

U.S. Supreme Court

Mast, Foos & Co. v. Stover Manufacturing Co., 177 U.S. 485 (1900)

Mast, Foos & Co. v. Stover Manufacturing Company

No. 149

Argued February 1-2, 1800

Decided April 23, 1900

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CERTIORARI TO THE CIRCUIT COURT OF

APPEALS FOR THE SEVENTH CIRCUIT

Syllabus

There is no obligation on the part of courts in patent causes to follow the prior adjudications of other courts of coordinate jurisdiction, particularly if new testimony be introduced varying the issue presented to the prior court. Comity is not a rule of law, but one of practice, convenience and expediency. It requires of no court to abdicate its individual judgment, and is applicable only where, in its own mind, there may be a doubt as to the soundness of its views.

Patent No. 433,031, granted to Mast, Foos & Company upon the application of Samuel W. Martin, for an improvement in windmills was anticipated by prior devices, and is invalid. Under the state of the art, it required no invention to adapt to a windmill the combination of an internal toothed spur wheel with an external toothed pinion for the purpose of converting a revolving into a reciprocating motion.

Where a case is carried by appeal to the circuit court of appeals from an order granting a temporary injunction, it is within the power of that court to dismiss the bill if there be nothing in the affidavits tending to throw doubt upon the existence or date of the anticipating devices, and, giving them their proper effect, they establish the invalidity of the patent.

This was a writ of certiorari to review a decree of the circuit court of appeals dismissing a bill in equity brought for

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the infringement of a patent, and appealed to that court from an order of the Circuit Court for the Northern District of Illinois granting a preliminary injunction. The bill was

filed by the petitioner, Mast, Foos & Company, an Ohio corporation, and was founded upon letters patent No. 433,531, granted to the petitioner, upon the application of one Samuel W. Martin, for an improvement in windmills.

In his specification, the patentee states that the

"invention consists essentially of an improved back gear organization involving an external toothed pinion, and an internal toothed spur gear, the pinion being mounted on the wheel shaft and the gear having formed on or connected with it the wrist pin, to which the operating pitman is attached, whereby the speed of the main shaft as applied to the wrist pin and pitman is reduced, and whereby also all pounding and lost motion is prevented as the pitman connection passes over the center and changes from a pushing to a pulling action. This object is accomplished by the fact that a plurality of the pinion teeth are always engaged with the internal spur gear, resulting in giving a perfectly uniform and smooth and noiseless reciprocating motion to the actuating rod, thereby prolonging the life of the machine by saving it from constant jarring and preventing wear and tear."

"* * * *"

"The freedom of the organization from lost motion and sudden jerks as the wrist pin passes over the center renders the operation of the pump smooth and regular. This increases the effectiveness of the pump and prevents undue wear and tear."

The following diagram illustrates the patented combination:

image:a

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Petitioner sought a recovery only upon the first claim:

"1. The combination, with a windmill driving shaft and a pinion thereon, of an internal toothed spur wheel mounted adjacent to the said shaft and meshing with said pinion, a pitman connected with the spur wheel, and an actuating rod connected with the pitman."

Almost immediately upon filing the bill motion was made for a preliminary injunction, which was granted, largely upon the authority of an opinion of the Circuit Court of Appeals for the Eighth Circuit in the case of *Mast, Foos & Co. v. Dempster Mill Manufacturing Co.*, 82 F. 327. An appeal was taken from that order to the circuit court of appeals, which not only reversed the order for the injunction, but dismissed the bill. 89 F. 333.

Whereupon petitioner applied for and was granted a writ of certiorari from this Court.

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MR. JUSTICE BROWN delivered the opinion of the Court.

1. Plaintiff complains of the action of the circuit court of appeals in refusing to follow the opinion of the Circuit Court of Appeals for the Eighth Circuit in a case of this same plaintiff against the *Dempster Mill Manufacturing Company*, 82 F. 327, and in reversing the order of the circuit court, which, upon the ground of comity, followed the judgment of that court with respect to the validity and scope of the patent. Its contention is, practically, that the circuit court of appeals should have been governed by the prior adjudication of that court, and, so far at least, as concerned the interlocutory motion, should have accorded it the same force and dignity as is accorded to judgments of this Court. Premising that these considerations can have no application in this Court, whose duty it is to review the judgments of all inferior courts, and in case of conflict to decide between them, we think the plaintiff overstates somewhat the claims of comity.

Comity is not a rule of law, but one of practice, convenience, and expediency. It is something more than mere courtesy, which implies only deference to the opinion of others, since it has a substantial value in securing uniformity of decision, and discouraging repeated litigation of the same question. But its obligation is not imperative. If it were, the indiscreet action of one court might become a precedent, increasing in weight with each successive adjudication, until the whole country was tied down to an unsound principle. Comity persuades, but it does not command. It declares not how a case shall be decided, but how it may with propriety be decided. It recognizes the fact that the primary duty of every court is to dispose of cases according to the law and the facts -- in a word, to decide them right. In doing so, the judge is bound to determine them according to his own convictions. If he be clear in those convictions, he should follow them. It is only in cases where, in his own mind, there may be a doubt as to the soundness of his views that comity comes in play and suggests a uniformity of ruling to avoid confusion, until a higher court has settled the

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law. It demands of no one that he shall abdicate his individual judgment, but only that deference shall be paid to the judgments of other coordinate tribunals. Clearly it applies only to questions which have been actually decided, and which arose under the same facts.

The obligation to follow the decisions of other courts in patent cases, of course, increases in proportion to the number of courts which have passed upon the question, and the concordance of opinion may have been so general as to become a controlling authority. So, too, if a prior adjudication has followed a final hearing upon pleadings and proofs, especially after a protracted litigation, greater weight should be given to it than if it were made upon a motion for a preliminary injunction. These are substantially the views embodied in a number of well considered cases in the circuit courts and circuit courts of appeals. *Macbeth v. Gillinder*, 54 F. 169; *Electric Mfg. Co. v. Edison Electric Light Co.*, 61 F. 834; *Edison Electric Light Co. v. Beacon Vacuum Pump & Electrical*

Co., 54 F. 678, and cases cited; *Beach v. Hobbs*, 82 F. 916, 92 F. 146; *see also Newall v. Wilson*, 2 De G.ex, M. & G. 282.

Comity, however, has no application to questions not considered by the prior court, or, in patent cases, to alleged anticipating devices which were not laid before that court. As to such, the action of the court is purely original, though the fact that such anticipating devices were not called to the attention of the prior court is likely to open them to suspicion. It is scarcely necessary to say, however, that when the case reaches this Court, we should not reverse the action of the court below if we thought it correct upon the merits, though we were of opinion it had not given sufficient weight to the doctrine of comity.

2. The principal mechanism of an ordinary pumping windmill is directed to the conversion of the rapid rotation of the wind wheel into the perpendicular reciprocating movement of an ordinary pumping shaft. This is accomplished in much the same way that the revolution of a water wheel is made to operate an upright saw -- namely by means of a pitman -- of different

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forms, but always with the object of converting one motion into another. In doing this, the revolving wheel, during one-half of a complete revolution, pulls, and during the other half pushes, upon the pitman. This change from a pulling to a pushing motion is accompanied, as the pitman rod passes over the center of motion, by a bounding, which not only produces a peculiar noise, but a strain upon the mechanism, resulting in frequent breakages. These poundings naturally increase in force as the mechanism becomes worn, and are sometimes heavy enough to strip the cogs from the wheels. Before the Martin patent, the device usually employed was a small external toothed wheel or pinion mounted upon the shaft of the wind wheel, the cogs of which interlaced with the teeth or cogs of a large spur wheel, also externally toothed and revolving at a greatly reduced speed, to which the pitman bar was attached. As both wheels were fitted with teeth on the outer edge of the rim, the consequence was that as each wheel presented its convexity to the other, but one or two teeth of either wheel engaged with the corresponding teeth of its fellow, and fractures of the teeth were frequent. There was also a tendency of the two wheels to draw apart. Martin obviated this by providing the large or spur wheel with teeth fitted on the inner side of the rim, whereby the concavity of the rim was opposed to the convexity of the pinion, and a greater number of teeth on each wheel engaged with the corresponding teeth of the other, and the strain occasioned by the change of motion was greatly reduced. That the invention was a useful and popular one is shown by the fact that it went into immediate use, and over three thousand windmills containing the combination are said to have been manufactured and sold since 1890.

Prior to Martin's patent, windmills of this class had been driven by externally toothed spur wheels, interlacing with externally toothed pinions, and hence were subject to the pounding motion which proved so destructive to the mechanism, and which it was the

object of the Martin patent to obviate. The defense to this case is largely based upon the fact that the prior art had shown a large number of instances of spur wheels, provided with teeth on the inner side of the rim, operated by external

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toothed pinions. They are shown to have existed as early as 1841, in a patent to Perry Davis, No. 2,215, for an improvement in windmills, in which cogs fixed upon the inner periphery of the rim, interlaced with an external toothed pinion, although for a different purpose, of keeping the wheel in the wind. They are shown in several other patents for windmills, and also in a large number of other patents for harvesters, hay tedders, churns, mowing and sewing machines, and other mechanical movements for the conversion of motion. It would appear from the opinion and dissenting opinion in the case against the Dempster Mill Manufacturing Company, 82 F. 327, and from the opinion of the circuit court of appeals in this case, that, while the combination of an external toothed pinion and internal toothed spur wheel was common in other mechanisms, the only windmill patent in that case offered as an anticipation of Martin's was one granted to Edward Williams, September 19, 1876, No. 182,394, which showed a pitman actuated by two eccentric external toothed gear wheels, and that the majority of the court was of opinion that the transfer of the Martin device to windmills for the purpose named in the patent involved invention within the cases of the *Western Electric Co. v. La Rue*, [139 U. S. 601](#); *Crane v. Price*, Webster's Pat.Cas. 393, and *Potts v. Creager*, [155 U. S. 597](#). In the present case, however, not only are there a large number of patents shown containing this combination, but several in which the combination is used for different purposes in the construction of windmills: for instance, in patent No. 254,527, to George H. Andrews; in patent No. 500,340, to S.W. Martin; in patent No. 271,635, to William H. and Clifford A. Holcombe; in patent No. 273,226, to Peter T. Coffield; in patent No. 317,731, to Coleman & Turner, and in patent No. 346,674, to Henry G. Newell, in all of which the system is employed for different purposes in connection with windmills -- generally to keep the wheel in the direction of the wind.

It is admitted that in none of the instances in which an internal toothed wheel is employed in windmills in connection with an external toothed wheel, is the combination used for the purpose specified in the Martin patent of converting the revolving

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motion of the wind wheel shaft into the perpendicular motion of the pump shaft, though what is known as the Perkins mill presents the closest analogy. This mill is shown, by indisputable proof, to have been manufactured at Mishawaka, Indiana, as early as 1885, and to have been sold in considerable numbers. It does not appear to have been a pumping mill, and the upright shaft, instead of having the reciprocating perpendicular movement of a pumping shaft, revolved, and furnished, by means of a bevelled gear at the lower end of the shaft, a revolving motion to a horizontal shaft used for various purposes upon farms. A large internal toothed wheel was placed on the outer ends of

the arms of the spider to which the windusheel arms were bolted, the internal gearing of which wheel engaged with a small gear wheel or pinion placed on an independent shaft at the other end of which shaft a bevelled pinion was placed, interlacing with a corresponding bevel on the upper end of the upright revolving shaft. As there was no conversion or change of motion, the strain was uniform, and there was no interruption of a continuous motion or a pounding to be provided against. This is undoubtedly a different use from that to which the Martin combination was put, but the question is whether there is not such an analogy between the several uses in which this combination was employed as to remove its adoption, in the use employed by Martin, from the domain of invention.

The case, then, reduces itself to this: the Martin combination had previously been used in a large number of mechanical contrivances for the purpose of converting a rotary into a reciprocating motion, as is notably shown in patent No. 421,533, to John Wenzin, for a reciprocating gearing; in patent No. 399,492, to Edward Burke, for a means of converting motion; in patent No. 89,217, to E. R. Hall, for a wood sawyer; in reissue patent No. 2,746, to Christopher Hodgkins, for a sewing machine; in patent to Krum and Brokaw, for harvesters, and in what is known as Filer & Stowell Company's lath bolter, a sketch of which is given in the record. The combination had also been used in windmills, but not for the purpose of converting rotary into reciprocating motion, although in the Perkins mill it was

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used in connection with the shaft of the wind wheel to transfer power from a horizontal to an upright rotating shaft, which at its lower end, transferred its own motion by a bevelled gearing to another horizontal shaft. The combination of two externally toothed wheels had also been used in windmills for the purpose of converting rotary into reciprocating motion.

Having all these various devices before him, and whatever the facts may have been, he is chargeable with a knowledge of all preexisting devices, did it involve an exercise of the inventive faculty to employ this same combination in a windmill for the purpose of converting a rotary into a reciprocating motion? We are of opinion that it did not. The main advantage derived from it arose from the engagement of a large number of teeth in each wheel. This peculiarity, however, inured to the advantage of every machine in which the combination was used for the purpose of converting motion, although the jar produced by the change of motion may not have been sufficient to endanger a small machine. So, too, a reduction of speed is involved wherever the cogs of a small wheel engage with the cogs of a large one. Martin therefore discovered no new function, and he created no new situation except in the limited sense that he first applied an internal gearing to the old Mast-Foos mill, which was practically identical with the Martin patent except in the use of an internal gearing. He invented no new device; he used it for no new purpose; he applied it to no new machine. All he did was to apply it to a new purpose in a machine where it had not before been used *for that purpose*. The result may have added to the efficiency and popularity of the earlier device, although to what

extent is open to very considerable doubt. In our opinion, this transfer does not rise to the dignity of invention. We repeat what we said in *Potts v. Creager*, [155 U. S. 597](#), [155 U. S. 608](#):

"If the new use be so nearly analogous to the former one that the applicability of the device to its new use would occur to a person of ordinary mechanical skill, it is only a case of double use."

The line between invention and mechanical skill is often an exceedingly difficult one to draw, but in view of the state of the art as heretofore shown, we cannot say that the application of this old device to a use which was only new

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in the particular machine to which it was applied was anything more than would have been suggested to an intelligent mechanic who had before him the patents to which we have called attention. While it is entirely true that the fact that this change had not occurred to any mechanic familiar with windmills is evidence of something more than mechanical skill in the person who did discover it, it is probable that no one of these was fully aware of the state of the art and the prior devices, but, as before stated, in determining the question of invention, we must presume the patentee was fully informed of everything which preceded him, whether such were the actual fact or not. There is no doubt the patent laws sometimes fail to do justice to an individual who may, with the light he had before him, have exhibited inventive talent of a high order, and yet be denied a patent by reason of antecedent devices which actually existed, but not to his knowledge, and are only revealed after a careful search in the Patent Office. But the statute (sec. 4886) is inexorable. It denies the patent if the device were known or used by others in this country before his invention. Congress, having created the monopoly, may put such limitations upon it as it pleases.

The case in the Eighth Circuit was evidently decided upon a wholly incomplete showing on the part of the defendant.

3. One of the principal questions pressed upon our attention related to the power of the court of appeals to order the dismissal of the bill before answer filed, or proofs taken, upon appeal from an order granting a temporary injunction.

This question is not necessarily concluded by *Smith v. Vulcan Iron Works*, [165 U. S. 518](#), since in that case the interlocutory injunction was granted after answer and replication filed, a full hearing had upon pleadings and proofs, and an interlocutory decree entered adjudging the validity of the patent, the infringement and injunction, and a reference of the case to a master to take an account of profits and damages. In that case, we held that if the appellate court were of opinion that the plaintiff was not entitled to an injunction because his bill was devoid of equity, such court might, to save the parties from further litigation, proceed to consider and decide the case upon its merits and direct a final decree dismissing the bill.

Does this doctrine apply to a case where a temporary injunction is granted *pendente lite* upon affidavits and immediately upon the filing of a bill? We are of opinion that this must be determined upon the circumstances of the particular case. If the showing made by the plaintiff be incomplete; if the order for the injunction be reversed, because injunction was not the proper remedy, or because under the particular circumstances of the case, it should not have been granted; or if other relief be possible, notwithstanding the injunction be refused, then, clearly, the case should be remanded for a full hearing upon pleadings and proofs. But if the bill be obviously devoid of equity upon its face, and such invalidity be incapable of remedy by amendment, or if the patent manifestly fail to disclose a patentable novelty in the invention, we know of no reason why, to save a protracted litigation, the court may not order the bill to be dismissed. Ordinarily, if the case involve a question of fact, as of anticipation or infringement, we think the parties are entitled to put in their evidence in the manner prescribed by the rules of this Court for taking testimony in equity causes. But if there be nothing in the affidavits tending to throw a doubt upon the existence or date of the anticipating devices and giving them their proper effect, they establish the invalidity of the patent, or if no question be made regarding the identity of the alleged infringing device, and it appear clear that such device is not an infringement, and no suggestion be made of further proofs upon the subject, we think the court should not only overrule the order for the injunction, but dismiss the bill. *Gardt v. Brown*, 113 Ill. 475. This practice was approved by the Chief Justice in a case where the bill disclosed no ground of equitable cognizance, in *Green v. Mills*, 69 F. 852, and by the Circuit Court of Appeals for the Sixth Circuit in *Knoxville v. Africa*, 77 F. 501, where the question involved was one of law and was fully presented to the court. The power was properly exercised in this case.

There was no error in the action of the circuit court of appeals, and its decree is

Affirmed.