ON APPEAL FROM THE EXCHEQUER COURT OF CANADA

Patent—Infringement—Specification—Claims—Patent relating to safety razors—Claim for blade as subordinate invention—Anticipation—Subject matter—Scope of invention.

Appellant sued respondent for alleged infringement of a patent relating to safety razors, alleging that respondent had manufactured and sold razor blades which constituted an infringement of certain five claims (relating to the blade alone) of the patent.

Held: Three of the claims alleged to have been infringed were clearly anticipated in the prior art. As to the others (certain openings in the blade for certain purposes)—if construed as presenting generally certain characteristics, they were invalid, having regard to the prior art; if construed as limited to the precise mechanism described in the specification and shown in the drawings, the respondent's blade did not infringe; the patent in question had to do with a certain mechanical improvement in a well known class of safety razors; and, even if there was valid subject matter of a patent in the blade alone (to which a contrary view was indicated), the subject matter lay in the particular mechanical mode by which the alleged invention was carried into operation, and the patentee could not bring within the scope of his invention a blade such as that of respondent (although it might fit the patented razor), differing, in the respects in which it did, from what the patentee had specifically described and claimed. (Tweedale v. Ashworth, 9 R.P.C. 121, at 126, 128, and other cases cited).

The nature of the invention protected by a patent and the extent of the monopoly thereby granted must be ascertained from the claims. The claims should be construed with reference to the specification and to the drawings, but the patentee's monopoly is confined to what he has claimed as his invention (Patent Act, R.S.C., 1927, c. 150, s. 14; Pneumatic Tyre Co. Ltd. v. Tubeless Pneumatic Tyre & Capon Headon Ltd., 15 R.P.C., 236, at 241; Ingersoll Sergeant Drill Co. v. Consolidated Pneumatic Tool Co. Ltd., 25 R.P.C. 61, at 82-83).

The patentee had claimed the blade as an appendant or subordinate invention (in addition to the main or principal invention consisting in the complete safety razor). In such a case, the patentee must describe with particular distinctness the alleged new element for which he asks special protection. He must make plain the metes and bounds of the subsidiary invention and he will be held strictly to the thing in which he has claimed "an exclusive property and privilege" (Patent Act, s. 14; Ingersoll v. Consolidated Pneumatic, supra, at 84).

Judgment of Maclean J., President of the Exchequer Court, [1932] Ex. C.R. 132, dismissing appellant's action, affirmed.

^{*}PRESENT:—Rinfret, Lamont, Smith, Cannon and Crocket JJ.

APPEAL by the plaintiff from the judgment of Maclean J., President of the Exchequer Court of Canada (1), dismissing its action for alleged infringement of a patent. The material facts of the case are sufficiently stated in the OF CANADA, judgment now reported. The appeal was dismissed with costs.

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- A. W. Anglin K.C. and E. G. Gowling for the appellant.
- O. M. Biggar K.C., R. S. Smart K.C. and M. B. Gordon for the respondent.

The judgment of the court was delivered by

RINFRET J.—The appellant brought this action against the respondent for the alleged infringement of patent No. The particulars of breaches were that the respondent manufactured and sold razor blades which constitute an infringement of claims 1, 2, 3, 4 and 5 of the patent.

The defence was: no infringement; and, alternatively, no invention on account of anticipation, lack of novelty and lack of utility.

Before the Exchequer Court, the appellant failed in its action, which was dismissed with costs (1).

The patent relates to safety razors and the invention is stated to be particularly applicable to the class of safety razors comprising a guard, a backing and a thin flexible blade clamped between the guard and the backing to retain the cutting edge of the blade in shaving position to the guard teeth.

In the class of razors referred to, as, for example, in the widely known razors of the original Gillette type, it has been customary to provide the backing members with pins that project through holes in the blade and into holes in the guard member, whereby the blade and the backing are retained from rotation on the guard by the co-operation of the pins with the guard and by the clamping of the blade between the guard and the backing, so that the blade performs no function in retaining any of the said parts in relation one to another

The object of the invention defined in the patent is said to provide a safety razor wherein a blade will co-operate 1933
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with a guard member to retain the blade in shaving relation thereto and the blade will also co-operate with a backing member to retain the latter in proper relation to the blade for shaving purposes, so that the position of the backing member with regard to the guard member is maintained by the blade and not by the co-operation of said members together in the well known manner which used to prevail up till then.

Having so defined the object of the invention, the specification states that the latter comprises novel details of improvement more fully set forth thereinafter and to be pointed out in the claims; also, that "reference is to be had to the accompanying drawings forming a part hereof." The specification then proceeds to describe the razor, and the description refers to the blade as follows:

The blade is provided with a substantially centrally disposed opening 2a through which the projection 4 of the backing member may pass when the blade is between the members 1 and 3. Heretofore, so far as I am aware, the opening in the blade for the projection from the backing for clamping the parts together has been circular so that reliance was had upon spaced pins projecting from the backing to pass through spaced holes in the blade and into holes in the guard member to keep the blade and backing in position on the guard member. In accordance with my invention I provide co-operative means between the blade and the guard member to keep the blade from rotating on said member. For such purpose I provide a projection 1b on the blade side of the guard member adapted to enter an opening 2a in the blade. By preference I make the opening 2a in the blade of non-circular shape, preferably having straight sides, the opening 2a in the drawing being shown in so-called diamond shape, and the projection is of non-circular shape, as shown in so-called diamond shape, (fig. 3), adapted snugly to receive the metal at the sides of opening 2a so that the blade will, by said projection, be retained upon guard member 1 with its cutting edges in shaving relation to the guard teeth when the parts are assembled. Means are provided between the blade and the backing member to cause the blade to retain the backing in operative relation to the blade and the guard, for which purpose I have shown the blade provided with recesses or openings 2b, preferably at its ends, adapted to receive projections or pins 6 extending from the backing member toward the blade, but not to co-op rate with the guard member to retain the backing.

The balance of the description relates to the combination of the guard, the backing member and the blade and explains how they should be assembled for purposes of cooperation.

There follows a series of eleven claims, the last six of which have to do with the combination, that is to say, with the complete razor; while the first five claims relate to the

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blade alone. They are the only claims with which we are concerned in this case and they may now be set out in this place:

1. A blade having means to co-operate with clamping members of CANADA, located on opposite sides of the blade to retain said members and blade in shaving relation.

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2. A blade having means to position it on a clamping member, and having means to co-operate with another clamping member to retain the latter member in relation to the blade.

3. A blade provided with means to position itself on a clamping member, and having means independent of the first-named means for positioning another clamping member on the blade.

4. A blade having a non-circular opening substantially centrally disposed to retain the blade in shaving relation to a guard member, said blade having means spaced from said opening to co-operate with a clamping member to retain the latter in shaving relation to the blade independent of the guard member.

5. A blade having an angularly shaped opening disposed substantially centrally in the blade to co-operate with a guard member to retain the blade in shaving position thereon, and said blade being provided with means spaced from said opening to co-operate with a backing member to retain the latter in shaving relation to the blade and to the guard member.

The plain object of the invention as described in the specification is to substitute to the razor of the old Gillette type a new and improved safety razor wherein the position of the backing member with regard to the guard member is maintained by the blade and not by the co-operation of the backing and guard. The purpose of this was explained in the evidence.

In that class of razors, which have a flexible blade clamped between a guard and a backing, both the outside surface of the guard teeth as well as the upper corner at the edge of the backing member combine as a shield for the blade to prevent it cutting the face when it is in use. "The combined function of the guard and cap makes it a safety razor, provided the blade does not project too far beyond a plane which might be considered a tangent to the guard teeth and corner of the cap (or backing member), which plane (in this case) is represented by a man's cheek when he shaves with a razor. The guard teeth bear on the cheeks underneath and pull down so as to depress the cheek somewhat, so that the blade will only cut the hair and not dig deeply into the cheek."

Obviously the amount of the exposure of the blade along that tangent plane is important and has a great deal to do with the utility of the razor, for, the greater the accuracy GILLETTE
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of the blade exposure, the greater the shaving efficiency of the razor.

According to the evidence, a long series of blade tests and shaving tests indicate _{000} of an inch is the preferable exposure. But there are difficulties in the way of securing this result. There stands the necessity for clearance, that is, the necessity of providing a "sliding fit" between the holes in the blade and the projections in the holder. And there is also the manufacturing necessity of providing tolerances, or, in other words, of determining, from a commercial and economical point of view in governing the factory, how far the clearances should be allowed to vary from the dimensions essentially required for the "sliding fit." The consequence is that the accuracy of the blade exposure is affected by these clearances and tolerances. It is contended that, through the invention, the variations caused by the cumulative effect of the clearances and tolerances are corrected to a great extent and, thus, the improvement makes surer the approximation to the ideal exposure. This is caused, it is explained, by the fact that the clearances and tolerances are taken up simultaneously by the respective movements of the several parts of the razor, that is to say, that the movements of the guard and cap-which are designed to move independently from one another-are controlled by the blade, acting as a link between the two. As a result, you may have the same tolerances or, in other words, the same inaccuracies in manufacture, but they are taken care of and they are corrected to an extent at least sufficient to insure at all times the desired accuracy of the blade exposure. It is in this, the appellant stated, that lies the whole point of the patent.

This result, however, as will be perceived, is brought about—and can only be brought about—by the co-operation between the blade and the other members of the razor. It is not produced—and cannot be produced—by the blade alone. It is essentially the result of the particular combination of the component parts of the razor.

For the purposes of this case, it may be assumed that there was invention in the combination referred to. If there was, it is protected by the claims of the patent which are not in issue. But the attachment of the blade to the other members of the razor is not involved here. The question we have to consider is whether the blade was patentable independently of the combination and, if so, whether it was adequately claimed and whether the blade manufactured and sold by the respondent constitutes an infringe- of CANADA, LTD. ment thereof.

In order to answer that question, we must be guided primarily by the provisions of the 14th section of the Patent Act.

That section requires the specification to be a correct and full statement of what the invention is. The inventor must describe its operation or use as contemplated by him. He must set forth clearly the method of constructing or making the manufacture he has invented. He must end the specification with claims stating distinctly the things or combinations which he regards as new and in which he claims an exclusive property and privilege. In any case in which the invention admits of illustration by means of drawings, the inventor shall, with his application, send in drawings showing clearly all parts of the invention and each drawing shall have written references corresponding with the specification. One duplicate of the specification and of the drawings, if there are drawings, shall be annexed to the patent, of which it shall form an essential part.

It follows that the nature of the invention protected by a patent and the extent of the monopoly thereby granted must be ascertained from the claims. The claims should be construed with reference to the specification and to the drawings, but, as pointed out by Lindley, M.R., in The Pneumatic Tyre Company Limited v. The Tubeless Pneumatic Tyre and Capon Headon Limited (1), whether the patentee has discovered a new thing or whether he has not, his monopoly is confined to what he has claimed as his invention. And, if the proposition requires further support, we would like to quote a passage from the speech of Lord Loreburn, L.C., (concurred in by Lord Halsbury, Lord Macnaghten and Lord Atkinson) in the case of Ingersoll Sergeant Drill Company v. Consolidated Pneumatic Tool Company Limited before the House of Lords (2). think, peculiarly apposite in the circumstances:

There can be no dispute about the law. Each Claim in a Specification is independent, and a plaintiff in an action for infringement must show that there has been an adoption of some new invention adequately

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^{(1) (1898) 15} R.P.C. 236, at 241. (2) (1907) 25 R.P.C. 61, at 82-83.

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described in a Claim when fairly construed. I am not aware that any special canons of construction are applicable to Specifications, nor am I able to accept, if indeed I rightly understand them, certain formidable generalizations presented to us in argument as to the principles on which they are to be interpreted. Obviously, the rest of the Specification may be considered in order to assist in comprehending and construing a Claim, but the Claim must state, either by express words or by plain reference, what is the invention for which protection is demanded. The idea of allowing a patentee to use perfectly general language in the Claim, and subsequently to restrict, or expand, or qualify what is therein expressed by borrowing this or that gloss from other parts of the Specification, is wholly inadmissible. I should have thought it was also a wholly original pretension.

The claims alleged to have been infringed are set out in an earlier part of this judgment. They are five in number, but they may be divided into two groups.

The first group, composed of claims 1, 2 and 3, may be at once disposed of. They are clearly anticipated in the prior art and we deem it unnecessary to refer to or even to enumerate the numerous patents shown in the evidence as disclosing blades of the kind described in these claims and blades having means performing similar functions. We fail to see how claims 1, 2 and 3 may be patentably distinguished from the patents set forth in the particulars of objection and discussed in the evidence of Mr. Blosk. Moreover, each of these claims are completely met, we think, by one or the other of the original Gillette patents (U.S. Nos. 775,134 and 775,135), which have expired.

Further, it may be noted that claims 1, 2 and 3 do not appear in the corresponding United States patent. The evidence shows that they were inserted in the original application for that patent, but they were subsequently abandoned and cancelled.

The second group of claims in suit are Nos. 4 and 5. The characteristics of the blade therein described are that the blade must have a non-circular or angularly shaped opening, substantially centrally disposed, to co-operate with the guard and to retain the blade in shaving position on the guard, as well as in shaving relation to the latter; and the blade is also to be provided with means spaced from said opening to co-operate with the backing member and to retain the latter, independently of the guard, in shaving relation to the blade and to the guard.

In dealing with these claims, one must remember that they have reference only to the blade. They have nothing to do with the combination of blade, guard and cap covered by the subsequent claims and which is the true subjectmatter of the patent. For the purpose of construing the claims, we must assume that the holder is neglected, and OF CANADA, LTD. the blade must be envisaged, not as an element of the combination, but as a separate article independent of the other component parts of the razor. And the question must be: Is that blade standing alone as described a good and valid subject-matter of a patent?

In that view and as presented in the specification, the blade would be an appendant or subordinate invention, which the patentee has chosen to claim in addition to the main or principal invention consisting in the complete safety razor.

In such a case, the patentee must describe with particular distinctness the alleged new element for which he asks special protection. He must make plain the metes and bounds of the subsidiary invention and he will be held strictly to the thing in which (to borrow the words of s. 14 of the Act) he has claimed "an exclusive property and privilege." (Ingersoll Sergeant Drill Co. v. Consolidated Pneumatic Tool Co. Ltd. (1).)

The claims relate to a blade with means to "co-operate" and to "retain." One of the means is stated: it is the centrally disposed opening. The others are referred to merely as "means spaced from said opening." If we look at the rest of the specification and at the drawings, to assist in comprehending what these means are, we find that what the patentee had in view and what he intended to claim were four notches or openings, at the ends of the blade, adapted to receive projections extending from the backing member of the razor. So that, so far as concerns the blade, the means disclosed throughout are nothing but holes, one set of means being the central hole and the other, the holes or openings in the ends.

We would not think the patentee intended to make the broad claim to the monopoly of the right to perforate any and all shapes of holes in a razor blade of the type in question. That alone would be quite sufficient to invalidate the claim, for evidently, having regard to the prior art, the claim would be abnormally wide.

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Always bearing in mind that the blade alone is now under discussion, we are of opinion that neither could the patentee have claimed the invention of a blade presenting generally the characteristics of a central non-circular opening with spaced corner apertures or recesses. In that connection, many prior disclosures might have to be referred to, including Krusius (U.S. 885,252), Wakeley (U.S. 1,119,132), Van Den Berg (U.S. 1,276,712); and more particularly Société Générale de Coutellerie et Orfèvrerie (Brit. 23,563), where the blade described is strikingly similar to that of the appellant's specification. If claims 4 and 5 were meant to cover all central non-circular openings with spaced corner apertures in a razor blade, the question how far they are anticipated by these patents would have to be developed.

But the appellant argues the openings in the blade he claims as new are openings with certain functions in the holder and the openings in the earlier blades were not intended to function in the same way as the openings described in the claims in suit. A claim for a blade having openings with certain functions in the holder comes perilously near being a claim for the combination and not a claim for the so-called subordinate invention, for, in such a case, the utility of the holes depends entirely upon their co-operation with the projections in the other members of the razor. In any event, the moment the validity of the subordinate invention is put on that ground, it necessarily limits the form of the holes in the blade to that of holes shaped in the particular way required to function in the holder and that is to say: to holes precisely as described in the specification for the purpose of functioning in the precise holder therein described.

The appellant's patent does not disclose a pioneer invention. It has to do with a certain mechanical improvement in a well-known class of safety razors. Even if there be valid subject-matter of a patent in the blade alone—and our present view would be that there is not—the subject-matter lies in the particular mechanical mode by which the alleged invention is carried into operation (*Tweedale* v. *Ashworth* (1)). And the words of Lord Watson in that case are very pertinent (p. 128):

The plain object of the invention as described in the specification is to substitute better mechanical equivalents for those already known and used as a means to the same end. It follows that, in construing the appellant's specification, the doctrine of mechanical equivalents must be left out of view. He cannot bring within the scope of his invention any mechanical equivalent which he has not specifically described and claimed.

Similar observations were made in *Curtis* v. *Platt* (1), and in the judgment of Lord Davey in *Consolidated Car Heating Co.* v. *Came* (2).

If the above principles be applied to claims 4 and 5, the appellant is driven to the alternative that: either the claims are to be construed as limited to the precise mechanism described in the specification and shown in the drawings or else they have been designed in order that they might be expanded or contracted as occasion might require in the interest of the patentee and, if that be so, they are bad and void. (See Lord Loreburn's speech in the House of Lords in Natural Colour Kinematograph Co. Ltd. v. Bioschemes Ltd. (3); and also that of the Lord Chancellor in British Ore Concentration Syndicate v. Minerals Separation Ltd. (4).

The blade disclosed in the claims in suit is a blade having a non-circular or angularly shaped opening disposed substantially centrally. The specification refers to and the drawings show a diamond shaped opening in the centre—both latitudinally and longitudinally—of the blade. The drawings "form an essential part" of the patent (Patent Act, subs. 4 of s. 14) and they are useful to indicate the invention "as contemplated by the inventor" (s. 14 (1) (a)). It was represented that they are only subsidiary to the verbal description. In this case, they agree with it and, besides, reading claims 4 and 5 with the body of the specification and with the drawings is giving them a beneficial construction, as otherwise they would lack the distinctness and the precision required in the premises.

Further proceeding in the disclosure, we find that the function of the central opening is to co-operate with a projection of a similar shape in the guard, adapted snugly, "so that the blade will " " be retained " " in

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^{(1) (1863) 3} Ch. D. 135; (1864) 11 L.T. n.s. 245.

^{(3) (1915) 32} R.P.C. 256, at 266. (4) (1909) 27 R.P.C. 33, at 46.

^{(2) [1903]} A.C. 509, at 516-518.

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shaving relation to the guard teeth when the parts are assembled."

According to the evidence, no razor or blade was ever built by the appellant in accordance with the above description. The patent issued in May, 1926. In November, 1929, a safety razor—known as the bar type razor which might or might not come under the patent—went into production and was put on sale by the appellant in the early part of 1930, but the manufacture of that article was soon abandoned; and, then, another safety razor, known as the Goodwill type, claimed to be made under the patent by the appellant, came on the market in May or June, 1931. We are not called upon to decide whether the Goodwill razor corresponds to the patent. We are concerned only with the blade disclosed in the claims in suit and the question is whether that blade was patentable. whether it was adequately claimed and whether it was infringed.

The blade manufactured and sold by the respondent differs from that disclosed in the patent in that, instead of a diamond shaped opening disposed in the centre latitudinally and longitudinally of the blade, it has a long irregularly shaped slot extending for most of its length and that, instead of the notches in the ends, the four corners are perforated with rectangular openings. The central hole in the blade is not adapted to fit snugly over a projection in the guard. In fact, if one takes the whole opening as being a hole—which it is not within the meaning of the patent that opening is not disposed centrally in the blade, in the sense that, as just mentioned, it extends practically over the whole length of the blade. Assuming the respondent's blade was used in the Goodwill holder, far from fitting snuglv over the projections of the Goodwill guard, there would be no function whatever in the longitudinal slot, nor in the central hole of the respondent's blade. The means co-operating with the guard of the holder and retaining the blade in shaving relation thereto would then consist in two enlargements, diamond shaped, of the longitudinal slot; and, for that purpose, the rest of the slot and the central hole would be functionless. If one suppressed all the parts of the elongated slot thus being functionless, the blade would remain with the central hole (which has nothing to

do with shaving relation), and two diamond shaped apertures spaced from the central hole; or altogether, three openings. The blade as designed by the respondent may fit the razor patented by the appellant, although it would not of CANADA, fulfil the functions intended in claims 4 and 5—or, at least not in the same way—but it will also fit the bar type razor, the Goodwill razor and other holders, according to the evidence.

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The respondent's blade does not correspond to the blade described in the specification and in the drawings. was no infringement. Of course, the appellant urges the respondent's blade is substantially similar to the blade used in the Goodwill type of razors. The answer is that the Goodwill blade is not the article disclosed in the patent.

We have been referred to a judgment rendered in the United States (1), wherein the corresponding United States patent was involved. In that case, the combination claims were sued on. Besides, it is quite apparent from the report that the evidence, the prior art referred to and, in certain aspects, the law to be applied were not the same. The whole trial was conducted on a different footing. We mention the judgment to show that it was not overlooked.

The appeal should be dismissed with costs.

Appeal dismissed with costs.

Solicitors for the appellant: Henderson, Herridge & Gowling.

Solicitors for the respondent: Smart & Biggar.

⁽¹⁾ Gillette Safety Razor Co. v. Hawley Hardware Co., (1932) 60 Fed. Rep. (2nd series), 1019. 58969-1