Case No. 6,187.

HARWOOD ET AL. V. MILL RIVER WOOLEN MANUF'G CO.

{3 Fish. Pat. Cas. 526.}[1]

Circuit Court, D. Connecticut. April, 1869.

PATENTS—PATENTABILITY—INFRINGEMENT—"DIPPERS."

1. In answer to the offer to anticipate an American invention by a foreign patent, proof will be received that the devices set forth in the foreign patent are inoperative, impracticable and worthless.
2. When the plaintiff used a perforated dipper for performing the double function of stirring the oil and raising enough for a single operation, and the defendant substituted a diaper of wire gauze, which stirred the oil and raised enough for a single operation, but the raising and lowering mechanism was different, and the mode of applying the oil was different. *Held,* that the defendant's mechanism was a substantial equivalent for the plaintiff's.

This was an action on the case, tried by the court without a jury, and brought to recover damages for the infringement of letters patent {No. 36,603} for improvements in machinery for oiling or lubricating wool or other fibrous material, granted to William Clissold, October 7, 1862, assigned to plaintiffs {George S. Harwood and George H. Quincy} and reissued to them September 13, 1864 {No. 1,764}, and again March 27, 1866 {No. 2,213}. The nature of the invention and the claims which it was alleged were infringed by the defendants, are set forth in the opinion.

Hubbard & McFarland, for plaintiffs.

C. G. Child, for defendants.

SHIPMAN, District Judge. This is an action at law for an alleged infringement of a patent. By stipulation it was tried to the court. The suit is founded upon a patent reissued to the plaintiffs, as assignees of William Clissold, the alleged inventor. Clissold originally took out a patent for the invention in England, February 24, 1862. October 7, 1862, he took out a patent in the United States. September 13, 1864, the same having been surrendered, was reissued to these plaintiffs. The latter again surrendered the patent, and the present reissue was granted to them March 27, 1866. The present action is founded upon this last reissue.

The invention purports to be an improvement in machinery for oiling or lubricating wool, or other fibrous material. The specification contains an elaborate description of the machinery, and the claim includes nine different combinations. The plaintiffs insist that the machine used by the defendants infringes the third, fourth, and fifth combinations set forth in their patent as the inventions of Clissold. The defendants have pleaded the general issue, and given notice of a patent to John Mason, of England, published in a printed volume, which they claim includes and antedates the invention of Clissold. This part of the case, however, is easily disposed of, as the proof by witnesses familiar with the subject is, that the devices set forth in the Mason patent are inoperative, impracticable and worth-

less. The plaintiffs having proved the validity of their invention of Clissold, and their title to the exclusive use of the same, the only material question left is, that of infringement. It will be extremely difficult, if not impossible, to describe the plaintiffs' and defendants' machines in a judicial opinion so that anyone not familiar with them can understand their precise operation. The plaintiffs' specification sets forth the nature of Clissold's invention as follows:

"This invention relates to the operation of supplying oil or oleaginous mixture to wool, preparatory to its being submitted to the carding engine, and whilst being fed thereto for the purpose of being worked into sliver, the object of this invention being to effect a uniform and equable distribution of the liquid through the mass of fibers under operation, and prevent the waste of oil, labor and time that is consequent on the mode of oiling heretofore practiced. To this end a pressure roller is used, mounted above the feed apron of a carding machine, to which the wool is supplied in the usual manner. This

pressure roller, receiving oil from a suitable reservoir through the intermediary of a traveling brush, or brushes, and dipping plate, or plates, which supply the brush or brushes with the requisite quantity of oil, will insure the equable distribution of the oil over the whole surface of the wool as it passes under it, and in contact therewith. The dipper is arranged to perform two functions: first, of continually stirring up and mixing the oil or composition, and second, in carrying or lifting up the requisite quantity of oil for each individual oiling operation. Without this stirring up, it would be impossible to use a composition, or even common oil. The one separates; the other settles with a heavy sediment."

It is unnecessary to attempt a full description of the machinery constructed by Clissold to accomplish this purpose, as the alleged infringement is only of some of the subordinate combinations, whose use he contemplated apart from the other devices.

The third branch of the claim is in the following words: "In automatic wool oiling machinery, we claim the combination of a tank or reservoir with a dipper or equivalent mechanism for performing the double functions of stirrin'g or agitating the oil or lubricating matter in the tank, and of lifting there from at each time a quantity of oil or lubricating matter requisite for one oiling operation, and this is claimed only when arranged for operation as described—that is to say, so that the said dipper shall not come in contact with the wool—substantially as set forth."

The fifth branch of the claim is: "In automatic wool oiling machinery, we also claim the combination of an oil tank with a dipper, constructed substantially as described, so that the requisite quantity of oil for each operation shall be lifted and conveyed from the tank by adhesion of the oil or lubricating matter to the dipper, substantially as set forth." It is not important to cite the fourth branch of the claim, as the question of infringement is presented in relation to the third and fifth clauses, above cited. In the plaintiff's machine the tank or reservoir containing the oil or other lubricating mixture is placed at one end of the carding engine; a horizontal cross-bar extends over the tank and across the sheet of wool parallel to and over a pressure roller, under which pressure roller the wool passes. On this cross-bar, which is supported by posts at each end, travels a carriage to which is attached a brush, and also an incline or lifting shoe. The dipper plate is of thin perforated metal, lying flat to the surface of the fluid. To this dipper plate is attached a vertical rod, which runs in a vertical slide, the slide being attached to the cross-bar over the tank. The carriage slides backward and forward over the edge or top of the cross-bar, and as it reaches the vertical rod which is attached to the dipper plate, it (the incline) engages a pin inserted in the rod at right angles to its and raises the dipper plate, and with it, sufficient oil for one operation. This oil is taken by the moving brush and distributed over the pressure roller, the latter carrying it on to the wool. After the dipper plate has been lifted and the brush taken off the oil, the plate, by its own gravity and that of the rod, falls again into the fluid, and at the next return of the carriage is again lifted by the incline or

shoe. This operation is continually repeated at each revolution of the endless belt By this constant rising and falling of the perforated dipper plate the liquid is agitated and mixed, and a regular and equable quantity presented to the brush. The tank in the defendants' machine is placed in front of the carding engine, and has a shaft placed over it near the outer edge, and traversing its whole length. Near each end of the tank two arms project from this shaft, and from their ends are stretched a piece of wire gauze. One end of the shaft projects from the end of the tank; on this end of the shaft is a fixed pulley, to which is attached a leather strap. This strap is fastened to the end of a curved arm, the other end of which arm is pivoted near the base of the opposite side of the tank, at the same end. A coil of wire is wound round the shaft, the toe or bearing point of which engages the side of the tank, and tends to keep the arms of the shaft resting on the side of the tank, with the wire gauze stretched across above the sheet of wool as it passes to the carding engine. A small pulley is pivoted to the curved arm referred to, and a cam placed on the shaft of a cog-wheel under it As the cog-wheel revolves, carrying the cam, the latter engages the pulley and lifts the curved arm. By this-means the shaft, through the medium of the strap and fixed pulley, is revolved so as to immerse the wire gauze in the fluid in the tank. The incline plane of the cam gradually releases the shaft so that it raises the wire gauze to a certain point, and then, by an abrupt shoulder on the cam, the shaft is wholly and suddenly released, and the coiled spring throws it over with force, the projecting arms of the shaft striking on the edge of the tank, and sprinkling the liquid on the wool.

From the point where the brush takes off the oil in the Clissold machine, and the point where the wire gauze reaches near the top of the tank, and stands on a plane at all points equidistant from the surface of the oil, in the defendants' machine, the operations of the machines are different; but up to these points, they both perform substantially the same operations. The wire gauze in the defendants' is clearly an equivalent for the perforated metal plate in the plaintiffs'. There is, then, a combination of tank and dipper. They both raise the oil by adhesion, and raise only enough for one oiling operation The only difficult question is, whether the operation is performed substantially

in the same way. In the plaintiff's machine the dipper is immersed by its own gravity, and is raised by the action of the incline or lifting shoe operating directly on the pin in the vertical rod. In the defendants, the dipper is immersed by the operation of the incline on the revolving cam, through the medium of the curved arm, strap, and pulley on the end of the shaft, and is raised by force of the spring on the shaft, bearing on the side of the tank. The same result is reached in both cases, and I am of the opinion that the defendants' mechanism is substantially an equivalent for the plaintiffs', and infringes the third and fifth claims in, the latter's patent.

Let judgment be entered for the plaintiffs for one dollar damages and costs.

[1] {Reported by samuel S. Fisher, Esq., and here reprinted by permission.}