

Munday, Evarts & Adcock, for defendants.

BLODGETT, J. This suit is brought to restrain the infringement of letters patent No. 191,405, granted to George M. Clark and Arthur Harris, May 19, 1877, for an “improvement in soldering processes,” and letters patent No. 194,519, granted to said Harris and to said Clark, as assignee of said Harris, August 27, 1877, for an “improvement in soldering tools,” both of which patents are assigned to complainant, and no question is raised as to complainant’s title.

I do not understand that defendants seriously deny that they have used substantially the same process described in the first-mentioned patent, but they deny the infringement of patent No. 194,519. Patent No. 191,405 purports, as I understand and construe it, to be for a process. The inventors say in their specifications:

“Our invention relates to anew and useful process or soldering tin cans without the use of soldering irons; and consists in heating the joint to be soldered to a high temperature, as high as the tin will bear

without burning or becoming discolored, and then, after applying resin, either in the powdered or liquid form, pouring into the joint molten solder. The solder flows and fills the joint on account of its being heated to a high temperature. The necessary requisite to our invention is to have the parts of the can which constitute or form the joints to be soldered, heated, so that the solder, which must also be in a liquid state, will flow in the joint and fill it. * * * We are aware that joints have been heated preparatory to soldering, and the solder laid on cold; but the purpose was to heat sufficiently to melt the solder when applied. This requires a very high temperature, which is very liable to scorch the tin, and there is great inconvenience in applying the solder cold, and relying upon its contact with the tin to melt it and heat it sufficiently, so that it will flow readily. We melt the solder separately, and only heat the joint to a sufficiently high temperature, so that the melted solder, when poured upon the joint, will at once flow and fill the joint. We avoid the great danger 649 of scorching the tin, and, by using melted solder, are enabled to solder tin cans with great facility.”

The proof in this case shows, if it were not already admitted in the specifications themselves, that devices for soldering had been patented, and perhaps otherwise publicly described, in which a wire, strip, or drop of cold solder had been laid upon the joint, and then the joint sufficiently heated, by contact with a hot table or metallic plate, to melt the solder; and it also appears that other devices had been patented—where the joint, after being heated sufficiently to secure the adhesion of the solder, was dipped into molten solder, or turned in a groove fitted to receive the flange-joint of the can, into which the melted solder had been poured—long before the invention claimed by complainant’s patent. In the patent of Robert J. Hollingsworth, dated September 12, 1865, he

describes a hollow metallic plate, G, with grooves fitted to the form of the can to be soldered, with a provision for heating this plate, and then describes his process, as follows:

“When the plate is sufficiently hot for use, a can previously supplied with a coil of solder, wire is placed on it, so that the groove of one of its joints, B, will fit in one of the grooves, G, of the plate. So soon as the solder begins to flow, the can is to be shifted and shook a little, so as to distribute it more perfectly around the joints. It is then taken off. Each of the grooves, G, is to receive a can at the same time; and, since the operation takes very little time, a large number of cans can be soldered in a given time. The top and bottom joints are soldered in the same way. This mode of soldering the bottom and top joints preserves the side joint or seam, which is soldered on the outside, in good order, without impairing it at the joint, B, of the top and bottom of the can, as is liable to be done in the common mode of soldering the joints, B, only on the outside.”

In the specifications of the patent issued June 6, 1871, to Isaac Kaylar, it is said:

“The soldering of the top and bottom of the can is effected by placing the can on the heated plate or soldering bed, G, with a small lump of drop solder inserted in the can, as represented in figure 3, when the solder will adjust itself and be caused to melt immediately over the lowest point of the grooved end of the can, so that by turning the latter once, twice, or more frequently if necessary around the plate, G, the solder will flow or be distributed all around the joint of the can, and the same thus be made tight. The general heated surface of the plate, G, prepares or warms the ends of the can before or as its edge approaches the hottest point in the plate over which the solder lies, thus expediting the soldering of the joint; and, to further expedite the process, the cans to

be soldered may be preliminarily heated by arranging them on heated shelves connected with the furnace.”

This inventor further says that he uses drop solder in place of ring solder arranged around a groove, because it can be done more rapidly, and save labor and trouble. In the patent issued to Jacob Gulden, dated July 16, 1872, the process shown is that of heating a metallic table having a recess or groove fitted to receive the end of the can into which melted solder is poured, the end of the can being turned thereon to take up the solder so as to close the joint. It is 650 unnecessary to select further illustrations from the large number of prior patents introduced in evidence to show that heating the ends of the can or joints, in order to prepare them for receiving solder, was not new with this inventor; indeed, the testimony in this case, as to the art of soldering, shows that tin, to make it unite with or take solder, must be heated to quite a high degree of temperature; and this, in the old way of doing the work, was accomplished by the soldering-iron, which, in the hands of a skillful workman, was made to heat the joint in advance of laying on the melted solder with the point of the iron.

It will be seen that the patentees in this case provide no special method for heating the joints or ends of their cans to be soldered. They do, however, as a mode of showing how their *process* can be applied, say that “they place the cans to be operated upon, upon a hot metal plate, so that the joint may become heated uniformly, and to as high a temperature as it will bear without scorching or discoloring the tin;” that they then put some resin about the joint in the ordinary manner of preparing it for solder, and then, with a ladle or similar article, pour the melted solder into the groove, and it immediately flows around and fills the heated joint, soldering the same more perfectly than it can be done with the soldering iron. It appearing sufficiently from the proof that it was old at the time these

inventors entered the field to heat the joints for the purpose of making them receptive of the solder, the only element left in the complainant's patent, wherein it differs from the older devices for producing the same result, is that, instead of heating the joint to such an extent as to cause it to melt cold solder or drop solder, or solder wire placed, in or around the joint, and instead of turning the heated joints in a groove filled with melted solder, these patentees pour hot solder around the heated joint; and the question arises, is this a patentable difference? My conclusion is that when the advantage of heating the joint for the purpose of making it take solder more readily, and of heating upon a metallic table, or in a gas jet, or by any of the other methods shown in the proof in this case, was once devised, there is no invention, and no calling into action of the inventive faculty in changing the process from that of turning the heated can in molten solder to that of pouring melted solder into the joint from a cup, ladle, or other article capable of holding it. It therefore seems to me that this patent must be held void for want of novelty.

As to the patent No. 194,519, for an "improvement in soldering tools," the evidence in the record shows very little use by the defendant of this device; in fact, I did not understand that the infringement of this patent was seriously insisted upon. The proof does show some slight use by the defendant of the device of a soldering tool covered by this patent, or another instrument so similar in construction and operation as to be clearly an infringement of this. ⁶⁵¹ I conclude, therefore, there must be a finding under the proof that the defendants have infringed No. 194,519; and, if the matter is of consequence enough for counsel to demand a reference on the question of damages, such reference will be ordered.

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