

of accidental imperfect operation of the machine, upon which the defendant's product is manufactured, is sufficient to establish infringement. No other proof was introduced to show that defendant had ever thus operated said machine or produced such an article; nor did the exhibits introduced by complainant show any such infringement of said claim.

Let a decree be entered dismissing the bill.

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

(Circuit Court, D. Delaware. February 23, 1894.)

No. 148.

1. PATENTS—NOVELTY AND INVENTION—RAILROAD SPIKES.

The Goldie patents for a railroad spike, for a spike-pointing machine, and for a method of pointing spikes (numbered 394,113, 413,341, and 413,342, respectively) show patentable novelty and meritorious invention.

2. SAME—INFRINGEMENT—COLORABLE CHANGES.

Infringement of a patent for a railroad spike is not avoided by forming it with two points, instead of one, by cutting out a crescent-shaped central part, when the two spikes are identical in all essential parts.

3. SAME—EVIDENCE OF INFRINGEMENT.

Positive evidence of an experienced witness, giving a specific description of the construction and operation of an alleged infringing machine, which shows it to be substantially the same as the machine of the patent, aided by strong inferences from marks left upon the product of the machine, must prevail over the unsupported assertions of defendant's expert and employes that such description is "erroneous" and "false and misleading"; that defendant's machines are "radically and totally different"; and like statements of opinion.

This was a suit by William Goldie and others against the Diamond State Iron Company and others for infringement of certain patents. Heard upon motion for a preliminary injunction.

R. D. Totten and James I. Kay, for complainants.

Bradford & Vandegrift, for defendants.

ACHESON, Circuit Judge. This suit is upon three letters patent granted to William Goldie, namely: No. 394,113, dated December 4, 1888, for improvements in spikes, and more especially spikes used in the construction of railroads; No. 413,341, dated October 22, 1889, for a spike-pointing machine; and No. 413,342, dated October 22, 1889, for a method of pointing spikes.

The distinguishing feature of the Goldie spike consists in its having a point provided with diagonal cutting edges located in the same perpendicular plane with its rear side, and a compressing surface on its front side, formed with oblique facets on the front sides of the cutting edges; the diagonal cutting edges, as the spike is driven into the wood, dividing the fiber with a clean, shearing cut, whereby is obtained a square-cut backing or solid supporting wall to hold the spike against the crowding strain of the rail, while the oblique facets turn and compress the ends of the severed fiber

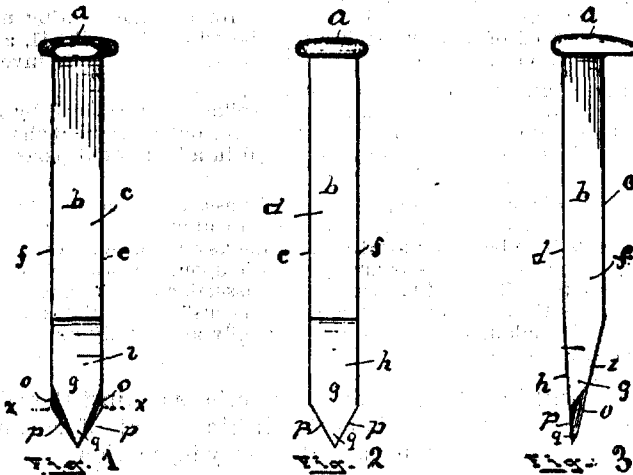
outwardly towards the side grain of the timber, so that they bear with great friction on the body of the spike, which is held firmly in the tie.

The claims of this patent are:

"(1) A spike having a point provided on each side with diagonal cutting edges located in the same perpendicular plane with its rear side, substantially as set forth."

"(2) A spike having a point provided with a sloping compressing surface on its front side, and with cutting edges, p, p, located in a plane with the rear side of the point, and diverging from the center diagonally upward to the lateral sides, and with the oblique facets, o, o, on the front sides of the said cutting edges, substantially as set forth."

[We herewith publish from the records of the United States patent office drawings of the Goldie spike, patented December 4, 1888, letters patent No. 394,113.]



Goldie's method of pointing spikes consists in swaging the point to form front and rear compressing surfaces, and then producing a sharp edge by shearing off the surplus metal obliquely across and in the direction of the length of the grain or fiber of the rolled iron. His spike-pointing machine consists of a vertically reciprocating plunger provided on its lower portion with one or more cutters of a shape to conform to the shape of the cutting edges required on the spike, and with a gage stop projecting below and in the rear of the cutters, and an anvil die having its upper face arranged to support the spike in a position oblique to the movement of the plunger, and having its front lower edge fitted to conform to the cutter or cutters on the plunger.

The Goldie spike, which was first put on the market in the year 1889, has met with unusual public favor. It has gone into very extensive use upon lines of railway all over the country. The uncontradicted proofs show that it is regarded by road masters and track officials generally as the best fastener for rails that has yet

been produced. It is also satisfactorily shown that the plaintiffs' competitors in business (save the defendant company) have respected their rights under the patents in suit.

I have very carefully examined the numerous prior patents set up by the defendants as anticipating Goldie's inventions, or as showing want of patentable novelty in what he has done. I am, however, quite clear that no such effect is to be given to them. The Goldie spike seems to be a valuable improvement, evincing meritorious invention. Nothing appears to create a doubt as to the validity of either of the patents sued on.

A specimen of the spikes manufactured by the defendants and here complained of is an exhibit in the case, and the question of the infringement of the spike patent (No. 394,113) is determinable by a mere inspection of this exhibit. The plaintiffs' spike and the defendants' spike differ in this: that, whereas the spike shown in the patent has a single point, the defendants' spike has two points, each, however, being substantially the same as the Goldie point in form, function, and result. The two points in the defendants' spike are produced by shearing away as well a central part of the metal as the sides, after the point is formed by swaging. The central shear, indeed, is crescent-shaped; but this is purely a formal difference. The substance of the invention remains. The principle of the two spikes is identical. The defendants' spike is provided with diagonal cutting edges located in the same perpendicular plane with the rear side of the point, and with oblique facets on the front sides of the cutting edges. To all intents and purposes the defendants' construction is a mere duplication of the Goldie point. The change which the defendants have made is a palpable evasion, and cannot here avail them. *Hoyt v. Horne*, 145 U. S. 302, 308, 12 Sup. Ct. 922. Infringement of this patent, I think, clearly appears.

With respect to the other two patents, the evidence of infringement is both direct and circumstantial. The defendants' spike itself bears very strong indications that it was cut by a reciprocating plunger acting upon the metal while supported upon an anvil die in a position oblique to the movement of the plunger. Plainly, its sharp cutting edges were produced by shearing the metal obliquely across and in the direction of the length of the fiber. The faces of the cut show straight and continuous lines, while the under side of the spike has visible marks which can be reasonably accounted for only upon the supposition that when cut it rested upon an anvil die. Then we have the positive statement of David Ford, an experienced witness, who examined and describes with particularity the defendants' spike-making machines. According to the specific description contained in his affidavit, those machines are the same, in construction and operation, as the machine of the Goldie patent, or substantially so. How do the defendants meet this case? In their answer the denial of infringement is couched in the most general terms. George W. Todd, the president of the defendant company, and its codefendant, in his additional opposing affidavit does not at all explain the defendants' machines or method.