both as to manufacture and to use." In Boesch v. Graff, 133 U.S. 698, 10 Sup. Ct. Rep. 378, a case where the alleged infringer had purchased in Germany patented lamp-burners from a person who had authority to make and sell them in that country, and had imported them into the United States, and there was selling them in the usual course of trade, the court, after quoting from Adams v. Burke, supra, said:

"The right which Hecht had to make and sell the burners in Germany was allowed him under the laws of that country, and purchasers from him could not thereby be authorized to sell the articles in the United States in defiance of the rights of patentees under a United States patent."

The decision in McKay v. Wooster, 2 Sawy. 373, must be construed and confined to the interpretation placed upon it by Judge Sawyer in Graff v. Boesch, 33 Fed. Rep. 279, and, when so construed, is certainly not in opposition to the views I have expressed. Other authorities relied upon by respondents relate to the use and not to the sale of the patented articles. Complainant is entitled to a decree for an injunction and for an accounting. Let the usual decree be entered, as prayed for in complainant's bill.

Johnson Co. v. Pacific Rolling-Mills Co.

SAME v. SUTTER ST. Ry. Co.

(Circuit Court, N. D. California. July 27, 1891.)

1. PATENTS FOR INVENTIONS-STREET-RAILROAD RAILS-EXTENT OF CLAIM. The claim of letters patent No. 272,554, issued to Tom L. Johnson, February 20, 1883, for an improved form of rails for street railroads, consisting in placing the head to the left of the vertical line of the web, and the whole of the upper face of the flange over the whole width of the web, must, in view of the art, be limited to the form described, and is not infringed by a form in which the head is located over the web, and the flange is to the right of the vertical line.

2. Same—Patentability.

1. 10

The form of rails described in said patent, as combining the principal features of the tram and T-rails, but with a different disposition of metal and combination of parts, so as to allow the advantage of even fish-plating, and still be adaptable to street service, is merely the result of ordinary mechanical skill, and does not involve any patentable principle. Trimmer Co. v. Stevens, 137 U. S. 433, 11 Sup, Ct. Rep. 150, followed.

In Equity. Bills by the Johnson Company against the Pacific Rolling-Mills Company and the Sutter Street-Railway Company for infringement of patent. Dismissed.

William F. Booth and Harding & Harding, for complainants.

Wheaton, Kalloch & Kierce and Naphtaly, Friedenreich & Ackerman, for respondent.

HAWLEY, J. These cases were tried together, and involve precisely the same questions. They are actions in equity, to recover for an alleged infringement of letters patent numbered 272,554, bearing date February 20, 1883, granted to Tom L. Johnson, for a street railroad, and by him assigned to the corporation complainant in both cases. The alleged infringement is for the manufacture and sale of certain rails by the Pacific Rolling-Mills Company in one case, and in the other case for the use of said rails by the Sutter Street-Railway Company. The specifications of the patent are quite lengthy. The following quotations therefrom have more or less bearing upon the points involved:

"The object of my said invention is to improve the form of that class of railroad rail used principally by street railroads, which combine the principal features of the tram-rail, ordinarily used for such purposes, and those of the T-rail, used on steam-railroads. I am aware that rails embodying the general features above mentioned are old, and I therefore disclaim the same, and confine myself to the form hereinafter particularly described and claimed as new.

"Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Fig. 1 is a perspective view of a portion of a rail formed in accordance with my invention, and Fig. 2 a transverse vertical section of the same. Fig. 3 shows a section of a street-railway bed, and ordinary rails, as commonly laid. In said Figs. 1 and 2 the letter A indicates the flanged portion of the rail; B, the head of the rail; C, an offset under the head of the rail, abutting the web, E, on the side of said web opposite to that continued out into the flange, A. The web, E, extends from the foot, D, to the angles respectively formed on opposite sides by its union with the offset, C, and flange, A; thus securing a uniform depth of web proper for the fish-plates to clamp. In Fig. 3, the letter G indicates an ordinary cross-tie; the letters, H, H, stringers, such as are ordinarily used upon street railways; and K, K, an ordinary form of street rail laid thereon. The letters, x, x, indicate the edges of the adjacent and underlying road-way.

"A peculiar and important feature of this rail is the offset, C, which, while serving the purpose of a close fit for the splice-bar or fish-plate, as above mentioned, also serves another equally or more important purpose in the general conformation of and peculiar disposition of metal in the rail. * * * The splice-bar offset, C, is a large factor in the proper retaining of this ballast, for it is large enough, with its square corner, in connection with the curved or arched shape of the lower part of the head and T-shaped foot, to allow the surrounding and superincumbent traffic to press the ballast—gravel and stones of the streets—into and against the rail instead of (as shown in

Fig. 3) cutting away the surface of the street from the rails."

There are six claims to the patent, but only one—the fifth—that it is contended is infringed. This claim reads as follows:

"(5) In the combined tram and T rail described, the web, E, located relatively to the flange, A, and head, B, offset at C, as described, whereby a maximum capacity of outside pocket is secured, with a minimum quantity of metal consistent with the proper stability of the rail, substantially as set forth."

The defenses to this patent set up by defendants are (1) non-infringement; (2) non-patentability.

1. In construing the patent it is the duty of the court to confine its deliberations to the fifth claim, as that is the only one that is claimed to be infringed. It is also proper to restrict the interpretation of the patent to the particular class to which it belongs, viz., to patents for mere

form, as distinguished from patents involving mechanical action, or patents for some particular kind of process. This case is one "where, in view of the state of the art, the invention must be restricted to the form shown and described by the patentee." Duff v. Pump Co., 107 U. S. 639, 2 Sup. Ct. Rep. 487. The fifth claim requires the web, E, to be located relatively to the flange, A, and head, B, as described. This relative location, when compared with the drawings and specifications, places the head, B, to the left-hand side of the vertical line of the web, E, and the whole of the upper face of the flange, A, over the whole width of the web. The form of the defendants' rail, in this respect, locates the head over the web, and the flange is to the right of the vertical line of the web. The difference in the relative location of the different parts of the patented rail and of the defendants' rail is shown in the cross-examination of complainant's expert witness Breevort, who, in answer to questions, testified as follows:

"Question 8. In the patented rail, is there any part of the head that is over the web in a vertical line? Answer. No. Q. 9. In the defendants' rail, is the head in vertical line over the web or not? A. The head is over the web. Q. 10. Then, in this respect, referred to in the last two questions, is the relative location of the head and web the same in the defendants' rail as it is in the patented rail? A. It is not. Q. 11. In the patented rail, is the flange in a vertical line over the web? A. Yes. Q. 12. In the defendants' rail, is the flange in a vertical line over the web? A. No. Q. 13. Then, in this respect, is the relative location between the web and the flange the same in the defendants' rail as it is in the patented rail? A. No."

If, therefore, the patent is to be limited to the form that results from having "the web, E, located relatively to the flange, A, and head, B, as described," it would seem to follow that there is no infringement by the defendants' rail. The relative location between the web, the head, and the flange is made—by the fifth claim—a material part of the form of the patented rail, as distinguished from the prior state of the art, and, in connection with the offset, C, constitutes the "improvement in street-railroad rails" for which the patent was obtained. When a claim is so explicit, the courts cannot alter or enlarge it. If the patentee has not claimed the whole of his invention, and the omission was the result of inadvertence, he should have sought to correct the error by a surrender of his patent and an application for a reissue. He cannot expect the courts to wade through the history of the art, and spell out what he might have claimed, but has not. Since the act of 1836, the patent laws require that an application for a patent shall not only by a specification in writing fully explain his invention, but that he "shall particularly specify and point out the part, improvement, or combination which he claims as his own invention or discovery." This provision was inserted in the law for the purpose of relieving the courts from the duty of ascertaining the exact invention of the patentee by inference and conjecture, derived from a laborious examination of previous inventions, and a comparison thereof with that claimed by him. This duty is now cast upon the patent-office. There his claim is, or is supposed to be, examined, scrutinized, limited, and made to conform to what he is en-

If the office refuses to allow him all he asks, he has an ap-But the courts have no right to enlarge a patent beyond the scope of its claim as allowed by the patent-office or the appellate tribunal to which contested applications are referred. "When the terms of a claim in a patent are clear and distinct, as they always should be, the patentee, in a suit brought upon the patent, is bound by it. Merrill v. Yeomans, 94 U.S. 568. He can claim nothing beyond it. But the defendant may at all times, under proper pleadings, resort to prior use and the general history of the art to assail the validity of a patent or to restrain its construction. The door is then opened to the plaintiff to resort to the same kind of evidence in rebuttal, but he can never go beyond his claim. As patents are procured ex parte, the public is not bound by them, but the patentees are; and the latter cannot show that their invention is broader than the terms of their claim; or, if broader, they must be held to have surrendered the surplus to the public." Keystone Bridge Co. v. Phænix Iron Co., 95 U. S. 278. See, also, Railroad Co. v. Mellon, 104 U. S. 118; Sargent v. Lock Co., 114 U. S. 86, 5 Sup. Ct. Rep. 1021; Western Electric Co. v. Ansonia Brass & Copper Co., 114 U. S. 452, 5 Sup. Ct. Rep. 941; Clark v. Manufacturing Co., 115 U.S. 86, 5 Sup. Ct. Rep. 1190; Lock Manuf'g Co. v. Greenleaf, 117 U. S. 558, 6 Sup. Ct. Rep. 846.

2. The contention of defendants with reference to the defense of non-patentability is—

"That the complainant's patent is absolutely void, for the reason that it is only for one especial form of the well-known girder rails, and that such especial form did not develop any new or unknown mode of operation."

It is undoubtedly true, as has often been said, that no more difficult task can be imposed upon the court, in patent cases, than that of determining what constitutes invention, and of drawing the line of distinction between the work of the inventor and the constructor. It is very often difficult to determine what degree of improvement takes a case out of the mere exercise of mechanical skill and judgment, and places it within the domain of invention or discovery. Certain well-defined general principles have, however, from time to time, been announced, in plain, clear, and distinct terms, which are calculated to materially aid the courts in deciding cases of like character with the cases under con-The supreme court has repeatedly held that, under the consideration. stitution and the acts of congress, a person, to be entitled to a patent, must have invented or discovered some new and useful art, machine, manufacture, or composition of matter, or some new and useful improvement thereof; and that "it is not enough that a thing shall be new, in the sense that in the shape or form in which it is produced it shall not have been before known, and that it shall be useful, but it must, under the constitution and the statute, amount to an invention or discovery." Hill v. Wooster, 132 U.S. 700, 10 Sup. Ct. Rep. 228. The cases on this subject are collected in Thompson v. Boisselier, 114 U.S. 1, 11, 12, 5 Sup. Ct. Rep. 1042. To them may be added: Stephenson v. Railroad Co., 114 U. S. 149, 5 Sup. Ct. Rep. 777; Lock Manuf'g Co. v. Greenleaf, 117

U. S. 554, 6 Sup. Ct. Rep. 846; Gardner v. Herz, 118 U. S. 180, 6 Sup. Ct. Rep. 1027; Holder Co. v. Ferguson, 119 U. S. 335, 7 Sup. Ct. Rep. 382; Hendy v. Iron-Works, 127 U. S. 370, 375, 8 Sup. Ct. Rep. 1275; Holland v. Shipley, 127 U. S. 396, 8 Sup. Ct. Rep. 1089; Plow Co. v. Kingman, 129 U. S. 294, 9 Sup. Ct. Rep. 259; Brown v. District of Columbia, 130 U. S. 87, 9 Sup. Ct. Rep. 437; Day v. Railway Co., 132 U. S. 98, 10 Sup. Ct. Rep. 11; Watson v. Railway Co., 132 U. S. 161, 10 Sup. Ct. Rep. 45; Marchand v. Emken, 132 U. S. 195, 10 Sup. Ct. Rep. 65; Royer v. Roth, 132 U. S. 201, 10 Sup. Ct. Rep. 58. In the light of these principles, the facts in these cases, as shown by the evidence, must be applied and considered, in order to enable the court to determine upon which side of the border line the patent falls.

The prior art is represented by the ordinary T-rail and the California street-rail. Neither of these rails possessed all the advantages of the patented rail. In fact, the object of the patentee in changing the form of the rail—as stated in his specifications heretofore quoted—was to secure in one form all the advantages possessed by the rails then in public use. The general features of his invention were admitted to be old, and he therefore disclaimed the same, and confined himself "to the form hereinafter particularly described and claimed as new." The advantages testified to by complainant's witness Breevort, that the patented rail "is adapted to be placed on a sleeper below the street level, so that the paving can be brought up to it. It has a head for the bearing of the wheel, a flange which permits ordinary street traffic, a vertical web and foot,"—were all possessed by the California street-rail. Speaking of the California street-rail, the witness said:

"The said rail has not got the same disposition of metal or the same combination of parts, as claimed in the fifth claim of the patent. It is true that the sample of rail shown me has a head, a flange, a web, and a foot, but these parts are differently shaped, and are differently located in regard one to the other, when compared with either the defendants' or the complainant's rail. The rail shown me has no offset under the head; and, if such a rail was used with fish-plates, one set of fish-plates would have to be used for the side of the rail on which the head was turned, and another and narrower set of fish-plates would have to be used for that side of the rail on which the flange is turned. Both in the defendants' and complainant's rail, the offset under the head enables fish-plates of like size to be used on both sides of the rail, besides furnishing strength to the head. In the sample of rail shown me, strength for the head has been obtained by a different disposition of the metal, and the offset has been dispensed with."

The flanged rails are shown by the testimony of both parties to be advantageous, by reason of their adaptability for street paving. The California street-rail is a flanged rail, and in this respect it was an improvement upon the T-rail. This advantage is secured in the form of the patented rail. The advantage of even fish-plating in the patented rail was obtained by the use of the offset, C. and this is the most prominent feature upon which the invention of the patented rail is claimed. The form of the California street-rail did not admit of even fish-plating. The old T-rail, however, had that advantage. Its form was such as to allow

even fish-plating. The rails were even on both sides, and the plates could be transferred from one side to the other, and only one size of plates were required to be purchased. It will thus be seen, as stated by complainant's witness Breevort, that "the patent of Johnson described an improved form of rail, intended principally for use in streets for car service and street-railway service. The said rail described in the patent is designed to present many of the advantages of the T-rail, and possessing also some of the advantages of the ordinary tram-rail." The change in the form of the rail so as to secure these advantages, as shown by the evidence, was, in my opinion, the result of ordinary mechanical skill, which did not require the exercise of the inventive faculty of the mind.

In Trimmer Co. v. Stevens, the supreme court, in passing upon a similar question involved in that case, said:

"Effort was made to show by other witnesses that the features in the Orcutt patent, specified in the statement of counsel above quoted, are all patentable novelties, especially the combination of them into one device. We repeat that, in view of the previous state of the art, we think otherwise. The evidence, taken as a whole, shows that all of those claimed elements are to be found in various prior patents, some in one patent, and some in another, but all performing like functions in well-known inventions having the same object as the Orcutt patent, and that there is no substantial difference between the Brown metal cutter and Orcutt's cutter, except in the configuration of their moulded surfaces. That difference, to our minds, is not a patentable difference, even though the one cutter was used in the metal art and the other in the leather art. A combination of old elements, such as are found in the patented device in suit, does not constitute a patentable invention." 137 U. S. 433, 11 Sup. Ct. Rep. 150.

The changes made by Johnson in the form of the rail were changes of degree only, and did not involve any new principle. It was a combination of old elements into a new form, without producing any new mode of operation. It is, as was said by the supreme court in *Burt* v. *Evory*, 133 U. S. 358, 10 Sup. Ct. Rep. 394—

"A mere aggregation of old parts, with only such changes of form or arrangement as a skillful mechanic could readily devise,—the natural outgrowth of the development of mechanical skill, as distinguished from invention. The changes made * * in the construction * * * were changes of degree only, and did not involve any new principle, * * performed no new function."

In Florsheim v. Schilling, 137 U. S. 77, 11 Sup. Ct. Rep. 20, the supreme court adopted the rule announced in Pickering v. McCullough, 104 U. S. 318:

"In a patentable combination of old elements all the constituents must so enter into it as that each qualifies every other. * * * It must form either a new machine of a distinct character and function, or produce a result due to the joint and co-operating action of all the elements, and which is not the mere adding together of separate contributions. The combination of old devices into a new article, without producing any new mode of operation, is not invention."

Burt v. Evory, supra. See, also, Hailes v. Van Wormer, 20 Wall. 353; Reckendorfer v. Faber, 92 U. S. 347; Double-Pointed Tack Co. v. Two Rivers Manuf'g Co., 109 U. S. 117, 3 Sup. Ct. Rep. 105; Bussey v. Manufacturing Co., 110 U. S. 131, 4 Sup. Ct. Rep. 38; Phillips v. City of Detroit, 111 U. S. 604, 4 Sup. Ct. Rep. 580; Stephenson v. Railroad Co., 114 U. S. 149, 5 Sup. Ct. Rep. 777; Beecher Manuf'g Co. v. Atwater Manuf'g Co., 114 U. S. 523, 5 Sup. Ct. Rep. 1007; Heating Co. v. Burtis, 121 U. S. 286, 7 Sup. Ct. Rep. 1034; Hendy v. Iron-Works, 127 U. S. 370, 8 Sup. Ct. Rep. 1275; Campbell v. Bailey, 45 Fed. Rep. 564, and authorities there cited.

The contention of defendants is, in my opinion, sustained, and complainant's bills must be dismissed. It is so ordered.

JUTTE v. DAVIS.

(District Court, W. D. Pennsylvania. May 7, 1890.)

Admiratry Jurisdiction—Libel in Personam—Supplies and Services.

The district courts of the United States have jurisdiction of a libel in personam against the owner of a domestic steam-boat for supplies furnished to the boat and services performed for her.

In Admiralty.

Libel in personam by Charles Jutte against John M. Davis, owner of the Bengal Tiger, for supplies furnished to the boat, and services performed for her. On motion to dismiss for want of jurisdiction. Denied.

Geo. C. Wilson, for libelant.

Barton & Barton, for respondent.

Acheson, J. Undoubtedly this court has jurisdiction generally of suits in personam upon maritime contracts; and as this is such a suit against the owner of the Bengal Tiger to enforce a personal liability, and not a proceeding in rem against the steam-boat, the objection that she is a domestic vessel, and hence is not subject to a maritime lien for the claim in suit, is not well taken, and the motion to dismiss must be denied. And now, May 7, 1890, the motion to dismiss the libel is denied.