the means used to produce it differ. In the defendants' device the tooth does not rest on a curved seat, nor is it held in place by a curved clip having biting edges. The patent office evidently considered the difference between the two devices so substantial that the Miller patent was not regarded as an infringement of the complainant's patent.

In view of the narrow construction which I feel constrained to put upon the complainant's patent, I do not regard the Miller patent as embodying an infringing device; and, as that device is the one used in the harrows sold by the defendants, they cannot be held liable for infringement. The bill is therefore dismissed for want of

equity, at complainant's costs.

TOEPFER et al. v. GALLAND-HENNING MALTING-DRUM MANUF'G CO. et al.

(Circuit Court, E. D. Wisconsin. March 16, 1895.)

PATENTS-LIMITATION-PRIOR ART-INFRINGEMENT.

The Toepfer patent (No. 226,890) for an improvement in malt kilns construed, and, upon reference both to the prior state of the art and an amendment in the patent office, held entitled only to a narrow construction; and held, further, that it was not infringed by a machine made in accordance with the Giesler patent (No. 483,781). 31 Fed. 913, followed and applied.

This was a suit by Frank Toepfer and Peter G. Toepfer against the Galland-Henning Malting-Drum Manufacturing Company and others for infringement of a patent.

Charles G. Page and J. V. Quarles, for complainants. H. G. Underwood, for defendants.

SEAMAN, District Judge. This bill alleges infringement of letters patent No. 226,890, for an improvement in malt kilns, issued to Wenzel Toepfer April 27, 1880. Of the several defenses which are urged, I have only found it necessary to consider that of non-infringement in view of the prior state of the art. All charge of infringement rests upon the first claim of the patent, which reads as follows:

"(1) In a malt dryer, a removable tilting tray, provided with journals having bearings in the end walls of the kiln, and on an intermediate bracket or brackets, the journals of the trays having polygonal openings for the reception of a polygonal tilting shaft, in combination with a corresponding tilting shaft, substantially as and for the purpose specified."

This same patent was before the circuit court for the Northern district of Illinois, and directly involved, in Toepfer v. Goetz, decided July 5, 1887, as reported in 31 Fed. 913. In the opinion there handed down, Judge Blodgett accurately describes the device which the complainants have shown here in the model and designs of their patent, and well defines the limitations which must be placed upon the claims of the patent, in view of the prior state of

the art and the terms employed. It is there stated that "perforated floors to malt kilns, so arranged that the sections or trays could be tilted or tipped in such manner as to dump the contents, were old at the time this inventor entered the field," and that it was old to make the floors open, by various means, "to allow the free circulation of heated air through the contents of the kiln"; and such state of the art clearly appears in this record. Numerous prior patents are shown which justify the application of the rule of narrow construction there enforced. In the Goetz Case the issue is thus stated:

"The only substantial difference between the trays constructed according to the complainant's patent and those made and used by the defendants is that defendants use a round rock shaft where complainant shows a square or polygonal one, and the ends of defendants' rock shaft form the journals upon which the trays turn. Complainant fastens his rock shaft rigidly to the tray by passing it through square holes, while defendants pass theirs through round holes, and make it rigid with the frames of the tray by pins or set screws."

This difference was held sufficient to avoid infringement, under the rule of construction which governed. The round tilting rod was shown in an old German patent (1867) for a similar purpose; and, if there was invention in substituting the square shaft and square openings in the later design, it was, at best, only a combination of details in construction, without the qualities of a pioneer invention, and the doctrine of mechanical equivalents did not enter See Card v. Colby, 18 U. S. App. —, 12 C. C. A. 319, 64 Fed. There the round rod, with added set screws, performed every office of the square design, but was held not an infringement, under the special terms of this claim. In the present case there is divergence which saves such strict application of the rule. It is true that the Giesler device employed by these defendants has the square form of rock shaft set in square openings, but in this respect it differs somewhat from that of the complainants, in that it has the trays made in parts or sections, with the rock shaft correspondingly subdivided, each rigidly secured to the tray section, and not removable; the ends of the sections being upset in the journals of the crossbars of trays, and the crossbars bolted together. The trays are then operated together by means of an independent shaft with cams attached. On the other hand, the tray of complainants is integral, with a continuous and removable shaft passing through square openings in the journals of the tray. Also the shaft of the latter is placed at the longitudinal center of the trays for this tilting purpose, while that of the former is expressly placed out of center, so that when the trays are raised they will drop by gravity, when loaded with malt. Whether these variations be deemed more material than those found in the Goetz Case, or whether the proof in this record of analogous tilting device in the early Nott patent, of 1826, for grates, or the Ashcroft patent, of 1879, be regarded as conclusive, it is manifest here that neither experts nor counsel on behalf of complainants place any substantial claim of infringement upon this feature alone, of the square shape of the shaft, and I am satisfied that infringement could not rest on any similarity in this regard.

The complainants' experts state that the element of intermediate supporting brackets contained in this claim distinguishes it from prior devices, and is infringed by the defendants. There cannot be invention in the idea of intermediate support to obviate a sag or weakness in a long tray, and a bracket support was clearly anticipated for a similar purpose in the Ashcroft improvement in The form of bracket provided by the Toepfer patent is mentioned in their testimony as peculiar to accomplish the object in view, but similar forms are well shown by this record to have been long employed for analogous purposes. Aside from the fact that there may be a want of identity between the defendants' supporting brackets and those of the patent in question, and aside from any question of want of novelty, either in idea or form, it is here shown that in the Goetz and Brada device, which was involved in the former suit, there was "practically the same intermediate supporting bracket as in the Toepfer patent"; and Judge Blodgett found that the claims of the patent did not cover that feature, and that, "if there was any invention involved in the construction of the supporting frame or the bracket, it has been abandoned to the public." I am satisfied with that conclusion as applicable to this supporting bracket as well.

There is an element of this first claim of the complainants' patent which I think is made distinguishing, namely, the removability of the tray in its entirety. The certified copy of the file wrapper and contents shows that the original application was made broadly for a malt dryer, upon claims which are, in effect, the same contained in this first claim, with the exception that the removable feature was not stated. The patent office then rejected the claims on several prior patents, and the applicant amended by substituting the present claim: "In a malt dryer, a removable tilting tray," The patent was thereupon granted, with this feature regarded and accepted as the saving one for patentability, and should be The complainants' trays are bodily removconstrued accordingly. able from the kiln, as described by one of their experts. shafts are supported on the brackets in open bearings; the bearings made in boxes with removable covers. The cover at the inner end can be taken off, the shaft lifted out of its bearings, and withdrawn endwise, leaving the tray free to be lifted out. provision is made by the defendants, and their trays are not removable, except by taking the structure apart, as their bearing plates are anchored in the wall. The design of removability is entirely absent. In my opinion, there is no infringement here.

The defendants are operating under letters patent No. 483,781, granted to F. B. Giesler October 4, 1892 (after the commencement of this action, but upon application filed in June, 1891). Finding no grounds for conflict between the patents, it is not necessary to consider questions affecting the validity of either. The arguments urged in behalf of complainants, of utility and of great

benefit conferred by the Toepfer invention, cannot weigh against the well-settled rules which must govern in construction of the patent. The complainants' bill must be dismissed for want of equity. So ordered.

SMITH V. MACBETH.

(Circuit Court of Appeals, Second Circuit. February 14, 1895.)

No. 35.

1. PATENTS-LIMITATION OF CLAIM-REJECTION AND AMENDMENT. An applicant who, after rejection of a claim upon reference to an anticipating device, amends the same by adopting language narrower than the reference required, is nevertheless bound by the limitations thus adopted.

2. Same—Interpretation of Claim—Infringement. In a patent for a magneto-electric machine operated by a rack bar, a claim for a switch arranged in the condensing circuit in the path of the "operating device," and adapted to be opened "by direct impingement of said device thereupon," held to cover a construction in which a shaft attached to the rack bar carried a rigid arm having a stud which impinged upon a latch, and thereby released a spring which then opened the circuit. 64 Fed. 797, reversed.

The Smith patent (No. 201,296) for improvements in magneto-electric machines construed, as to the first claim, and held infringed. 64 Fed. 797, reversed.

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

This was an action by H. Julius Smith against James Macbeth for infringement of a patent relating to magneto-electric machines. The circuit court dismissed the bill on the ground that there was no infringement in the use of defendant's machine. 64 Fed. 797. Complainant appealed.

Leonard E. Curtis and Thomas B. Kerr, for complainant. James A. Hudson and Arthur S. Browne, for defendant.

Before WALLACE, LACOMBE, and SHIPMAN, Circuit Judges.

SHIPMAN, Circuit Judge. The bill in equity in this cause was based upon the alleged infringement of the first claim of letters patent No. 201,296, dated March 12, 1878, and issued to H. Julius Smith, for improvements in magneto-electric machines. The defendant principally relied upon the proposition that this claim was limited by the proceedings in the patent office to such arrangement or construction of the elements of the combination as to exclude his machine from a just charge of infringement. circuit court consented to this conclusion, and dismissed the bill. From its decree the complainant appealed to this court.

The object and the details of the alleged invention are described

in the specification as follows:

"This invention relates to certain improvements in that class of magnetoelectric machines used chiefly for developing an intense current of electricity for firing fuses in blasting, or igniting gas jets, and known as 'dynamo-