colic, dry gripes, general debility, sick headache, and all other troubles in all parts of the system that are caused by the liver, stomach, and bowels not being in healthy condition,"

-Defendant undoubtedly intended to convey the impression that his medicines are the same as those known as M. A. Simmons' of Iuka. Mics. The testimony is so voluminous on that point, and the similarities so numerous, that to state them all in this opinion would be impracticable. But after having carefully examined them, and aided by the arguments of counsel for both sides. I have no hesitancy in finding that the facts clearly establish that the medicines of defendant constituted an unfair and ungenerous competition; that they were so dressed by him with the intent to deceive the public, and lead at least the ignorant class of the purchasers, who constituted the largest percentage of them in the localities in which defendant compounds and sells his medicines almost exclusively, to believe that they were purchasing complainants' medicines, which have been established for over 50 years, and have become well and favorably known to the public. Courts of equity must prevent such injustice, when appealed to. Complainants acted promptly in this matter. As soon as they learned of the manufacture and sale of defendant's compound, they instituted this action. Let there be a decree for complainants in conformity with the views herein expressed.

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

## (Circuit Court, D. Delaware. June 16, 1897.)

- 1. PATENTS-NOVELTY AND INVENTION-RAILROAD SPIKES.
  - The Goldie patents for a railroad spike and for a spike-pointing machine (Nos. 394,113 and 413,341) show patentable novelty and meritorious invention. 64 Fed. 237, affirmed.
- 2. SAME-INFRINGEMENT.

A patent for a railroad spike having a point with diagonal cutting edges located in the same perpendicular plane with the rear side of the spike, and which is made by shearing the point obliquely in the direction of its length, is infringed by a spike having two points with diagonal cutting edges located in the same perpendicular plane, and which is made by shearing off the point in the same manner, excepting that the central shear is crescent shaped.

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 cause was heretofore heard on motion for a preliminary injunction, which motion was granted. 64 Fed. 237.

Kay & Tottin, for plaintiffs. Francis T. Chambers. for defendants.

ACHESON, Circuit Judge. This bill charges the defendants with the infringement of three letters patent, all granted to William Goldie, one of the plaintiffs. The first patent, which is numbered 394,113, and dated December 4, 1888, is for a novel spike, adapted more especially for use in railroad construction. The second and third patents are numbered, respectively, 413,341 and 413,342, and are both dated October 22, 1889. The former is for a new spike-pointing machine, and the latter for a new method of pointing spikes. The distinguishing feature of the Goldie spike described and claimed in the first above mentioned patent consists in its having a point provided with diagonal cutting edges located in the same perpendicular plane with the rear side of the spike. The specification states that these diagonal cutting edges, as the spike is driven into the wood, divide the fiber by a clean, shearing cut, and the point of the spike passes into the timber in the same relative position that it had when started, and that thus there is obtained a square-cut backing or solid supporting wall to hold the spike against the crowding strain of the rail. Another important stated characteristic of the spike is that it is provided on the front side of the point with a sloping compressing surface, formed with oblique facets on the front side of the diagonal cutting edges, these oblique facets turning and compressing the ends of the severed fiber outwardly towards the side grain of the timber. The result, as stated, is that the body of the spike for its full length is held firmly in the wood. The claims of this patent are as follows:

"(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, O as set forth."

The invention of the Goldie machine patent (No. 413,341) relates to means for pointing the spike after it has been swaged or pressed into the ordinary taper form, by shearing the point obliquely, and in the direction of the length of the grain of the metal, so as to produce a keen and sharp cutting edge. To accomplish this, the described machine of the patent is provided with a reciprocating plunger having on its lower end one or more cutters of a shape to conform to the cutting edges required on the spike, 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 plunger having below its cutters a guide stop to receive the point of the spike, and sustain the spike against end thrust during the cutting operation. The claims of this patent are:

"(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. (2) In a spike-pointing machine, the combination, with a reciprocating plunger provided on its lower portion with cutters, and having a gage stop projecting below and in rear of the 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 and for the purpose set forth."

The patent No. 413,342 covers the method of producing a sharp cutting edge on a spike point by first swaging the point of the spike blank into the ordinary form with front and rear compressing surfaces, and then shearing off the surplus metal of the dull pointed end obliquely across and in the direction of the length of the grain of the metal. The claim of this patent is in the words following:

"The herein-described method of forming a cutting edge on a spike point, consisting substantially of swaging the point to produce 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, substantially as set forth."

On motion for a preliminary injunction, this case was heard by the court upon bill, answer, and affidavits, and an injunction against the defendants, under all the patents, was granted. 64 Fed. 237. Afterwards an amended answer setting up additional matters of defense was filed. -Voluminous proofs on the one side and the other were then taken. At final hearing the case was fully and ably discussed by the counsel of the respective parties, whose oral arguments have been supplemented by exhaustive briefs. Thus aided, and in the light of the plenary proofs, the court has attentively re-examined the patents in suit, and has given careful consideration to all the questions at issue. In disposing of the case, however, the court cannot do much more than state its conclusions. To discuss the proofs with particularity would expand this opinion unreasonably and needlessly.

1. Naturally we first take up the spike patent. The spike of this patent was put upon the market about the year 1889, and from the start met with unusual public favor. Upon its undoubted merits, it has gone into extensive use on many lines of railway. It satisfactorily appears that it possesses advantages which were not to be found in any spike previously in use. Abraham C. Stickney, a road master of large experience, speaking of this spike, testifies, "My experience has been that the holding power of the Goldie spike would be at least fifty per cent. greater than the power of the common spike." It is shown that in practical use this spike cuts the fiber of the timber cleanly, without tearing, that the wood is left compact about the spike, and that its holding power against the spreading action of the rail far exceeds that of the common spike. In a word, the spike has been found to fulfill the objects the inventor had in view as stated in his specification. The great utility of this spike is firmly established by the evidence. Upon the question of patentable novelty, also, the plaintiffs are here entitled to a favorable judgment. None of the prior patents can fairly be said to show anticipation. The "lancepoint" spike described and claimed in Goldie's patent of 1883 proved The perfect uniformity of bevels required in to be unsatisfactory. that spike (not to speak of the great cost of production) precluded its practical use. That spike was only a single step forward in Goldie's Had he stopped there, he would have failed development of this art. of practical success. The 1883 spike did not have a cutting edge located in a plane with the rear side, and therefore lacked the great feature of the invention of the 1888 patent. There is, I am quite satisfied, a clear, patentable difference between the lance-point spike and the spike of the patent in suit. Barbed-Wire Patent, 143 U.S. 275, 282, 12 Sup. Ct. 443, 450; Sayre v. Scott, 3 U. S. App. 643, 5 C. C. A. 366, and 55 Fed. 971. Nor can I discover in the Fennerty patent anything to suggest the Goldie invention. The Fennerty specification states that "both the inclined sides of the shank, A, terminate at the bottom in a cutting or chisel point, H." This calls for the old chisel point, and excludes the Goldie point. The Kingsland patent and the Wills patent relate to horseshoe nails, which can hardly be said to belong to the art of spike making. But, be that as it may, I am not able to perceive in either of the two last-named patents any disclosure of the Goldie invention. The proofs fully justify the conclusion that the spike patent in suit is valid, and that it covers an invention of decided merit. This brings us to the question of infringement. Upon the full proofs, the case is not essentially different from what it was at the preliminary hearing. I must. then. adhere to the conclusion at that time reached,-that infringement of the spike patent is made out. Here I need only repeat the views expressed by the court when the preliminary injunction was granted. 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. Surely a patent is not to be evaded by such an expedient as we have here. Hoyt v. Horne, 145 U. S. 302, 308, 12 Sup. Ct. 922; Devlin v. Paynter, 28 U. S. App. 115, 122, 12 C. C. A. 188. and 64 Fed. 398.

2. We now approach the consideration of patent No. 413.341, for the spike-pointing machine. The problem which was before Mr. Goldie when he conceived this machine was to provide practical means for putting sharp cutting edges and smooth compressing surfaces upon the point of a spike after it had been swaged or pressed into the common form, by shearing off the superfluous metal obliquely, and in the direction of the length of the grain of the metal. To accomplish this result, he devised, as we have seen, a special spike-pointing machine, consisting of a stationary anvil die having an inclined upper face terminating in cutting edges conforming to the shape of the point to be produced, and so arranged as to support the spike, and hold it in position oblique to the movement of a reciprocating plunger provided with cutters conforming to the cutting edges of the anvil die; the plunger also having below its cutters a guide stop to sustain the end of the spike against downward movement during the shearing This machine has proved to be entirely successful, and by operation. it the Goldie spikes of the patent of 1888 are produced. Mr. Tretheway, a skilled machinist, who has had great practical experience in metal shearing, thus describes the operation of this machine:

"In the pointing of the spikes on the Goldie machines, the cold spikes are held at an incline approaching the line of the stroke of the plunger, which provides for an actual shearing of the point cleanly between the plunger and the bottom die; there being a shearing or cutting through the metal on lines fixed by the shapes of the plunger and die, and such a shearing as will include the formation of a sharp point on the spike."

### Again Mr. Tretheway states:

"To shear in this peculiar way (that is, obliquely and in the direction of the length of the spike) raised some serious difficulties, and I would not have believed it possible to do so unless I had seen the Goldie machines actually doing the work. In the first place, the spike itself is small, and there is no opportunity to support it outside of the dies themselves, and therefore the dies have to provide support for the spike."

I have examined the large number of prior patents relied on by the defendants, namely, patents for spike machines, for shearing boiler plates, horseshoe-nail patents, and other patents; and I have carefully read and reflected upon the evidence as to alleged prior uses, and touching the general subject of spike making and metal shearing. The result of this investigation is unfavorable to the defense. I do not find in the prior art, as exhibited in this record, any device or machine possessing the functions and capable of performing the work of the Goldie machine. Nor do I discover any prior mechanism suggestive of the peculiar spike-pointing machine which Goldie has devised. His machine was the outcome of original conception. The defense of anticipation, in my judgment, is not sustained by the proofs. 1 am clearly of the opinion that the Goldie machine in question is patentably new and useful, and, furthermore, that the invention is one of more than ordinary merit. Have the defendants infringed this patent? The proofs, I think, require an affirmative answer. The defendants have two machines,-one a reciprocating, and the other a rotary machine. In each there are an anvil die and guide stop substantially, if not identically, the same as those described and claimed in the Goldie patent. The defendants' reciprocating machine has a plunger provided with a series of cutters one above the other. to The operation of this machine is the same as that of the Goldie machine, except that several shearing cuts are taken successively across the spike point, instead of a single cut. This, however, is an immaterial difference. In construction, mode of operation, and result, this machine of the defendants is substantially the same as Goldie's machine. This is likewise true of the defendants' rotary machine, which also is provided with a series of cutters acting successively. The rotary machine performs all the functions of the Goldie reciprocating machine, and the difference in movement is quite immaterial.

3. We now reach patent No. 413,342, for the method of pointing spikes. The defenses peculiar to this branch of the case are alleged prior practice at the works of the Phœnix Iron Company and at the works of Corydon Winch, and that the patent does not describe and claim patentable subject-matter. The proofs, I think, do not sustain the defense of prior use. The evidence as to the alleged practice at Phœnixville lacks the completeness requisite to overthrow a patent. That the Goldie method was ever practiced at Winch's is not estab-

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lished to my satisfaction. It rather seems to me that all that was there done by the workmen was to trim off the ends of the objectionable spikes,-such as were too long and thin to drive,-in order to put them in form to pass inspection. No particular method was observed; much less, the peculiar method described and claimed in this The other named defense, however, raises a serious quespatent. tion, in view of the late decision of the supreme court in Locomotive Works v. Medart, 158 U. S. 68, 72, 15 Sup. Ct. 745. In the opinion of the court in that case it is declared:

"It may be said, in general, that processes of manufacture which involve chemical or other similar elemental action are patentable, though mechanism may be necessary in the application or carrying out of such process, while those which consist solely in the operation of a machine are not."

Now, the specification of patent No. 413,342 contains a description of the machine covered by patent No. 413,341, and of no other device; and the question presented is whether patent No. 413,342 is 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 the case cited. Upon this question I do not feel called upon to express an opinion, for the reason that the plaintiffs are shown to be entitled to, and they will be allowed, an injunction against the defendants with respect to their infringing spike and their infringing machines, and generally against infringement of the spike patent and machine patent, and this will afford the plaintiffs all the relief that they now need. The decree may be without prejudice to the plaintiffs' rights under the method patent. Let a decree be drawn in favor of the plaintiffs in accordance with the views expressed in the foregoing opinion.

## ADAMS et al. v. TANNAGE PATENT CO.

#### (Circuit Court of Appeals, Third Oircuit. May 10, 1897.)

1. PATENTS-PRELIMINARY INJUNCTION-PRIOR ADJUDICATION. A patentee should not, on motion to dissolve a preliminary injunction, be deprived of the advantage he holds, as the owner of a patent adjudged valid by a court of appeals, upon anything less than thoroughly convincing ad-ditional proofs. 77 Fed. 191, affirmed.

2. SAME—PROCESSES FOR TAWING LEATHER. The Schultz patents, Nos. 291,784 and 291,785, for processes of tawing leather, held (on appeal from a refusal to dissolve a preliminary injunction) not anticipated, and valid and infringed. 77 Fed. 191, affirmed.

Appeal from the Circuit Court of the United States for the Eastern District of Pennsylvania.

This was a suit in equity by the Tannage Patent Company against William W. Adams and others for alleged infringement of letters patent Nos. 291,784 and 291,785, issued January 8, 1884, to Augustus Schultz, for processes of tawing hides and skins. The cause was heard below on motion to dissolve a preliminary injunction, and the motion was denied. 77 Fed. 191. The defendants have appealed.

Hector T. Fenton, for appellants. Charles Howson, for appellee.