WILLIMANTIC LINEN CO. ET AL. V. CLARK THREAD CO. ET AL.

Case No. 17,763.

[4 Ban. & A. 133.][1]

Circuit Court, D. New Jersey. March, 1879.

PATENT FOR INVENTIONS—THREAD WINDING MACHINE—COMBINATION OF OLD INSTRUMENTALITIES—ANTICIPATION.

1. A foreign patent is not admissible as evidence to anticipate an American patent of a date anterior to the enrolment of the foreign patent.
2. Old instrumentalities are patentable when combined for the first time in such a manner as to produce new and useful results.
3. The rule, that, a claim for a combination of old instrumentalities, in a machine, is not anticipated by a prior invention in which the combination of equivalent instrumentalities appears, when the inventor of the second patent has changed the mechanism so as to produce new and valuable results, stated.
4. The first and third claims of letters patent No. 26,415, granted to Hezekiah Conant, December 13th, 1859, and extended for seven years June 21st, 1873, for an "improvement in machines for winding thread on spools," *held* valid.

F. Adams, for complainant.

George Gifford, for defendant.

NIXON, District Judge. The pleadings in this case show, that an original bill of complaint was filed against the defendants on the 13th of July, 1872, for an infringement of the original patent; and that an extension of the same having been obtained, pending the suit, on application to the commissioner of patents, the supplemental bill was filed February 5, 1874, setting forth the fact. The bills charge, that the defendants have infringed the said letters patent, originally granted to Hezekiah Conant, for "improvement in machines for winding thread on spools," numbered 26,415, dated December 13, 1859, ante-dated June 22, 1859, and extended June 21, 1873, for seven years from and after the expiration of the first term thereof.

The defendants in their answer deny: (1) That the threading machines used in their manufactory contain the inventions recited in any of the claims of the complainants' patent. (2) That Conant was the original and first inventor of what is claimed in his patent, having been anticipated by certain enumerated English patents. And (3) they claim that the thread-winding machines used by the defendants were the invention of one William Weild, to whom English letters patent were granted January 22, 1858; that said invention was prior to Conant's; and that the defendants paid royalty to the owner of the Weild patent.

At the hearing no stress seems to have been

laid upon the third defence, to wit, the alleged older invention of Weild—it appearing in the proofs that the patent, although granted on the 22d of January, 1858, was not enrolled until the 22d of July following, and foreign patents are not admissible as evidence against an American patent, anterior to the date of their enrollment.

The complainants' patent has reference to an improvement in machines for winding thread on spools, and exhibits six claims. Two models were produced on the argument marked "Complainants' Exhibits 5 and 6," and the counsel admitted that the defendants had used and were using machines containing the features represented in these models. The complainants insist that these machines contain the invention set forth in the first, third and fourth claims of the Conant patent. In the specifications of the patent, Mr. Conant says, that the object of his invention is to wind thread upon spools, with regularity and precision, layer upon layer, and each filling the whole length of the spool, without any attention on the part of the operator, further than to remove and replace the spools; to cut the thread and to fasten it when the spool is full; and to attach the thread to a fresh spool and set the machine in motion; and he thus describes the mechanism, which is claimed to be infringed by the defendants: "The nature of the first part of my invention consists in combining a pattern cam or traverse charger with nuts and right and left-hand screws or their equivalents for the purpose, the operation of the combination being such, that a thread guide shall have its motion reversed and its length or distance of motion regulated automatically," etc. "The nature of the third part of my invention consists in combining with a pattern cam, and right and left-hand screws and traversing nuts, a stop motion, substantially such as is hereafter specified, so that the whole apparatus shall be brought to rest when the bobbin is completely filled. The fourth part consists in making the lips of the levers that actuate the screw nuts or their equivalents, for the purpose they serve, adjustable, so that different lengths of spools may be wound properly by the same traverse charger."

He states his claims as follows: "(1) The combination, in the manner set forth, of a traverse charger, with right and left-hand screws, and with nuts which are alternately in gear with such screws, the combination operating as a whole substantially in the manner and for the purpose described." "(3) A stop motion, substantially as described, for causing the machine to come to rest when a spool is filled, in combination with automatic apparatus, substantially such as set forth, for regulating the length of motion and change of direction of motion of a guide, through which thread is delivered on to a bobbin or spool. (4) Adjustable lips, substantially such as set forth, in combination with a traverse charger, whereby spools of different lengths may be wound by the use of the same traverse charger."

The claims are all for combinations of mechanism for the production of specific results in the winding of thread upon spools. The elements of the first, are right and left-hand

nuts, right and left-hand screws, and a traverse charger. The prior use of such nuts and screws, and of a traverse charger is admitted. The two former are found in the Wibberly patent, and the latter in the Young patent, both of which are English patents and antedate the complainants'. The question here is whether their combination is new. Old instrumentalities are patentable, when combined for the first time, in such a manner as to produce new and useful results.

The defendants insist that this claim is anticipated both by the Wibberly patent and the Young patent; inasmuch, as in the former, the spool itself, when the machine is in operation, performs all the functions of a traverse charger, and, in the latter, there is an independent traverse charger, with which the thread guides are connected, so that each, thread guide is caused to move to and fro, or traverse along its respective spool or bobbin.

It is not necessary to stop to inquire whether the spool in the Wibberly invention, is an equivalent for the traverse charger in the complainants' patent; for a specific traverse charger, in connection with right and left-hand nuts and screws, appears in the Young patent. If we should give the broad construction to the claim, insisted upon by the complainants, it is clearly anticipated by the Young invention, where the combination of equivalent instrumentalities appears. But it does not thence follow that the claim is void. The inventor has changed the mechanism so as to produce new and valuable results. His shaper or traverse charger is of peculiar construction, whereby the length of each succeeding traverse is not determined by the diameter of the barrel of the spool, or by even the presence of the spool upon the spindle, as in the Wibberly and Young machines, but by the varying lengths of the ribs on the periphery of the wheel. Whether the defendants' machines infringe the claim as thus construed will be considered hereafter.

The constituents of the third claim are the several elements of the first claim, in combination with automatic mechanism for a stop motion, which, by moving the belt from the driving pulley to a loose pulley, when the bobbin is nearly filled, brings the whole apparatus gradually to rest by its own friction. If this claim should be construed to include every stop motion, or means of stopping the machine with automatic apparatus, it would be void for want of novelty. The stop motion is not new per se, nor was Conant the first to combine a stop motion with a traverse charger, so as to stop the machine automatically. Wibberly does this, not by the shifting of the belt, but by means of a brake;

which is brought suddenly to bear upon the parts of the apparatus connected with the winding spindle.

Avoiding, then, the construction which renders the claim invalid, let us inquire what is the scope or purpose of the invention, as exhibited in the claim. It is a combination with a combination, and the patentee sets forth in the specifications of his patent, the methods which he employs, and the results he obtains, by their union. "It is important," he says, "that the winding should be stopped at the instant that the spool is filled, and the last course completed. First, for the reason, that the latter will then present a smooth surface from end to end of the spool. Second, because the machine will then have all its parts in the right position to commence winding another spool, and for this purpose, I have contrived a stop motion"—two modifications of which he then describes. To accomplish this result, he has mechanism for shifting the belt from the driving pulley to a loose one. Both the loose pulley and the brake are devices known in mechanics, to produce a stop motion in machinery. Being equivalent, there is no invention in substituting the one for the other. Wibberly used the brake; the complainants the loose pulley; and the defendants the brake, for the same purpose. It is quite as permissible for the defendants to substitute the brake for the loose pulley of the complainants, as it was for the latter to substitute the loose pulley for the brake of the Wibberly patent. That combination being common to the three machines, it follows that whether the defendants have infringed the third claim, depends upon whether their machine infringes the other combination of the claim, to wit, the first claim of the complainants' patent.

The fourth claim of the complainants is also a combination, and its three elements are adjustable lips so combined with right and left-hand screws and a traverse charger, that spools of different lengths may be wound by the use of the same traverse charger.

The attention of the court has not been called to any machine devised before the Conant, that possessed this adjustable quality. The defendants' expert Waters is of the opinion that its insertion required no invention, for the reason that there is no combined action between the adjustment of the lips and the other parts, while the machine is in operation. In this opinion, we think, he is mistaken. The result is new and useful, and Conant is entitled to be protected in the combination of the instrumentalities, or their equivalents, which he employs to obtain it. The defendants' machine, Exhibit No. 6, has, to some extent at least, the same capacity of adjustment, but their counsel insists that it is produced by substantially different means. In their machine the adjustability is in the traverse charger, while in the complainants' it is in the pallets or lips. The shaper of the defendants is of such peculiar construction, that adjustability is brought about by the direct action of the screw with its nuts, without the intervention of the lips,—the defendants thus dispensing with one of the parts of the combination of the complainants' fourth claim. They accomplish the same result, to wit, adjustability; but the patent is not for the result.

It is for the means whereby it is secured; and if their means are essentially different, there is no infringement.

The invention pertains to a machine, and the case falls in that class, where all the elements are old, and where the invention consists in a new combination whereby a new and useful result is obtained. A party guilty of infringing this claim, must be shown to have used all the necessary parts of the combination. It is clear from the inspection of the models exhibited, that there are great differences in form. But differences in form will not excuse the defendants, unless they construct and operate their mechanism in a substantially different manner.

The leading case of Gould v. Bees, 15 Wall. [82 U. S.] 187, is authority for nothing that the omission of one of the ingredients of the complainants' combination, takes the defendants out of the category of infringers of the claim in the present case.

The only remaining question is, whether the traverse charger in the defendants' machine is substantially identical with the traverse charger in the complainants'. It has long been settled, that the identity or diversity of two machines, depends, not in the employment of the same elements, or powers of mechanics, but upon producing of the given effect by the same mode of operation, or the same combination of powers. Odiorne v. Winkley [Case No. 10,432]; Union Sugar Refinery v. Matthiesson [Id. 14,399]. Or, to adopt the language of Mr. Justice Washington, of this circuit, in Evans v. Eaton [Id. 4,500], the rule is, "that if the two machines be substantially the same, and operate in the same manner, to produce the same result—though they may differ in form, proportions, and utility, they are the same in principle." The characteristic mode of operation, claimed for the Conant machine, and which, it is alleged, existed in no prior machine, is a traverse charger, and the half nuts and their fellow screws, so combined, that the thread guide is made to move through an exact distance in one direction and then in the opposite direction, with a certain definite increase of distance, until the spool is filled, without any regard either to the dimensions of the thread, or to the size of the spool. The defendants' machine produces the same result Is it done by substantially the same mechanical means, or by the same law of action?

All, or nearly all, of the witnesses, are experts, on one side or the other. A case is rarely presented where there is a more substantial agreement as to the facts, or a more radical difference in the conclusions from them. The defendants have such advantage of the opinion of professional experts, as a majority

in numbers gives. Messrs. E. S. Renwick, Hervey Waters, and J. Boyd Eliot, scientific witnesses of deserved reputation, agree that the shapers in the two machines are entirely different in their structure, functions and mode of operation; while Mr. H. S. Renwick, of like reputation, supports Conant, the patentee, that they are essentially the same. They all swear with equal confidence and with apparently equal intelligence, to their respective opinions. The traverse chargers are certainly different in appearance. The complainants' revolves, while the defendants' slides. The one is, in form, a wheel, and the other, a plate, shaped like a truncated wedge, or isosceles triangle with its point cut off parallel to its base. The gradually increasing length of the teeth or ribs on the periphery of the wheel, determines the length of the traverse in the Conant machine. The same is determined in the defendants' machine, by projecting forward the plate for each successive course of thread, so that longer sections of the shaper shall be successively traversed.

But, turning from any further consideration of these mere variations in form, is not this the true test of infringement in this case: One machine with its peculiar mechanism being given, does it require invention to produce the other with its peculiar mechanism? Let a skilled mechanic, for instance, take the Conant machine, and watch it when in operation. He soon ascertains that its distinguishing feature is a shaper, furnished with a series of lips or steps, of gradually increasing length, and that the mechanism of the apparatus—and not the size of the spool or the dimensions of the thread, fixes and determines the number and length of the traverses. He substitutes for the steps around the periphery of the cylinder, a plate of a truncated wedge shape; or, in other words, he unrolls the cylinder until he gets a wedge shaped plate, like Fig. 5 of the second page of the drawings in Conant's original patent. He also observes another office performed by the Conant traverse charger, to wit, bringing the proper parts of the machine, after a traverse is made, into a relation that it can act again, by engaging the next step upon the wheel, and that this office is lost by the above described change of form. He supplies the loss, by substituting the device of a spring, or some other mechanical contrivance, to furnish the necessary actuating force. In our judgment there is no invention in such substitutions. A machine thus reorganized and actuated, embodies the vital principle of the complainants' mechanism, and, inasmuch as the Conant patent, by the provisions of the laws of the United States, is entitled to priority over the English patent of Weild, under which the defendants claim to act, it must be held that the complainants are entitled to a decree for infringement of the first and third claims of their patent, and it is ordered accordingly.

{NOTE. Subsequently damages were awarded complainants to the amount of $159,035.22. Exceptions filed by defendants were overruled, and a final decree for the amount awarded. 27 Fed. 865. An appeal was then taken to the supreme court, where the decree of the circuit court was reversed, and the cause remanded, with directions to dismiss the bill of complaint. 140 U. S. 481, 11 Sup. Ct. 847.

{For another case involving this patent, see 24 Fed. 799.}

[1] {Reported by Hubert A. Banning, Esq., and Henry Arden, Esq., and here reprinted by permission.}