

Co., 16 U. S. App. 78, 104, 105, 7 C. C. A. 197, 208, 209, and 58 Fed. 227, 238, 239.

Such being the well-established doctrine, we think it is clear that the first four claims of Bean's reissued patent, No. 8,631, should be held void for want of proper diligence in applying for a reissue, inasmuch as it appears that the reissued patent was not taken out for nearly three years after the date of the original patent, and inasmuch as it further appears that in the meantime a new pump had come into use, which was not covered by the claims of the original patent, but was covered by the first four claims of the reissued patent. This latter conclusion renders it unnecessary to decide whether there was any evidence before the commissioner of patents tending to show that the alleged defect in the original specification was due either to accident, inadvertence, or mistake, and no opinion is expressed on that point. It results from these views that the decree of the circuit court should be affirmed, and it is so ordered.

BALDWIN et al. v. KRESL et al.

(Circuit Court of Appeals, Seventh Circuit. October 22, 1896.)

No. 301.

1. PATENTS—INFRINGEMENT SUITS—DEFENSES—WANT OF INVENTION.

The defense of want of invention, including the right to show the prior state of the art, is always open, and it is not necessary to set it up in the answer. *Richards v. Elevator Co.*, 15 Sup. Ct. 831, 158 U. S. 299, followed.

2. SAME—INVENTION—MECHANICAL SKILL—CIGAR MOLDS.

The *Miller & Peters* patent, No. 258,940, for an improvement in cigar molds, is void for want of invention, in view of the prior state of the art, and as being for a mere change of degree, without change of function.

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

This was a suit in equity by J. P. Baldwin and the Miller, Du Brul & Peters Manufacturing Company against Charles Kresl and John H. Mallue for alleged infringement of a patent for cigar molds. The circuit court dismissed the bill, and the complainants have appealed.

Edward Boyd, for appellants.

D. H. Fletcher, for appellees.

Before WOODS and JENKINS, Circuit Judges, and SEAMAN, District Judge.

SEAMAN, District Judge. The complainants appeal from a decree dismissing their bill for want of equity. The bill alleges infringement of letters patent No. 258,940, issued to Frederick C. Miller and Henry C. Peters, June 6, 1882, for an improvement in cigar molds, of which J. F. Baldwin is owner, and the other complainant is exclusive licensee. A single claim is stated in the patent, as follows:

"The combination, in a cigar mold, of the lid, having at its extreme end an outer bearing and turning point, resting on the lower part of the mold, extended beyond the end cup or matrix a sufficient distance to enable the plunger to be moved out of the matrix in a plane substantially parallel with the sides of the matrix, and without subjecting the edges of the plunger, or the side walls of the matrix, to strain, with the gain or rabbet at or near the opposite end of the mold, substantially as described."

The specification contains this further statement of the object and method of the alleged invention:

"Our invention relates to certain improvements in cigar molds shown and described in letters patent of the United States granted to us July 26, 1881, and numbered 244,941; the said improvements not being claimed in said patent, and the right being therein reserved to claim the same in a separate application. Said improvements relate to the construction of the cigar molds, which enables the plungers to be moved out of the matrices in planes substantially parallel with the sides of the matrices; and, to such end, may be stated to consist in the combination, in a cigar mold, of the lid, having at its extreme end an outer bearing and turning point resting on the point of the mold extended beyond the end cup or matrix a sufficient distance to enable the plunger to be moved out of the matrix in a plane substantially parallel with the sides of the matrix and without subjecting the edges of the plunger, or side walls of the matrix, to strain, with the gain or rabbet at or near the opposite end of the mold."

In a brief opinion filed by the circuit judge at the hearing, the following description is given:

"Said mold consists of a rectangular block of wood, transversely across the upper surface of which is fixed a series of longitudinally hollowed wooden cups or matrices, in which the tobacco is placed for impression; and a similar and corresponding block, transversely across the lower surface of which is fixed a corresponding series of longitudinally hollowed wooden plungers. When these are brought together the plungers telescope into the matrices, compressing the tobacco in each into the form of a cigar. The purpose of the alleged invention is to facilitate the parting of the upper from the lower half of the mold without breaking the edges of the matrices and plungers."

All claim of invention in this device rests upon the alleged novel feature that the end of each of these blocks extends further beyond the matrix cavities than in the prior forms of mold, and by thus lengthening the distance of the point or axis upon which the upper block swings, in lifting it for separation, the pre-existing defect is avoided, whereby "the edges of the plunger, or side walls of the matrix," are subjected to strain or injury. In the opinion of the trial court the conclusion is reached that there was no patentable invention in this improvement; and it is also suggested that under the rule of strict construction, which must apply, if the patent were sustained, it is doubtful whether infringement is made out, for the reason that the claim limits the axis of separation to "the extreme end of the lid," while in the "mold used by the defendant said axis is not at the extreme end." An adoption of either of these propositions would sustain the decree, but we are of opinion that it must be affirmed upon the primary ground that the patent, under well-established rules of the patent law, is invalid. The question of patentable invention involves the ascertainment of the prior state of the art; and the objection is urged on behalf of the appellants, at the threshold of this inquiry, that the defendants have not pleaded such defense, and therefore cannot be heard

to "assail the patent for want of invention on account of prior devices, which require proof, or which it was necessary to offer in evidence"; that the answer sets up the numerous prior patents therein mentioned for the defense of want of novelty only. The objection is untenable, as the defense of want of invention, including the right to introduce evidence of the prior art, is always open, and it is not necessary to set it up in the answer. *Richards v. Elevator Co.*, 158 U. S. 299, 301, 15 Sup. Ct. 831, 832, and cases cited.

Numerous forms of cigar molds existing prior to this patent were shown in letters patent, in mold exhibits, and by the testimony of expert witnesses and others, which do not require mention in detail. It is sufficient to assume the stages of advance in the art, as claimed by the appellants, substantially as follows: That in the earlier forms of molds the matrices and plungers were made flaring, and, not registering closely, produced a crease or fin on the side of the molded cigar, which seriously injured its value; that turning and repressing the cigar would only correct this in part, and at the expense of additional labor and time; that, long prior to the application for the patent in suit, Miller and others had "discovered that the creases could be avoided by making the walls of the matrices and plungers vertical, so that there would be a close fit," as "shown in Miller's patent of October 13, 1874"; that this form introduced another difficulty, in the breaking of the matrix edges, because of their close fit, and this was obviated by a device for which Miller & Peters obtained (upon division of claims) letters patent No. 244,914, issued July 26, 1881, and the letters patent in the suit, issued June 6, 1882. According to the testimony for the defense, cigar molds imported from Germany were in common use in this country, prior to either of the last-mentioned patents, where-in the only difference from the construction shown in these patents, so far as material to this controversy, was that they gave less space outside the matrix cavities; and this seems to be opposed only by the claim that they did not register as closely, and the cigars molded in them were creased. But, laying aside the German molds, it is conceded that the form shown in this patent was not novel at the date from which it must take effect, except in the degree of space to the edge of the blocks, or hinging point. This change was made necessary by the fact that the outermost matrices (whether more than one or two on each side is not shown) were pinched and injured in separating the blocks, manifestly due to the arc of motion in lifting. The cigars which were molded in these broken matrices were imperfect, and the remedy would be apparent to any operator on discovery,—either to permanently close these defective outer matrices, or to cease using them. To increase the number of cigars molded at each operation, it would seem equally apparent that the mold must be lengthened. Of the expedient thus called for it is justly said in the opinion of the trial court:

"The extension of the two blocks, or mold, as here described, seems to me an obvious mechanical expedient, suggested at once by the object to be obtained. That a given length of arc approaches more nearly to a straight line as the radius of the circle becomes longer is a fact apprehended as soon as the conditions of the proposition are present to the mind."

It is true, as contended by counsel for the appellants, that no general definition has been found which clearly marks the distinction between invention and mechanical skill, and it is always difficult, and oftentimes impossible, to determine with certainty that the conception of a device was "spontaneous, and by a necessity of human reasoning," and that any doubt in that regard should then be resolved in favor of invention, unless it is clearly placed within the domain of mere mechanical construction by some of the well-settled rules of the patent law. The authority for granting a patent rests exclusively upon statute, and is thereby strictly limited to the invention of what is new and useful. *McClain v. Ortmyer*, 141 U. S. 419, 428, 12 Sup. Ct. 76, 79. It is not, therefore, sufficient to show the utility or great popularity of the improvement, as strenuously urged here to sustain this patent. *Id.* But it must also be new, in the sense of patentable diversity from prior methods, forms, and accomplishments, as recognized by the decisions. The fact alone of improvement does not establish invention. Nor, on the other hand, can it be denied for mere simplicity, which may be the feature of special merit. For the improvement claimed in this patent, however, a test is furnished under the rule frequently declared by the supreme court, that "a change only in form, proportions, or degree, the substitution of equivalents doing substantially the same thing in the same way, by substantially the same means, with better results, is not such invention as will sustain a patent." *Smith v. Nichols*, 21 Wall. 112, 118, 119; *Burt v. Ivory*, 133 U. S. 349, 358, 10 Sup. Ct. 394; *Cluett v. Claffin*, 140 U. S. 180, 183, 11 Sup. Ct. 725, 726; *McCarty v. Railroad Co.*, 160 U. S. 110, 118, 16 Sup. Ct. 240, 243; *Caverly's Adm'r v. Deere & Co.*, 24 U. S. App. 617, 631, 13 C. C. A. 452, and 66 Fed. 305; *Griswold v. Wagner*, 37 U. S. App. 171, 15 C. C. A. 525, and 68 Fed. 494. To change the degree of a thing, or of one of its features, is not patentable invention. *Guidet v. Brooklyn*, 105 U. S. 550, 552; *Walk. Pat. (3d Ed.)* § 31. And so of any change in the "form of embodiment," of mere degree or quality of action, without changing the function of any element, or adding a new element, although it may greatly improve the old combination. 1 Rob. Pat. § 237. It is obvious that the diversity in the mold of these patentees from the old form was only in the proportions of space beyond the matrices which happened to exist in the prior molds, without any special function in the pre-existing proportion; and all the elements performed the same general function after the changes as before, with the same movement, only modified in degree. There was no new combination, and the improvement clearly belongs to the "category of degree" referred to by Mr. Justice Swayne in *Smith v. Nichols*, *supra*, and is not patentable. The decree is affirmed.

ROWLETT v. ANDERSON et al.

(Circuit Court, D. Indiana. October 14, 1896.)

No. 9,096.

1. PATENTS—INTERPRETATION—EXTENSIVE USE.

The fact that a machine or device has met with general favor and acceptance by the trade is not of persuasive force in favor of a broad construction of the patent, when, in view of the prior art, there is no fair doubt as to the limitations which must be placed upon the claims.

2. SAME—INFRINGEMENT—LAWN MOWERS.

The Rowlett patent, No. 383,829, for a ratchet mechanism for lawn mowers, if valid at all, must, in view of the prior state of the art, be limited to the exact combination described or its fair equivalent; and the same is not infringed by a mechanism made according to the Farmer patent, No. 497,467.

This was a bill by Jacob V. Rowlett against Francis S. Anderson and others for alleged infringement of a patent relating to lawn mowers.

V. H. Lockwood, for complainant.
Chester Bradford, for defendants.

BAKER, District Judge. This is a suit in equity for the infringement of letters patent No. 383,829, issued May 29, 1888, to the complainant, for an alleged improvement in lawn mowers. The device in question is a ratchet mechanism, such as is used for many purposes. A ratchet mechanism of this general character is in common use in lawn mowers, and both parties to this suit are engaged in the manufacture of such machines. The complainant's device consists of a pinion loosely mounted on the reel-shaft of the lawn mower, and containing perforations through the same parallel with the axis of the shaft in which the pawl-pins are placed; a ratchet-collar permanently fastened to the shaft upon one side of the pinion, and a two-faced cam-collar permanently fastened to the shaft upon the other side, which two-faced cam operates to drive the pawl-pins through the pinion into engagement with the teeth of the ratchet-collar.

The claims alleged to be infringed are the second, third, fourth, fifth, and eighth, which are as follows:

(2) In a lawn mower, the combination, with the reel-shaft, of a ratchet-collar keyed to said shaft near its end, driving pinions loose thereon, and provided with pawl-pins arranged in bearings in the body of the pinion parallel with its axis, and a cam-collar keyed to the shaft at each end outside the pinion, and having upon its inner face cam projections which project the pawl-pins inward, substantially as specified.

(3) In a lawn mower, the combination, with the reel-shaft, of a pinion loose upon the end thereof, a ratchet-collar upon one side of said pinion, a cam-collar upon the other side, and steel pawl-pins lying in bearings in the body of the pinion, and thrown by the cam-collar into engagement with the ratchet-collar, both said collars being keyed to the shaft, substantially as specified.

(4) In a lawn mower, the combination, with a ratchet-collar having opposite inclines terminating in square cam-shoulders upon one of its parallel faces, of a pinion loose on the shaft, pawl-pins arranged in the body of said pinion to move towards the ratchet-collar and from it, a cam-collar having two double inclines