

DIAMOND STATE IRON CO. et al. v. GOLDIE et al.

(Circuit Court of Appeals, Third Circuit. February 4, 1898.)

No. 32.

1. APPEALS IN PATENT CASES—QUESTIONS REVIEWABLE.

A suit was brought on three patents,—one for a railroad spike, another for a machine for making the spike, and a third for a method of making the spike. The court granted an injunction on the spike and machine patents, but refused an injunction on the method patent; the decree stating that it was without prejudice to complainant's rights thereunder. Defendant appealed from the decree "so far as the same grants an injunction," and plaintiff took no appeal. *Held*, that neither party was entitled to have the appellate court consider the method patent.

2. PATENTS—ANTICIPATION.

A patent for a railroad spike having a point with diagonal cutting edges on each side, and in the same perpendicular plane with its rear side, and a sloping compressing surface on its front side, is not anticipated by a spike whose point is formed by two regular sloping sides, having the under corners or edges rounded off, so that the shank terminates in a chisel point.

3. SAME.

A patent for a railroad spike is not anticipated by a patent for a horse nail, the functions of which are different, and which is adapted to an entirely different art.

4. SAME—INFRINGEMENT.

A patent for a railroad spike, having a point with diagonal cutting edges on each side, and in the same perpendicular plane with its rear side, is infringed by a spike having two points, each with diagonal cutting edges in the same plane with its rear side, so that, if split through the center, two of the patented spikes would be formed. 81 Fed. 173, affirmed.

5. SAME.

A spike-pointing machine, consisting in the combination, with a reciprocating plunger having one or more cutters on its end, of an anvil die having an inclined die face for supporting the spike in a position oblique to the movement of the plunger, is infringed by a similar machine in which the reciprocating plunger is provided with several cutters, each extending a little further forward or outward from the plunger; and also by a rotary machine, in which the cutters, instead of being fixed to the plunger, are formed on the periphery of a rotating disk, and placed successively further and further from the center of rotation, so that they perform the same function as those on the reciprocating plunger.

6. SAME—RAILROAD SPIKES AND SPIKE-POINTING MACHINES.

The Goldie patents, Nos. 394,113 and 413,341, covering, respectively, a railroad spike and a spike-cutting machine, *held* valid, and infringed. 81 Fed. 173, affirmed.

Appeal from the Circuit Court of the United States for the District of Delaware.

This was a suit in equity by William Goldie and others against the Diamond State Iron Company and others for alleged infringement of certain patents relating to railroad spikes and spike machines. The circuit court rendered a decree in favor of complainants (81 Fed. 173), and the defendants have appealed.

Francis T. Chambers, for appellants.

James I. Kay, for appellees.

Before DALLAS, Circuit Judge, and BUTLER and KIRKPATRICK, District Judges.

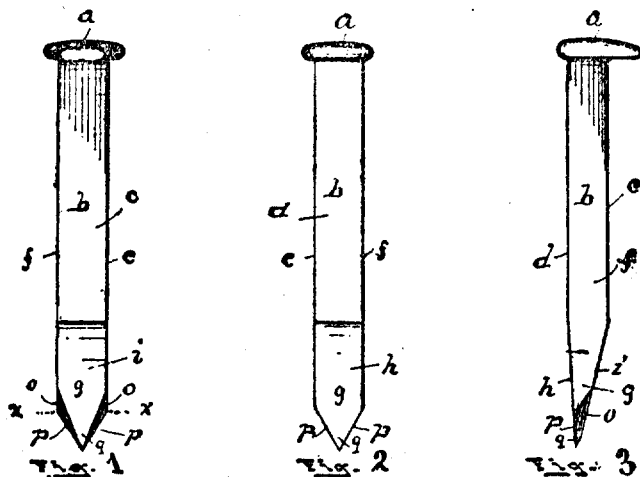
KIRKPATRICK, District Judge. The bill in this cause was filed for the alleged infringement of three patents, all granted to William Goldie, the complainant below,—the first, No. 394,113, dated December 4, 1888, for an improvement in railroad spikes; the second, No. 413,341, dated October 22, 1889, for a spike-cutting machine; and the third, No. 413,342, dated October 22, 1889, for a method of pointing spikes. The matter coming on to be heard before his honor, Judge Acheson, the validity of the patents No. 394,113 and No. 413,341 was decreed, and the defendants declared to be infringers, and as to these two patents injunction was directed to issue against the defendants according to the prayer of the bill. Upon a consideration of the third patent, No. 413,342, the learned judge, in view of the decision which had been rendered in the case of *Locomotive Works v. Medart*, 158 U. S. 72, 15 Sup. Ct. 745, did not express any opinion whether it was “for a patentable method, or merely for the operation of the described machine within the definition of patentability laid down by the supreme court in case cited.” The decree was “made without prejudice to the complainants’ rights under said letters patent No. 413,342, * * * on which this suit is also based.” The court declined to grant to the complainant the affirmative relief prayed for in his bill so far as it related to letters patent No. 413,342. This refusal worked no injury to the defendants, and therefore, in their appeal, after reciting that the decree had adjudged “that the defendants be perpetually enjoined from infringing on the claims of patents No. 394,113 and No. 413,341,” they state that they “appeal therefrom so far as the same grants an injunction.” The complainant, satisfied with the injunction order based upon the patents set out in the decree, does not appeal. Neither party is now in a position to bring to the attention of this court any matter relating to the patent upon which the court below declined to grant affirmative relief by way of injunction. If, after final decree, either party is dissatisfied with any failure of the court to make disposition of the rights of the parties so far as they relate to this patent, it will be competent for them to take such appeal as they may be advised is necessary for the protection of their interests. We are of the opinion that none of the questions relating to patent No. 413,342 are before us at this hearing, and that the only matters to be now considered are those pertaining to the validity of the other patents set out in the bill, and whether there has been infringement of the same. In determining these questions it will be necessary to consider the patents separately, and we will do so in the order in which they have been named.

Patent No. 394,113 relates to “improvements in spikes,” more particularly those adapted to be used in the construction of railways, and pertains entirely to the point which punctures the wood, and prepares a passageway for the spike body therein. The claims of the patent are as follows:

Claim 1: “A spike having a point provided on each side, with diagonal cutting edges located on the same perpendicular plane with its rear side, substantially as set forth.”

Claim 2: “A spike having a point provided with a sloping, compressing surface, on its front side, and with cutting edges, *v, v*, located in a plane with

the rear side of the point, and diverging from the center diagonally upward to the lateral sides, and with oblique facets O, O, on the front sides of saw-cutting edges, substantially as set forth."



The spike point, to which the invention relates, is formed by reducing the end of the front and rear of the spike to form the puncturing portion. It is provided with diagonal cutting edges on the rear corners of the lateral sides, which divide the fiber of the timber with a clean spearing cut. The front surface of the spike is made with a sloping, compressing surface, with cutting edges located in the same plane with the rear side, and with oblique side facets, which, as the spike is driven into the wood, force outwardly on one side the severed fiber of the wood, while on the other side the severed ends of the fiber retain their original position unbroken, and form a solid wall, which enables the spike the better and more firmly to resist the pressure of the rail. In the practical use of the spike, bending of the fiber and breaking down through the same is prevented, and the same are cut cleanly without tearing, as the result of placing the diagonal cutting edges on different planes, while the location of these cutting edges on the same perpendicular plane with the rear face of the spike results in forming the solid back wall, which enables the fibers of the wood to adhere more closely to the spike, and which holds the spike in line for driving, so that it will not turn. These were improvements upon all the previously devised spikes, which either broke down the fiber of the soft wood into which they were driven, thereby destroying the adhesive quality of the spike, rendering it loose from the tie, and affording an opening and receptacle for water, or were apt to be twisted in their driving, as was the lance point spike unless the four oblique faces were exactly balanced, and as was the spike made under the McLean patent. The spike point called for by the Finnerty patent is formed by two regular sloping sides of the spike, differing slightly from the ordinary spike in that he "rounds off the under corner or edges." In his description of his point Finnerty says that the back of the

shank is beveled, or cut away in "chisel-shaped form," and that the inclined sides of the shank terminate at the bottom "in a cutting or chisel point." This is the old chisel point, well known in the art, and cannot be considered an anticipation of the Goldie point as described in the patent under consideration. Neither do we consider the Kingsland horse nail patent, No. 191,242, to be in any way anticipatory of the Goldie patent. Its use and functions are different. It was adapted to an entirely different art from a spike. *Electric Co. v. La Rue*, 139 U. S. 601, 11 Sup. Ct. 670; *Potts & Co. v. Creager*, 155 U. S. 606, 15 Sup. Ct. 194.

Without special reference to the other patents cited as anticipatory, we may say that none of them are of such character as to induce the court to accept the conclusions sought to be drawn from them by defendants' counsel. After careful consideration, we are of the opinion that the complainants' patent relates to an article of substantial, practical merit, which excels in operation and results other existing appliances, and that the patent is valid. *Consolidated Brake-Shoe Co. v. Detroit Steel & Spring Co.*, 59 Fed. 902. That the defendants' spike is an infringement of that described in the complainants' patent is apparent from an inspection of the defendants' exhibits Nos. 1, 2, and 3. It has the same diagonal cutting edges located on the back of the spike point, and in front of said edges the same oblique facets which direct the wood forward after it is cut. The outer facets differ only in size from those of Goldie, while the center facets, though somewhat concave, still form oblique facets on the front side of the diagonal cutting edges, just as called for in the patent. A spike identical with that of defendants can be made by joining side by side two Goldie spikes, while by dividing defendants' spike through the center you will obtain two spikes, each of which will have the Goldie point. The function performed by the spike points is the same in each, both that of Goldie and defendants, and the result obtained is also the same. The form of defendants' spike is for all practical purposes the same as Goldie's, differing only in the fact that it has two Goldie points instead of one. The defendants' spike point embodies all that was of value in the Goldie device, and the mere duplication of the point does not enable the defendants to evade the charge of infringement. *Hoyt v. Horne*, 145 U. S. 302, 12 Sup. Ct. 922.

It remains to consider the patent No. 413,341, known as the "Machine Patent," the claims of which are as follows:

Claim 1: "In a spike-pointing machine, the combination, with a reciprocating plunger provided on one end portion with one or more cutters, of an anvil die having an inclined die face for supporting the spike in a position oblique to the movement of the plunger, whereby the fiber of the rolled metal is divided obliquely in the direction of its length, substantially as set forth."

Claim 2: "In a spike-pointing machine, the combination, with a reciprocating plunger provided on its lower portion with cutters, and having a gauge stop projecting below and in rear of said cutters, with an anvil die having an inclined face for supporting the spike with its end presented to the cutters, and in a position oblique to the movement of the plunger, substantially as for the purpose set forth."

The complainant, in order to enable himself to put his spike upon the market at a reasonable cost, employed a special method of manufac-

ture, consisting of two steps: First, swaging down the hot spike bar to form front and rear compressing faces, and then shearing the cold spike at the end of the point obliquely, and in the direction of its length, to produce the sharp cutting edges thereon, as describe in his patent. To accomplish the second step in his method, Goldie provided a special machine, which is the subject of the above patent. The invention consists of a vertically reciprocating plunger, provided on its lower portion with one or more cutters to conform to shape required on the spike, and which has a guide or stop extending below the end in rear of cutters, for receiving the point of the spike, and sustaining it against downward pressure movement during the cutting operation, said plunger to be used in combination with a stationary or anvil die, having its front edge likewise fitted to conform to the required shape of the spike, and which has its upper face so arranged as to hold the spike, when placed thereon, in a position oblique to the movement of the plunger, and which supports the spike in proper position to receive the stroke of the plunger. In the practical operation of this machine it will be seen that the anvil die simply holds the spike to place, and sustains the strain put upon it by the stroke of the plunger or upper die, which, when striking the spike point forces it laterally away. It is the top die or plunger that does practically all the cutting, the lower die or anvil having but little cutting action. The spikes which are to be operated upon being small, all support must be provided by the dies, and the lines of the cutting all fixed by the shape of the plunger and anvil. In these respects the machine differs from the ordinary shear knives, and is a departure from anything connected with the shearing of metals, to which reference has been made. We find that the complainants' machine is a special one, adapted to a special purpose, relating to an art entirely different from that of ordinary shearing knives. After a careful examination of the whole record in this case, we fail to find anything which leads us to the conclusion that the complainants' invention, as disclosed in this patent, No. 413,341, was in any way anticipated, either by prior use or by any machine possessing its functions.

It is proved in this case, and not denied, that the defendants use two machines, one a reciprocating machine and the other a rotary machine. Each machine contains a stationary or anvil die with an inclined face having side guards on each side thereof to guide the spike point laterally, and the spike rests on the inclined face of the anvil die, its end projecting over the cutting edge thereof. It differs from the anvil die of the Goldie patent merely in the form of its edge, which is made to conform to the form of the point of the defendants' spike. In the reciprocating machine there is a plunger, having on its face a number of cutters, each extending a little further forward or outward from the plunger, and below these cutters a guide stop against which the spike point is placed. In the rotary machine, the cutters, of which there are several, instead of being secured to a plunger, are formed on the periphery of a rotating disk, and placed successively further and further from the center of rotation. The cutters on the plunger and the disk have the same function, and differ from the cutter on the

Goldie machine, in that several cuts are taken across the spike point, instead of one. The action of the cutters is to cut obliquely in the direction of the length of the spike across the face of the anvil die, and prepare the spike to receive the action of the last one of the cutters, which passes so close to the shearing edges of the anvil die as to form the sharp cutting edges of the spike point by an operation similar to that of the Goldie machine. The defendants' rotary machine has the same anvil die, and its cutters are arranged to operate with relation thereto in exactly the same way as on the reciprocating machine. They must be classed in the same category. *Oval Wood Dish Co. v. Sandy Creek, N. Y., Wood Mfg. Co.*, 60 Fed. 285. Each performs the same function, and produces the same result as the other, and both infringe the claims of the complainants' patent. For the reasons given above, the decree of the circuit court will be affirmed.

CHICAGO SUGAR-REFINING CO. v. CHARLES POPE GLUCOSE CO. et al.

(Circuit Court of Appeals, Seventh Circuit. February 4, 1898.)

No. 383.

1. PATENTS—PATENTABLE PROCESSES—MAKING STARCH FROM CORN.

The Behr patent, No. 247,152, for a process of treating corn in the manufacture of starch, glucose, etc., and consisting in the automatic and continuous separation of crushed corn into germs, hulls, and starch, by means of starch milk, itself continuously and automatically formed in the course of the operation, and being of such specific gravity as to cause the germs to rise to the top, so that they may be carried off through a chute, describes a patentable process, and was not anticipated by either the Anderson or Cavaye British patents of 1857 and 1872, respectively. 79 Fed. 957, reversed. Woods, Circuit Judge, dissenting.

2. SAME—MECHANICAL PATENT—VALIDITY AND INFRINGEMENT.

The Behr patent, No. 247,153, for an apparatus for carrying on his continuous process of separating from crushed corn the starch milk and germs, construed, and held not infringed as to the first claim, and void as to the fifth claim, for want of invention.

Wood, Circuit Judge, dissenting.

Appeal from the Circuit Court of the United States for the Northern Division of the Northern District of Illinois.

C. K. Offield and Robert N. Kenyon, for appellant.

L. L. Coburn, for appellees.

Before WOODS, JENKINS, and SHOWALTER, Circuit Judges.

SHOWALTER, Circuit Judge. The circuit court upon final hearing dismissed for want of equity a bill wherein this appellant charged infringement by appellees of the one claim of letters patent of the United States No. 247,152, and the first and fifth claims of letters patent of the United States No. 247,153. These patents were issued in 1881 to Arno Behr. They became later the property of