

*Privy Council Appeal No. 33 of 1928.*

The Pope Appliance Corporation - - - - - *Appellants*

*v.*

The Spanish River Pulp and Paper Mills, Limited - - - *Respondents*

FROM

THE SUPREME COURT OF CANADA.

---

JUDGMENT OF THE LORDS OF THE JUDICIAL COMMITTEE OF THE  
PRIVY COUNCIL, DELIVERED THE 23RD NOVEMBER, 1928.

---

*Present at the Hearing :*

THE LORD CHANCELLOR.

VISCOUNT DUNEDIN.

VISCOUNT SUMNER.

LORD DARLING.

LORD ATKIN.

[*Delivered by* VISCOUNT DUNEDIN.]

---

The present action is directed against an infringement of a Canadian patent, 192726 of 1919, which is owned by the appellants. There were originally two actions brought, one against the present respondents, the Spanish River Pulp Company, and the other against a company called the Abitibi Company. The cases were tried together, and the evidence in each admitted in the other. The defences were various:—(1) Want of novelty and no subject matter; (2) anticipation; (3) a defence founded on certain Canadian statutes, which will be explained later; and (4) denial of infringement. The trial judge gave judgment in favour of the respondents in respect of (1). He dealt with (2), and used much of what had been proved under that head in support of his judgment on (1), but he did not formally pronounce that there had been anticipation. He found it in these circumstances unnecessary to consider (3) and (4). His judgment was confirmed *simpliciter* by the Supreme Court of Canada, who were unanimous.

The present appeal is brought by special leave. Their Lordships think it necessary to say that it must have been

conveyed to their Lordships who granted the leave, that the case raised an important and general question. Speaking generally, a patent case has to do with the construction and the infringement of one or more particular patents, and it cannot often be said that any general question is thereby raised. In such cases where there have been concurrent judgments of the judge of first instance and the Court of Appeal, their Lordships would deprecate the idea that leave should be given to appeal to the King in Council.

Leave, however, having been given, it is their Lordships' duty to deal with the case, and they must say at once that the case does not fall within the rule known as the rule of concurrent findings. This matter was exhaustively dealt with in the recent case of *Robins v. the National Trust Company* [1927] A.C. 515 ; and on page 518 this is said :—“There is, however, also another way of preventing the application of the rule. If it can be shown that the finding of one of the Courts is so based on an erroneous proposition of law that if that proposition be corrected the finding disappears, then in that case it is no finding at all.” It is quite true that, dealing with the respective functions of judge and jury, there is high authority to the effect that while it is for the judge to construe a specification, it is for the jury to contrast the specification so construed with the facts of the case as found so as to arrive at a conclusion either as to anticipation or as to novelty and subject matter, but there must be no misdirection as to the facts found or as to how they may be handled. In a case tried by a judge alone he fulfils the functions of both judge and jury. If, therefore, it can be shown that in the view he has taken there is something which, if addressed to a jury, would be misdirection, there is no finding of pure fact in the judgment, and the rule, as explained above, does not apply. Their Lordships therefore felt bound to hear counsel on the merits of the case so as to come to a conclusion thereon.

The patent is for a device to be used in connection with the calender rolls of a Fourdrinier paper-making machine. To make the matter intelligible it is necessary to describe the machine. The Fourdrinier paper-making machine is a machine for making paper from wood pulp. The pulp starts from a receptacle where it is in a highly triturated state and full of water, which at that stage represents 99 per cent. of the mixture. It is spread on to a travelling band of the breadth of what is to be the eventual paper sheet. This band is of sieve-like formation, and as the material travels forward it gradually loses its water. A large part of the water being gone, it next goes on to a felt band, and that band goes through press rollers which squeeze still more of the water out, and then through drying rollers which effect the final drying. By this time the material has assumed the form of paper, and the final operation is to put a polished surface on it, which is effected by what are known as calender rollers. All the motion is continuous. Calender rollers are arranged in a

stack, *i.e.*, one above the other, generally six or eight in number. The rollers all closely touch. The lowest roller alone is actuated by power, the other rollers obtaining their motion by reason of the frictional contact between each. The paper goes into the bite below the topmost roller and the second, then back to the bite of the second and third, and so on to the lowest, from whence it is taken to a receiving roller on which it is accumulated. In its progress through the calenders, owing to the severe pressure between the smooth surfaces, it obtains a polished or glazed appearance. Now, once the whole process is in operation, it is evident that what has been called the accumulating roller can be mechanically moved, and so moved will pull the paper through the calender rolls; but at the commencement of the operation, or if from any reason the paper gets broken so that its continuity is destroyed, this is not so. The end of the paper must then in some way be threaded through the successive calender rolls. This threading will be alternately on one side or the other. Thus, if the paper, as one looks at the end of the rolls, goes between the top and the second roll, which latter is turning clockwise, the next thread will have to be done on what is the right side of the rolls from the point of view of the onlooker. The next will have to be on the left, as the second roll will be moving anti-clockwise, and so on. Prior to the present patented device this threading was done by hand, a man being stationed on each side of the rolls. It was easy enough to direct the paper between the first pair of rolls, but after that the direction of the paper had to be reversed, and it became a risky business, as the slightest misplacement of the hand led the fingers to be caught and pinched in the rolls, and it is in evidence that nearly all the older workmen had pinched and mutilated fingers. The object of the patented device is to effect this threading automatically without the necessity of the paper ever being touched by hand. The device consists in the placing of an air jet so directed as to play upon the upper roll just where it emerges from the nip or point of contact between it and the immediately lower roll. This air jet is placed inside and combined with what is called a "doctor," but which might in less technical language be called a scraper, which scrapes against the surface of the upper roll. The tendency of the paper which approaches the nip adhering to the upper roll is after it passes the nip still to adhere to the upper roll. The air blast and "doctor" combined detach it from the upper roll and the air blast forces it on to the lower roll, and from its angle of reflexion has what may be termed a "hugging" operation, *i.e.*, it keeps it adhering to the lower roll, so that it is pushed into the nip which that roll makes with the roll beneath it. Passing through that nip it is again greeted by an air blast and "doctor" which perform a like operation with regard to the roll beneath, and so it is threaded automatically, taking the path of a flattened spiral and at the bottom being led on to the accumulating roller. The operation is not at first

done with the whole breadth of the paper, but what is termed a leading strip is cut at the side. As soon as the leading strip is fully engaged a knife is made to travel diagonally which widens the strip to the full breadth of the paper.

There is no controversy as to this device being completely successful. It has, since its appearance, been universally adopted. Nor is there any doubt that it is adequately described in the patent and adequately claimed. The objections, as already stated, are based on want of novelty and subject matter, that is, want of invention, and also of anticipation. It will be convenient to examine anticipation first, as much of the argument on want of invention is bound up with what was disclosed by the patents which are said to anticipate. The test of anticipation has been dealt with in many cases. They were enumerated in the very recent case of *British Thomson Houston Company v. Metropolitan Vickers Electrical Company*, 45 R.P.C. At page 23 the judgment runs thus:—"In *Otto v. Linford*, 46 L.T., N.S. 35, at page 44, Lord Justice Holker expresses himself thus, 'We have it declared in *Hill v. Evans* as the law, and it seems very reasonable, that the specification which is relied upon as an anticipation of the invention must give you the same knowledge as the specification of the invention itself.' And in *Flour Oxydising Company v. Carr & Company*, 25 R.P.C., at page 457, Mr. Justice Parker (afterwards Lord Parker) says: 'When the question is solely a question of prior publication, it is not, in my opinion, enough, to prove that the apparatus described in an earlier specification could be made to produce this or that result. It must also be shown that the specification contains clear and unmistakeable directions so to use it.' And the remarks of Lord Dunedin in *Armstrong Whitworth & Company v. Hardcastle*, 42 R.P.C. 543, at page 555, are quite in line with these dicta.'" In the same case the test is stated at page 22, and turning the particular instance to the general may be expressed thus—Would a man who was grappling with the problem solved by the patent attacked, and having no knowledge of that patent, if he had had the alleged anticipation in his hand, have said, "That gives me what I wish?"

A number of patents were appealed to by the respondents as anticipations, and their Lordships will deal with them *seriatim*. It may be mentioned in passing that except the patents of Pope himself, all the others were paper anticipations. That is, there is no evidence that the machines described had ever been made under them or proved to work successfully. When particulars of objection were lodged the respondents tabled no fewer than 158 specifications, but nearly all of them at the trial passed into the oblivion which doubtless they deserved. Their Lordships are accordingly only concerned with those that were mentioned in the judgment of the Courts below, or were brought before them in argument. Two very early patents, of date 1858 and 1859, U.S. patents by Beach and Mackay, were mentioned, but not



really insisted on. They had to do with printing presses and, except that they showed that air could be used to direct the course of a sheet of paper, they have nothing at all to do with the present question. The two earliest patents touching the present question were those of Imray, 5th April, 1884, and Smith, U.S., September, 1885. But these patents which, as already stated, were never, so far as is shown, put into use by the machines described being made, at once compel the observation that the problem, to wit, of avoiding pinched fingers in inserting paper through calender rolls was known in 1884, and yet it is proved that till 1919—nearly thirty-five years later—the problem was never practically solved. This fact will be further adverted to hereafter. Imray's device consists in a whole series of jets of air arranged, first of all against the upper roll, and then all round the periphery of the lower roll till the next nip. This is a great complication as compared with the present device. So far from there being any indication of the discovery that one jet directed against the upper roll at a certain angle would by reflexion keep the paper adhering to the next roll up to the next nip, the very device employed indicates the opposite, because he thought it necessary to have the successive jets arranged at succeeding parts of the periphery of the lower roll. Smith's patent of 1885 puts in the plainest terms that the object of the patent is to avoid the jamming of fingers which results from hand manipulation. His solution, according to the patent, consists in having sets of wind cases hugging alternately each side of the periphery. He also uses a "doctor" which strips the paper from the upper roll, and it was then kept close to the lower roll by the wind, steam, or gas, which he directs from the wind cases. As already mentioned, this was, so far as known, never constructed, so that whether it would have acted successfully or not remains doubtful. But in any case it is obvious that the whole idea of the encirclement of the periphery by a frame is just a rather more complicated form of Imray, and no one could guess from it that one jet, when arranged as in the present patent, would have the desired effect. Smith's two succeeding patents are just modifications of the first, but he adds a piercing of the "doctor" so as to have wind all the way. Then comes the patent on which learned counsel for the respondent laid most stress, namely, Schulte's patent. Schulte took out a patent both in England and in Germany. So far as the letterpress is concerned, the one is just a translation of the other, but the drawing in the German patent is the clearer of the two, and therefore counsel preferred to refer to it. Now, the Schulte patent has nothing to do with calender rolls at all; it has to do with the drying rolls, and it proposes an automatic device for dealing with the paper as it issues from the nip between the drying rolls. Drying rolls are only in pairs. This consists of a scraper or "doctor," and the scraper has an air blast through it. The point of similarity on which the respondent founds is that here you have depicted a "doctor" and an air blast through

the "doctor" directed to the same spot on the upper roll, *i.e.*, just after the bite. But the great difference between the Schulte scheme and the patent consists in this. The drying rolls are only in pairs and not in stacks. There was therefore no problem of continuous in and out winding. The threading being merely a first threading was easy enough, what the patent dealt with was the tendency of the paper to stick to the upper roll. Further, in the Schulte device the paper is not impinged on the lower roll but is impinged on a carrying felt band, which straight away leads it off in another direction. The truth is, that the Schulte device only seems an anticipation if it is looked at in the light of the knowledge imparted by the Pope patent. If analysed, the argument is this: The Schulte device makes the paper impinge on the felt band. If the felt band were not there the paper would impinge on the lower roller, and then we know from the Pope patent how it would act. But this is really to interpret the earlier patent in the light of the knowledge given by the latter, which is just what must not be done. Their Lordships cannot therefore take the view that here there was any anticipation. The argument may be also put thus: Imray and Smith show that if you can have the paper made to cling round the periphery of the lower roll it will enter the next nip. Schulte shows that an arrangement of a "doctor" with air directed to the upper roll just after the nip will deflect the paper on to the felt. Remove the felt and it will be directed as Schulte shows on to the roller. And then Imray and Smith show that once clinging to the roller it will enter the next nip. This, however, is to make a mosaic. That is illegitimate. In the case of *British Ore Concentration Syndicate Limited v. Minerals Separation Limited*, 26 R.P.C., at page 147, Lord Moulton speaks thus:—"It cannot be too carefully kept in mind in Patent Law that in order to render a document a prior publication of an invention it must be shown that it publishes to the world the whole invention, *i.e.*, all that is material to instruct the public how to put the invention in practice. It is not enough that there should be suggestions which, taken with suggestions derived from other and independent documents, may be shown to foreshadow the invention or important steps in it. Since the date of the vigorous protest of Lord Justice James against such a mosaic of prior publications, this has been a universally accepted and most salutary principle. It applies with exceptional force in cases where the alleged prior publications are the specifications of unsuccessful inventions which have accordingly never passed into public general knowledge, but have rightly been forgotten." The three patents granted to Pope himself may be very shortly dismissed. The first has to do with drying rolls and not with calender rolls. The paper is carried by an endless apron, and there is the device of a scraper or "doctor," together with a current of air to blow the paper on to the apron. It is, of course, clear that the course of the paper is really directed by the endless apron which passes below the

rollers. The second has to do with the removing of the paper from the pressure roll to the felt band. It does this by an air blast tangentially applied to the roller. Comment is unnecessary. The third has to do with the same problem, and although the words used "Applicable to all stages of the machine when removal is desired" would include the original entry to the calender rolls, it evidently does not deal with the problem of the calender rolls themselves, and the method employed is by opposing currents of air. This is far from the present patent. The result is that, in their Lordships' view, no anticipation has been proved.

At the same time, their Lordships fully recognise that the judgments below were not based on anticipation but on want of novelty or want of invention. The argument is this—"Doctors" or scrapers were admittedly old, guiding paper by means of an air blast had also been disclosed, and the use of an air blast to help the "doctor" to detach the paper from a roll, which might be the upper roll in a calender stack, was also disclosed. It required, therefore, no real inventive ingenuity to so dispose the "doctor" and the air blast as to obtain the desired result. The first and obvious observation is that if it required no invention it was very odd that people were allowed to go on pinching their fingers for thirty-five years. Counsel felt this difficulty, and sought to explain it by the fact that the increased speed of the machines was modern. In truth, it did not need several pages of evidence and minutes of address to bring home the proposition that an operator would be more likely to pinch his fingers if the machine went fast than if it went slow. But the pinching happened with the old slow machines. Indeed, it was proved that pinched and maimed fingers were looked on as the symbol of a veteran workman. It must be remarked that in almost every patent for mechanical combination the elements are old. It must also be considered that there may be invention in what, after all, is only simplification. But here there is really more than that. The plan for separating the paper from the upper roll by means of a "doctor" and an air blast had been shown, but it had not been shown that by a particular arrangement of these two the paper would not only be separated from the upper roll, but induced to cling to the lower roll round about its adjacent periphery, so as to enter of itself into the next nip. After all, what is invention? It is finding out something which has not been found out by other people. This Pope in the present patent did. He found out that the paper would so stick, and the practical problem was solved. The learned judges below say that all this might have been done by anyone who experimented with "doctors" and air blasts already known. That is that someone else might have hit upon the invention. There are many instances in various branches of science of independent investigators making the same discovery. That does not prevent the one who

first applies and gets a patent from having a good patent, for a patent represents a *quid pro quo*. The *quid* to the patentee is the monopoly; the *quo* is that he presents to the public the knowledge which they have not got. That knowledge the other inventor has kept sealed in his own breast, and he therefore cannot complain that his rival got the patent. And if this is the case when a person can show that he actually made the discovery, surely that is a much stronger case than the present, when the objector does not say that he did discover, but only that if he had experimented he would have discovered. The real invention often may be and is just the last element of the combination. In his address last September to the British Association, Sir William Bragg described how the location of the German guns was discovered. The problem was to find out the exact moment at which the wind puff caused by the explosion arrived at the British lines. It was known that a wire electrically heated would if even slightly cooled show a changed resistance. Would a gun puff cool it? To an officer listening to the whistling noise which the gun puffs made in the fissures of his tent it occurred that it might. It was tried and it did, on which Sir William says, "It may be the last little adjustment that turns the scale, and the last step the one that counts." This had nothing to do with patents for there was no manufacture, but analogously it accurately describes what may constitute invention. It may be the last step; and the last step here, the step that had not been tried by Imray and all the others, was taken by Pope in the present patent. Having these views, it is clear that, in their Lordships' opinion, the learned trial judge misdirected himself. He arrived at the opinion that the invention was old by making a mosaic of other and prior descriptions. He also, in their Lordships' opinion, took quite an erroneous view as to an analogous user. Analogous user is what its name denotes, something which has to do with user. He has applied the doctrine not to things used but to things described. But as to things only described, there must either be anticipation or not. And anticipation must be judged by the canons already mentioned. Does the man attacking the problem find what he wants as a solution in the prior so-called anticipations? The distinction between anticipation by prior description and by prior user is well understood. The doctrine of analogous user only applies to cases as to things in actual use. The leading case is the Fishplate case, *Harwood v. The Great Northern Railway Company*, 11 H.L.C., 654. That dealt with the question of whether there could be a good patent for a fishplate on a railway where the same fishplate had been used on a bridge. Blackburn (J.), one of the consulted judges, who although he differed on the ground that he thought there was a real difference between the two fishes, yet concurred with all the others as to the law, states the problem thus at page 667: "In every case arises a question of fact, whether the contrivance before in use was so similar to that



which the patentee claims that there is no invention in the difference." The contrivance, be it observed, must be a contrivance in use, not one merely described. Then there was the case of *Morgan & Co. v. Windover & Co.*, the C-spring case, 7 R.P.C., 131. Throughout the judgment analogous user is only applied to a known thing. In the words of Lord Halsbury, at page 134, "The application of well-known things to an analogous use is not the proper subject for a patent."

Upon the whole matter their Lordships find that the judgments below cannot be supported. To do so would be to deprive the patentee of the fruits of what has been found a very practical and very useful invention. It has the outstanding merits of simplicity and success.

There were, however, two other defences which were pleaded, though in the view taken by the Courts below there was no need to deal with them. The first is the defence based on Canadian legislation. The date of the patent being 1919, the legislation current at that time was the Revised Statutes of 1906. Section 7 of chapter 69, which is the Patent Act, is as follows: "Any person who has invented any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement in any art, machine, manufacture or composition of matter, which was not known or used by any other person before his invention thereof, and which has not been in public use or on sale with the consent or allowance of the inventor thereof, for more than one year previously to his application for patent therefor in Canada, may, on a petition to that effect, presented to the Commissioner, and on compliance with the other requirements of this Act, obtain a patent granting to such person an exclusive property in such invention." Now, as to the facts, no use was proved except one, and that was by Pope himself at paper works in Maine, U.S. In fact it seems that it was there he practically applied the invention which he subsequently patented for the first time, and it was a complete success, where other endeavours had failed. Now, Section 7 has two parts. The first part "not known or used by any other person before his invention thereof" obviously could not apply, for if it was Pope who showed the people at the works how to do it, they could not do it before his invention. But then comes the second part, and the point is whether the public use is a use in Canada previous to the application for a patent, or whether it is public use anywhere previous to the application for a patent in Canada. It is worthy of remark that in the statute of 1872, which was replaced by the Revised Statutes of 1886, the comma comes after "application" and not after "Canada," and the words "for patent therefor" are omitted. Section 8 of Ch. 4 of the Revised Statutes of 1886 is as follows: "The said Revised Statutes shall not be held to operate as new laws, but shall be construed and have effect as a consolidation and as declaratory of the law as contained in the

said Act and parts of Acts so repealed, and for which the said Revised Statutes are substituted.

“(2) But if upon any point the provisions of the said Revised Statutes are not in effect the same as those of the Repealed Acts and parts of Acts for which they are substituted, then, as respects all transactions, matters and things subsequent to the time when the said Revised Statutes take effect, the provisions contained in them shall prevail but, as respects all transactions, matters and things anterior to the said time, the provisions of the said Repealed Acts and parts of Acts shall prevail.”

It is antecedently very improbable that it was meant really to alter the law by the displacement of a comma. The consideration, however, which determines the matter in their Lordships' opinion is that, considering that the whole section is dealing with an application for a Canadian patent, the addition of the words “in Canada,” if meant to qualify the word “application,” is quite pleonastic. The question has been before the Canadian Courts and opposing decisions have been given.

In *Smith v. Goldie* (9 Sup. Ct. Can. 46) the point was decided as their Lordships indicate, but in *Barnett-McQueen Co. v. Canadian Stewart Co.* (13, Exch. Court R. at p. 230) the opposite result was reached. The argument, convincing to their Lordships, as to pleonastic use of the words in Canada was sought to be met by pointing out that in other sections the words “in Canada” were and are referable to the application for a patent. This seems to their Lordships to be duly met by pointing out that in the sections quoted they were called for by the necessities of antithesis so that the argument from pleonasm did not truly arise. There is therefore no defence available under the statute.

There remains only the question of infringement. With this their Lordships have no difficulty. Infringement is denied because in the apparatus used by the respondents the air jet inside the “doctor” was not directed straight against the upper roll as in the patent, but was directed against the blade of the “doctor” itself, but having impinged upon the blade of the “doctor” it was eventually diverted to exactly the same place on the upper roll. It cannot be supposed that the patent being good can be escaped by such an obvious mechanical equivalent. Their Lordships will therefore humbly advise His Majesty to allow the appeal, to declare that the patent is good, and has been infringed, and to remit to the Canadian Court to grant an injunction and to deal with the question of damages and other relative claims. The appellants must have their costs before this Board and in the Courts below.

1870

1870

1870

In the Privy Council.

---

THE POPE APPLIANCE CORPORATION

2.

THE SPANISH RIVER PULP AND PAPER MILLS,  
LIMITED.

---

DELIVERED BY VISCOUNT DUNEDIN.

Printed by  
Harrison & Sons, Ltd., St. Martin's Lane, W.C.2.  
1928.