HIS MAJESTY THE KING (PLAINTIFF) .. APPELLANT;

1951 *Apr. 9, 10,

AND

(DEFENDANT)

RESPONDENT.

ON APPEAL FROM THE EXCHEQUER COURT OF CANADA.

- Patents—Eye-glasses—Two-point Numount mounting—Action for impeachment—Anticipation—Lack of invention—Ambiguity—Commercial success.
- Pursuant to s. 60 of the Patent Act (S. of C. 1935, c. 32), the Crown, on the information of the Attorney General of Canada, sought to impeach respondent's patent 381,380, covering an invention relating to a mounting means for temples of rimless eye-glasses (spectacles), on the ground that it was invalid for lack of novelty and lack of subject matter. The action was dismissed in the Exchequer Court of Canada.
- Held (Locke J. dissenting), that the judgment appealed from be affirmed and the appeal dismissed, since there was no anticipation and since the patent in suit contributed substantially to the solution of the problem of breakage and did involve the taking of an inventive step which the respondent was the first to take.

^{*}PRESENT: Rinfret C.J. and Kerwin, Locke, Cartwright and Fauteux JJ.

^{(1) 88} L. Jo. ch. 105. (3) [1923] P. 191.

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- Per Rinfret C.J. and Kerwin, Cartwright and Fauteux JJ.: In an invention which consists in a combination as in the present case, it matters not whether the elements thereof are old and were already known in the art as separate entities, the only point is whether the actual combination is new. The invention lies in the particular combination, provided it is not a mere aggregation or a juxtaposition of known contrivances.
- Whether there is invention in a new thing is a question of fact for the judgment of whatever tribunal has the duty of deciding.
- Ex post facto analysis of an invention is unfair to the inventors and is not countenanced by the patent law.
- Baldwin International Radio Co. of Canada Ltd. v. Western Electric Co. [1934] S.C.R. 94; Samuel Parkes & Co. v. Cocker Bros. 46 R.P.C. 241; British Westinghouse Electric and Manufacturing Co. Ltd. v. Braulik 27 R.P.C. 209 and Non-Drip Measure Co. Ltd. v. Stranger's Ltd. 60 R.P.C. 135 referred to.
- Per Locke J. (dissenting): Since the essence of the alleged invention as disclosed by the evidence lay not in attaching the temple supporting arm to the lens edge engaging portion or shoe of the strap, but rather to the nose-engaging means at the point where the strap was soldered to it, for the very purpose described in the specification of transferring any pressure from the temples to the nose-engaging means and the bridge; and since, having regard to the common knowledge in the art at the time of the alleged invention, there was nothing new in such a construction or in any of the parts or in the idea, the relief claimed should be granted.
- The slight change made from the prior disclosure by Savoie in securing the temple-bow holder to the strap by solder rather than to the ear of the strap by a screw, did not involve the exercise of the inventive faculties; the commercial success of the mounting, although extensive, cannot be regarded as in any sense conclusive on the question in view of the evidence of the lack of invention.
- Natural Colour Kinematograph v. Bioschemes Ltd. 32 R.P.C. 256; Pugh
 v. Riley Cycle Co. 31 R.P.C. 266; Pope Appliance Corp. v. Spanish
 River Pulp and Paper Mills [1929] A.C. 269; Crosley Radio Corp. v.
 Canadian General Electric Co. [1936] S.C.R. 551; Vanity Fair Silk
 Mills v. Commissioner of Patents [1939] S.C.R. 245 and Longbottom
 v. Shaw 8 R.P.C. 333 referred to.

APPEAL from the judgment of the Exchequer Court of Canada, Thorson P. (1), dismissing the Crown's action for a declaration of invalidity of the respondent's patent 381,380.

E. G. Gowling K.C. and G. F. Henderson for the appellant. The patent in suit is attacked on the grounds of anticipation, lack of subject matter and ambiguity.

In construing the prior document to determine if it constitutes an anticipation, the Court has regard to the effect of the disclosure upon one skilled in the art namely one

who is deemed to be familiar with the common knowledge in the art: King Brown & Co. v. The Anglo American THE KING Brush Corp. (1) and Gillette Safety Razor Co. v. Anglo UHLEMANN American Trading Co. (2). The case of Rice v. Christiani Optical Co. (3) is also relied upon.

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The prior publication must disclose invention claimed to the extent that the skilled technician faced with the problem, would find the answer obvious from examining the document: Electric and Musical Industries Ltd. (4). A drawing alone can constitute an anticipatory document.

The claim here is invalid since there is something old within it and since it is not a combination patent within the case of Baldwin International Radio v. Western Electric (5). The cases of Smith Incubator Co. v. Seiling (6) and The King v. Smith Incubator (7) are also relied upon.

It is not essential that the same problem be envisaged in the anticipatory document. It is critical that the construction has been disclosed to and is open to the public to use: John Summers & Sons Ltd. v. The Cold Metal Process Co. (8).

Applying the foregoing principles, it is submitted that the claims of the patent in suit are anticipated by Stevens U.S. patent 953,304, Savoie U.S. patent 988,666 and Nerney U.S. patents 1,984,541 and 1,987,701.

Even if the prior documents should not be found to constitute an anticipation or a disclosure of the invention, the degree of advance in the art made by the patentee over the disclosures cannot constitute invention. Any difference is in the matter of non-essentials structurally and functionally. Every advance over the prior disclosures cannot constitute invention or the grant of the patent monopoly would arrest rather than encourage development in the arts and science: British Ore Concentration Syndicate Ltd. v. Minerals Separation Ltd. (9). The cases of Vanity Fair Silk Mills v. Commissioner of Patents (10) and Crosley Radio Corp. v. Canadian General Electric Co. Ltd. (11) are relied on as cases dealing with advances which did not

- (1) 9 R.P.C. 313.
- (2) 30 R.P.C. 465.
- (3) [1931] A.C. 770.
- (4) 56 R.P.C. 23.
- (5) [1934] S.C.R. 94.

- (6) [1937] S.C.R. 251.
- (7) [1937] S.C.R. 238.
- (8) 65 R.P.C. 75.
- (9) 27 R.P.C. 33.
- (10) [1939] S.C.R. 245.

(11) [1936] S.C.R. 551.

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constitute patentable advance over the prior publication. THE KING All the advantages flowing from the alleged invention UHLEMANN resulted from features which were old in the art. All that OPTICAL Co. the inventor did was to make a non-essential contribution. The principle enunciated in Clyde Nail Co. v. Rusesll (1) is applicable. Reliance is also placed on the case of Morgan & Co. v. Windover & Co. (2).

> To the extent that there is a diversity between the claims of the patent in suit and the prior art, it is merely one of form which does not constitute an advance in the art to warrant the grant of a valid patent: Mauck v. Dominion Chain Co. Ltd. (3). Similarly if the change over the prior art is purely a matter of design, no invention has resulted: Safveans Aktie Bodag v. Ford Motor Co. (4) and Wood v. Raphael (5).

> It is therefore submitted that the claims of the patent in suit fail to disclose a patentable advance over the Stevens, Savoie and Nerney patents.

> It is further submitted that the patent in suit did not lead to an unexpected result or the solution of a long existent problem. There was no evidence of the existence of a problem. Rather than the satisfaction of a long felt want, the patent in suit merely constituted a style change accepted by the public for reasons of commerce rather than invention.

> The trial judge placed too much weight on the commercial success of the mounting. The success of the mounting was attributable to causes other than the invention. The case of Niagara Wire Weaving Co. Ltd. v. Johnson Wire Works Ltd. (6) is relied on. The case of Western Electric Co. v. Baldwin International Radio (7) at page 595 is relied on to show the danger of looking at the evidence of witnesses on the article in the market rather than looking at the specifications and claims.

> The term "lens edge engaging portion of the strap" is ambiguous. It is not defined in the patent. There is no evidence that the phrase has any technical meaning to any one skilled in the art. It would appear to have been a phrase chosen by the inventor and should, therefore, have

(1) 33 R.P.C. 291.

(4) 44 R.P.C. 49.

(2) 7 R.P.C. 131.

- (5) 13 R.P.C. 730.
- (3) [1933]Ex. C.R. 120.
- (6) [1940] S.C.R. 700.

been defined with precision by him, if it constitutes the essence of the invention as defined by the trial judge. THE KING Uncertainty relating to the meaning of the phrase is par- UHLEMANN ticularly objectionable since it relates to the very essence OPTICAL Co. of the invention as found by the trial judge. Moreover, it is an obscurity that could easily have been avoided by a more precise description in the specification. circumstances, the principle of the decision in Unifloc Reagents Ld. v. Newstead Colliery Ld. (1) is applicable. There is an obligation upon the inventor to provide the public with the subject matter of his advance in the art without avoidable obscurity: Natural Colour Kinematograph Co. Ld. v. Bioschemes Ld. (2).

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Christopher Robinson K.C. and Rusesll S. Smart for the respondent. Considered by the tests in Canadian General Electric v. Fada (3) and Pope Appliance Corp. v. Spanish River Pulp and Paper Mills (4), none of the prior patents or publications is an anticipation of the invention covered by the patent in suit.

As to the propriety of looking at prior patents, the cases of Non-Drip Measure Co. v. Strangers (5) and Fiberglas Canada Ltd. v. Spun Rock Woods (6) are cited.

Having regard to the findings of fact by the trial judge, which are fully supported by the evidence, the respondent submits that this case is similar to the cases of Non-Drip Measure Co. v. Strangers (supra) and Samuel Parkes & Co. 1. Cocker Bros. (7), and that the mounting of the patent in suit was no mere workshop improvement which was obvious to any workman faced with the problems of the old rimless mountings, but was, on the contrary, an invention.

There was a problem and the existence of that problem plus the commercial success is a strong evidence of an invention: Longbottom v. Shaw (8), Howaldt v. Condrup Ltd. (9), Albert Wood and Amcolite Ltd. v. Gowshall Ltd. (10) and John Wright and Eagle Range Ltd. v. General Gas Appliances Ltd. (11).

| (1) 60 R.P.C. 165. | (6) 64 R.P.C. 54. |
|--------------------------|--------------------|
| (2) 32 R.P.C. 256. | (7) 46 R.P.C. 241. |
| (3) (1930) 47 R.P.C. 69. | (8) 8 R.P.C. 333. |
| (4) 46 R.P.C. 23. | (9) 54 R.P.C. 169. |
| (5) 60 R.P.C. 135. | (10) 54 R.P.C. 37. |
| /11 | \ 40 D D C 100 |

(11) 46 R.P.C. 169.

There is no ambiguity in the expression "lens edge $T_{HE}K_{ING}$ engaging portion". It means the base edge of the U.

UHLEMANN It is a combination invention and not a new invention in OPTICAL Co. the sense that there are no new parts.

E. G. Gowling K.C. replied.

The judgment of the Chief Justice and of Kerwin, Cartwright and Fauteux JJ. was delivered by

THE CHIEF JUSTICE—This action was instituted under the provisions of Section 60 of *The Patent Act*, S. of C. 1935, c. 32. The information of the Attorney-General of Canada sought to impeach patents 381,380 and 392,449 as well as industrial design registration 58/12138; but the respondent withdrew its defence in respect of patent 392,449 and the industrial design, so that the trial of this appeal relates only to the validity of patent 381,380.

The disclosure of the nature of the invention of the respondent and of the best mode of realizing the advantages thereof is expressed as follows in the specification:

My invention relates to eyeglasses, and more specifically it relates to a mounting means for the temple.

One of the objects of my invention is to provide an improved temple mounting which prevents strain from being transmitted to the lenses.

A further object of my invention is to provide a temple mounting that requires a minimum amount of labor in attaching the mounting.

A further object of my invention is to provide an improved temple mounting which will be inconspicuous in appearance.

A further object of my invention is to provide an improved temple mounting which will result in a saving of material.

The attacks made on the patent are its lack of novelty (sometimes called anticipation) and lack of invention (usually referred to as lack of subject matter), and the conclusions of the information were that the letters patent be declared invalid or void and that the same be cancelled and set aside.

The specification is dated the 28th day of February, 1938, and the patent was granted to William R. Uhlemann on the 16th day of May, 1939. It was subsequently assigned to the respondent.

The learned President of the Exchequer Court (1) dismissed, with costs, the appellant's action for a declaration of invalidity.

The learned President arrived at the conclusion, on the evidence submitted by the plaintiff, that it was shown THE KING that at an early date efforts were made to improve rimless v. spectacles. He said:

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The problem was to overcome their defects, namely, the high rate Rinfret C.J. of breakage of the lenses and their tendency to loosening, and at the same time retain their advantageous features, namely, their lightness, wide range of vision and comparative inconspicuousness. The problem was primarily that of breakage and next that of loosening. It was also desired to reduce the inconspicuousness of rimless spectacles still further. There was certainly a clear recognition of the problem to be solved in the specifications of several of the patents such as, for example, the Stayman, Ferris and Nerney patents.

He adds:

Without discussing the patents in detail, I think that it may fairly be said that up to the time when the defendant's 2-point Numont mounting came on the market no satisfactory solution of the problem had been found.

When the defendant's mounting came into production in 1938 there was an immediate and wide demand for it and it almost swept other types of rimless spectacles mountings off the market. This was admitted by Mr. Elliott for the plaintiff who said that when it first came it was about 90 per cent of the optician's business. Mr. Goodwin for the defendant also stated that it was the greatest revolution in the optical frame business.

The judgment appealed from finds that:

The evidence establishes that there was no practical contribution to the solution of the problem prior to the 2-point Numont mounting. The inventions covered by the patents (filed as Exhibits) were in the main paper proposals or, where that was not so, had no commercial success.

The judgment also states that:

The evidence establishes that the 2-point Numont mounting went a considerable distance towards solving the problem to which the inventor had addressed himself. There was really no substantial dispute of this fact;

and that

the evidence is conclusive that the defendant's mounting made a substantial contribution to the solution of the problem of breakage.

The learned President then addresses himself to the question whether the change from the prior art made by Uhlemann was a patentable invention, and after having stated that "there was no novelty in any of the parts, all of which were well known in the art prior to 1930," he adds:

So that whatever invention there may be in the defendant's mounting lies, not in any part or parts, but in the manner of attachment of some of them . . . The inventive idea lay in having a mounting in which there

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is a single point connection with the lens and the temple arms are connected at a specific place near the nasal edge of the lens, namely, to the lens edge engaging portion of the strap. It was the essence of the invention to have the temple arms so connected.

Perhaps it may be said at once that counsel for the appellant suggested that the idea so described was not incorporated in the claims at the end of the specification, but the answer of the judgment to that objection was that:

It is to the securing of the temple arm at the lens edge engaging portion of the strap that all the claims are directed . . . The thread which runs through all the claims is the connection of the temple arm to the lens edge engaging portion of the strap at the nasal edge of the lens. In my opinion, counsel for the defendant has correctly set out the essence of the alleged invention. I do not think that any person skilled in the art who read the specification would have had any doubt about it or how to carry it into effect.

It may be said that, at bar, Mr. Robinson, counsel for the respondent, accepted this interpretation of the claims.

With this interpretation of the specification and of the claims it is clearly shown that Uhlemann's invention consists in a combination and it matters not, therefore, whether, as contended by counsel for the appellant, the elements thereof are old and were already known in the art as separate entities. As was pointed out by this Court in Baldwin International Radio Co. of Canada Ltd. v. Western Electric Co. Inc. et al (1), "On this branch of the case, viz.: anticipation, the only point is whether the actual combination is new"... "It is idle to repeat that anticipation is not established by what may be qualified the 'imaginary assemblage' of separate elements gathered from glosses selected here and there in several and distinct anterior specifications." The invention lies in the particular combination, provided it is not a mere aggregation or a juxtaposition of known contrivances.

We have here a group of co-acting parts achieving a combined result or, as was said in *British United Shoe Machinery Company Ltd.* v. A. Fussell & Sons Ltd. (2), "a collocation of intercommunicating parts so as to arrive at (what may be called) a simple and not a complex result." As was found in the *Baldwin* case supra, that satisfies the definition of a combination for the purposes of the patent law.

After having examined the several prior patents claimed by the appellant to be anticipatory to the patent in issue, THE KING the judgment found that no anticipation had been estab- UHLEMANN lished because none of these anterior patents, for purposes OPTICAL Co. of practical utility, were equal to that given by the patent Rinfret C.J. in suit; that nothing essential to the invention and necessary or material for its practical working and real utility could be found substantially in the prior publications, nor were there in them clear directions to use it in order to produce the particular result brought about by Uhlemann's discovery. In that connection, Lord Dunedin's reference to a "mosaic" in the judgment of the Judicial Committee of the Privy Council in Pope Appliance Corporation v. Spanish River Pulp and Paper Mills, Ltd. (1) was referred to.

We agree that the judgment appealed from cannot be disturbed on that ground.

That leaves only the issue of subject matter; and the ground upon which it is suggested that the invention in the present case was not patentable is that the advantages "would be obvious as a workshop improvement to a person skilled in the art and did not involve any inventive step."

On that point, the judgment is to the effect that the result accomplished by Uhlemann did involve the taking of an inventive step and that he was the first to take it. That was the finding of the learned trial judge, and with that conclusion we agree. Whether there is invention in a new thing is a question of fact "for the judgment of whatever tribunal has the duty of deciding." (Lord Moulton's dictum, quoted by Terrell on Patents, 7th edition, page 71). The learned author adds:-

It would seem to be necessary to fix upon some definition of invention, but this has never been done, and in my opinion no definition of invention can be found which is of the slightest assistance to anyone in a case of difficulty . . . When you approach the dividing line it is so impossible to get a test that it becomes, more or less, a matter of personal opinion. Some of the elements of a combination are altered so as to improve, but not essentially change its working. Is that a new invention? If it is only the substitution of mechanical elements which are notoriously the equivalents of the old elements the law is clear, but in any other case it is treated as being a question of fact for the judgment of whatever tribunal has the duty of deciding.

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Rinfret C.J.

As Tomlin J. (as he then was) said in Samuel Parkes & THE KING Co. v. Cocker Bros. (1):

Nobody, however, has told me, and I do not suppose anybody ever OPTICAL Co. will tell me, what is the precise characteristic or quality the presence of which distinguishes invention from a workshop improvement. Day is day, and night is night, but who shall tell where day ends or night begins? . . . The truth is that, when once it had been found, as I find here, that the problem had waited solution for many years, and that the device is in fact novel and superior to what had gone before, and has been widely used, and used in preference to alternative devices, it is, I think, practically impossible to say that there is not present that scintilla of invention necessary to support the Patent.

> In British Westinghouse Electric and Manufacturing Co. Ltd. v. Braulik (2), Fletcher Moulton L.J. remarked that "ex post facto analysis of invention is unfair to the inventors, and in my opinion it is not countenanced by English Patent Law."

> This was approved by the House of Lords in Non-Drip Measure Company, Limited v. Stranger's Limited et al (3), where Lord Russell of Killowen remarked:

> Nothing is easier than to say, after the event, that the thing was obvious and involved no invention;

and Lord Macmillan said (at p. 143):

It might be said ex post facto of many useful and meritorious inventions that they are obvious. So they are, after they have been invented.

See, also, the remarks of Fletcher Moulton L.J. in Hickton's Patent Syndicate v. Patents and Machine Improvements Company Ld. (4):

To say that the conception may be meritorious and may involve invention and may be new and original, and simply because when you have once got the idea it is easy to carry it out, that that deprives it of the title of being a new invention according to our patent law, is, I think, an extremely dangerous principle and justified neither by reason, nor authority.

We have it, therefore, in the present case that there was a problem to be solved and a want to be supplied. The 2-point Numont mounting made a substantial contribution to the solution of the problem. The commercial success of the invention, if not conclusive, is, at least in this case, an element to establish the clear recognition that the patent in suit met the problem and the want; that the advantages therein involved an inventive step, which

- (3) (1943) 60 R.P.C. 135 at 142. (1) (1929) 46 R.P.C. 241 at 248.
- (4) (1909) 26 R.P.C. 339 at 347. (2) (1910) 27 R.P.C. 209 at 230.

Uhlemann was first to take, and that the appellant's action for a declaration of invalidity was rightly dismissed by the The King judgment a quo.

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The appeal should therefore be dismissed, with costs.

Locke J. (dissenting):—This is an appeal from a judgment delivered in the Exchequer Court (1) dismissing a claim advanced in His Majesty's name for a declaration that Canadian Patent No. 381,380 issued to one Wm. R. Uhlemann on May 16, 1939, and assigned by the latter to the respondent, be cancelled and set aside. The information filed claimed the same relief in respect of Canadian Patent No. 392,499 and an industrial design registration, but as to these the defence filed was withdrawn and the issues thus restricted to the letters patent first above mentioned.

Of the grounds for the relief claimed disclosed in the amended Particulars of Objection, those principally relied upon were: firstly, that there was no invention, having regard to the common knowledge in the art, and secondly, that the alleged inventions were not new and were known and used by others before the date when the said inventions were alleged to have been made. The patent in question was issued in Canada on the application of Uhlemann on May 16, 1939. In advance of this, however, he had applied on April 22, 1937, for a United States patent and, pursuant to such application, letters patent had been issued relating to the same matter under date of February 22, 1938. In the present proceedings the date of the filing of the application for the American patent is claimed as the date of the invention.

The invention claimed relates to rimless eye-glasses and by the specification it is stated that specifically it relates to a mounting means for the temple. The objects of the invention are stated to be:-

- (a) to provide an improved temple mounting which prevents strain from being transmitted to the lenses;
- (b) to provide a temple mounting that requires a minimum amount of labour in attaching the mounting;

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- (c) to provide an improved temple mounting which will be inconspicuous in appearance; and
- (d) to provide an improved temple mounting which will result in a saving of material.

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and this is followed by a further statement that other objects and advantages of the invention will be apparent from the description and the claims.

The construction in question, to adopt the language of the specification, comprises:

a pair of channel-like straps having a lens-edge engaging portion with ears extending therefrom for embracing the edges and adjacent surface portions of the lenses, a bridge secured to these straps, a pair of temple-supporting wires having an anchorage portion thereof also secured to the straps, in general extending along, adjacent, and in the rear of the edges of the lenses, and a pair of temples pivotally connected with the ends of the wires, the axes of said hinge connections being substantially vertical, whereby the temples will fold compactly.

This description does not include any reference to nose guards, an essential part of any such construction, but later in the specification it is said that "the usual nose guards are secured to the straps in any suitable manner."

The straps so called are in general small "U" shaped pieces of metal designed to receive the edge of the lens. the ears or sides engaging the surface of the lens and the inner bottom portion or shoe bearing against the edge. The lens is secured in this position either by means of a screw passing through both ears of the strap or by cement, or by so constructing the inner surface of the ears as to cause them to engage slots cut into the side or the edge of the lens for that purpose. Samples of rimless spectacles said to have been made in accordance with the specification of the patent were filed at the trial. It is not apparent from the exhibits filed as to the exact manner in which the mountings are put together. In the exhibit marked 31 (but which, it would appear from the evidence, was exhibit 30) the inner extremity of the so-called temple-supporting wires, the metal portion which carries the nose guards, the outer side of one ear of the strap and the bridge appear to be soldered together. In this exhibit the metal portion carrying the nose guards does not appear to be an integral part of the bridge, but in Exhibit H, produced by Uhlemann and also said to be made in accordance with the specification, the bridge and the metal portion supporting the nose

guards appear to be one unit, to which the rear of the shoe of the strap and the temple-supporting wires are soldered. It is, in my opinion, unfortunate, in view of v. the nature of the issues, that the witness Uhlemann did OPTICAL Co. not disclose the manner in which exhibits 30 and 31 were assembled, these apparently being the mountings which are commonly in use. The witness Elliott, an optician and optometrist of long experience, called on behalf of the plaintiff, said in reference to Exhibit 30 (incorrectly referred to as Exhibit 31 in the evidence) that it looked as if the temple arm was soldered to the base of the "U" from which the straps project and to the nose guard arm and the base of the bridge. In view of the great importance said to attach to the fact that the temple arm was attached to the "lens engaging portion of the strap", it would have been helpful if Uhlemann, who presumably knew, had dealt with the matter.

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Further statements in the specification illustrated by reference to the drawings filed with it were to the effect that the temple-supporting wires were secured to the "lensedge engaging portion of the lens-supporting strap" in the construction shown in two of the drawings, and again that it was secured, as shown in another of the figures "in the plane of the lens-edge engaging portion thereof as by welding, soldering, or the like." Again referring to two of the illustrative figures it is said that the straps are secured in any suitable manner as by soldering or the like to the wire adjacent the junction of the bridge and the temple-supporting wire, and that:

The temple-supporting wires extend from the portions secured to the lens-engaging portions rearwardly and angularly to follow the contour of the lens adjacent to and along the rear surface thereof.

which may perhaps be intended to indicate a direct physical connection between the temple-supporting wire and a portion of the strap. These various descriptions of the nature of the mounting conclude with the following paragraph:

It will be seen that in all of the forms disclosed the temple-supporting wire follows the contour of the edge of the lens so as not to interfere with the vision and so as to be inconspicuous. It will also be noted that in all of the forms the temple-supporting wire is supported by the noseengaging means.

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Before discussing the claims it should be noted that the practice of affixing the lenses in rimless spectacles by the use of straps of the nature referred to by Uhlemann in OPTICAL Co. his specification was not new. In early types of such spectacles the inner edges of the lenses were secured by these straps which were soldered to the bridge or to the nose guards, while the spectacles were held in place by wires extending rearward which were attached by similar straps to the upper and outer edges of the lens and which engaged the ears of the wearer. The types of spectacles theretofore commonly in use employed frames in which the lenses were held and the elimination of such frames obviously produced problems in breakage, which was much less with the older type of framed spectacles. An examination of these early types of rimless glasses employing the above described method of holding them in place upon the nose makes it perfectly apparent that outward pressure upon the wires which engaged the ears would endanger the lens at the point where the straps were attached and cause breakage. Since of necessity a firm bridge and nose pieces of the nature referred to in Uhlemann's specification as the "nose-engaging means" were necessary component parts of any rimless spectacles, these obviously afforded the only point where the temple-supporting wires could be attached if direct strain upon the lenses, by reason of the movement of such wires and their temple-bows or extensions which engaged the ears of the wearer, was to be avoided. While to attach the temple-supporting wire directly to the inner side of the lens in the immediate proximity of the strap attached to the bridge, or the metal of the nose-engaging portion, might reduce the danger of breakage from pressure from the temple wires, some risk would undoubtedly remain.

> Uhlemann made six claims for his invention, these being in the following terms:

> 1. A spectacle construction comprising a pair of lenses, a pair of channel-like straps embracing the edges of said lenses, respectively, at the nasal edge of the lenses, each of said straps including a lens-edge engaging portion, a bridge member for connecting said straps, and a pair of templesupporting wire members each having an anchorage portion extending therefrom and being secured directly to the lens-edge engaging portions of the strap and extending rearwardly and angularly therefrom and following the contour of the lens adjacent to and along the rear surface thereof for connection with the temple of the spectacle.

- 2. A spectacle construction comprising a pair of lenses, a pair of channel-like straps embracing the edges of said lenses, respectively, at the nasal edge of the lenses, each of said straps including a lens-edge engaging portion, a bridge member for connecting said straps, and a pair of temple- UHLEMANN supporting wire members each having an anchorage portion extending OPTICAL Co. therefrom and being secured directly to the lens-edge engaging portions of the strap intermediate the ends thereof and extending rearwardly and angularly therefrom and following the contour of the lens adjacent to and along the rear surface thereof for connection with the temple of the spectacle.
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- 3. A spectacle construction comprising a pair of lenses, a pair of channel-like straps embracing the edges of said lenses, respectively at the nasal edge of the lenses, each of said straps including a lens-edge engaging portion, a wire bridge member connecting said straps, and a pair of temple-supporting wire members each being formed integrally with said wire bridge member and being secured to the lens-edge engaging portions of the strap and extending rearwardly and angularly therefrom to follow the contour of the lens adjacent to and along the rear surface thereof for connection with the temple of the spectacle.
- 4. A spectacle construction comprising a pair of lenses, a pair of channel-like straps embracing the edges of said lenses, respectively, at the nasal edge of the lenses, each of said straps having a lens-edge engaging portion, a bridge member for connecting said straps, and a pair of temple-supporting wire members each having an anchorage portion extending therefrom parallel to the lens-edge engaging portion of said channel-liké straps and being secured directly to said straps, there being offsets extending from said portions in the direction of the lenses, said temple-supporting wire members extending from said offset portions and following the contour of the lens adjacent to and along the rear surface thereof for connection with the temple of the spectacle.
- 5. A spectacle construction comprising a pair of lenses, a pair of channel-like straps embracing the edges of said lenses, respectively, at the nasal edge of the lenses, each of said straps including a lens-edge engaging portion, a bridge member for connecting said straps, and a pair of temple-supporting wire members each being secured to the lens-edge engaging portions of the strap and extending rearwardly and angularly therefrom and following the contour of the lens adjacent to and along the rear surface thereof for a substantial distance, the free end portions of said temple-supporting wire having a rearwardly extending portion terminating in a hinge for pivotally receiving the temple of the spectacle.
- 6. A spectacle construction comprising a pair of lenses, a pair of channel-like straps embracing the edges of said lenses, respectively, at the nasal edges of the lenses, each of said straps including a lens-edge engaging portion, a bridge member for connecting said straps, and a pair of temple-supporting wire members each having an anchorage portion extending therefrom and being secured to said straps in the plane of the lens-edge engaging portions thereof, said temple-supporting wire member extending therefrom to follow the contour of the lens adjacent to and along the rear surface thereof for connection with the temples of the spectacles.

In each of the claims the shoe of the strap is referred to as "the lens-edge engaging portion." The portion of the shoe which engaged the edge of the lens was of necessity

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the inner portion forming the base of the "U". Obviously THE KING the expression could not refer to this portion of it. Presumably what was intended to be indicated was the exterior OPTICAL Co. of the shoe and in claims 1, 2 and 3 the construction described involves an anchorage portion extending from the temple-supporting wire being secured directly to the lensedge engaging portion of the strap. Claim 4 describes the temple-supporting wire members as each having an anchorage portion "extending therefrom parallel to the lens-edge engaging portion of said channel-like strap and being secured directly to said straps," but does not specify whether the attachment shall be to the shoe or to the ear of the strap. In Claim 5 there is no reference to an anchorage portion of the temple-supporting wire, the connection being described as directly between the temple-supporting wires and the shoe of the strap. In Claim 6 the temple-supporting wire members are described as each having an anchorage portion "secured to said straps in the plane of the lens-edge engaging portions thereof", which apparently contemplates that the attachment may be to one or other of the ears of the strap.

> Reading the claims together with the specification that: in all of the forms the temple-supporting wire is supported by the noseengaging means.

> the inventor sought by attaching the temple-supporting wire at some point on the strap, which strap in turn was connected by solder or otherwise to the metal of the noseengaging means, to transfer the pressure to this portion of the structure and avoid any pressure on the lens itself.

> The idea of a construction in which the pressure from the temple-supporting wires was exerted upon the bridge rather than upon any part of the lens was far from new. On July 14, 1908, Joseph Savoie applied for a United States patent, for improvements in the class of spectacles having frameless or rimless lenses described in the third of his claims as being:

> the combination with a pair of frameless lenses and a central nose-piece having said lenses mounted therein, of a pair of suitably bent resilient holding wires rigidly secured to the rear portion of the nose-piece and extending outwardly therefrom in a plane substantially parallel with that of the lenses, and means connected with the free ends of said holding wires adapted when in use to engage the head of the wearer.

A patent was issued for the invention on March 16, 1909.

On February 23, 1909, Savoie applied for a Canadian patent for a structure of almost identical form, except that UHLEMANN the wires which connected with the temple-supporting wires Optical Co. and extended rearward to engage the ears of the wearer were of more rigid construction than those described in the American application. Spectacles said to have been constructed in accordance with the specification of Savoie's American patent were filed as exhibit A at the trial and show the temple-supporting wires as being rigidly affixed to the bridge in a manner rendering it impossible that any pressure from the temple wires could be transmitted to the lenses. The latter were secured in straps similar to those employed by Uhlemann and which were either an integral part of the bridge or soldered to portions of the bridge projected forward to the point where the temple-supporting wires were connected.

By an application for a United States patent filed February 19, 1910, Savoie applied for a patent for an improvement in frameless spectacles, the object of which was to produce an improved temple holder constructed so as to be: easily, quickly and firmly attached or fixed to the usual or ordinary nose-piece, and also capable of being as readily disconnected from it.

In the explanatory part of the specification the following appears:

By means of my improvement herewith frameless spectacles as usually constructed, that is, spectacles having the temple-bows jointed to the lenses, may be quickly and cheaply converted into spectacles having, when in use, the general appearance of frameless eye-glasses. That is to say, the temple-bow members will then be jointed to bent wire holders having enlarged head portions superimposed upon and conforming to the back faces of the rear straps or ears of the well-known nose-pieces as devised for frameless spectacles, all the members being secured together by means of the usual fastening screw.

Uhlemann's "temple-supporting wire member" was described by Savoie as a "temple-bow holder" and the first of his claims which were allowed describes the invention thus:

The improved one-piece temple-bow holder member herein described. comprising a curved shank or body part having one end constructed for a co-operative engagement with a temple-bow and having the other or head end portion of the member elongated and extending inward toward the other end of the holder, its wall being quite thin and resilient and concave-convex in form cross-sectionally and adapted when in use to bear against and cover the outer or convex face of an elongated aperture ear or strap of a nose-piece, the said head part having a hole therethrough registering with that of the ear for receiving the usual holding screw.

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The drawings attached to the application show the temple-bow holder member fitted over the exterior of the ear of a strap similar to that used by Uhlemann and secured by the screw which secured the lenses in the strap. There was no contact in this construction between the temple-bow holder member and the lens. The strap appears to have been either part of the bridge or attached to it, as in the case of Uhlemann, by solder. It will be observed that this connection, like that described in Claim 6 of Uhlemann's patent, was "in the plane of the lens edge engaging portion" of the strap. The method of attachment to be employed in the structure described in Claim 6 of Uhlemann is not, however, specified.

On October 11, 1909, Frederick A. Stevens applied for a United States patent for improvements in frameless spectacles, a patent issuing pursuant to the application of March 29, 1910. Stevens' structure employed a wire member similar to Savoie's temple bow-holder which followed generally the lines of the lower edges of the lens rather than the upper, as in the case of Savoie's design. The nose-piece was provided at each end with straps into which the lenses were fitted and the connection between the wire members, according to the specification, was as follows:

In the present invention the bent connection or member (the temple-bow holder) is constructed and adapted to be readily positioned with respect to the lens and nose-piece while at the same time being secured to the lens and practically interlocking with the nose-piece, thereby, in co-operation with the lens-screw, serving to maintain the several parts in position.

and further:

The inner end portions of said member are enlarged so as to provide a substantially flat thin head, adapted in use to register with the integral ear or ears of the nose-piece and also to lay flatwise snugly against the rear side of the lens. In Figs. 1 to 4 the said head portion is represented as having an open transverse notch or recess formed between the upper and lower lugs shaped to receive therein the adjacent shank part of the nose-piece.

In Stevens' construction, while apparently the head of the temple-supporting wire or temple-bow holder was in direct contact with the side of the lens at the point of attachment, it also was designed to engage the shank part of the nose-piece. As in the case of Savoie's design, a screw was employed which passed through the ears of the strap and the head of the supporting wire and the lens, to secure the latter in its place.

Evidence as to other patents obtained after those of Savoie and Stevens and in advance of that obtained by Uhlemann was given on behalf of the Crown but, in my v. opinion, it is unnecessary to deal with these in detail to dispose of the issues in the present action. Of these, the United States patent obtained by Ferris on September 4, 1934, one of the objects of which was stated to be the provision of a mounting adapted for use in spectacles for eliminating strain upon the lenses, in which the templebows or wires which engaged the ears of the wearer were attached at either extremity of the bridge or an extension thereof and the lenses were secured from above in straps attached to the bridge, and that granted to Bishop in the United States on March 26, 1936, may be mentioned. Bishop's construction differed from that of Ferris in that. while the temple-bows were affixed in like manner to the extremities of the bridge or an extension of it and the lenses were similarly affixed in straps soldered to the bridge, the nose guards were affixed to the lenses by straps rather than to the bridge, as contemplated by Ferris.

Considering first the contention of the plaintiff that there was no invention, having regard to the common knowledge in the art. The Patent Act 1935, s. 2(d), defines invention as meaning:

any new and useful art, process, machine, manufacture or composition of matter, or any new or useful improvement in any art, process, machine, manufacture or composition of matter.

S. 26 provides that, subject to certain defined terms, a patent may issue to an inventor of an invention which was. inter alia, not known or used by any other person before he invented it. S. 35 requires the applicant, by his specification, to correctly and fully describe the invention and its operation or use as contemplated by the inventor and set forth clearly the method of constructing the machine or manufacture in "such full, clear, concise and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most closely connected, to make, construct, compound or use it." In Natural Colour Kinematograph v. Bioschemes Ld. (1), Earl Loreburn, dealing with the duty of a patentee to state clearly and distinctly either in direct words or by clear and distinct

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reference the nature and limits of what he claims, said that THE KING if he uses language which when fairly read is avoidably obscure or ambiguous the patent is invalid, whether the defect be due to design, or to carelessness or to want of In the present matter, the expression "lens-edge skill. engaging portion of the strap" used both in the specification and the claims is, in my opinion, ambiguous in the sense of being capable of more than one meaning, as has been pointed out above. While the objection of ambiguity is made against both the specification and the claims, it appears to me unnecessary to consider the point since, even if it be given the meaning apparently adopted by the defendant as describing the rear of the shoe, the patent cannot, in my opinion, be sustained.

> The learned President of the Exchequer Court (1) in his judgment at the trial has found that the inventive idea lay in having a mounting in which there was a single point connection with the lens and the temple arms were connected at a specific place near the nasal edge of the lens, namely, to the lens-edge engaging portion of the strap, it being of the essence of the invention that the temple arm should be so connected. In view of the statement in the specification that in all of the forms exhibited by the illustrations and referred to in the specification the templesupporting member is to be supported by the nose-engaging means, and of the fact that the outer portion of the case of the strap is soldered to the nose-engaging means, it is necessary to examine with some care the evidence of the manner in which this so-called invention has been used in practice. since the manner of its use should lead to a sound conclusion as to what was the essence of the invention.

> Four exhibits were filed at the trial and numbered 30, 31. 32 and 36 and it is common ground that these illustrated the manner in which Uhlemann's invention was put to use. In the exhibit marked 30 the lens-edge engaging portion of the strap, which I will continue to refer to hereafter as the shoe, consists of a narrow piece of metal approximately three-eighths of an inch in length, the inner portion of which engages, and is the only part that engages, the edge of the lens. The only evidence given at the trial as to the manner in which the mounting was assembled is that of Elliott,

which is above referred to, but an examination of the exhibit shows that there is no connection between the temple- THE KING supporting arm and the shoe. In the case of the exhibits $\frac{v}{\text{UHLEMANN}}$ marked 31, 32 and 36, the shoe consists of three small thin OPTICAL Co. pieces of metal of differing lengths, the longer of which is approximately three-eighths of an inch in length and the shorter of which bears against and is attached to or constitutes the bottom of the "U" shaped strap. In none of these exhibits is the temple-supporting arm attached to the shoe. In the absence of any evidence on the point, and Uhlemann apparently decided to give none, it is necessary to rely on what is disclosed by an examination of the three exhibits, and in each of them the temple-supporting arm appears to be soldered to the side of one of the straps and at the same point to the metal of the nose-engaging means.

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Uhlemann gave evidence at length at the trial and a fifth exhibit marked "H" was introduced during his examination-in-chief and his evidence directed mainly to it. In this exhibit the strap differed materially from those used in the mountings theretofore produced, being apparently of solid construction, the ears being in breadth practically double their length and the shoe being of the same breadth as the ears. According to Uhlemann, this type of strap was made in accordance with a patent developed by his father some fifteen years ago and was so constructed that diagonally angled slots within the lens engaged lugs inside the strap, creating a dove-tail construction and this eliminated the necessity of drilling a hole in the glass. In this exhibit the temple-supporting arm is soldered both to the side of one ear and the rear of the shoe of the strap as well as to the metal of the nose-engaging means, which is an integral part of the bridge. According to Uhlemann, straps of this nature have not been sold "except through our own distribution," and in cross-examination he said that they did not go into general use. The spring type of straps, as used in Exhibits 31, 32 and 36, he said, were acknowledged to be a better construction and tended to reduce breakage.

It is, in my opinion, the only proper inference to be drawn from the evidence that the method of attachment of the temple-supporting arm to the so-called nose-engaging means shown in Exhibits 30, 31, 32 and 36 show the manner in which the mounting described in the patent has been put

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to use. With great respect for the contrary opinion of the THE KING learned President of the Exchequer Court, this demonstrates, in my opinion, that the inventive idea, if there was OPTICAL Co. one, lay not in attaching the temple-supporting arm to the shoe of the strap but rather to the nose-engaging means at the point where the strap was soldered to it, for the very purpose described in the specification of transferring any pressure from the temples to the nose-engaging means and the bridge.

> In order to determine whether Uhlemann's construction was new, it is necessary to determine what was the state of the public knowledge on April 22, 1937. Savoie had in July 1908 obtained his patent for a form of mounting in which the temple-supporting wires were attached to a projection from the bridge, and in 1909 had obtained a Canadian patent. In 1910 he had obtained his United States patent for the construction above described, in which the temple-supporting wire was secured to the exterior of the strap. In both of these mountings the pressure from the temples was conveyed to the bridge and diverted from the lens. These patents were, in my opinion, for combinations and, as said by Lord Moulton in Pugh v. Riley Cycle Co. (1), the publication of a proper and sufficient specification of an invention of a combination is a publication of each subordinate integer of that combination. From the moment of its publication, each subordinate integer therefore passes into the domain of public knowledge as fully and as certainly as does the whole combination of which they are parts. Uhlemann by his specification said that his construction provided a pair of temple-supporting wires having an anchorage portion thereof secured to the straps, and that in the construction shown in his Figures 1 to 3 the supporting-wire was secured to the lens-edge engaging portion of the lens supporting strap, while in Figure 6 it was secured to the rear edge of the strap in the plane of the lens-edge engaging portion. It is only in Claims 1, 2, 3 and 5 that the temple-supporting arm is stated to be attached to the shoe of the strap. Claim 4 refers to the anchorage portion of the temple-supporting wire as being secured directly to the straps, while Claim 6 adopts the language of the specification in saying that the

anchorage portion is "secured to said straps in the plane of the lens-edge engaging portion thereof." The manner of THE KING attachment employed in actual use, as shown by the UHLEMANN exhibits, is that described in Claim 4 and appears to me to OPTICAL Co. fall within the language of the specification. How soldering the temple-supporting wire to the shoe, which was in turn soldered to the metal of the nose-engaging means, could be more effective in diverting pressure from the lens than soldering it to the side of the ear of the strap and to the nose-engaging means is not explained. The manner in which the mounting was put to use and continues to be used shows conclusively, in my opinion, what was the essence of the so-called invention. The learned trial judge has found that there was no novelty in any of the parts, all of which were well-known prior to 1930, and that the desirability of having a single point connection with the lens and the temple arms connected somewhere near the nasal edge of the lens was not new. It may also be said that the idea of attaching the temple-supporting wires in a manner which would transmit the pressure from the temple-bows to the bridge was not new, having been disclosed in both of Savoie's patents.

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The change made by Uhlemann from Savoie's construction disclosed in the 1910 patent was to secure his templebow holder to the strap by solder rather than to the ear of the strap by a screw. According to the witness Uhlemann, while he had not constructed a mounting according to Savoie's 1910 patent, in use there would have been difficulty caused by the strain on the temple-bow holder loosening the screw. Was it invention to guard against any such movement by attaching the temple-bow holder to the side of the strap in this manner to prevent this? In Pope Appliance Corporation v. Spanish River Pulp and Paper Mills (1), Viscount Dunedin said that what constituted invention was finding out something which has not been found out by other people. It was Savoie's idea that the strain from the temples should be transmitted to the bridge by attaching his temple-bow holder either in the manner disclosed by his 1908 or 1910 patent. The strap to one ear to which Savoie secured his temple-bow holder in his 1910 patent was either a part of, or soldered to, the bridge, as

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was that of Uhlemann. Both constructions transferred the THE KING pressure from the temples to the bridge. Did the slight change made involve the exercise of the inventive faculties, OPTICAL Co. or can it be said that it showed a degree of ingenuity which must have been the result of thought and experiment (Crosley Radio Corporation v. Canadian General Electric Company (1), Rinfret J. at 556). In my opinion, Uhlemann's construction was merely an application of the ideas disclosed by Savoie "which anybody familiar with and skilled in the art might be expected to arrive at without the exercise of invention in the sense of the patent law", to adopt the language of Sir Lyman Duff C.J. in Vanity Fair Silk Mills v. Commissioner of Patents (2).

> Much was made at the trial of the success in the market of mountings made in accordance with Uhlemann's patent. That, of course, is a matter to be taken into consideration but, as pointed out by Lord Herschell in Longbottom v. Shaw (3), it is obvious that it cannot be regarded as in any sense conclusive on the question we are here considering. That mountings made in accordance with Uhlemann's patent were very extensively sold is undoubted but this is not to say that the advance made on previous knowledge has been sufficient to constitute invention. In my humble opinion, the contrary is established by the evidence in this case.

> I would allow the appeal and direct that judgment be entered for the plaintiff in the action for the relief claimed in the information, with costs in both courts.

> > Appeal dismissed with costs.

Solicitors for the appellant: Gowling, MacTavish, Watt, Osborne & Henderson.

Solicitors for the respondent: Smart & Biggar.