

v.43F, no.9-37 CONSOLIDATED ROLLER-MILL Co. v. WALKER.

*Circuit Court, W. D. Pennsylvania.*

September 12, 1890.

1. PATENTS FOR INVENTIONS—PATENTABILITY—MECHANICAL SKILL.

The first claim of letters patent No. 228,525, granted June 8, 1880, to William D. Gray for improvements in roller grinding-mills, namely, "(1) In a roller grinding-mill, the combination of the counter-shaft, provided with pulleys at both ends, and having said ends mounted in vertically and independently adjustable bearings, the rolls, C, E, having pulleys connected by belts with one end of the counter-shaft, and the rolls, D, F, independently connected by belts with the other end of the counter-shaft, as shown," does not disclose any patentable subject-matter. The application of belting to drive roller grinding-mills did not originate with Gray, and his peculiar arrangement resulted at most in an improvement in degree merely, and said combination evinced only the exercise of ordinary mechanical or engineering skill.

2. SAME—PRIOR STATE OF ART.

In view of the terms of the specification and the prior state of the art, said claim could not be so construed as to cover a roller-mill manufactured in accordance with letters patent No. 334,460, granted January 19, 1886, to John T. Obenchain.

3. SAME—FOREIGN PATENT.

By the Austrian patent law, the fixed longest duration of a patent for an Invention Is 15 years, and every patentee Whose privilege has been granted for a shorter period than the longest may claim its prolongation for one or more years within the fixed longest period, provided such prolongation be demanded before the privilege has become extinct. In the original grant of an Austrian patent, the allowance of the franchise was for one year, hut on request it was four times extended, from year to year, and at the end of the fifth year the franchise was suffered to expire.

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A United States patent to the, same patentee, and for the same invention, was issued after the Austrian patent was granted and during the first year it was in force. *Held*, that by the original grant of the Austrian patent the patentee was invested with the right, at his mere option, to have the patent prolonged for the full term of 15 years, and that, under section 4887 of the Revised Statutes, the United States patentran for that term, notwithstanding the expiration of the Austrian patent at the end of its fifth year.

### 4. SAME—DECISION OF FOREIGN PATENT-OFFICE.

Under the Austrian patent law, the ministry of commerce, in deciding the question of the length of the term which appertains to every Austrian patent, exercises a judicial function, and its opinion on that subject will be followed here, agreeably to the established rule that the courts of the United States adopt the construction of a statute of a foreign country made by the courts of that country.

In Equity.

*R. Mason*, for complainant.

*Parkinson & Parkinson*, for defendant.

Before McKENNAN and ACHESON, JJ.

ACHESON, J. The bill in this case charges the defendant with the infringement of two patents relating to roller-mills,—one issued to William D. Gray, and the other to Udolpho H. Odell; but at the final hearing the suit was pressed only as respects the former patent, and hence the Odell patent may be dismissed from consideration. The patent to William D. Gray is No. 228;525, and was granted June 8, 1880, upon an application filed May 2, 1879. Gray's invention relates to that class of mills in which horizontal grinding-rolls arranged in pairs are employed, and consists, the specification declares, "in the improved arrangement of belts and pulleys for communicating motion to the rolls, and in other minor details." The patent contains several claims, but infringement of the first claim only is here charged. That claim is in these words:

"(1) In a roller grinding-mill, the combination of the counter-shaft, provided with pulleys at both ends, and having said ends mounted in vertically and independently adjustable bearings, the rolls, C, E, having pulleys connected by belts with One end of the counter-shaft, and the rolls, D, F, independently connected by belts with the other end of the counter-shaft, as shown."

The answer sets up, among other defenses, want of novelty and want of patentability and non-infringement. After stating in his specification that driving the rolls by gearing occasions great noise, and also a jarring of the parts of the apparatus and trembling of the mill-floor, in turn causing ah unevenness in grinding, and a rapid and uneven wear of the rolls, Gray adds:

"To obviate these difficulties, and produce an even, steady motion, I discard the gearing hitherto employed, and substitute therefor a system of belting arranged in a peculiar manner, to give the proper direction and speed to the rolls."

And he mentions, as incident to his arrangement of belting, the further advantage that, by simply removing the pulley of any shaft and replacing it with another of proper size, any desired difference in the speed of the rolls may be obtained, which he states cannot be accomplished, except by a complicated arrangement of intermediate wheels, where gearing

is used. The specification, after referring to the accompanying drawings, explains the arrangement of the belts thus:

"N represents the main driving belt, which passes to and around the pulley, *c*, of the roll, C, thence downward, and around pulley, *b*, of the counter-shaft, B, thence upward, and around pulley, *e*, of the roll, E, and back to the source of power, imparting to the rolls C and E a motion in one direction, and to the counter-shaft a motion in the reverse direction. From the pulleys, *b*, *b*, on the rear end of the counter-shaft, B, belts, P and R, pass upward and around pulleys, *d* and *f*, of the rolls, D and F, as shown in Fig. 2, imparting to said rolls a motion the reverse of that of the rolls, C, E. In this way the two rolls of each set are caused to revolve towards each other while being all driven from a common source primarily."

To fully understand the particular claim of the patent involved in this controversy, one other paragraph of the specification must be quoted:

"In order to adapt the counter-shaft, B, to perform the double purpose of reversing the motion of certain of the rolls, and of acting as a belt-tightener, it is mounted, at opposite sides of the frame or body, A, in boxes swiveled or hung in yokes, L, sliding vertically in guides or boxes, K, and adjusted up and down therein by screw rods or stems, S; the swivel-boxes permitting a slightly greater movement of the shaft, B, at one end than at the other, without interfering with its free rotation, and thereby permitting the tightening of the belt or belts at one side of the machine without disturbing those at the other."

Gray's specification, as our quotations therefrom indicate, suggests the idea that he was the first to apply belt-drives to roller grinding-mills. But the fact is otherwise, as the proofs abundantly show. Nor was he the first to discard from such mills cog-gearing and friction gears altogether, and substitute therefor belt-driving. Confining our attention here to Mechwart's Austrian patent, granted August 3, 1875, we find therein distinctly set forth the disadvantages resulting from the use of spur-gearing in roller grinding-mills, viz.: the disagreeable rattling, the rapid wearing away of the gears, and the unequal movement and unequal wearing away of the rollers, and also the inefficiency of driving by means of Motional contact between the rolls, which latter, it is set forth, is only practical when the chop passes the rollers in very thin layers, and not in coarse particles, and is not applicable when an unequal peripheral speed of the rolls is required. All these disadvantages, it is declared, are avoided by Mechwart's invention, which consists in driving both co-operating rolls by means of belts, whereby, also, can be obtained an equal and also an unequal peripheral speed, while the diameter of the rolls, as well as the diameter of the belt pulleys, can be varied relatively to each other for different objects. Mechwart's drawings show as examples six different arrangements of belting, which he states are intended to illustrate "only some of the different arrangements of the belt-drive for roller-mills, without exhausting the possible variations in its application." Fig. 3, sheet A, shows a machine

having two pairs of grinding-rolls, the pairs being vertical, and arranged side by side. A shaft, mounted in the machine frame in fixed bearings, carries two pulleys, one at each side of the machine. A belt from one of these pulleys passes around a tightening pulley at the upper right-hand corner of the

machine, thence around a pulley on the upper left-hand roll-shaft, thence around a pulley on the lower right-hand roll-shaft, and thence back to the driving-pulley, and by this belt one roll of each pair is driven. From the other pulley, on the other side of the machine, a belt is arranged in a similar manner, so as to drive the other two rolls of the pair. Without further description of the Mechwart system, it is enough to say that his patent disclosed roller grinding-mills, single and double, with both vertical and horizontal pairs of rolls arranged side by side, driven by means of belts exclusively; his machine being equipped with adjusting or tightening pulleys, and having a shaft journaled directly into the machine frame, and receiving its motion from the prime mover of the mill, either directly or by belt.

But, turning now to machinery employed in the arts generally, it is certain that the use of belt-gearing interchangeably with or as a substitute for cog-gearing was very old and common before Gray's alleged invention. It was, too, an old and familiar expedient to keep the belt adjusted to a proper degree of tightness by means of tightening pulleys, the shaft of which in revolving sometimes did other work about the machine; and shafts had been made movable in such manner as to tighten belts passing over pulleys on other shafts. It was also old, and very common in machine-shops and factories of various kinds, to provide an individual machine with a counter-shaft, mounted directly in the machine-frame, the counter-shaft being driven by a belt from the line-shaft and the machine by a belt from the counter-shaft. Furthermore, it was no new thing to provide the journal boxes or hangers in which counter-shafts are mounted with means, for independently adjusting the ends of the shaft.

In view of these things, then, we are unable to discover any patentable subject-matter in the first claim, of Gray's patent. The case, it seems to us, falls directly within the established principle that the application of an old process, machine, or device to a like or analogous purpose, with no change in the mode of application, and no result substantially different in its nature, will not sustain a patent, even if the new form of result has not before been contemplated. *Pennsylvania R. Co. v. Locomotive 25. 8. T. Co.*, 110 U. S. 490, 4 Sup. Ct. Rep. 220; *Blake v. San Francisco*, 113 U. S. 679, 5 Sup. Ct. Rep. 692. Moreover, it is quite clear that the application of belting to drive roller grinding-mills, to obviate the difficulties incident to the use of cog-gearing, and to secure the advantages set forth in Gray's specification, did not originate with him. Therefore, even were it conceded that his peculiar arrangement is attended with better results than had been attained previously, still this would not sustain the patent; for the mere carrying forward of an original conception, resulting in an improvement in degree simply, is not invention. *Burt v. Evory*, 133 U. S. 349, 10 Sup. Ct. Rep. 394. After the most careful study of the subject, we think the conclusion is unavoidable that the combination set forth in Gray's first claim evinces only the exercise of ordinary mechanical or engineering skill, as the same has been

defined by the supreme court and illustrated by so many recent decisions of that tribunal.  
*Hollister v. Manufacturing Co.*, 113 U. S. 59, 5 Sup. Ct. Rep. 717;

*Thompson v. Boissclier*, 114 U. S. 1, 5 Sup. Ct. Rep. 1042; *Aron v. Railway Co.*, 132 U. S. 84, 10 Sup. Ct. Rep. 24; *Hill v. Wooster*, 132 U. S. 693, 701, 10 Sup. Ct. Rep. 228; *Howe Machine Co. v. National Needle Co.*, 134 U. S. 388, 10 Sup. Ct. Rep. 570.

It seems to be proper for us to add that our judgment is with the defendant upon the defense of non-infringement also. To understand the nature of the invention intended to be covered by the first claim, resort must be had to the specification, and we there find that the "swivel-boxes" are essential to the contemplated greater movement at one end of the shaft than at the other, whereby is effected "the tightening of the belt or belts at one side of the machine without disturbing those at the other." This is apparent on the face of the paragraph hereinbefore quoted at length; and the expert testimony is direct and convincing that, to the practical working of the described device as a belt-tightener, this swiveling feature is indispensable. Without the swiveled boxes Gray would not have "independently adjustable bearings." True, those boxes are not expressly mentioned in the claim, but we think they are to be regarded as entering therein by necessary implication, for the reason just stated, as well as by force of the words "as shown." Moreover, the prior state of the art would limit the claim to the specific organization shown and described. *Caster Co. v. Spiegel*, 133 U. S. 360, 369, 10 Sup. Ct. Rep. 409. But that organization the defendant does not use. His alleged infringement consists in the use of a roller-mill, manufactured under and in accordance with letters patent No. 334,460, granted January 19, 1886, to John T. Obenchain. In the defendant's machine the journal boxes are rigidly supported, so as to be always horizontal, and incapable of any tilting or swiveling motion; and this is essential to the working of the apparatus. A continuous counter-shaft is not employed, but three coupled base-shafts; the outer shafts or sections being each journaled at the outer end in a vertically adjustable non-swiveling box, and the inner end of each being forked and carrying a loosely pivoted ring. These two rings are connected by a tumbling-rod, forked at each end and pivoted to the rings, thus forming a universal coupling; and thereby, through the central shaft or tumbling-rod, rotary motion is transmitted from one of the end-shafts or sections to the other, no matter how much they may differ in vertical position.

Now, for the reasons already given, we are of opinion that such a construction of Gray's first claim as would embrace the Obenchain device is inadmissible. The foregoing views being decisive of the case, we deem it unnecessary for us to consider the other grounds of defense.

I am authorized by Judge MCKENNAN to state that he concurs in the conclusions announced in the foregoing opinion.

(October 10, 1890.)

ACHESON, J. Since the filing of our opinion we have been requested by the plaintiffs counsel, with a view to the final determination of the rights of the parties under a



contemplated appeal to the supreme court after decree entered, to consider and pass on the question raised by the

answer as to the effect of the expiration of two foreign patents, viz., a German patent and an Austrian patent, granted to William D. Gray upon the term of his United States patent, and, as the proofs are full, and the question was elaborately argued, we accede to the request.

As to the German patent, little need be said. It was granted March 5, 1879, for the usual term of 15 years, and expired and was canceled in consequence of the failure to pay the tax for the seventh year of the term. The case, then, as respects this patent, comes directly within the ruling of the supreme court in *Pohl v. Brewing Co.*, 134 U. S. 381, 10 Sup. Ct. Rep. 577, in which it was held that, under section 4887 of the Revised Statutes, a United States patent runs for the term for which the foreign patent was granted, notwithstanding the lapse or forfeiture of the foreign patent by the non-observance of a condition subsequent prescribed by the foreign patent law.

By the fourth section, cl. 25, of the Austrian patent law, (the imperial decree of August 15, 1852; 1 Abb. Pat. Laws, 15,) in force when Gray's United States patent was granted, "the longest duration of privileges is fixed at fifteen years." Clause 27 provides as follows:

"Every patentee whose privilege has been granted for a shorter period than the longest may claim its prolongation for one or more years within the fixed longest period, provided they demand such a prolongation before the privilege has become extinct. To obtain such a prolongation, a petition for the same must be delivered in due time, together with the original patent, and the tax in full for the required term of prolongation, or the receipt for the same from a public treasurer."

The Austrian patent to Gray was granted December 17, 1879. The term of the franchise as originally allowed was for one year, but on request it was four times extended, from year to year, and at the end of the fifth year the franchise was suffered to expire. The seventh section, cl. 42, of the Austrian patent law, provides thus:

"The ministry of commerce and trades alone decides the question whether a patent, from any legal cause whatever, is to be considered as null and void, or as extinct. It therefore especially decides the question of the novelty of a discovery, invention, or improvement; moreover, the question as to whether it had only been imported from abroad, and was not appropriate for a privilege. Finally, in contestations arising between two patentees, the ministry decides the question of the total or partial identity of their privileges."

The plaintiff has put in evidence a duly authenticated copy of the official opinion of the Austrian ministry of commerce, dated October 10, 1888, from which we quote:

"The imperial and royal ministry of commerce certifies herewith: (1) That according to sec. 25 of the imperial decree of August 15, 1852, No. 184 of the Publication of the Laws of the Realm, the longest term of duration for all patents granted is indiscriminately fixed at 15 years, which longest term of duration runs on uninterruptedly, provided the patentee fulfills the conditions mentioned, (sub. 2;) and that this original term of 15 years

appertains to every Austrian patent granted in accordance with the imperial decree of August 15, 1852, No. 184 of the Publication of the Laws of the Realm, without exception.

\* \* \* (3) That in so far as in the deed of an Austrian patent granted according to the above-mentioned law one or more years are

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named in connection with the statement of the grant of the patent, this reference to one or more years has exclusively the purpose of stating that the annuity has been paid in advance for one or more years, and that by such reference the actual term of the patent is by no means touched upon, this term being, as above mentioned, fixed at the term of 15 years.”

It is, we think, clear that under the Austrian patent law the ministry of commerce, in deciding the question when patents terminate, exercises a judicial function; and, if so, then its opinion on that subject, cited above, is controlling here, agreeably to the established rule that the courts of the United States adopt the construction of a statute of a foreign country made by the courts of that country. *Cathcart v. Robinson*, 5 Pet. 264. And upon that view it would follow that by the original grant of the Austrian patent to Gray he was really invested with the lawful term of 15 years, although the grant of the franchise purported to be for one year only. But, upon an independent consideration of the question, the same practical result, in our opinion, must be reached. In *Refrigerating Co. v. Hammond*, 129 U. S. 151, 9 Sup. Ct. Rep. 225, it was held that where, under the Canada act, a patent was originally granted January 9, 1877, for the period of five years, but there was an extension for a further period of five years, and then a second extension for a like period, the extensions being a matter of right at the option of the patentee, a United States patent granted during the first period of the Canadian patent did not expire before the end of the 15 years. Now that the fact that the Canadian patentee exercised his option, and thus kept the patent in force, was not a controlling circumstance, appears from the declaration of Mr. Justice BLATCHFORD, who, after reciting the facts, says: “Therefore, the Canadian patent does not expire, and it never could have been properly said that it would expire, before January 9, 1892.” This observation was the subject of special comment in the opinion of the court, delivered by the same learned justice, in *Pohl v. Brewing Co.*, *supra*, which established the principle that the duration of a United States patent is not affected by the fact that a prior foreign patent has been suffered to lapse by non-payment of a tax, or for other failure to comply with the requirements of the foreign patent law. It seems, therefore, to be the logical and necessary conclusion from these two decisions of the supreme court, that, if by the foreign law under which a patent is granted, the patentee, by virtue of the original grant, is invested with the right, at his mere option, to have the patent extended or prolonged for a fixed term, it is this latter term which limits the United States patent, under section 4887 of the Revised Statutes. Thus is the life of the United States patent definitely fixed when it is granted, and its duration is not left in perplexing uncertainty, depending upon the future exercise of an option in a foreign country, or the observance there of conditions subsequent. We have only to add that Gray’s right to prolong his Austrian patent for the full term of 15 years

was as clear as was the right of the Canadian patentee in *Refrigerating Co. v. Hammond*, *supra*.

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Our contention here does not conflict with the decision in *Commercial Manuf'g Co. v. Fairbank Canning Co.*, 135 U. S. 176, 10 Sup. Ct. Rep. 713, for in that case the question ruled, both in the court below (27. Fed. Rep. 78) and in the supreme court, was as to the identity of the United States patent with the Austrian patent. Upon this branch of the case, then, our judgment is favorable to the plaintiff; but, for the reasons expressed in our original opinion, the decree must be for the defendant. Let a decree be drawn dismissing the bill of complaint, with costs.

MCKENNAN, J., concurs.