

tion on the part of the alleged infringer to induce purchasers, through the use of a simulated trade-mark, to buy his goods under the belief that they are another's, furnishes no ground for relief, unless the similarity between the two trade-marks is of a character "to convey a false impression to the public mind, * * * and to mislead and deceive the ordinary purchaser." *McLean v. Fleming*, 96 U. S. 254, 256; *N. K. Fairbank Co. v. R. W. Bell Mfg. Co.*, 23 C. C. A. 554, 77 Fed. 869, 876. The reason for this rule is that neither actual nor probable "injury," in the legal sense of that word, results from the use of a trade-mark that is not calculated to mislead the public, or to deceive the purchaser, and hence one of the indispensable elements of a good cause of action is wanting. Whatever may have been the intention of Robert J. Marx and the appellees in adopting and using their trade-mark, it does not sufficiently resemble that of the appellant to mislead purchasers, or to convey a false impression to the public. There is no evidence in the record that the appellant has ever suffered any injury from any deception caused by it, and there is no probability that it ever will. Such a case presents no ground for relief, either at law or in equity. The decree below is affirmed.

HUBBARD v. KING AX CO. et al.

(Circuit Court, N. D. Ohio, E. D. May 23, 1898.)

No. 5,425.

1. PATENTS—VALIDITY—MACHINE FOR MANUFACTURE OF AXES.

The Taylor patent, No. 500,084, for an improvement in the manufacture of axes, which covers a new form of machine for making the body of the ax, consisting of a die with a yielding bumper or plunger, which acts as an anvil against the head of the ax in forging, preserving its form while preventing the formation of fins, is valid, the invention being novel, not anticipated, and of great utility, as attested by its general use.

2. SAME—SUIT FOR INFRINGEMENT—DEFENSE.

The fact that an infringing machine does not perform its work as well as the one infringed is not a defense.

This is a suit in equity by Charles W. Hubbard, Jr., against the King Ax Company and A. William Oppman, president and treasurer, for infringement of a patent.

Bakewell & Bakewell and E. A. Angell, for complainant.
Chester Bradford and A. E. Lynch, for respondents.

RICKS, District Judge. This bill in equity is to establish the validity of letters patent No. 500,084, issued to James Taylor, dated June 20, 1893, for an improvement in the manufacture of axes. The bill avers the utility and extensive use of the patented improvements, and alleges that the defendant has infringed the same, and prays for an injunction, for an accounting for damages and profits, and for general relief. The answer admits the grant of the letters patent, denies infringement, and alleges anticipation by certain prior letters patent of the United States.

The patent in suit is for an invention in the nature of a drop press for the forging of axes or similar eye tools, and particularly calculated to complete the manufacture of axes by what is known as the "hammering off" process. The state of the art at the time of this invention was in the forming of the body portion of the ax, which contains the eye, and to which, after it has been forged, the bit or edge of the ax is welded. F. T. Powell, a witness in the case, thus described the process of making axes before the use of the complainant's machine. In reply to a question as to how the machine was used, and how they carried out the process of manufacture before the machine was completed, he says:

"Why, we use it for hammering off the head and forming the eye, completing the forging after the bit is drawn. The manner of doing this work before we used the present machine was with small drops, a number of them, and upset hammers, open dies. The ax, after the bit was drawn, the head was heated, mandrel inserted, placed in upright dies in an upset block, the head upset, taken out, mandrel drove out of the eye, inserted from the other side, taken back to the upset hammer and upset again, mandrel extracted, edged under the drop, handed to the straightener, who drove short pins both sides of the eye, and went under the drop, back to the drop, and dropped both edge and sideways a number of blows. That is about the process by the method adopted about eight years ago. For the quantity we are doing now at Jamestown it would require about five of these small drops, and a heater, a helper, and a straightener for each small drop, whereas, with the present method,—the bumper and weight process,—it requires but one large drop and three men and a boy, and one small drop with two men, to average about 2,400 pieces per day. The present method, besides saving largely in labor, saves in power, fuel, makes more uniform, better goods, forged nearer to a finished ax, requires less labor and less cost to grind, less grit to grind with, less power, less wear and tear. It is the biggest advance in the manufacture of axes, that I know of, that has been made for the last fourteen years, the time of my connection with the ax business. The forging does a large part of what was formerly done on the grindstone, by this method."

The same witness says:

"The cost by hand was seven or eight times as much as it is by the bumper process; that is, the hand process was reduced in cost by the small drops and upset hammers process about 15 cents a dozen, I should say. Then that cost was reduced by this process—the bumper process—from 12 to 15 cents a dozen more."

Other experts testified as to the state of the art, and demonstrated clearly the great progress made in the manufacture of axes by the patent in controversy. Under the old process, the horizontal crevice between the upper and lower dies permitted the metal, when in the molten state, to ooze out through the crevice, and form large fins, which extended around the edge of the ax, and which it was necessary to remove after the ax was made, either by grinding or cutting. By the use of the machine covered by this patent, the box die in the bottom of the machine, into which the metal was placed, was the exact form of the die placed in the drop, so that when the die in the drop fell in the die below the edges fitted so closely that there was but little chance for fins to form around the outer edges. The use of the box die retained the ax in its proper shape, and drove the metal around the mandrel in such a way as to give it a perfect eye and a well-formed head. The ax, when it came out of the die, was solid, and generally

so smooth as to require but little more labor to make it complete in form and weight. The patentee himself described the operation as follows:

"The ax, with the mandrel still passing therethrough, is placed in the cavity in the lower die, with the plunger butting against the rear end of the poll, and the upper die is reciprocated. As the ax lies in a box die, it is compressed in all directions by the blow of the upper die, and is forced into the exact form desired, with a finely finished surface and a squared end to the poll, while the formation of fins between the dies is prevented by the plunger, which will give sufficiently to allow the flow of the metal endwise. The plunger or hammer head will not, however, allow sufficient endwise flow of the metal to distort the ax, on account of the quickness of the blow, it acting in the manner of an anvil. The plunger will adjust itself automatically to an ax having too little or too much metal therein, and finish the same as perfectly as one having exactly the right amount; and a spring may be employed to hold the same in place, though I prefer the weight shown. The advantages of my invention will be appreciated by those skilled in the art. The flowing of the metal sidewise and the lengthening of the eye portion, which always takes place when open dies are used in finishing, are entirely obviated, as well as the fin formation, which always occurs when ordinary box dies are employed. The surface of the ax is compressed and given a high polish, and its edges are made sharp and exact."

There is no claim made that either the drop press or the box dies are new. The defendant first contends that there is no novelty or utility in the invention. In addition to that part of the machine and the process of manufacture already given, the chief contention relates to that part of the machine which may be called a third or bumper die. This is mounted and held so as to become an important part in the shaping of the ax, by acting something like an anvil. The inventor has described the function of the plunger, or bumper die, in the operation of the machine, as hereinbefore quoted from the specification forming the letters patent.

As there seems to be a claim that Taylor was not the inventor of this device, it is well enough to look to some of the testimony on that subject. Taylor himself, in referring to his directions to Mr. C. W. Hubbard as to the building of the first experimental machine, says:

"I told him to take the present dies, and plane the head clean out, then make a ram fit in there to take the place of that piece planed out, and at the end of that ram place a weight to receive the blow, similar to a blacksmith's anvil to receive the blow of the hammer. I also informed him that that ram was in there, and that weight pressing against the end of it, when the ax was placed in the die the drop or hammer struck it, that the metal would flow out again at the end of the ram, squaring the head of the poll or ax perfectly square, and also forcing the iron up around the mandrel or eye piece, making a perfect eye. That is a full description of it, I believe. If there was too much stock, the ram would give,—would go out farther."

Mr. Nichols, a witness, in stating the efficiency of the invention, says:

"It consists in the application of a bumper to a bumper arm extending through the standard of a drop press to the head of an ax poll in an open-ended box die."

It will thus be seen that there is abundant evidence to establish the fact that something new in the manufacture of axes was given to the public by the Taylor machine and process. In addition to this, as pertinent to the subject of the question of novelty, we have a right to

look to the practical result of Taylor's invention. The machine went at once into extended use. Some 12 or 15 of these machines, under license of the patentee, are in constant use in different factories of the American Ax & Tool Company. With one of these machines, three men can hammer off about 2,000 axes per day, according to the witness Powell,—five times as many as could be hammered off by the small drop system in use before the Taylor invention. The rapid introduction of the invention into the largest factories tends to support the claim of utility and novelty, and, taken in connection with the testimony of the defendant's experts, Dayton and others, establishes that there is both utility and novelty in the machine. Mr. Dayton, when asked the following question: "As far as shown by the prior patents in this suit, was Taylor the first to provide an end wall which was yieldingly held, so as to close the end of the matrix cavity in the stationary die, while the upper die moves downwardly?" said "Yes." The defendant's expert, Arthur M. Hood, in answer to a similar question, said: "So far as I know, Taylor seems to have been the first to have used box dies, one of which was acted upon externally to forge the metal, and a third die, which was continuously and yieldingly pressed forward to form a portion of the die cavity." These admissions concede that the novelty of the Taylor invention was broad, and was a decided departure from the prior machines.

The three claims of the patent are as follows:

"(1) A pair of dies having a hole, a plunger movable within the hole, and means for continuously forcing in said plunger with a yielding pressure, substantially as described.

"(2) A stationary die and a reciprocatory die having mating recesses at one end forming a hole opening into the die cavity, a plunger within the hole, and means for exerting a continuous yielding pressure upon said plunger.

"(3) A stationary die and a reciprocatory die having mating matrix cavities, a hole leading through the die to the matrix, a plunger in the hole, and a weight arranged to exert a constant pressure upon said plunger, substantially as described."

There is no doubt but that the means or process by which the yieldingly pressed bumper die or plunger arrests the flow of the metal backward, and thereby preserves and gives to the head of the ax a uniform and shapely appearance, and also prevents the formation of fins, is the chief factor of the complainant's invention in this case, and the chief object in the defendants' adopting the machine to avoid the complainant's patent. Whether this pressure in the hole at the open end of the matrix cavity is by the arm extending into the hole, sometimes called a "plunger," or whether it is by pairing or planing this hole down so that the main bumper applies the force directly to the outside of the hole, is immaterial. The fact that the metal is forced back into the matrix by some uniform yielding force, so as to add both to the solidity and the shape of the ax, is the principal thing to be ascertained and established. This seems to me to appear very clearly, both from the testimony of the expert witnesses and from the examination of the model and drawings of the machine covered by the patent. This was the last and final contribution to the invention, which has made this machine a success, and which entitles it to the protection of the court as a new and useful invention.

The answer originally set forth some patents which anticipated the one in suit, and subsequently two amendments were allowed, setting forth additional patents. The fact appears upon the record that the manufacture of the infringing machine was deliberately planned, and no secret was made of the purpose or object in view. The principal reason given by some of the experts why the defendants' machine is not an infringement is that it does not perform its work as well as the complainant's. This, of course, is not to be considered a defense in a case of infringement.

Now, as to the anticipating patents. Of the group set out in the original answer, thirteen in number, defendant's expert refers to only two of them,—the Gracey patents, Nos. 72,288 and 158,485. The patent office, when the patent was in the hands of the special examiner, called attention to the Gracey patent, and disallowed some of the complainant's claims as being in conflict with the prior Gracey patent. This was afterwards remedied by an amendment, so that, in the opinion of the patent office, that objection to the patent has been removed.

Considerable prominence is given to the Cole patent, of 1857. A careful examination and comparison of these two patents shows that the Cole patent is not an anticipation of the Taylor machine, and I adopt the comparison made in the complainant's brief, as showing very clearly the differences between the two devices:

"The mistaken idea of Hood as to the action of this bumper is at the root of all his testimony, and partially accounts for his distorted views; views which directly contradict the statements of the defendant's own practical experts. To sum up the comparison between the Cole machine and the Taylor machine, we point out that in the Taylor machine a sudden external forging blow is given to the ax blank by means of a drop die, while in the Cole machine a punch is slowly forced through an ax-poll blank. In the Taylor device the bumper die actually forges the ax by its reactive anvil blow, and performs this action at every stroke, while in the Cole machine the yielding die part does not forge the metal, never comes into action unless there is an excess of metal, and is merely a yielding cushion arranged to move back slowly to give a space for an abnormal amount of metal. In the Taylor machine the bumper drives the metal inwardly around the eye pin to form a perfect eye. In Cole there is no eye pin, and the punch forces the metal outwardly to form the eye. In the Taylor device the bumper die contacts with the head of the ax, while in Cole the spring-backed die, c, surrounds the eye of the poll, and contacts with its edges. Moreover, as pointed out by Laureau, in answer to Q. 37, C. R. p. 221, it is far from certain that a spring, if employed in place of the weight for the Taylor bumper, would act the same as the weight, since the weight has the necessary inertia to give the anvil action of the bumper die upon the quick rush of the metal against it. (See Powell, X-Q. 64, C. R. 139.) Even if the spring would act as the weight, it is evident that Cole's spring was not designed to give the die part, c, these functions, and that it could not impart them, not only because of the slow outward movement of the metal under the action of the punch, but also because the spring is not of sufficient strength or in any way adapted for such purpose. (See the answer of Laureau to X-Q. 42, C. R. p. 222.) The Cole patent is a paper patent only. It existed from the date of its issue, in 1857, down to the date of the Taylor invention, without aiding any ax manufacturer in his work. It taught no one the Taylor mode of hammering off axes or other eye tools, and the complexity of its mechanism would at once prove to the practical ax maker the folly of attempting to use it."

After a careful examination of all the patents cited, I do not find that any of them fairly anticipate the complainant's invention. In

view of the very thorough examination of these patents by the experts, it does not seem useful to go into an extended analysis of each one of these patents, showing the respects in which they differ from the patent in suit.

In the third amendment to the defendants' answer it is claimed that this machine was in public use for more than two years prior to the date of the Taylor invention, and that the invention was sold by the inventor. In support of this allegation they offer the testimony of three witnesses,—Estep, Harkenstein, and Arthurs. A careful examination of their testimony fails to support these allegations. The charge of public use is based upon a trial in 1887, which was simply an experiment, and was in no sense such use of the machine as disclosed the principles involved to the public.

To recapitulate, then, claim 1 of the patent claims a hole, and that a bumper closes it yieldingly. Claim 2 specifically locates the hole, and how it is formed, and that the plunger is guided through it, closing it, with the means for exerting a continuous yielding pressure. Claim 3 differs from claim 1 in specifying that a weight furnished the continuous yielding pressure. The hole is simply recited as leading through the die to the matrix cavity, without specifying its size or length, and broadly includes any plunger, without reference to its length or shape. Applying, then, the principle that each claim should be given a function, if it can be fairly done by a liberal construction, I find all these claims to be valid, and to constitute the invention described, and that the defendants have infringed the same.

A decree may be prepared accordingly.

THRALL v. POOLE et al.

(Circuit Court, N. D. Illinois. April 12, 1898.)

1. PATENTS—LIMITATION OF CLAIMS—EQUIVALENTS.

The word "metal," used with reference to one of the elements of a combination claimed in a patent, does not necessarily prevent the patent from covering other equivalent materials, such as celluloid, hard rubber, wood, or other hard, but nonmetallic, substance; and this is true, notwithstanding the word "metal" was inserted by amendment during the progress of proceedings in the patent office.

2. SAME—RAILWAY TICKETS.

Letters patent No. 342,941, issued to William A. Thrall, June 1, 1886, for an improvement in railway tickets, *held* to be valid and infringed.

Final hearing on bill in equity for infringement of letters patent of the United States No. 342,941, issued June 1, 1886, to William A. Thrall, for an improvement in railway tickets, the claims of the patent being as follows:

"(1) A railway ticket, B, consisting of a continuous strip or ribbon divided into a series of consecutive numbered parallel spaces, and arranged in alternate folds within a flexible folding cover, A, provided with a metal straightedge, substantially as shown and described.

"(2) The combination of the railway mileage ticket, B, consisting of a single strip or ribbon divided into a series of consecutive numbered parallel spaces, flexible folding cover, A, provided with a metal straightedge, b', and