fringer, Justice Shiras, who delivered the opinion of the court, saying:

"Courts of equity, it has often been said, will not assist one who has slept on his rights, and shows no excuse for his laches in asserting them."

In the very late case of Keyes v. Mining Co., 15 Sup. Ct. 772, the doctrine of McLaughlin v. Railway Co., and Lane & Bodley Co. v. Locke, was followed, and a complainant who had delayed for nearly 17 years was repelled from court as guilty of inexcusable laches. Neither is it important that the defense of laches was not formally set up in the answer. Laches is a defense which may be made by demurrer, or by plea, or by answer, or presented by argument, either upon a preliminary or final hearing. Maxwell v. Kennedy, 8 How. 222; Walk. Pat. § 597; Curt. Pat. § 440; McLaughlin v. Railway Co., 21 Fed. 574.

The decree of the circuit court dismissing complainant's suit will be affirmed.

# GRISWOLD v. WAGNER et al.

#### (Circuit Court of Appeals, Sixth Circuit. June 10, 1895.)

#### No. 303.

1. PATENTS -- WHAT CONSTITUTES INVENTION -- TRANSFER TO ANALOGOUS IN-DUSTRY.

Transferring the hinging and journaling devices found in coffee roasters, and applying them to waffle irons, does not involve invention, within the rule relating to the transfer of devices from one branch of industry to another.

2. SAME.

There is no invention in forming a projecting socket to support the hinge of a waffle iron and at the same time to give support to the raised half of the open pan.

3. SAME-WAFFLE IRONS.

The Griswold patent (No. 229,280) for improvements in waffle irons, "consisting in a novel construction of the hinge connecting the two parts of the divided pan," was anticipated, as to claims 1 and 2, by the Harrington and Tower coffee roaster patents (Nos. 24,024 and 21,858, respectively), and is void of invention as to claim 3. 65 Fed. 513, affirmed. Griswold v. Harker, 10 C. C. A. 435, 62 Fed. 389, distinguished.

Appeal from the Circuit Court of the United States for the Western Division of the Southern District of Ohio.

This was a bill by Matthew Griswold against W. H. Wagner and others for infringement of a patent relating to waffle irons. The circuit court dismissed the bill (65 Fed. 513), and complainant appealed.

J. C. Sturgeon, for appellant.

Wilson & Wilson and Foraker & Prior, for appellees.

Before TAFT and LURTON, Circuit Judges, and SEVERENS, District Judge.

LURTON, Circuit Judge. This appeal involves the validity of the first three claims of letters patent No. 229,280, to Selden and Gris-

wold, issued June 29, 1880, for improvements in waffle irons. These claims are:

"(1) In a waffle iron, the hinge upon which the pan opens, provided with one of the journals or pivots on which the pan is rotated. (2) The journals or pivots on which the pan rotates, formed upon or connected, one with the hinge upon which the pan opens, and the other on the handle for rotating and opening said pan. (3) The waffle-iron frame or ring, provided with the enlargement or projection on one side, as described, forming the socket for the hinge of the pan, and a support for the lid when raised, substantially as described."

The defense presented by the answer included: (1) Anticipation; (2) nonpatentability of the invention claimed; (3) noninfringement. The case was finally heard by the Honorable George R. Sage, District Judge, who held that the first two claims were void as having been anticipated, and that the third claim was void as not patentable, and dismissed the bill. From this decree appellant has appealed, and assigned errors.

The prior state of the art, so far as it relates to waffle irons, is thus described by the patentees in their specifications:

"In waffle irons, as ordinarily constructed, the hinge connecting the two parts of the pan has been made separate from the pivot on which the pan rotates, and located at one side of the pan, relatively to said pivot. Our improvement consists in a novel construction of the hinge connecting the two parts of the divided pan, whereby one of the pivots or journals on which the pan rotates is made to form a part of said hinge, the hinge and pivot being thus brought together, while the opposite pivot or journal on which the pan rotates is formed on the divided handle, by means of which the pan is rotated, and by means of which, also, either portion of the pan which for the time being is uppermost is lifted for opening the pan. It further consists in a novel construction and arrangement of the socket in the rim or supporting ring for the reception of the hinge and pivot, whereby the tilting or dumping of the pan is prevented when the cover is raised, and in a novel manner of attaching the wooden handles, as hereinafter described."

No testimony was filed on the part of the defendants below, the defense resting wholly upon the state of the art as shown by patents pleaded as anticipatory, and by the expert evidence introduced by the complainant. Mr. Hallock, the expert examined on behalf of appellant, thus explained the prior state of the art, and the scope of the improvements covered by the claims here involved:

"The invention consists in certain improvements in waffle irons, and had for its object and purpose the simplification of the structure and mode of operation of a waffle iron. Before the date of the invention set forth in this patent, waffle irons were made with the pans hinged together, and mounted on trunnions within a frame piece in the form of a ring, which fitted upon, or was intended to fit upon, the holes on the top of a stove. The hinge by which the pans were joined together, so as to open and close like a book, for example, was on the side of the pan, at a joint midway between the trunnions, and thus the device was made to revolve upon an axis which was at right angles to the journal of the pivot of the hinge by which the pans were joined together. These old waffle irons had no handles on the pans, by which they could be revolved, or opened and closed. They were manipulated wholly, usually, by a case knife in the hand of the operator. By the invention set forth in the patent inquired of, a very radical change in the construction and method of operation of waffle irons was effected. We may say that the principal improvement consisted in providing the pans with handles by which they could be operated both rotatively, and to open and to close them. The first step towards effecting this result, and the necessary one, was to bring the journals

or trunnions on which the pan was rotated into such a position that the axis on which the pan rotated was lying in the same plane as that in which the pans moved when being opened, or, in other words, into such a position that the hinge upon which the pan opens is provided with one of the journals or pivots upon which the pan is rotated. A secondary feature of the invention consists in providing means for supporting the open pan while a waffle is being removed from the lower pan, and new batter is being placed therein. The first, second, and third claims of the patent are for the means by which the above-stated objects are accomplished."

The improvement by providing the pan with handles by which it could be opened, closed, or rotated, and which appellant's expert says is the principal improvement on the old form of waffle iron, is not here involved. It is obvious that, if the old form of waffle iron revolved upon an axis at right angles to the journal of the pivot of the hinge, handles rigid with the pans would prevent such revolution. To provide handles, it became, therefore, necessary that the journals or trunnions on which the pan was rotated should be so placed as that the axis on which the pan rotated should be on the same plane as that in which the pans moved when being opened. This result was reached by providing the hinge by which the pan opens with a journal upon which the pan could be rotated, and this improvement constitutes the first claim. While a second journal was not essential to the rotation of the pan, yet it is obvious that the side of the pan opposite the hinge would need a support, and that the pan could be rotated more evenly and easily if the pan should be journaled at this point of support. This was provided for by divided handles, one-half being rigid with one-half of the pan, and the other half with the corresponding half of the pan. The second journal upon which the pan rotates was therefore upon the handles. This constitutes the second claim.

The devices which appellees claim to have anticipated appellant's improvements are said to be found in the following patents: (1)Webster's patent, No. 27,176; (2) E. J. Smith's patent, No. 67,478; (3) Link & Curtis' patent, No. 96,930; (4) E. P. Russell's patent, No. 63,753; (5) Samuel Smith's patent. No. 126,585; (6) O. J. Smith's patent. No. 131,910 (all of which are for improvements in gridirons or broilers); (7) Thomas R. Wood's patent, No. 6,345; (8) Josiah D. Harrington's patent, No. 24,024; and the Samuel Tower patent, No. 21,387 (both of which are for coffee roasters). None of these alleged anticipations are for waffle irons. But, though this be so, it is very clear that the improvements in claims 1 and 2 of the appellant's patent are for devices found in both the Harrington and Tower coffee The Harrington patent is for a coffee roaster which roasters. consists of two hollow hemispheres of iron, constituting the receptacle for the coffee to be roasted. These hemispheres constitute. when united, a hollow ball, which is designed to rest upon bearings formed upon a ring or iron frame designed to be placed over the hole of a cooking stove when the roaster is in use. The handles are divided as in the case of appellant's waffle iron, one half being attached to each half of the spherical ball or pan; and this handle, when the two parts are united, is cylindrical, and forms one of the journals or pivots on which the ball is rotated. One side of the handle is shorter than the other. The outer end of the united handle is square, so that when the ball is closed a crank by which the ball is revolved fits upon the square end. This crank can be slipped on or off the shorter side of the handle, but is held on the longer handle by a washer at its outer end. When the crank is slipped into position upon the united handle, it aids in holding the two halves of the divided ball firmly together, and by it the ball is safely rotated. The side of the ball opposite this handle is held together by means of a joint or hinge. This hinge is the method claimed by Harrington for uniting the two halves of his roaster and holding them together, and constitutes the second claim of his patent, which is in these words:

"I claim my method of uniting the two halves of a coffee roaster by means of the hinge, E, formed of the curved jaw attached to one-half of the ball, and passing into a slot in the second jaw; said slot having the pin, F, beneath which the curved jaw passes."

Appellant denies that this joint is a hinge. A hinge is defined to be "an artificial movable joint; a device for joining two pieces together in such manner that one may be turned upon the other." Cent. Dict. An inspection of the model of the Harrington roaster shows that this device does operate to hold the two halves of the roaster together when rotated, and in such manner as that one half may, when desired, be turned upon the other. This hinge forms one of the journals or pivots on which the roaster is revolved, while the united handles on the opposite side form the other journal or pivot. The hinge has therefore the same two functions found in the hinge of appellant's patent,---that is, it both holds the two parts of the roaster together when being rotated, and serves as one of the journals upon which the ball rotates,-and is therefore a complete anticipation of complainant's first claim. The second claim is likewise anticipated, in that the ball, which is nothing more than a spherical pan, rotates upon a journal formed upon the hinge which holds the divided ball together, while the other is formed by the united handles. That the hinge in the one patent is constructed in a somewhat different way from the hinge in the other is an im-Essentially, they are the same, and perform material circumstance. the same functions in the same way. The first two of these claims were involved in the case of Griswold v. Harker, 10 C. C. A. 435, 62 Fed. 389, and were upheld as valid claims in an opinion delivered by Sanborn, Circuit Judge, for the court of appeals of the eighth In the opinion of Judge Sanborn, it is stated that none of circuit. the devices covered by the patents pleaded as anticipations, including this Harrington patent, included a hinge which operated both to hold the two parts of the apparatus together, and as a journal upon which the united parts might be rotated. This is an oversight, due doubtless to the fact that no model of Harrington's roaster was before the court. The drawings and specifications of the Harrington patent are not very plain as to the construction of this hinge, and nothing is said as to its function as a journal, which is, however, very obvious upon an examination of the official model. In the absence, therefore, of a model, both its operation in holding v.68f.no.4-32

the parts together, as well as its function as a journal, might have been unobserved. Neither did the court in that case have the Tower patent, or any model thereof, before it. The hinge and journaling of the roaster claimed by Tower are essentially the same in principle as that claimed by appellant. Tower, in his specifications, describes the part, a, shown in his drawings as capable of being elevated like a cover or lid, "the journal, B, forming a hinge." The hinge, as shown by the original model from the patent office, and exhibited upon the hearing in the circuit court, and again upon the hearing of this appeal, is essentially a hinge in construction, and much the same as the hinge used by the defendants in the infringing waffle iron. Indeed, it may be said with confidence that, if the joints used in the Harrington and Tower roasters are not "hinges," it would follow that the infringing joint is not a "hinge," and therefore does not infringe either the first or second claim. The hinge of the alleged infringement consists of the ball member of a ball and socket joint divided in halves, which co-operate by means of a pin or stud fixedly inserted in the face of one of them, and projecting into a hole or opening in the face of the other adapted to This ball, when united, constitutes the outer journal receive it. upon which the pan rotates. If it be sought to differentiate the journaling of appellant's waffle iron from the journaling of either the Harrington or Tower roaster by the suggestion that appellant does not journal his pan upon his hinge proper, but upon an independent member, described as a wedge-shaped block mechanically attached between the lugs forming the hinge, and that the journaling is upon a projection of this member outside of and beyond the hinge, and that this projecting end upon which the pan is journaled performs no part of the functions of a hinge, then it would follow that appellees do not infringe either the first or second claim of appellant's patent, for the obvious reason that the waffle iron of appellees is journaled upon the hinge, and not upon an independent, mechanically attached, member of the hinge.

The suggestion has been made that, if the hinging and journaling devices covered by the first and second claims are substantially identical with the devices found in the Harrington and Tower coffee roasters, nevertheless those claims should be sustained as a transference of a device from one branch of industry to another, and therefore a patentable novelty, under the doctrine of Potts v. Creager, 155 U. S. 597, 15 Sup. Ct. 194. This contention is not to be supported upon the facts of this case. In the case cited by counsel, and referred to above, Justice Brown, for the court, very clearly and tersely qualified and limited the doctrine invoked by appellant by saying:

"But, where the alleged novelty consists in transferring a device from one branch of industry to another, the answer depends upon a variety of considerations. In such cases we are bound to inquire into the remoteness of relationship of the two industries, what alterations were necessary to adapt the device to its new use, and what the value of such adaptation has been to the new industry. If the new use be analogous to the former one, the court will undoubtedly be disposed to construe the patent more strictly, and to require clearer proof of the exercise of the inventive faculty in adapting it to the new use,—particularly if the device be one of minor importance in its new field of usefulness. On the other hand, if the transfer be to a branch of industry but remotely allied to the other, and the effect of such transfer has been to supersede other methods of doing the same work, the court will look with a less critical eye upon the means employed in making the transfer."

What the applicant has done is this: He has taken the hinging and journaling devices found in the two coffee-roaster patents we have referred to, and applied them to his waffle iron, where they perform precisely the same functions in precisely the same way. Neither can it be said that coffee roasters and waffle irons belong to different branches of industry. Upon the contrary, both constitute instruments used in the culinary art. It is clear that the case is simply one of double use. One acquainted with the structure and use of these patent coffee roasters, and with the structure and uses of the old, handleless form of waffle iron, would readily see the adaptability of the hinging and journaling devices found in the first as a remedy for the obvious defects of the other. This plain capability of a double use is more analogous to the facts involved in Brown v. Piper, 91 U. S. 37, where invention was denied to one who applied the principle of an ice-cream freezer to the preservation of fish, and to the facts in Pennsylvania R. Co. v. Locomotive Engine Safety-Truck Co., 110 U. S. 490, 4 Sup. Ct. 220, where an old method of attaching car trucks was applied to the forward truck of a locomotive engine, and to the facts upon which a claim of novelty was based, found in Atlantic Works v. Brady, 107 U. S. 192, 2 Sup. Ct. 225, and Tucker v. Spalding, 13 Wall. 453.

We come now to consider the validity of appellant's third claim, which reads as follows:

"The waffle-iron frame or ring, provided with the enlargement or projection on one side, as described, forming the socket for the hinge of the pan, and a support for the lid when raised, substantially as described."

The appellant's expert thus explains the scope of this claim:

"The invention here intended to be summarized, as I understand it, is the secondary feature of the structure shown, and relates to the means for supporting the upper pan when elevated into position to allow the removal of the finished waffle, and the refilling of the pan. The essential feature is that the enlargement on the side of the ring is to form a socket for the hinge of the pan, and also a support for the lid when raised. I do not understand that there is any limitation in the claim as to the form or location of the hinge or of the socket; the only limitation being that the socket is to be an enlargement on the ring, and is to receive and hold the hinge, necessarily, and it is to form a support for the lifted pan, so as to hold it in an upright position while the finished waffle is being removed, and new batter placed in the pan."

The socket supporting the ball member of the hinge found in the waffle iron of the appellees is formed by an enlargement or projection of the flange of the iron ring or frame which supports the waffle iron. The back and sides of this projecting socket are raised higher than the other part of the range or iron ring, and the object of this projection is to form a socket for the support of the hinge. The undoubted purpose in making the back and sides of this projecting socket higher than that of the flange of which it is a part is to afford support to the raised half of the pan; thus preventing tilting or sagging and at the same time holding the raised half of the pan in an upright position while the finished waffle is being removed, or the pan refilled. If this third claim is a patentable novelty, it may be conceded that appellees are guilty of infringement. Clearly it cannot be invention to form a projecting socket to support a hinge and at the same time give support to the raised half of the open pan. The matter covered by this claim "does not," to quote from the opinion of the learned and experienced patent judge who heard this case in the circuit court, "rise to the dignity of an invention." "Given the other parts of the combination," said Judge Sage, "and the necessity for a support for the lid when raised is obvious. Any intelligent artisan ought to be competent, in the exercise of the ordinary skill of his craft, to suggest the enlargement or projection covered by this claim." We quite agree with the trial judge in regarding this third claim as void for want of novelty. The decree is therefore affirmed.

# WITHINGTON-COOLEY MANUF'G CO. v. KINNEY.

## (Circuit Court of Appeals, Sixth Circuit. June 4, 1895.)

## No. 270.

PATENTS-LICENSE BY IMPLICATION-INVENTION BY EMPLOYE.

An inventor was employed at a salary by a manufacturer of machines to devise a new and improved machine and superintend the making of patterns therefor, with full knowledge that his employer intended to construct the machines for sale. A successful machine was accordingly made. Soon afterwards the inventor left the employment and obtained a patent, but the manufacturer continued to make and sell the machines. The original patterns were subsequently destroyed by fire, but new ones were made and the construction of the machines continued. The inventor claimed a royalty, but the manufacturer refused to pay it, on the ground that he was entitled to make the machines. After the expiration of 10 years, an infringement suit was brought against users of the machine who bought it of the manufacturer. Held that, under the circumstances, there was an implied license to the manufacturer to make and sell the machines, and that the same was not terminated by the destruction of the original patterns.

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

This was a bill by Horace B. Kinney against the Withington-Cooley Manufacturing Company for infringement of a patent for an improvement in power presses. There was a decree for complainant in the court below, and the defendant appeals.

Edwin H. Risley, for appellant.

A. H. Swarthout, for appellee.

Before TAFT and LURTON, Circuit Judges, and SEVERENS, District Judge.

LURTON, Circuit Judge. The complainant in the court below, Horace B. Kinney, is the inventor and sole owner of patent No. 264,837, which was issued September 19, 1882, for an improvement in power presses used in the manufacture of hoes and forks. The de-