30FED.CAS.—28

Case No. 17,941.

WOOD ET AL. V. CLEVELAND ROLLING-MILL CO.
SAME V. UNION IRON—WORKS CO.

[4 Fish. Pat. Cas. 550.][1]

Circuit Court, N. D. Ohio. May, 1871.

PATENT FOR INVENTION—TIME OF APPLICATION—SUIT FOR INFRINGEMENT—IMPROVEMENTS IN MAKING NUTS.

1. The acts of congress in force in 1851 did not prescribe the time within which a patent should be applied for, after the invention was perfected.

2. Where it had not been abandoned to the public, and had not been in public use or on sale with the consent and allowance of the inventor, no lapse of time, however protracted, barred an application for a patent, nor after it had been granted, affected its validity.

3. Prior to the act of July 8, 1870 [16 Stat 198], there was no act of congress limiting the time within which a suit must be prosecuted, either at law or in equity, for the infringement of a patent

[Cited in May v. County of Logan, 30 Fed. 257.]

4. It is not a subject of inquiry, upon the trial of a suit for infringement whether a prior machine could have been so modified as to do the work of the patented machine.

5. Where the existence of a prior machine is attempted to be proved, and the maker of it is at hand, but is not examined, it is a circumstance to be considered in weighing the value of the other testimony as to the existence and character of the machine.

6. A claim for "making nuts for bolts, by subjecting the blank of which the nut is to be formed, at a welding heat to compression between swages, or dies, in a close die box, or matrix, and punching the eye of the nut during the continuance of such pressure, for the purpose of welding up any imperfections in the iron and giving a symmetrical shape and smooth finish to the nut, and of preventing any injury to the nut which it might suffer by the passage of the punch through it, if it were not thus sustained by the sides of the die box and forcibly compressed between the dies," describes a patentable subject matter.

7. In such a patent the state of the iron is as much a part of the claim as the means and appliances by which the process is conducted and the result accomplished.

8. In the fossils of geology, belonging to certain classes of animals, regular gradations from a low form of organism to a much higher one, are found to exist. The contrast between the highest and the lowest is very striking. The same thing takes place in the progress of inventions. Models and machines in the same series, upon inspection, not unfrequently exhibit curious points of analogy to such fossils. Sometimes one will be found to reach almost the highest point afterward attained, but to fall short of it. The difference is that between success and failure.

[Cited in Westinghouse v. Gardner, etc. Air Brake Co., Case No. 17,450.]

9. When a great success is achieved in the field of mechanical invention, and the higher organism is protected by a patent, it is almost as certain that invasions will follow, as that there exists the relation of cause and effect. Such is the voice of universal experience.

10. When the infringer is called to account, it is usually asserted that the invention in one of the lower grades is substantially the same with that of the patentee. The confidence of the attacking witnesses is often in proportion to the distance in time that one is removed from the other.

[Cited in Hawes v. Antisdel, Case No. 6,234.]

11. When the defense of want of novelty is made out, it is the duty of courts and juries to give it effect. But such testimony should be weighed with care, and the defense allowed to prevail only where the evidence is such as to leave no room for a reasonable doubt upon the subject.

[Cited in Hawes v. Antisdel, Case No. 6,234; Miller v. Smith, 5 Fed. 364; The Driven-Well Cases, 16 Fed. 411; American Bell Tel. Co. v. People's Tel. Co., 22 Fed. 313; Thayer v. Hart, 20 Fed. 694; McDonald v. Whitney, 24 Fed. 602; Kittle v. Hall, 29 Fed. 514; American Bell Tel. Co. v. American Cushman Tel. Co., 35 Fed. 739; Electrical Accumulator Co. v. Julien Electric Co., 38 Fed. 127.]

12. Reissued letters patent for "improvement in the manufacture of nuts," granted February 15, 1859, to James Wood, assignee of William Kenyon, examined and sustained.

13. The machines described in patents granted to William Chisholm, November 17, 1863, and to James Paton, November 29, 1864, are infringements of the Kenyon patent as reissued.

These were bills in equity, filed [by Charles A. Wood and others, executors of James Wood, deceased] to restrain the defendants from infringing letters patent [No. 8,427] for "improvement in the manufacture of nuts," granted to Joseph P. Haigh, Andrew Hartupee, and John Morrow, assignees of William Kenyon, October 14, 1851, reissued to them March 18, 1856, assigned and reissued to James Wood, February 15, 1859 [No. 666], and extended for seven years from October 14, 1865; also, letters patent [No. 13,118] for "improvement in making nuts," granted to Henry Carter, assignee of Isaac H. Steer, June 19, 1855; and also letters patent [No. 8,322] for "improved nut and washer machine," granted to Henry Carter and James Rees, August 26, 1851, reissued June 19, 1855 [No. 313], and assigned to complainants. These inventions related to the manufacture of hot-pressed nuts. The mechanism covered by the Kenyon patent subjected the nut blank, while at a welding heat to compression in a close fitting die box, and then punched it while under pressure, while that set forth in the Carter and Rees patent, punched the nut, and then compressed it upon the punch.

The claims of the several patents and reissues were as follows:

Original patent to Haigh, Hartupee & Morrow, assignees of William Kenyon: "The compressing and discharging the nut and washer by means of the follower or hollow piston, the bracket, cross-head, and the moving die box, constructed and operating substantially as described."

Reissue of March 18, 1856: "(1) The use of the die T, and die box M, for severing the blank; the close die box in combination

with the dies and bracket X, for pressing; and the punch L, for perforating the same during the pressure, the whole operating conjointly as herein described, for making nuts or washers at one operation. (2) The manner substantially hereinbefore described of so arranging the dies, in relation to the punch, that any excess of iron in the blank shall be forced into the path of the punch, thus securing the compression of the nut without risking the breaking of the machine."

Reissue of February 15, 1859: "(1) Making nuts for bolts, by subjecting the blank of which the nut is to be formed, at a welding heat, to compression between swages or dies in a close die box or matrix, and punching the eye of the nut during the continuance of such pressure, for the purpose of welding up any imperfections in the iron, and giving a symmetrical shape and smooth finish to the nut, and of preventing any injury to the nut which it might suffer by the passage of the punch through it, if it were not thus sustained by the sides of the die box and forcibly compressed between the dies. (2) The use of a die box, closed at the sides, for surrounding the nut, and sustaining its sides while it is subjected to pressure, substantially in the manner hereinbefore described. (3) The combination of the compressing dies P and T, with the die box M, for the purpose of compressing the nut while it is sustained at the sides, and thus welding up any imperfections in the iron, and compacting its fibre, so as to give strength as well as exterior finish and symmetry to the nut. (4) The combination of the punch L, with the die box M, and compressing dies P and T, for the purpose of compressing, confining, and restraining the opposite faces of the nut during the passage of the punch through it, and thus preventing any injury to the nut during the process of punching; and also for the purpose of insuring the making of the bore of the nut in the proper relative position to its upper and lower surfaces. (5) The combination of the die box M, the compressing dies T and P, and punch L, constructed and arranged substantially as hereinbefore described, for the purpose of making hot pressed nuts, at a single operation, by severing a blank from a bar of heated metal, compressing it into shape, and punching a hole or eye through it, while under compression, and delivering the finished nut from the machine. (6) Arranging the compressing dies in relation to the punch, and regulating their relative motion in such manner, substantially as hereinbefore described, that any excess of iron in the blank shall be forced into the path of the punch in the compressing dies, thus securing the compression of the nut without risk of damage to the machine."

Original patent to Henry Carter, assignee of Isaac H. Steer: "(1) Making a nut at a single operation, from a heated bar or plate of metal, by cutting off the blank from the bar, punching a hole or eye through it, and swaging it into shape, substantially as herein set forth. (2) Punching the eye of the nut in a die or press box, by which it is surrounded and firmly supported, and thus prevented from straining or bursting during the operation, substantially as set forth. (3) Shaping nuts by subjecting them, while hot, to powerful and

sudden compression on the punch and in the punching die, substantially as herein set forth, whereby they are finished with such a degree of smoothness, regularity, and precision that in the condition in which they come from the machine they are fit to use in the construction of most kinds of machinery, and are, at the same time, sounder and stronger than un-pressed nuts made by machinery."

Original patent to Henry Carter and James Rees: "The two punches moved at the same time with different velocities, and in the same direction, in combination with a die box, within which the nut is formed, substantially as herein set forth."

Reissue of June 19, 1855: "We are aware that Isaac H. Steer, about the year 1840, proposed to make nuts by the process we have here described, but never completed a machine which would do this automatically, therefore we do not claim this process in itself, and irrespective of machinery; but being the first to construct a machine capable of making nuts by this process, without any other or further manipulation than is required for feeding in the bar of iron, we claim as our invention, and desire to secure by letters patent, the machine substantially as herein described, for making nuts by cutting the blank from a heated bar of iron, punching its eye in a closed die box, pressing it into shape while in the die box and on the punch, and then discharging it, as specified."

The defendants were using machines constructed under letters patent, the machine used by the Cleveland Rolling Mill Company being made in substantial accordance with the machine described in letters patent for "improvement in machines for making nuts," granted to William Chisholm, November 17, 1863, and that used by the Union Iron Works Company being made in substantial accordance with the machine described in letters patent for "improvement in machine for making nuts," granted to James Paton, November 29, 1864.

In the Chisholm machine, the nut blank was cut off and forced into a matrix and against a female die, which retreated, allowing the punch to enter the iron. The movement of the male die being somewhat more rapid than that of the female die, compressed the nut.

In the Paton machine, the matrix was composed of four pieces, three of which were movable while the other was attached to the stationary die. The forward movement of

the matrix cut off the blank, and by the aid of the stationary side completely inclosed it in a close die box, in which it was compressed and punched.

Geo. Willey, S. S. Fisher, W. Bakewell, and G. Harding, for complainants.

W. H. Burridge, A. F. Slade, S. F. Andrews, and R. P. Ranney, for defendants.

SWAYNE, Circuit Justice. These cases present substantially the same questions. They have been argued together, by the same counsel, and with great ability on both sides. I have considered them with care. Some of the points which they present are not without difficulty.

But finding myself ready to decide both the cases, I shall proceed to announce my conclusions. The time at my disposal will allow me to do but little more. The annunciation, however, will be so shaped as to show, as clearly as remarks more extended would, the grounds of the judgments which will be given. The analysis of the testimony, the examination of the authorities, and the processes of reasoning, which have produced the results, must, to a great extent, necessarily be omitted.

The suits are for the infringement of three patents: The Kenyon patent, granted originally to Haigh, Hartupee & Morrow, assignees of Kenyon, October 14, 1851, No. 8,427, reissued to the same parties March 18, 1856, reissue No. 361, and reissued to James Wood, assignee, February 15, 1859, reissue No. 666; the Steer patent, granted to Henry Carter, assignee of Isaac H. Steer, June 19, 1855, No. 13,118, and the Carter and Rees patent, granted to Henry Carter and James Rees, August 26, 1851, No. 8,322, reissued June 19, 1855, reissue No. 313.

All these patents were extended by the commissioner for the period of seven years from the expiration of their respective original terms. No question is made as to the title of the complainants.

In the view which I take of the cases it will be necessary to consider only the Kenyon patent. The claims in the specification of that patent, as reissued to Wood, are substantially as follows: (1) For making nuts, by subjecting them, at a welding heat, to compression between swages in a die-box, and punching the eye during the pressure to remedy any imperfections in the iron, and prevent the Injury which might arise from the punching process, if the sides were not thus sustained and compressed at the time of its performance. (2) The use of the die-box as before stated. (3) The combination of the compressing dies with the die-box, as before stated. (4) The combination of the die-box, compressing dies and punch, as stated in the specification. (5) The combination of the punch and dies with the die-box, as before stated. (6) Arranging the compressing dies in relation to the punch, and regulating their relative motion, as described, so that any excess of iron in the blank shall be forced into the path of the punch within the compressing dies, thus securing the compression without any injury to the machine.

The main feature of the invention covered by this patent, as claimed by the complainants, is, compressing iron at welding heat, in a box, between sliding dies, and forcing a round punch through the mass while thus heated and compressed, causing a hole to be formed with smooth and compact walls or sides, and finally the removal of the nut without injury.

The invention of Kenyon dates back to the year 1835. His own testimony is clear and explicit to that effect, and it is so corroborated by the other evidence in the case as to leave no room for doubt upon the subject.

Nothing is shown which tends in any degree to establish the abandonment of his rights. It is clear that he intended from the time of the making of his first model, which was in 1835, to take out a patent. His poverty, and not his will, caused the delay. The acts of congress in force when his patents were issued did not prescribe the time within which a patent should be applied for, after the invention was perfected. Where it had not been abandoned to the public, and had not been in public use or on sale with the consent and allowance of the inventor, no lapse of time, however protracted, barred an application for a patent, nor, after it had been granted, affected its validity. Act of July 4, 1836, §§ 6, 15 [5 Stat 119, 123]; act of March 3, 1839, § 7 [Id. 353]; Allen v. Blunt [Case No. 217]; Kendall v. Winsor, 21 How. [62 U. S.] 327; McClurg v. Kingsland, 1 How. [42 U. S.] 208. Here there was only delay. It was unmingled with any other adverse consideration.

The Cleveland Rolling Mill Company admits, in its answer, that the machines, which it uses in making nuts, are constructed in substantial accordance with the patent to William, Chisholm, dated November 17, 1863. The Union Iron Works Company makes the like admission with reference to the patent of James Paton, dated November 29, 1864. The specifications of these patents, the models exhibited in evidence, and the expert testimony—I refer particularly to that of Winter on one side and of Clough on the other—satisfy me that a case of infringement is made out.

The use of machines constructed under both patents, involves the compression of the hot metal, and the application and action of the mandrel, substantially as in the Kenyon machine. This proposition I did not understand to be seriously contested at the argument.

Such is the complainants' case, and it must prevail unless one or more of the grounds of defense relied upon by the defendants shall

avail to defeat it. The objections alleged to lie in the way of the complainants will now be considered.

When these Suits were commenced there was no act of congress limiting the time within which a suit must be prosecuted either at law or in equity for the infringement of a patent. The act of 1870 does not affect them. There is no proof tending to show the abandonment of the rights secured by the Kenyon patent since it was issued. The complainants have not lost their remedy by laches in the institution of these suits. The Carter and Rees patent and the Steer patent having been laid out of view, the attacks upon them need not be considered.

The patents to Berry, Jackson, Holmes, Arnold, and to Conger and Woodbury, and Rome's French patent, and Poole's French patent, are not for machines to make nuts, and it is not shown that any machine made under either of them was ever used or attempted to be used for that purpose. Certainly neither of them is for a machine identical in any essential particular with the Kenyon invention, nor is it alleged that any of his claims are for the mechanical equivalent of any thing which either of these patents described and appropriated. They are all interesting as showing the state of the kindred mechanic arts to which they relate, but beyond this they have no bearing upon the eases under consideration.

The Colebrook machine was used only to make washers, and they were made of cold iron. It was not applied to hot iron. The spring, which was an element in it, was incapable of sustaining the intense compression effected by the Kenyon machine. The object and dominant ideas of the two machines were different. Whether the Cole-brook machine could have been so modified as to do the work of the Kenyon machine, is not in these cases a subject of inquiry.

The nut machines relied upon by the defendants are four in number:

(1) The machine of Dr. Andrews. He furnished Charles Waters the means to make a nut machine, which was in existence when his deposition in these cases was taken. He thinks it was in the year 1848, but is not certain as to the time. He used other devices also for making nuts, and sold the nuts in the market. He says he used a machine for punching, about—as he believes—the year 1832, or 1833. In his examination-in-chief, he declined to describe it. In his cross-examination he seems to have been more explicit. He took out a patent. This, he thinks, was in 1853. The patent is not in evidence, and he does not state what it was for. This testimony is too vague to affect the Kenyon patent Aside from the question of date, it describes nothing identical with either of the essential elements, which go to make up Kenyon's invention.

(2) The Ratcliff machine. Ratcliff himself was at hand when the testimony upon the subject was taken. He was not called; why not? This is unexplained. His machine was abandoned, and went out of use. It was antedated by Kenyon's invention.

(3) The machine described in Lamb's application for a patent. The application was rejected, withdrawn, and not renewed. After a careful examination of the description which he gives, I am not satisfied that his alleged invention involved the main feature of Kenyon's—which is intense and unyielding compression of hot metal during the action of the mandrel. Kenyon's invention was also prior in date.

(4) Enoch Scott's machine. A patent was issued to Scott, December 26, 1833. The record and model were burned when the patent office was destroyed by fire. The patent has not been restored to the office. Scott's invention was for making nuts as well as other things, and was unquestionably older than Kenyon's invention. It is also clear that he made nuts out of hot as well as cold iron. His machine was made at Rochester, removed to Waterford, thence to Ramapo, and finally to Haverstraw, in New York. A large number of witnesses were examined in relation to it by the parties. The testimony upon several material points is in conflict, and can not be reconciled. It would serve no useful purpose to analyze and discuss it. A few remarks, embodying the results of my reflections, will suffice.

I entertain no doubt of the validity of the Kenyon patent here under consideration, as regards the invention described in the specification. To my mind the case of Leroy v. Tatham, 22 How. [63 U. S.] 134, is conclusive upon that subject.

The turning point of these cases is the alleged want of novelty in respect to the Kenyon patent, and the fate of that defense depends upon the testimony as to the Scott machine.

The subject is not free from difficulty. At the close of the argument my mind was in a state of suspense. It is not now entirely free from doubt. But after a careful consideration of the evidence and of the arguments of counsel, I am not satisfied that the idea of making nuts out of iron in the "waxy" condition of welding heat, and subjected to such pressure on every side when the mandrel passes through the blank, was ever present to the mind of Scott, or that his machine was designed or competent to perform the work of Kenyon's machine upon iron in that condition.

These, as before remarked, are the essential features of Kenyon's invention. The state of the iron is as much a part of it as the means and appliances by which the process is conducted and the result accomplished. It is not shown by any testimony in the case, that these ideas were not original with Kenyon, nor that, until after he made his first model, they ever existed in the mind of any other person.

In the fossils of geology, belonging to certain classes of animals, regular gradations from a low form of organism to a much higher one are found to exist. The contrast between the highest and the lowest is very striking. The same thing takes place in the progress of inventions. Models and machines in the same series, upon inspection, not unfrequently exhibit curious points of analogy to such fossils. Sometimes one will be found to reach almost the highest point afterward attained, but to fall short of it.

The difference is that between success and failure. When a great success is achieved in the field of mechanical invention, and the higher organism is protected by a patent, it is almost as certain that invasions will follow, as that there exists the relation of cause and effect. Such is the voice of universal experience.

When the infringer is called to account, one of two defenses is usually set up, and frequently both. First, that the invention in one of the lower grades is substantially the same with that of the patentee. The confidence of the attacking witnesses is often in proportion to the distance in time that one is removed from the other.

Their imagination is wrought upon by the influences to which their minds are subjected, and beguiles their memory. When the defense is made, it is the duty of courts and juries to give it effect. But such testimony should be weighed with care, and the defense allowed to prevail only where the evidence is such as to leave no room for a reasonable doubt upon the subject.

The other defense is, that the machine of the infringer is so different in principle, and so wide a departure from that of the patentee, as to constitute an original and independent invention. Questions of the latter kind are not difficult to deal with, and a serious error in their solution can hardly occur. Here both these defenses are interposed. The witnesses as to the Scott machine spoke of what occurred more than thirty years before. The discrepancies in their testimony, and its conflict with that of the complainants, are therefore not surprising.

The Kenyon invention is a valuable one. It had borne successfully the test of more than one litigation when these suits were instituted. The decision of Judge Morsell was not made in the case of the application, upon which reissue No. 666 was founded. In that case there was no contest and no appeal.

None of the defenses relied upon, according to my views of these cases, can avail the defendants.

These remarks have been submitted to my learned brother, the district judge, who sat with me at the argument I am authorized to say, he concurs in them. In preparing them I have had the benefit of his views and suggestions. A decree will be entered for the complainants in both cases.

{See Case No. 2,475.}

[1] {Reported by Samuel S. Fisher, Esq., and here reprinted by permission.}