harmony with the fundamental rules of equity jurisprudence; and we think, under the circumstances, we ought to follow them. The motion for a preliminary injunction is denied.

GOULD COUPLER CO. v. PRATT et al.[1]

(Circuit Court, N. D. New York. November 19, 1895.)

No. 6,184.

1. PATENTS—WHAT CONSTITUTES INVENTION.
An invention does not cease to be meritorious because it is simple. The test should be, not whether the mechanism is simple or complex, but whether the patentee has given the world something new; whether the public is richer for his contribution to the art; whether he has produced novel and beneficial results. Invention should be determined more by an ascertainment of what the inventor has actually accomplished than by a technical analysis of the means used to accomplish it.

2. SAME—CAR-COUPLERS.
The Browning patent, No. 254,106, for an improvement in car-couplers, which improvement relates to car-couplers of the Janney type, and provides a successful means for automatically opening, and holding open, the coupler, so that it is no longer necessary for the operator to go between the cars for any purpose, covers a meritorious invention of high order, and was not anticipated by the Hein patent, No. 190,858, or by the English patent to Talbot, or by any devices known to the prior state of the art; and the claim is entitled to a wide range of equivalents.

3. SAME—MECHANICAL EQUIVALENTS.
A lever used for throwing out the hooks of a car-coupler is the mechanical equivalent of a spring, or gravity devices, which accomplish the same result.

4. SAME—INFRINGEMENT.
Where the true value of an invention lies in one element of a combination, an infringer who has appropriated that should not be permitted to escape upon the plea that he has omitted a subordinate and comparatively nonessential feature, unless it is clear that he has in fact omitted it. In the case of a meritorious invention, the court should be diligent to give the patentee the fruits of his genius and labor, by resolving doubtful points in his favor.

5. SAME—CAR-COUPLERS.
The Browning patent, No. 254,106, for an improvement in car-couplers, *held* infringed by a device made in accordance with the Pooley patent, of November 3, 1891, and the Gilbert patent, of January 19, 1892.

6. SAME.
The Barnes patent, No. 337,650, for an improvement in car-couplers, which consists substantially in the addition to the Janney and Browning devices of two inclined bearings,—one at the top, and one at the bottom, of the drawhead cavity,—by which the locking and unlocking process is facilitated, by permitting the locking dog to slide down and up these inclines, must be confined, so far as concerns the third claim, to the specific details shown and described, and is not infringed by a device which omits the upper inclined bearing.

This was a suit in equity by the Gould Coupler Company against Pascal P. Pratt and others for alleged infringement of two patents relating to car-couplers.

Edmund Wetmore, Frederick P. Fish, and Ernest C. Webb, for complainant.

Frederic H. Betts and L. F. H. Betts, for defendants.

[1] Rehearing denied December 21, 1895.

COXE, District Judge. This is an equity suit for infringement of two letters patent owned by the complainant. No. 254,106 was granted to Clinton Browning, assignor, etc., February 28, 1882, and No. 337,650 was granted to Charles O. Barnes and Lucien Barnes, Sr., March 9, 1886. Both are for improvements in car-couplings of the Janney type.

The Browning Patent.

The Janney coupler, patented on February 25, 1879, No. 212,703, was defective in that the hook cannot be opened automatically and is left free to rotate by the jarring of the cars to a point where coupling is rendered impossible. When in this position it is necessary for the operator to go between the cars and, by hand, adjust the coupler. This operation is slow and dangerous. Browning's object was to remedy this defect by rotating the hook automatically to the desired coupling position and retaining it there until required to rotate in the act of coupling. In other words, Browning opens and holds open the coupler automatically. This result is accomplished by means of a spring, gravity or other equivalent means. The operator, standing at the side of the car, releases the locking device by a lever and at the same time extends the coupling hook where it is held in a position ready for use.

There is but one claim. It covers both the idea of opening the hook automatically and also the idea of holding it open in a proper position for coupling. The claim is as follows:

"In a car-coupling composed of a bifurcated head and rotary interlocking hook, the combination, with said rotary hook, of means, substantially such as described, for automatically opening and retaining said hook in proper position for coupling."

The defenses are anticipation, lack of patentability and noninfringement.

The court has little difficulty in finding novelty and invention in this patent. Browning attempted to remedy the defects in the Janney coupler. He dealt with no other coupler. His task was not, broadly, to construct a coupler which would open and close automatically, but to give these features to the Janney coupler—to make it a complete and perfect device by adding to it the additional element of automatic opening. The prior art, therefore, in so far as it relates to totally different types of couplers, is not material for the reason that it furnishes little information which could be utilized by one whose sole object was the improvement of the Janney coupler. An inventor, for instance, might have succeeded in making the old link and pin coupler automatic, but this would not have taught others how to make the Janney structure automatic.

Janney was an inventor of more than ordinary genius. He struck out on entirely new lines, and produced a coupler so far superior to all that had gone before that it at once began its phenomenal progress towards popular favor. The Master Car Builders' Association adopted it as the standard, and now it is almost universally recognized as the most complete coupler used on American

railroads. It was not perfect. Every one recognized this fact, but it was so much better than the old varieties, that, even with its defects, it soon supplanted them. The tide of invention at once set in the direction of the Janney coupler. Obviously the man who could remedy its defects was to take a long forward step in the art. Browning was the first to take this step. Those engaged in practical railroading knew that in certain situations the Janney coupler was slow and dangerous. Hundreds of skilled car builders and railroad mechanics knew of these defects; the brilliant inventor himself knew of them, but no one suggested a remedy until Browning proposed his simple plan of throwing out the hook by mechanical means.

He is attacked on the old lines. The accusation against him is one that every inventor must meet. The moment the solution of the problem is made plain those who did not see it seek to belittle the achievement of the one man who did see it by the assertion that it was so exceedingly obvious and simple as to exclude the possibility of a demand upon the inventive faculties. This will not do. An invention does not cease to be meritorious because it is simple. Many of the greatest inventions are most simple. The test should be not whether the mechanism is simple or complex, but whether the patentee has given the world something new; whether the public is richer for his contribution to the art; whether he has produced novel and beneficial results. Invention should be determined more by an ascertainment of what the inventor has actually accomplished than by a technical analysis of the means by which the result is attained. Measured by this rule there can be little doubt that Browning is entitled to the rank of an inventor. He made the position of the intelligent trainman one of absolute safety. It is no longer necessary for the operator to go between the cars for any purpose. The crushing out of life and the maiming of limbs between the dead blocks of approaching cars are things of the past. Not only is there a saving of human life but of time and labor also. The advantages of Browning's invention have been very generally recognized, and over 300,000 couplers embodying the invention are in use on many of the leading railroads of the country. It is safe to say that to-day no car would be accepted if equipped with couplers requiring the trainmen to go between the cars to manipulate them.

The Hein Patent.

The nearest approach to Browning in the prior art is, unquestionably, the Hein patent, No. 190,858. Hein was also attempting to improve the Janney coupler. He shows a block attached to a spring which, after the hook is partly opened, is capable of opening it still further and retaining it in a coupling position, although nothing is said of this function in the patent. There is no evidence that the hook was ever so used in actual practice. This is not the Browning structure. It misses the very point of the Browning invention. It shows how near an intelligent experimenter may come to success and yet fail utterly. If the court understands the Hein patent, it is, as to the points now under consideration, no

improvement on the old Janney coupler. It does not do away with hand manipulation or the necessity for the operator to expose himself to danger by going between the cars. Indeed, it would seem more cumbersome in operation than the Janney coupler. The operator must, first, by means of a lever, withdraw from its recess the block which holds the hook in a locked position; second, he must go between the cars and open the hook, part way at least; and, third, release the lever from its retaining notch, so that the spring will press the block against the heel of the hook, thus forcing the hook wide open and holding it there. So long as the operator must go between the cars it is easier for him to open the hook the entire distance by one motion of the hand than to open it part way and depend upon a subsequent manipulation at another point to open it still wider. Hein shows a new form of lock, but the trainman's task was just as dangerous afterwards as it was before.

The Talbot Patent.

The British patent to Talbot shows an ingenious and complicated mechanism designed for use on English and continental railroads and not adapted, it would seem, for use on American roads. It has a bell crank, somewhat resembling the hook of the Browning patent, which is rotated automatically by a coiled spring. In other respects the device, though somewhat sui generis, resembles the old link and pin type more than the Janney type of coupler. Of course coiled springs have from time immemorial been used to pull or push mechanism into working position, but would the Talbot coupler suggest the Janney coupler to the skilled workman?

If the defendants are right the Talbot device would infringe and, if made before, would anticipate the Janney invention. Theoretically there are several points of similarity, while in practice it is clear that it belongs to a different class and operates in a totally different manner. It is thought that it would neither anticipate nor infringe nor suggest to the skilled mechanic improvements upon the Janney coupler. Can it be said that the bell cranks of Talbot interlocking with swinging links or shackles would convey to the mechanic the idea of opening automatically Janney's rotary hook? It is thought not.

The Prior Art.

It is not possible to discuss all of the patents in evidence. They have been examined, and an earnest effort has been made to understand them. None of them adds materially to the disclosures of Hein and Talbot. Indeed, this branch of the case may be left with the following quotation from the complainant's expert, in whose conclusion I fully agree:

"In the foregoing review of all the patents discussed it conclusively appears, I think, that the Browning invention does not exist in any of them, and is not suggested by any one of them alone or by any number of them taken together. In fact, it appears that, as stated in the early part of this answer, no inventor ever conceived of the idea of accomplishing what Browning set out to accomplish, and that he stands, therefore, in the art both as the first to conceive such an idea as well as the first to put it into form and practice."

The question as before stated is: Did it require invention to conceive the idea, and embody it in practical form, of unlocking and throwing out the Janney hook by mechanical means? Unless the prior patents show this, or show mechanism which would suggest this to the skilled workman, they do not anticipate or invalidate the Browning invention. The record shows that an army of inventors were struggling in this art and yet the feature now conceded to be so valuable did not occur to any of them till Browning gave it form. Talbot and Hein, who, it is asserted, did all that Browning did, were respectively seven and five years before him in the art, but the standard coupler of America continued to kill and maim, and no one was found to stop the dangerous work. After surveying the vast array of couplers, in infinite variety of form, with which the record abounds, it is hardly possible to resist the conclusion that an indirect tribute has been offered to Browning's ability and genius. Hundreds of inventors were in the field; some came very near to success, but no one quite reached the goal; no one did what Browning did. He made the Janney coupler safe. This is enough. He is entitled to rank not with the great inventors, but certainly on a higher plane than some who have been awarded the palm. These views are sustained, it is thought, by a long line of authorities, of which the following are among the most recent: Potts & Co. v. Creager, 155 U. S. 597, 15 Sup. Ct. 194; Du Bois v. Kirk, 158 U. S. 58, 15 Sup. Ct. 729; Topliff v. Topliff, 145 U. S. 156, 12 Sup. Ct. 825; Krementz v. S. Cottle Co., 148 U. S. 556, 13 Sup. Ct. 719; Smith v. Macbeth, 14 C. C. A. 241, 67 Fed. 137; Consolidated Brake-Shoe Co. v. Detroit Steel & Spring Co., 47 Fed. 894; National Cash-Register Co. v. American Cash-Register Co., 3 C. C. A. 559, 53 Fed. 367.

Infringement of the Browning Claim.

The question of infringement is more difficult. As before stated, the claim covers both the feature of opening the hook and holding it open in a position for coupling. Of this there is no doubt. All of the experts agree upon this proposition. The complainant's expert says, and says correctly, that a coupler which has means for accomplishing but one of these results does not infringe. In order to infringe, then, a coupler must have "means for automatically retaining the rotary hook in proper position for coupling." The means thus adopted must be something more than the mere inertia or friction of the parts caused by rust or otherwise. It must be something more than is shown by the old couplers. It must be the Janney coupler plus some additional means. The retaining means need not, necessarily, be the same as the opening means. It cannot be doubted that one who, for instance, throws the hook open with a spring and holds it open with a latch, will infringe. Any other construction would be cruelly technical.

Of course the defendants have the bifurcated head and rotary interlocking hook of the claim. Theirs is a twin coupler of the Janney type. That they employ means for opening the hook automatically is also undoubted, but it is said that their mechanism operates upon a different principle and is not the equivalent of the spring or

gravity devices described in the patent. The defendants' hooks are thrown out by an ingenious double acting lever contrivance, patented to Charles A. Pooley, November 3, 1891, which is clearly an equivalent for the means described in the Browning patent. There was nothing in the prior art limiting Browning to a specific form of construction. Every mechanic knew that the result could be accomplished in a variety of ways, and Browning says this in so many words at the close of the description. He is entitled to a wide range of equivalents, but even though the range were limited it would still include the defendants' construction. Levers and springs are often used interchangeably in the arts, and furnish a familiar example of equivalents. Browning used a spring; the defendants use a lever. The object in each case is to open the hook. What possible difference can it make, in principle, whether it is pulled out by a spring or "kicked" out by a lever? Whether it is pulled out by a coiled spring, pushed out by a flat spring, forced out by a lever or made to slide down the spiral inclines of a hinge of the old window-blind construction, would seem quite immaterial. In each instance the same object is accomplished without change of result by means which have for years been used interchangeably by mechanics. Assume that, instead of a lever, the defendants used a coiled or flat spring, arranged back of the locking arm, to force out the hook the moment the locking pawl is moved out of engagement; could there, then, be a doubt that the patented device was appropriated? This is precisely what is done, except that a lever is substituted for a spring. In theory the two things are identical.

That the defendants employ means for automatically retaining the hook is beyond dispute, but they insist that it is not retained in a suitable position for coupling, and is, therefore, not within the claim. In their coupler the outside of the locking catch and the inside of the locking arm are given an unusual fullness, or bulge, so that when these abnormally bulging surfaces come together the inward swinging of the hook is arrested and held at that point against all the ordinary shocks of railroading. To move still further inward, the hook must have sufficient force imparted to it to move not only the heavy locking catch, but force it up the inclined bearing in the drawhead. That the hook is, for all practical purposes, stopped at the point of contact with the catch, is clearly shown both by proof and by actual experiment in court, but the question remains, is this a proper coupling point? It is not necessary that the hook should be retained in its most open position, for admittedly it need not be open to its fullest extent to be in the proper position for coupling even with an opposing coupler which is locked. The distinction between a fully open position and a proper position for coupling was recognized by the inventor, as will be seen by a perusal of the file wrapper. On the other hand, the hook must be retained in such a position as will, in actual practice, facilitate the operation of coupling cars. If it has passed the useful coupling point, the fact that, in some improbable contingencies, it may couple with an opposing hook, will not bring it within the language of the claim. A position in which it will only couple theo-

retically is not a proper position. A position in which it will usually operate without further attention from the trainman is a proper position. In other words, it need not be in the best possible position for coupling; if in a position where it will couple in the ordinary conditions of everyday use, or in some of them, it is enough.

If the defendants' couplers are unlocked, the most unfavorable condition in which the hooks can get is when they bear against the locking catch. There is testimony that opposing hooks will couple in this position. If this be true they can, when unlocked, never get out of the coupling position. Here is a distinct practical advantage. The attendant, seeing the hooks unlocked, can proceed with the coupling process with perfect confidence in its successful termination. It is true that this testimony is disputed, and the experiments made in court indicated that the fact may be otherwise. If the complainant is right the hook in its retained position will couple with any but a locked coupler, and if the defendants are right it is still true that it will couple with an opposing hook which is opened, even for a very short distance, beyond actual contact with the locking catch.

Conceding that the couplers will not operate where both hooks are held against the locking dogs, it is not improbable that there may often be substantial advantage in keeping so near the coupling point that the slightest variation in the position of either hook must make successful coupling certain. The partly open position is not so desirable as the position which Browning had in mind, but it is a distinct advantage over a hook with no retaining device at all. There are many contingencies in which it may be a proper position for coupling. The defendants have Browning's idea, but their embodiment of it seems less effective than his. In the position shown by him the hook will couple with an opposing coupler in every conceivable condition. The defendants' hook will not do this, but it will couple in very many instances where the old Janney hook would fail. The defendants have a retaining device, but it will not do all that Browning's device, when in a perfectly operative condition, will do. The peculiar bulge of the hook and dog before mentioned are not features of the Pooley patent. They are shown in a patent granted to Truman H. Gilbert, January 19, 1892. These features are not merely accidental. They were added deliberately. If not intended for retaining devices, it is not easy to perceive for what purpose they were added; that the coupler was strong enough without them seems clear from the successful operation of prior couplers.

The court has reached the conclusion that the defendants infringe with less hesitancy because it is thought that Browning, by making the Janney coupler fully automatic, and, therefore, safe, has done a meritorious act, entitling him to protection. The retaining means, though clearly an element of the claim, is not of the essence of the invention. If omitted the claim would have been valid. It probably would have been omitted if Browning had had the assistance of an experienced solicitor. In these circumstances it is not only the duty, but it should be the pleasure, of the court to give him the

fruits of the invention if possible. Where the true value of the invention lies in one element of a combination, and an infringer has appropriated that, he should not be permitted to escape upon the plea that he has omitted a subordinate and comparatively non-essential feature unless it is clear that he has omitted it. To find an invention meritorious and then defeat it by an illiberal construction is as inconsistent as it is unfair. To decide that an inventor has conferred a benefit upon mankind and subsequently destroy his patent by a harsh construction is condemned both by the general principles of equity and by express authority. The court should be diligent to give him the rewards of his genius and labor, and resolve doubtful points in favor of the patent.

Another and more practical view of the situation is, perhaps, entitled to some weight. Because of the presence of the retaining element in the claim, it is impossible for the court to give the patentee the full benefits of his invention. The really valuable feature is the device for automatic opening. This may be appropriated so long as the retaining element is omitted. Unless some considerations have escaped the attention of the court, the defendants may use their kicking lever in connection with the old Janney hook, as shown in "Complainant's Exhibit Janney Coupler," with impunity. If their experts are correct in the statement that their retaining mechanism does not retain and is of no practical value for this purpose, it is very easy to discontinue it. Why use it if it is not useful? If it is useful, if it does operate to retain the hook in a proper position for coupling, the claim is infringed. If it does not, the defendants' coupler will lose no material element of value by its removal. Its presence seems inconsistent with the contention that their coupler is intended to operate and does operate without the least reliance upon such mechanism. The presumption is manifestly the other way.

It may as well be admitted that the defendants' argument on this branch of the case is a cogent one. There are many expressions in the Browning patent which are in accord with their contention. Nevertheless, the claim is capable of a construction which includes the defendants' structure, and every consideration seems to require that this construction should be adopted.

The Barnes Patent.

The Barnes patent is for additional improvements in the same variety of coupler. So far as this controversy is concerned, it covers the Browning mechanism plus inclined bearings for controlling and guiding the upward and downward movements of the locking catch.

The third claim, the only one involved, is as follows:

"(3) The combination of the drawhead provided with the cavity c and opening b, the swinging head H, composed of the coupling arm d' and supplemental arm d, and pivoted on the drawhead to swing outward therefrom, and having the arm d entering the opening b, the catch C pivoted in the cavity c, inclined bearings i o, respectively on the bottom and top of the cavity, and the chain l connected to the catch and passing out from the top of the cavity c, substantially as described and shown for the purposes set forth."

The defenses are lack of patentability and noninfringement.

The Barnes coupler has the same general features as the Browning coupler. It discloses no new principle of operation, and accomplishes no new result. Its improvements relate to minor details in the locking mechanism, and seem to be confined entirely to the addition of two inclined bearings, one at the top and the other at the bottom of the drawhead cavity. The locking and unlocking process is facilitated by permitting the locking dog to slide down and up these inclines.

The discussion may still further be narrowed to a consideration of the upper incline o, for whatever of novelty there is in the claim must be found in the addition of this element. Every other feature was not only old in analogous structures, but old in car couplers of the Janney type. Without pausing to consider whether it involved invention to add the upper incline to the combination, it is perfectly clear that the claim must be limited to the specific details shown and described.

I fully agree with the defendants' expert. He says:

"Taking the entire state of art prior to Barnes and Barnes' invention, I am clear that the third claim of their patent, if it contains any novel combination, must be restricted to the precise construction shown and described in the patent."

That the claim is a limited one is admitted by the complainant, and, in view of the prior art and the well-known principle of operation utilized by the patentees, a broad construction is clearly inadmissible. The prior art taught the patentees how to do all that they have done, and if their exact combination is not found there it is approximated so closely that it is manifest that the doctrine of equivalents cannot be invoked to bring within the patent, mechanism which employs different means and operates in a different way.

The rib in the defendants' coupler, which it is said corresponds to the rib o, was placed there originally as a strengthening rib. It was not designed to perform any function in connection with the locking dog, and it is doubtful if it ever did do so. The great weight of testimony is to the effect that this rib never did any practical work in crowding the dog back when pulled up by the chain. This seems to be demonstrated conclusively by the fact that very soon after the commencement of this suit the strengthening rib was removed. The coupler operates as well without the rib as with it. With the strengthening rib gone, of course, there could be no pretense of infringement, unless something else was found to take the place of the rib o. An element of the combination was lacking. That there is nothing in the drawhead cavity of the Pooley coupler as now constructed to take the place of the rib o is absolutely certain, and, therefore, the complainant seeks relief in the theory of equivalents.

It is said that the elongated eye link, which seems to be common to both the Gould and Pooley coupler, when pulled up by the chain, acts as a lever with a sliding fulcrum where it impinges upon the front margin of the chain aperture, and, when so acting, tends to pry the locking dog backward. This long link in the moving

chain is said to be the equivalent of the fixed bearing of the patent. The position cannot be maintained. In location and manner of operation it is a very different contrivance. A construction which would hold such a structure as an equivalent would have to be an exceedingly broad one, so broad, indeed, as to invalidate the patent. With the claim restricted as required by the prior art and its own language, it is not possible, in my judgment, to hold the defendants' coupler as an infringement. It does not have the upper inclined bearing o of the claim.

It follows that the complainant is entitled to a decree for an injunction and an accounting based upon the claim of the Browning patent, but, as the defendants have succeeded upon the Barnes patent, the decree should be without costs.

THE CLANDEBOYE.

STRICKLAND v. LOMM.

(Circuit Court of Appeals, Fourth Circuit. November 7, 1895.)

No. 130.

1. SALVAGE—UNFAIR CONTRACT—COMPENSATION—FRAUD.
   A British steamship, bound for Vera Cruz, arrived disabled at the Little Bahamas. Her mate was sent in the ship's boat to Savannah, whence he communicated with the owners, by whom the tug M., lying at Philadelphia, was chartered to tow the ship to Vera Cruz for $5,000. The master of the tug D., lying at Brunswick, Ga., learning from the newspapers the situation of the vessel, telegraphed to Savannah, and received a reply, stating the facts in regard to the chartering of the M. He thereupon started with his own tug for the Little Bahamas, and, arriving before the M., without disclosing the fact of the latter's employment, made a salvage contract with the steamship's master, under which he towed her to Newport News, and was awarded by the district court of that district $10,000 salvage. *Held* that, owing to the suppression of the facts by the master of the D., the parties to the contract did not deal on equal terms, that the analogies of the doctrine of caveat emptor did not apply, and that the contract must be set aside.

2. SAME.
   It appearing, however, in such case, upon a comparison of the items of expense actually incurred by the steamship with those which would apparently have attended a towage to Vera Cruz by the M., that the steamship was actually benefited by the services of the D. in a sum estimated at $1,000, *held*, that this amount should be awarded to the latter. Goff, Circuit Judge, dissenting, on the ground that the master of the D. was guilty of a fraud, whereby all right to salvage compensation was forfeited.

Appeal from the District Court of the United States for the Eastern District of Virginia.

This was a libel by Leo Lomm, master of the steamtug Dauntless, against the steamship Clandeboye, W. H. Strickland, master, claimant, to recover compensation for salvage service. The circuit court rendered a decree awarding salvage in the sum of $10,000, from which the claimant has appealed.

Wilhelmus Mynderse (of Butler, Stillman & Hubbard), for appellant.

Robert M. Hughes, for appellee.