v.43F, no.8-34

CONSOLIDATED ROLLER-MILL CO. *v.* BARNARD & LEAS MANUF'G CO.

Circuit Court, N. D. Illinois. February 10, 1890.

1. PATENTS FOR INVENTION—ANTICIPATION—MECHANICAL EQUIVALENTS.

Patent No. 222,895, granted December 23, 1879, to William D. Gray, for "an improvement in roller grinding-machines," and patent No. 238,677, granted March 8, 1881, to said Gray, for a "roller-mill for grinding grain," are anticipated by the Nemelka Austrian and French patents of 1875, and the Nemelka Lake English patent of 1877; the adjustments of the rolls provided for by by the Gray patents being accomplished by substantially the same instrumentality adopted by the Nemelka patents, though somewhat differently placed or modified.

2. SAME—PATENTABILITY—INVENTION.

Reissued patent No. 10,139, granted to W. H. Odell, for a "roller-mill," (original granted December 13, 1881,) is void for want of invention, the device being but the connection of the two shafts in a double roller mill, so as to obtain a simultaneous operation of the two.

3. SAME.

Patent No. 269,628, granted December 26, 1882, to Hans Birkholz, for a "roller grinding-mill," is but a modified form of the first Gray patent, there being no pat entable difference in the devices.

In Equity.

Rodney Mason, for complainant.

Parkinson & Parkinson and *John W. Munday,* for defendant.

BLODGETT, J. The bill in this case, as amended, charges the infringement by defendant of patent No. 222,895, granted December 23, 1879, to William D. Gray, for "an improvement in roller grinding-mills." Patent No. 238,677, granted March 8, 1881, to the said Gray, for a "roller-mill for grinding grain." Reissued patent No. 10,139 granted June 20, 1882, to W. H. Odell, for a "roller-mill,"—the original of said last-named patent having been granted December 13, 1881,—and patent No. 269,623, granted December 26, 1882, to Hans Birkholz for a "roller grinding-mill."

While the bill charges infringement of each of these several patents in general terms, the complainant's proof limits the charge to the infringement of the fourth, fifth, and sixth claims of Gray's patent No. 222,895; second and third claims of Gray's patent No. 238,677; second claim of Odell's reissued patent No. 10,139; first claim of Birkholz's patent 269,623.

All these patents are intended to be applied to machinery for the purpose of grinding grain by means of rollers in place of millstones introduced into this country at a comparatively recent date.

It is conceded that the process of grinding grain by means of rollers as a substitute for the immemorial millstones originated in Europe, and that the devices therefore had been brought to an approximately successful operation long before they were adopted in the United States. Hence all the patents in question here are for what are claimed to be improvements on the roller-mills of Europe, as our manufacturers found them developed and in use there. The Gray patent No. 222,895, granted December, 1879, is said in the specifications to relate to roller grinding-mills, and to consist of a peculiar construction and arrangement of devices for adjusting the rolls vertically, as well as horizontally, Whereby any unevenness in the wear of the rolls, or their journals or parts, may be compensated for, and the grinding or crushing surfaces kept exactly in line. The invention also consists in the device for separating the rolls when not in action, without disturbing their parallelism. Only those portions of the devices covered by this patent, which provide for the lateral adjustment of the surfaces, of the rolls, so as to secure the parallelism of their surfaces, and which provide for the separating of the rolls from their working position without disturbing their parallelism, and the feature which regulates the working pressure of the rolls, are in question here.

The proof shows that it Was common in the European roller-mills, before Gray's device was produced, to secure this element of adjustability

by setting one of the rollers in fixed journals, while the other roller was set in a movable, sliding, or swinging frame, so as to be capable of such vertical and horizontal movement as to allow the requisite vertical and horizontal adjustments. Finding the mechanism in this stage of development,—that is, with one movable roller,—and without considering for the present any of the devices older than Gray's for securing the desired parallelism of the surface of the roller, Gray; by this patent, secured this adjustment of parallelism of surface by means of two rods, G, extending horizontally from the ends of the fixed roller frame to the swinging frame, which holds the movable roller; and these rods, being screw threaded at some distance on each end, allowed the desired adjustment for parallelism to be made by manipulating nuts upon these ends so as to draw and hold the movable rolls into the right relation to the surface of the fixed roller. And, in order to allow the movable roll to yield or give way in case a hard substance, like a wire, nail, or gravel-stone should get between the grinding surfaces, spiral springs are interposed between the bearings of this roll upon these adjusting rods and the point where they are attached to the swinging frame. It had also been found in practical use before Gray entered the field that, when the mill was stopped with some grain yet in the hopper, the grain would fall into the space between the rolls, where it would rest, and act as a wedge or brake to greatly retard, if not prevent, the starting of the mill again; and provision is therefore made for separating the rolls, without disturbing their grinding adjustment for parallelism, by means of nuts upon the threaded ends of the rods, G, where they are attached to the frame which holds the stationary roller, or by cams or eccentrics working upon the ends of these adjusting rods. These features of the patent are covered by the fourth, fifth, and sixth claims, which are:

"(4) In combination with the movable roller bearing, the rod, G, adjustable stop devices to limit the inward movement of the bearing, an outside spring urging the bearing inward, and adjusting devices, substantially such as shown, to regulate the tension of the spring. (5) In combination with the roller bearing, the adjusting rod provided, at one end with a stop to limit the inward movement, a spring, and means for adjusting the latter, and provided at the other end with a stop and holding devices, substantially as shown and described. (6) The combination of the bearing, D, rod, G, nut, I, spring, H, nut, *j,* stop, *n,* and nut, *o.*"

The feature of the Gray patent No. 238,677, which is in controversy here, is the provision for working the eccentrics to which the ends of the rods, G, of the first-mentioned patent are attached, where those rods are fastened to the frame, which holds the stationary roll, by means of the rod or shaft which connects the two eccentrics, and enables the operator to work these two eccentrics by one movement of this connecting rod, so that both the rods, G, are equally extended or shortened by the motion of this rod, thereby throwing the rolls apart, so that the grain may drop through between them without wedging the rolls when the mill stops, and drawing them together again in their grinding

position when the mill is put in motion, instead of requiring the operator to manipulate separately the nut or cam on the end of each rod, G, for such

purpose. These characteristics of this patent are covered by the second and third claims, which are:

"(2) In combination with the swinging roll supports, E, and the rods, G, connected thereto, the eccentrics, H, shafts, I, and rod, K. (3) In combination with the movable roll Supports, E, and the rods, G, adjustably connected thereto, a transverse shaft, I, provided with two eccentrics connected to the rods, G, at opposite ends bf One roll, whereby the roll may be thrown into and out of action instantly without changing the adjusting devices."

The feature of the reissued Odell patent No. 10,139, in controversy here, is a device for throwing the two sets of rolls in a double roller-mill apart from their grinding position, arid bringing them together again by the movement of a single lever or bar. This lever being so arranged as to work simultaneously with the rod or cams of the rods, G, or their equivalents in the first Gray patent, and this feature of the patent is covered by the second claim, which is:

"(2) In a roller-mill, the combination with the adjustable rolls and journals, of transverse shafts, *h,* a through shaft, J, link mechanism, Connecting the said shafts, and a single hand lever, K, connected with the through shaft, for simultaneously adjusting both sets of rolls by a single lever movement, substantially as described."

The Birkholz patent No. 269,623, so far as in question here, shows a frame having a fixed or stationary roller, with a swinging frame or casing pivoted to the fixed frame carrying the other roller, and a transverse rod like Gray's rod, G, whereby the distance of the roller and swinging frame, or movable roller, from the fixed roller, can be adjusted by means of nuts Working on this rod, and a spring at one end of the rod to relieve the rolls in case any unusually hard substance comes between them. This feature is covered by the first claim of the patent, which is:

"(1) The combination, substantially as before set forth, of the fixed roller supporting standard, the movable roller carrying casing pivoted thereto, the adjustable gauge rod, the nut thereof, held by the standard, and the spring connected with said rod, and adjustable in tension independently thereof."

The defenses insisted upon are: (1) Want of patentable novelty in the claims of which infringement is charged. (2) That the defendant does not infringe.

I have already said that when Gray, entered the art he found already there methods of adjusting the rolls so as to bring their axes into the same horizontal plane and methods of adjusting the parallelism of the surface of the rolls. I may add he found also methods of separating the rolls so that they would not bind or be wedged by the grain dropping between them when the rollers were at rest, which separation did not disturb their parallelism, and the material questions are whether Gray's mode of securing these several adjustments are new in the art, and if they are found so, then whether the defendant has

copied Gray or the older machines. I do not deem it necessary to analyze all the prior devices put in evidence by the defendant, and which it is claimed show the same adjustments accomplished prior to Gray's invention by other inventors, it being, as I think, sufficient to consider the Nemelka Austrian

patent, and the Nemelka French patent of 1875, and the Nemelka Lake English patent of 1877, together with some casual reference to the other patents and descriptions found in the record. Gray, in his first patent, provided for four adjustments, or what may be called adjustments:

"(1) The vertical adjustment, which was intended to bring the axis Of the rolls into the same horizontal plane, which is not in question here. (2) The adjustment of the surface of rolls to parallelism, that is, bringing their grinding surfaces parallel to each other, so that they would grind uniformly their entire length. (This is called 'tramming' in the proofs, the word being imported into this art of milling from the older art of grinding with millstones, where it was necessary to bring the grinding surfaces of the stones into perfect parallelism with each other, in order that they might grind uniformly all the grain that passed between them.) (3) The device for spreading the rolls apart, or throwing them out of working position, to prevent their becoming wedged or bound by the grain dropping between them without disturbing their adjustment for parallelism or their vertical adjustment. (4) And adjusting the pressure of the spring so as to hold the rollers with sufficient rigidity together for the purpose of grinding, and at the same time allowing them to yield when any unusually or unexpectedly hard substance should come between them."

And the devices of his patent which are here brought in question all have reference to these adjustments. An examination of the Nemelka devices as exhibited in his Austrian and French patents and in the English patent to Lake, and in the model of the French Nemelka patent, which is before the court, and was used upon the hearing, shows that each of these adjustments is provided for in those patents, and by substantially the same instrumentality which were adopted by Gray, although somewhat differently placed or modified. For illustration, Gray provided for the vertical adjustment by a cam or eccentric, working upon the pivot by which the swinging arm carrying the movable roller was attached to the frame, while Nemelka accomplished his vertical adjustment by a screw worked by a worm, which, for the purposes of the question here, must, I think, be considered the equivalent of Gray's cam or eccentric. Nemelka also showed a swinging frame carrying a movable roller, with a cam working upon the pivot by which the swinging frame was fastened to the fixed frame, by means of which the rolls could be separated without disturbing their parallelism, and a provision for adjusting the rollers to parallelism by sliding the pivoted attachment upon the fixed frame. He also shows a spring to hold the movable roll to its grinding position and pressure, with means for regulating the pressure of the spring and the grinding distance by means of cams, screws, and nuts, and I cannot resist the conclusion that all which Gray did by his first patent, under consideration, was to secure the same adjustments which are shown in these prior machines by, in many respects, the same instrumentality, but differently located, or well-known equivalents of such instrumentalities.

The especial feature of Gray's second patent, by which his two rods, G, are moved inwardly and outwardly by the operation of the cam, to which they are connected at, their inner ends, whereby the rolls are thrown apart without disturbing their grinding adjustment, is also shown

in the Nemelka French patent, and it is there accomplished by the use of cams, not working upon the ends of transverse rods like Gray's rods, G, but working upon the pivots by which the swinging frame is pivoted to the fixed frame; these cams being connected so that they were operated simultaneously by a movement of this shaft. So that I find in these older, devices all that is covered by the two patents to Gray.

The Odell patent shows only a device for separating the two sets of rolls of the double roller-mill by one movement, and I am compelled to say that I cannot conceive that it required invention to connect the shaft by which the cams in one movable roll were operated simultaneously with the cams of the other movable roll in a double mill. The ordinary and well-known device by which all the bolts in an iron safe door are shot by the movement; of a single lever seems to me to fully anticipate whatever there is in the second claim of this Odell patent, all which is fully explained by the testimony of defendant's expert witness.

The Birkholz patent seems to me to be only another form of Gray's first patent. I see nothing in his connecting his swinging frame by his rod, F, to essentially differentiate that device from the device shown in the first and second patents of Gray, except that he shows only one rod, and locates that below the rolls instead of above, which it does not seem to me is a patentable difference. But if there were room for doubt in the question, whether there is any patentable difference in the device of Gray and of Birkholz, I shall be constrained to find from the proof that the defendant does not infringe this patent, as I can find nothing in the defendant's structure which corresponds to the rod, F, either in function or location.

I will say further that, if I deemed it necessary to enter upon that field of the case, I think it is fully demonstrated from the defendant's proof that the defendant's devices for securing the adjustments in their mill, substantially the same as are secured by Gray, so far differ from Gray's as that no infringement can be charged against the defendant. The defendant's mill No. 2 contains a swinging frame carrying the movable rolls, but does not contain the rod, G, of the Gray patent with the cam operating upon the end of it, and does not secure the spring pressure to hold the roll in working position by a spring located upon such rod. The defendant secures the movement of separating its rolls, without disturbing their parallel or vertical adjustment, by a cam located in the pivot by which the swinging arm is attached to the frame, while Gray gets his movement by what is practically the elongation of his rods, G, by means of the cams at their ends.

I have been very much embarrassed in the examination of this case by the opinion of the learned judge of the eastern district of Michigan, in the case of *This Complainant* v. *Coombs*, reported in 39 Fed. Rep. 25. I have carefully examined that opinion, and the proofs which were submitted to the court in the case, sincerely hoping that I might be enabled to arrive at the same conclusion with the learned judge who tried that case, as

I think no one is more anxious than myself to preserve and act upon the rule of comity, which it seems to me

should prevail between the federal courts in cases involving the same patents; but after mature and careful consideration I feel constrained to say that my reading of the prior art satisfies me that Mr. Gray in effect invented nothing. He merely adopted well-known equivalents for the mechanism known and shown in the prior art for producing the same adjustments which are secured by his machine, and operating in substantially the same way. And I do not see that Gray, from the proof before me, has any right to be claimed as an original inventor, and entitled to invoke the doctrine of equivalents in regard to his mechanism in any respect. He came into the art at so late a date, and when others had covered the same ground which he attempted to cover, that, if his patents are to be sustained at all, they are to be sustained only for the special devices which he shows, and which I am clear the defendant in this case does not infringe. I may further say upon this point that the rule of comity perhaps ought not to be invoked by the complainant here to the same extent as in most cases where it has been applied, for the reason that in the case of *This Complainant v. Freeman,*[1] heard before the learned district judge of the western district of Wisconsin several years since, that court, upon the testimony which is now before this court, in these French and English patents, held that Gray's patent was invalid for want of novelty, and dismissed that case; so that we have here a decision in this circuit against the complainant pressing with equal binding force upon us as does the decision relied upon by the complainant from the eastern district of Michigan. The bill is dismissed for want of equity.

ON REHEARING.

(July 14, 1890.)

BLODGETT, J. Now comes the defendant by its solicitor, and the court, having considered the complainant's motion for a rehearing herein, overrules the same.

[1] No opinion was filed.