

No two cases are exactly similar on the facts; but the court should not be overzealous in the search for distinctions to enable an infringer to evade a patent once sustained. Pending the trial of this action one of these parties must suffer loss. This is inevitable. No system yet devised by man can mete out absolute justice. As this case now stands the defendant is in the wrong. It must prove itself in the right before it can use the patented device. This court has so recently expressed its views upon similar situations that further elaboration is unnecessary. *New York Filter Mfg. Co. v. Niagara Falls Waterworks Co.*, 77 Fed. 900, 906; *Same v. Elmira Waterworks Co.*, 83 Fed. 1013; *Beach v. Inman*, 75 Fed. 840, 842. The motion is granted, the complainant to give a bond in the sum of \$2,000.

CHUSE et al. v. IDE et al.

(Circuit Court of Appeals, Seventh Circuit. October 3, 1893.)

No. 487.

1. PATENTS—CONSTRUCTION—INVENTION.

The lubricating art being one which embraces all machinery, a patent cannot, by including in the claim for a means of lubrication the parts of a peculiarly constructed engine or machine, cut off inquiry into the state of the art as applied to other machinery.

2. SAME—IMPROVEMENTS IN LUBRICATING DEVICES.

The Ide patents, Nos. 321,726 and 400,682, for improvements in lubricating devices, are void for want of invention.

3. SAME—IMPROVEMENTS IN ENGINE FRAMES.

The Ide patent, No. 396,209, for improvements in engine frames, is void for want of invention.

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

This appeal is from a decree for an accounting and for an injunction against infringement of claims 1 and 4 of letters patent No. 321,726, claim 3 of letters patent No. 396,209, and claims 2 and 3 of letters patent No. 400,682, all granted to Albert L. Ide, who died pending the suit. The suit was revived and prosecuted to a decree by his executors, the appellees. Patent No. 321,726 was issued on July 7, 1885, and, according to the specification, is for "improvements in steam engine crosshead lubricators." The claims thereof in issue read as follows: "(1) The combination, with the crosshead guides and connecting rod of an engine, and means for feeding a lubricant to the upper guide, of a crosshead provided with a passage adapted to convey the lubricant from the upper guide to the bearing surfaces of the pivotal joint between the said crosshead and rod, substantially as described." "(4) The combination, with the crosshead guides and connecting rod of an engine, and means for feeding a lubricant to the upper guide, of a hollow crosshead adapted to receive the end of the connecting rod, and provided with a passage, h', for conveying lubricant from the upper guide to the interior of the crosshead, said connecting rod being provided with a funnel communicating with the bearing surfaces of the pivotal joint between the rod and crosshead, substantially as and for the purpose set forth." The elements of claim 1, according to the experts on either side, are: (a) The crosshead guides of an engine; (b) the connecting rod journaled to the crosshead; (c) means for feeding a lubricant to the upper guide; (d) a crosshead provided with a passage adapted to convey the lubricant from the upper guide to the bearing surfaces of the pivotal joint between the crosshead and connecting rod. Claim 4 specifies the same elements, the crosshead being described as hollow, "adapted to receive the end of the connecting rod, and provided with

a passage, h', for conveying lubricant from the upper guide to the interior of the crosshead," and the connecting rod being provided with a funnel communicating with the bearing surfaces of the pivotal joint between the rod and the crosshead. The prior art supposed to relate more directly to these claims consists of the following letters patent of the United States, bearing various dates from December 11, 1866, to January 20, 1885: No. 60,444, to O. Tufts; No. 69,957, to S. H. Badger; No. 86,214, to I. H. Congdon; No. 112,151, to King & Mulock; No. 264,368, to J. E. Sweet; No. 309,686, to J. L. Bogert; No. 310,979, to J. L. Bogert. Patent No. 396,209 was granted on January 15, 1889, and, as stated in the specification, "relates to improvements in steam, gas, and other engine frames, and more particularly to frames of that class in which the frame is continuous, and supports the cylinder at one end, and is provided with crank-shaft bearings at its opposite end." The claim reads as follows: "(3) An engine frame constructed for the attachment of a cylinder at one end, and having two shaft bearings at its opposite end, said frame comprising a straight tubular part adjacent to the cylinder, constructed to support the crosshead guides, a hollow base beneath said tubular part, vertical side walls continuous with the side walls of the tubular part and supporting the shaft bearings, and a bottom wall or plate, B *, extending downwardly from the lower wall of the tubular part to a point beneath the crank-shaft bearings, and connected at its side margins with the said vertical side walls, substantially as described." The prior art touching this claim consists of the Bailey patent, No. 62,920, bearing date March 19, 1867; the Wright, No. 144,817; the Stevenson, No. 168,803; the Bartlett, No. 174,935; the Rice, No. 187,984; the Putnam, No. 191,716; the Allen, No. 236,661; the Schnier & Smith, No. 276,479; and the Copeland, No. 360,761, issued on April 5, 1887. Patent No. 400,682, which bears date April 2, 1889, is also for improvements in lubricating devices, and relates, according to the specification, "to improvements in steam, gas, or other engines, and more particularly to improvements in lubricating devices for the crank shaft, connecting rod, crosshead, and other parts of such engines." The claims read as follows: "(2) The combination, with a crank shaft and crank disk, of an oil tank or basin beneath the disk, the side walls of which rise to a point above the lower edge of the disk, a housing or casing provided with an oil-receiving surface arranged in the same plane with the disk, a trough located within the housing in position to receive from the said oil-receiving surface fluid lubricant cast thereupon by the crank disk, a pipe leading from said trough to a bearing to be lubricated, and a valve in said passage, substantially as described. (3) The combination, with an engine crank shaft, a disk crown thereon, and a bearing for the shaft provided with an oil cup or receptacle located in position to receive from the surface of the bearing lubricant cast upon the same by the disk, of a pipe communicating with said trough or receptacle, and discharging into the oil cup upon the bearing, said oil cup being provided with an overflow pipe or passage leading into the housing, substantially as described." The prior art in evidence relating to this patent consists of the following letters patent of the United States: The Aerts, No. 24,914, dated August 2, 1859; the Batchelder, No. 65,328; the Reynolds & Batchelder, No. 78,895; the Fryer & Hall, No. 153,169; the Westinghouse, No. 246,258; the Brotherhood, No. 299,731, bearing date June 3, 1884; and two British patents, No. 852, issued in 1856 to William Joseph Curtis, and No. 3,522, issued in 1885 to Robert Lauder.

Ephraim Banning and Thomas F. Sheridan, for appellants,
Charles A. Brown, for appellees.

Before WOODS and SHOWALTER, Circuit Judges, and BUNN, District Judge.

WOODS, Circuit Judge, after making the foregoing statement, delivered the opinion of the court.

There is, to commence with, a dispute whether, by "means for feeding the lubricant to the upper guide," as that phrase is used in the

claims of patent No. 321,726, is meant the oil cup, L, shown in the drawings and mentioned in the specification. If that cup, or its equivalent, is an essential element of the combination claimed, the charge of infringement fails, because nothing of the kind is found in the engines made by the appellants. The contention that they are infringers though they do not equip their engines with oil cups, because it is intended that the user shall obtain upon the market the cups for which the engines are adapted, is not tenable, because there is no proof of such intention or practice, and the oil cup described as attached is not essential to the use of the engine. The expert called to make out the complainant's prima facie case testified that the oil cup, L, is the only means shown and described which answers to this requirement of the claims; but in rebuttal the patentee and another expert testified that the cup is not essential, and that the means referred to is to be or may be found in the "small vertical passage, l, which is formed through the part of the engine frame forming said guide, and is adapted to permit a slow feed of oil from the reservoir (or cup) to the bearing surface of the upper guide." We are of opinion that, when read with reference to the specification and the drawings, the claims include the oil cup as a part, at least, of the "means for feeding the lubricant," but prefer not to rest our decision of this part of the case on a narrow question of construction. What is the essential idea or conception of the patent? As stated in the specification: "The general object of this invention is to provide an improved construction of lubricating devices for the crossheads and crosshead guides of steam engines. * * * The principal features of novelty * * * are embodied in the means shown for lubricating the upper and lower crosshead guides and the bearing surface of the wrist pin, whereby the parts mentioned are all effectively lubricated from a supply of oil initially fed to the upper crosshead guide, and conducted to said several parts, as herein fully set forth." The construction and method of operation, in brief, are these: There is, first, a small passage, by which the oil, dropping from a cup or reservoir, reaches the bearing surface of the upper guide. On the upper bearing surface of the crosshead are longitudinal channels, which, during the reciprocating movements of the crosshead, receive oil from the surface of the upper guide, and carry it to the middle of the crosshead, where, through another vertical passage, it flows or drops into the hollow interior of the crosshead, whence, through a funnel, it reaches the wrist pin. In other words, the conception is that oil shall be introduced into an engine, or any other form of machine, through passages, channels, and ducts so located and constructed that by force of gravity it will be carried first to one bearing surface, thence to another, and thence to another, so long as possible and desirable. It would be useless to follow the discussions of the experts. They consist largely in pointing out irrelevant differences of construction between the engines and machinery of the prior art and the engine of the patent. The art of lubrication cannot be limited to a class of engines, or to a species of machines. It embraces all machinery; and when it has been shown, as here, that the method of lubrication described and claimed in this patent has been described in its essential

features in numerous earlier patents, and has been employed on engines of earlier construction, it is impossible to concede novelty to claims which show no difference except in the construction of the engine to which the method is applied. Indeed, while the patent professes to be for lubricating devices, the claims are in part for things to be lubricated as well as for the means of lubrication. The engine, with all its parts, is one thing, and, if patentable, should be covered by a distinct mechanical patent. The method of lubricating an engine is quite another thing, and should be so described and claimed, if it is to be protected as an invention. For example, the essential features of claim 1 would be better defined if the claim read in this wise: "The combination, in an engine, of means for feeding a lubricant to the upper guide for the crosshead and a passage in the crosshead, adapted to convey the lubricant from the upper guide to the bearing surfaces of the pivotal joint between the crosshead and the connecting rod." Claim 4 would be likewise more definite and accurate if it read: "The combination, in an engine, of means for feeding a lubricant to the upper guide for the crosshead, a passage, *h'*, for conveying lubricant from the upper guide to the interior of the crosshead, and a funnel in the connecting rod communicating with the bearing surfaces of the pivotal joint between the rod and crosshead." So worded, the claims would include exactly the means of lubrication described, and would not include, as a part of the supposed invention, the engine, or the parts thereof intended to be lubricated. The fact that such parts of the engine have been included affords no ground for distinguishing the actual means of lubrication from similar means in other engines, machines, or patents of earlier date. The lubricating art being one which embraces all machinery, it is not possible, by including in a claim for means of lubrication the parts of a peculiarly constructed engine or machine, to cut off inquiry into the art as displayed in earlier machines, whatever their parts or construction. There might, doubtless, be invention in so constructing an engine or other machine as to be capable of better or easier lubrication, but the patent in that case should be upon the machine, and not on known means of lubrication, capable of adaptation to one form of machine as well as another. Of course, it is not to be said that new means or modes of lubrication may not be invented. It is enough to say that the means shown in this patent are not new. There has, at most, been simply an adaptation of familiar means and methods, which an intelligent mechanic, with the *Ide* engine before him, could readily accomplish.

In respect to claim 3 of patent No. 396,209, the patentee, who was made a witness, after describing prior constructions of engine frames, and explaining points of weakness in them, said:

"To overcome these defects, I designed the tubular form of engine frame. It is well known that a certain amount of metal in the form of a tube will resist more strain, and will maintain a nearer correct alignment under excessive strains, than the same amount of metal in any other form. In addition to the advantage of rigidity by this tubular form of frame, this construction brings all of the strain in the central part of the tube or engine frame, and the line of center is nearly surrounded by metal, which entirely avoids any tendency to buckling or springing out of alignment under the

heaviest loads. This construction of frame also enables the working parts of the engine to be inclosed, the bottom portion of the tube or frame being gradually inclined or sloped towards the crank shaft, thus forming a suitable incline and receptacle or base for containing the oil or lubricant necessary to insure the automatic and complete lubrication of all the working parts of the engine, while the box form of extension below the tubular form of the frame gives a rigid support for the lower crosshead guide, and forms a long rigid bearing or support for the engine bed, which enables the engine to be of the double-crank pattern, and self-contained, and of sufficient rigidity to support the overhanging cylinder on one end and the crank shaft and fly wheels on the opposite end, without springing out of line, and without the use of massive foundations for holding the engine bed and crank shaft in true alignment."

That is to say: If it were conceded that he was the first to abandon the old style of frames, made of heavy timbers, with guides and bearings of iron or steel bolted thereon, and to contrive a frame of metal, the problem, according to his own testimony, was hardly so difficult as to require the exercise of extraordinary skill. It was well known that metal in tubular form was stronger to resist strain than when solid, and how to cast the desired tubular shapes in connection with other parts of a structure was, of course, well understood. The patentee, however, was by no means the first to design such a frame. The proof shows that in no single feature is his design novel, and as an entirety it is not entitled to be called an invention. Counsel for the appellee asserts as "the well-settled law that a patent for a meritorious invention cannot be defeated by citing as anticipations a large number of patents, some of which show some of the parts of the invention, while others show other parts used in a different connection, and under entirely different conditions." The proposition is, of course, true, but it does not fit the case. Every part of the frame of this patent is shown in earlier patents and frames substantially in the same relation to other parts as in this frame, and of necessity performing, or adapted to perform, the same office. Indeed, the testimony of the expert examined in support of the defense was that the equivalent of the entire frame was to be found in each of a number of frames shown in earlier patents, and in earlier frames of which proof was made. On the other hand, the expert for the appellees pointed out in detail the differences between the frames referred to and that of the patent, but differences of such a character in most instances as to have, in our judgment, no material bearing upon the question of invention. For instance, it was pointed out that patent No. 144,818 "does not show the hollow base as distinguished from a number of pedestals, which," the witness added, "is one of the essential features of the invention of the patent in suit." It is impossible that the hollow base should be a feature of the invention. Just as well might a blacksmith discard the wooden block under his anvil, and put in its place a hollow metal block, and call it an invention. Besides, the hollow base is shown in earlier frames. In another instance the expert pointed out that the frame referred to was not constructed for the attachment of an overhanging cylinder. If the patent were valid, infringement could hardly be avoided by extending the frame under the cylinder. In other instances the frames had only a single bearing for the main shaft, and therefore were not to be considered, though

in other parts not unlike the frame of the patent. Duplication of the bearings of a shaft is not a patentable novelty. The frame of this patent was contrived by selecting and combining the features of earlier designs. It is doubtless compact, and strong, and well adapted to automatic lubrication; but it is not an invention. The only features which may not be said to be matters of common knowledge are those designed to promote automatic lubrication, and the evidence is clear that they are not new in this patent.

The intention of patent No. 400,682 seems to have been to embody a method, or, as it is called in the brief for the appellees, "a system," of automatic lubrication. If the crank shaft were left out, the claims of this patent would not be obnoxious to the criticism that they include in the combination specified any part of the engine which is not a part of the means employed to effect lubrication. The crank shaft is not essential, because the necessary disk might be revolved by other means. The third claim is confessedly ambiguous. Indeed, as worded, it is meaningless. The expert of appellees says the ambiguity is "due to the omission of several words, and to a clerical error in writing the word 'bearing' instead of the word 'housing.'" He deduces that conclusion from the history of the application in the patent office, as disclosed in the file wrapper, of which he makes a labored analysis. The statute provides for a correction of defective patents by means of reissue, and we are of opinion that a court of equity has no power, in a suit for infringement, to give existence, on the theory of correcting a mistake, to a patent never issued in the mode provided by law, and adjudge damages for its infringement. It follows that only the second claim of this patent need be considered. The essential elements of it are: (1) A revolving disk; (2) an oil tank or basin beneath the disk; (3) a housing or casing, with an oil-receiving surface in the plane of the disk; (4) a trough within the housing to receive fluid lubricant cast by the disk on the inner surface of the housing; (5) a pipe leading from the trough to a bearing to be lubricated; and (6) a valve in the pipe. All else in the claim is an enumeration of minutiae of construction which might better be found only in the specification. The essential idea of this claim is the throwing of oil from a trough or basin upon the parts of the engine to be lubricated, or against the surface of a housing, to be collected and carried thence by pipes, channels, grooves, and funnels to the bearing surfaces to be lubricated. The use of such pipes, channels, grooves, and funnels is illustrated by patent No. 321,726, and the prior art considered in reference thereto; and that a combination of such means for the passage of oil or other lubricant by force of gravity from an initial point to different bearing surfaces of an engine or machine in the manner shown in those letters was not patentable we have already decided. Their use in this patent is not different, and, if there is here the novelty necessary to sustain the patent, it must be in the combination of the basin of oil, the revolving disk, and the housing, with its trough to receive the oil cast thereon. There was, and for many years before the date of this patent could have been, nothing new in that conception or in the means described for carrying it out. In the Curtis patent of 1856, which was for improvements in lubricating the axles of loco-

motive engines and of carriages on railways, it was stated that "the improvements consist of causing the lubricating fluid to be raised from below the axles by centrifugal action, which is most conveniently accomplished by applying a disk or projection to each of the axles, the periphery of which rotates in a vessel below the axle, and by centrifugal action constantly raises the lubricating fluid above the axle, and throws or projects it against a suitable surface and receptacle for conducting the fluid down onto the upper surface of the axle." What more does this patent show, and by what words could be given a more literal and vivid description of what it shows? The expert answers that the Curtis patent does not show means for lubricating the bearings of a steam engine, and is, therefore, entirely foreign to the subject-matter of the suit, and proceeds to point out the various parts of the steam engine of the patent which are not shown in association with the Curtis axles. The fundamental error is in the assumption that the lubrication of axles by a specified means is as an art entirely foreign to the lubrication of the parts of a steam engine by like means. But, if that were conceded, the earlier patents in evidence show steam engines constructed and lubricated in all essential particulars substantially by the means shown in the patent. The differences dwelt upon by the expert in the construction of the different engines, while in most instances too plain to have been overlooked if nothing had been said about them, are generally of such character as to have no possible bearing upon the question of invention. For instance, much time is given by both experts to the question whether, in a Westinghouse engine, more parts are automatically lubricated than in the engine of the patent in suit; and again and again they return to the question whether the lubricant used in the Westinghouse engine, consisting of oil and water mixed, is as good as oil alone; all of which is totally immaterial, because it was important to know, not how many parts were lubricated, or by what lubricant, but simply whether the means and methods of lubrication were the same, or to what extent, in essential respects, they differed. The testimony of a capable and conscientious expert, in a case which admits of his employment, cannot but be at once helpful to the court and creditable to the witness; but it is a sorry situation for the display either of skill or candor when, not to hurt the cause he was employed to promote, the expert must suppress his opinions upon all matters of controlling significance, and restrict his testimony to the pointing out of superficial and obvious distinctions of structural forms that involve no conceivable differences of function or operation,—a task of mere drudgery, which a common mechanic, accustomed to work by lines laid down for him by another, could perform quite as well.

Upon the proof made of the prior art, as found in earlier patents and structures, we see no escape from the conclusion that all of the claims in question of the three patents sued on come under the rule declared in *Thompson v. Boisselier*, 114 U. S. 1, 5 Sup. Ct. 1042, and often reaffirmed by the supreme court and by the circuit courts of appeals, that "it is not enough that a thing shall be new, in the sense that the shape or form in which it is produced shall not have been before known, and that it shall be useful, but it must, under the constitution

and statute, amount to an invention or discovery." *Lock Co. v. Greenleaf*, 117 U. S. 554, 6 Sup. Ct. 846; *Gardner v. Herz*, 118 U. S. 180, 193, 6 Sup. Ct. 1027; *Kelly v. Clow* (by this court, July 26, 1898) 89 Fed. 297, and cases cited. In none of these claims is it possible to find anything of a mechanical and operative or functional character which did not exist before in similar relations and combinations, and in none of the many differences of form pointed out is it possible to find evidence of invention or discovery. In the language of the opinion in *Hollister v. Manufacturing Co.*, 113 U. S. 59, 5 Sup. Ct. 717, the claims are for combinations the conception of which involved "only the exercise of the ordinary faculties of reasoning upon the materials supplied by a special knowledge" of the existing art. The decree below is reversed, with direction to dismiss the bill.

BATES MACH. CO. et al. v. EXCELSIOR HEATER CO.

(Circuit Court of Appeals, Seventh Circuit. October 3, 1898.)

No. 499.

PATENTS—FEED-WATER HEATERS.

In the improved feed-water heater and purifier described in the Ferreira patent, No. 400,319, the separation of the oil from the exhaust steam used for heating purposes by means of the steam chamber, which permits the expansion of the steam in its passage, is an incidental function only, and not covered by the patent, being performed in a similar manner by the heaters described in earlier patents, notably that of Crighton, Wills, and Rastetter, No. 65,547.

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

This appeal is prosecuted by the Bates Machine Company and Thomas J. Cookson from a decree of injunction forbidding infringement of the second, third, and eighth claims of letters patent No. 400,319, granted on March 26, 1889, to Charles E. Ferreira, assignor of the appellee, the Excelsior Heater Company, for an improvement in feed-water heaters and purifiers. The claims read as follows:

(2) In a feed-water heater, the combination of a water chamber provided with a water inlet, a steam chamber provided with a steam inlet, a pipe communicating with the steam chamber and extending into the water chamber for conducting steam through the water, a settling chamber, a pipe communicating between the water chamber and the settling chamber for conducting the water into the settling chamber, and an outlet for drawing off the water, substantially as described.

(3) In a feed-water heater, the combination of a water chamber provided with a water inlet, a steam chamber under the water chamber, provided with a steam inlet, a pipe communicating with the steam chamber and extending into the water chamber for conducting steam through the water, a settling chamber under the steam chamber, a pipe communicating between the water chamber and the settling chamber for conducting the water into the settling chamber, and an outlet for drawing off the water, substantially as described.

(8) In a feed-water heater, the combination of a water chamber provided with a water inlet, a steam chamber provided with a steam inlet, a pipe communicating with the steam chamber and extending into the water chamber for conducting steam through the water, a settling chamber under the steam chamber provided with a vertical partition perforated in its lower portion, a pipe communicating between the water chamber and the settling chamber, terminating at its upper end at a point in the water chamber be-