1929
*Nov. 20, 21, 22, 23.
1930
*Feb. 4.

FRENCH'S COMPLEX ORE REDUCTION COMPANY OF CANADA (DEFENDANT) ..... } APPELLANT;

AND

ELECTROLYTIC ZINC PROCESS COMPANY (PLAINTIFF) ..... } RESPONDENT.

ON APPEAL FROM THE EXCHEQUER COURT OF CANADA

ıtent—Specification—Claims of invention—Clear and distinct statement as to alleged invention—Jurisdiction of the court—Construction of specification—Professional or expert witnesses—When more than five to be examined—When leave to be obtained from court—Patent Act, R.S.C., 1906, c. 69, s. 13—Canada Evidence Act, R.S.C., 1927, c. 59, s. 7.

Under the *Patent Act*, R.S.C., 1906, c. 69, an applicant for a patent must present to the Commissioner a petition under oath giving the title or name of the invention and accompanied by a specification containing the claims of the alleged inventor.

Held that the object of the specification, under section 13, is to give a clear and distinct statement of what the alleged inventor "claims as new and for the use of which he claims an exclusive property and privilege." The effect of the patent is to grant him, for a fixed period of years, a monopoly in what he has so claimed. The condition for the grant is that the thing so claimed be truly new and useful and that there be given out to the public a correct and full description of the mode or modes of operating the invention, as contemplated by the inventor.

*PRESENT:—Anglin C.J.C. and Newcombe, Rinfret, Lamont and Smith JJ.

1930

FRENCH'S COMPLEX ORE REDUCTION CO. v. ELECTROLYTIC ZINC PROCESS CO.

Held, also, that, to that extent, the jurisdiction of the courts is not limited by section 29 of the Act. By the very terms of the patent, the grant is made "subject to the conditions contained in the Act" and also "subject nevertheless to adjudication before any court of competent jurisdiction." Therefore, unless the claims or the description or both comply strictly with the requirements of the Act, the monopoly should not be granted, and the patent is accordingly invalid and should be declared null and void.

Held, further, that obviously the decision on the point referred to above, depends upon the construction of the specification. It should not be construed astutely. The patent should be approached, in the words of Sir George Jessel "with a judicial anxiety to support a really useful invention" (*Hinks & Son* v. *The Safety Lighting Co.* (4 Ch. D. 607, at p. 612)); but, on the other hand, the consideration for a valid patent is that the inventor must describe in language free from ambiguity the nature of his invention, including the manner in which it is to be performed; and he must define the precise and exact extent of the exclusive property and privilege which he claims. Otherwise the specification is insufficient and the patent is bad.

At the trial, the depositions of three expert witnesses, who had previously been examined in Europe on commission, had been read and the testimony of a fourth witness similarly examined in Europe was about to be put in, when an argument took place as to the right of the respondent to call more than five of such witnesses without leave having been applied for before the examination of any one of them, as required by section seven of the *Canada Evidence Act.* The trial judge suggested that leave might then be applied for; and, notwithstanding objection by counsel for the appellant, the application for leave was held to be still in time and was allowed.

Held that such application was made too late and ought not to have been entertained at that stage of the proceedings. The application should at least have been made before the testimony of any of the witnesses examined on the Commission was read at the trial.

Semble that, in a case tried before a judge, it should not be necessary, on account of the evidence so improperly admitted, to refer it back to the trial court, such as would have to be done in a case tried before a jury or by arbitrators (*Canadian Northern Western Ry. Co.* v. *Moore,* (58 Can. S.C.R. 519)); but that it should be sufficient for an appellate court to disregard the evidence improperly admitted and to base its decision solely upon the record as it would then stand.

Judgment of the Exchequer Court of Canada ([1927] Ex. C.R. 94) aff.

APPEAL from the judgment of the Exchequer Court of Canada (1), maintaining the respondent's action to impeach a patent granted to appellant's author, for an alleged process to extract zinc from zinc lead ore by electrolysis.

The material facts of the case and the questions at issue are stated in the above head-note and in the judgment now reported.

(1) [1927] Ex. C.R. 94.

1930

FRENCH'S COMPLEX ORE REDUCTION CO. v. ELECTROLYTIC ZINC PROCESS CO.

R. S. Smart K.C. and *Henri Gérin-Lajoie K.C.* for the appellant.

W. N. Tilley K.C., A. Geoffrion K.C. and *R. C. Crowe* for the respondent.

The judgment of the court was delivered by

RINFRET J.—The action of the Electrolytic Zinc Process Company impeaches the Canadian patent no. 140,402 granted to Andrew Gordon French on the 14th of May, 1912, and now owned by French's Complex Reduction Company of Canada Limited.

The patent is a process patent for alleged improvements in the treatment of zinc and manganese sulphate solutions obtained in the hydro-metallurgical process for the extraction of zinc from zinc lead refractory ores containing manganese by the use of electrolysis.

The validity of the patent was disputed on several grounds which may be summarized as follows:

(*a*) No invention;
(*b*) Lack of novelty and anticipation;
(*c*) Lack of utility;
(*d*) Insufficiency of the specification;
(*e*) Wilful omission and misleading, deceptive or false statements in the specification;
(*f*) The specification did not specifically state or claim, and was not limited to, that which was the novelty, if any, of the alleged invention.

The trial judge, Audette J., in the Exchequer Court of Canada, held practically that all of these grounds of attack were established and, upon the conclusion of the argument, he delivered judgment adjudging the patent invalid and declaring it null and void.

He found that there was no invention;

that the defendant's patent does not possess any element of invention and (he could) in no sense, find any creative work of an inventive faculty which the patent laws are intended to encourage and reward; (and again) it cannot be found there was invention in the present case.

He found lack of novelty and anticipation:

It cannot be said that the improvement claimed lies so much out of the track of former use as to involve ingenuity of invention * * *

Dr. Ingalls (he said), a witness of unusual knowledge and experience in the metallurgical art, has described and considered with great competence, every substantial allegation in the defendant's patent and has

demonstrated and established beyond any doubt that each and every one of them has been anticipated and belongs to the prior art. There is, according to his view, not one single element of the patent which is not found in the prior art.

On the ground of usefulness, the learned judge remarked that the patent "has never been put into practice" and "has never been used commercially." He points out that "No purification is mentioned in the patent and it is in the evidence that purification is necessary"; and further that "The patent does not show that the impurities must be taken out." Although he does not state whether he considers the absence in the patent of any reference to purification as insufficiency in the specification or as wilful omission, both misleading and deceptive, it may be noted that that statement in the judgment comes immediately after his reference to section 13 of the Act, and the averment that if the patentee "designedly or unskilfully makes it ambiguous, vague or indefinite, the patent becomes obviously bad." He does say that "there is not in this indefinite and uncertain patent a new clearly and well defined process or method dealing with complex ore containing manganese," that it does not "point out clearly the method by which the process is to be performed."

Finally, he agreed with the Electrolytic company that the specification does not state or claim, and is not limited to, that which was the novelty, if any, of the alleged invention. If it consisted in

> fixing the proportion of manganese to be used, (that) does not amount to ingenuity of invention—however valuable it may be, and it is not defined in the patent.

If the invention consisted only in the discovery that "the presence of manganese sulphate in the electrolyte is a benefit," the learned judge says

> that no such statement as alleged can be found in any of the eight claims of the patent; and were it so, could it be a valid subject-matter under the circumstances of the present case?
>
> Even if it were in the specification—a statement which I do not find—if it is not embodied in the claims, it becomes *publici juris*. It has been given to the public. The patentee must define and limit with precision what he claims to have invented and I cannot find such a statement in the claims.

And the learned judge concludes:

> The use of manganese as mentioned in the patent, I am unable to take as a patentable improvement under the circumstances.

From such judgment the French's Ore Company now appeals to this court.

1930

FRENCH'S COMPLEX ORE REDUCTION CO. v. ELECTROLYTIC ZINC PROCESS CO.

Rinfret J.

Whether in a particular case there is invention, novelty or utility is always a question of fact depending on the special circumstances and stands to be decided on the evidence of those having the technical skill and knowledge enabling them to understand the new art, machine, manufacture, process or composition of matter or the improvement thereon for which the patent was granted.

The subject-matter of the French patent is such that the specification must be envisaged as a description addressed primarily to persons possessing a not inconsiderable amount of chemical knowledge (Lord Parker in *Osram Lamp Works Limited* v. *Pope's Electric Lamp Co.* (1)). The trial judge,

(1) (1917) 34 R.P.C. 369, at p. 391.

in this case, had the advantage of the assistance of eminent chemists and metallurgists of several countries in Europe, America and Australia; men, as he rightly says, " the most qualified to speak upon this subject-matter in our days." For reasons which he gives—and which have our approval —he made his choice in the conflict of testimony. From his judgment on these points—agreeing as it does " with the weighty evidence of the plaintiff,"—we are not prepared to differ.

Counsel for the French company, however, drew our attention to the fact that, at the hearing of the case, the depositions of Messrs. Ashcroft, Cowper-Coles and Laszczynski, who had previously been examined in Europe, on commission, were read and put in evidence by counsel for the Electrolytic company. The testimony of yet another witness similarly examined in Europe, Dr. Victor Engelhardt, was about to be put in, when a discussion arose as to the character of these witnesses,—whether they were professional or expert witnesses—and as to the right of the plaintiff to call more than five of such witnesses, without leave having been applied for before the examination of any one of them, as required by the 7th section of the *Canada Evidence Act.*

The contention of counsel for the Electrolytic company was that the witnesses heard in Europe were " only accounting for what they did " and giving the results they obtained, that they were not " experts with regard to the validity of the patent." The learned trial judge held a different view and, for greater certainty, suggested that leave

might now be applied for, to which counsel acceded without prejudice to his contention that none of the witnesses so far examined had given opinion evidence. Application was therefore made orally by counsel for the plaintiff for leave to examine five expert witnesses outside of those examined in Europe. Objection was taken by counsel for the defendant, but the learned judge held that the application was still in time and he allowed it.

With due respect, we think such application was made too late and ought not to have been entertained at that stage of the proceedings. The rule is clear that

> such leave shall be applied for before the examination of any of the experts who may be examined without such leave (s. 7-2).

In this case, the application should therefore at least have been made before the testimony of any of the witnesses examined on the commission was read at the trial. Their evidence became part of the trial as soon as it was put in. It already formed part of the trial when the application was made and the testimony of three of the witnesses had already been read and dealt with by counsel for the plaintiff.

In *Canadian Northern Western Ry.* v. *Moore* (1), this court, holding that s. 7 of the Canada *Evidence Act* had been infringed, set aside the award and referred the case back to the arbitrators. But this was a judgment in arbitration proceedings. No doubt also, in a jury trial, the like situation would have to be remedied in a similar way. In a case like this however, tried before a judge, the same result does not necessarily ensue. It should be sufficient, we think, to disregard the evidence improperly admitted and to base the decision solely upon the record as it would then stand. But we do not find it necessary to express an opinion upon the remedy, if any, to be applied, because of the views we hold upon other points, which do not depend on the evidence and which remain presently to be discussed.

The French patent was granted under the law in force in 1912. This was *The Patent Act,* to be found in Revised Statutes of Canada, 1906, chapter 69. Under it, an applicant for a patent must present to the Commissioner a petition under oath giving the title or name of the invention

(1) (1916) 53 Can. S.C.R. 519.

1930

FRENCH'S COMPLEX ORE REDUCTION CO. v. ELECTROLYTIC ZINC PROCESS CO.

Rinfret J.

and accompanied by a specification containing the claims of the alleged inventor. Under section 13 of the Act,

> The specification shall correctly and fully describe the mode or modes of operating the invention, as contemplated by the inventor; and shall state clearly and distinctly the contrivances and things which he claims as new and for the use of which he claims an exclusive property and privilege.

In compliance with this requirement of the law, French filed the following specification of his invention accompanied by the following claims. We shall omit those parts of the specification having reference to a process of calcination where bisulphate of sodium is used. That is covered by another patent against which the action was originally directed, but as to it a discontinuance was filed, and the process is not made an essential element of the patent in issue, it being distinctly stated that any other mode of calcination may be used for the oxidating and sulphating of the ores.

> This invention has for its object the electrolytic treatment of zinc and manganese sulphate solution obtained by the lixiviation of calcined zinc lead and manganese refractory ores * * *
>
> The mole of practising my invention is as follows:
>
> In my process the solution of the sulphates of zinc and manganese resulting from the lixiviation of the calcined zinc lead and manganese ores either with a dilute solution of bisulphate of sodium, or with water acidulated with sulphuric acid is placed in electrolytic tanks of any convenient form which are provided with anode plates of lead, and cathode plates of zinc or any other convenient metal for receiving the deposit of metallic zinc. The solution of zinc and manganese sulphates should be as near the saturation as possible, say from 1·25 to 1·30 specific gravity and a direct electric current of a minimum of four volts is passed through the solution from anode to cathode. The proportion of manganese to zinc in the solutions may be from one-half to three-fourths, i.e., one pound of zinc to from one-half to three-fourths of a pound of manganese, but the process works well with only an eighth part of manganese to one of zinc.
>
> An immediate and constant deposit of reguline zinc takes place on the cathode plates, whilst a simultaneous formation of manganese dioxide occurs at the anode plates partly adhering thereto and partly falling as a black mud to the bottom of the electrolytic tank. The advantages of this formation of dioxide of manganese by the action of the current on the sulphate of manganese in the solution are threefold, namely: (1) Polarization by free oxygen at the anode is prevented. (2) Peroxidation of the lead anodes and consequent destruction is prevented. (3) The manganese in the solution obtained from the ores is recovered in a commercially valuable form. The solution obtained from ores poor in manganese may be mixed with that from ores richer in manganese so as to get a good average. The sulphuric acid originally combined with the zinc and the manganese in the solution as it reaches the electrolytic tanks is separated by the current from those metals.

Then comes a description of what will happen if bisulphate of sodium was used in the calcination and the specification proceeds:

* * * In the case of plain calcining of the ores without the bisulphate of sodium the liberated sulphuric acid remains free in the effluent liquor from the electrolytic tank and is used again for leaching fresh ores * * * In order to obtain the highest efficiency in the electrolytic tanks, it is necessary to maintain the zinc and manganese solution at as high a strength as possible, and to keep the acidity from rising to such an extent as will cause a local back current at the cathodes, thereby diminishing the deposition of zinc. To effect these objects the solution is caused to circulate continuously between the leaching and the electrolytic tanks and not allowed to fall below 1·2 specific gravity or rise above 2 per cent of active sulphuric acid.

The applicant is aware that attempts have been made to electrolyse solutions of zinc obtained from zinc ores, but owing partly to inherent defects in the roasting or calcining and largely to the absence of manganese in the solution, such attempts have never reached the commercial working stage.

What I do claim and desire to secure by Letters Patent is:—

Claims:

1. In the electrolytic separation of zinc and manganese in hydrometallurgical solutions obtained from zinc lead ores containing manganese, the deposition of zinc in reguline form.

2. In the electrolytic separation of zinc and manganese in hydrometallurgical solutions obtained by treating zinc lead ores containing manganese, the deposition of zinc in reguline form on the cathode and manganese dioxide at the anode.

3. In the electrolytic separation of zinc and manganese in hydrometallurgical solutions obtained by treating and leaching zinc lead ores containing manganese, the precipitation of manganese dioxide at the anode.

4. In the electrolytic separation of zinc and manganese from an aqueous solution of their sulphates and sodium sulphate, the regeneration and recovery of sodium bisulphate.

5. In the electrolytic separation of zinc and manganese in an aqueous solution of their sulphates, the combination of the nascent oxygen formed at the anode with manganese and the consequent freedom from liberated gas.

6. In the electrolytic separation of zinc and manganese in an aqueous solution of their sulphates, the combination of the nascent oxygen formed at the anode with manganese producing manganese dioxide and the consequent freedom from oxidation of the lead anode itself.

7. In the electrolytic separation of zinc and manganese in hydrometallurgical solutions obtained by heating complex zinc lead ores containing manganese, with bisulphate of sodium and leaching, the deposition of reguline zinc on a zinc cathode and granular manganese dioxide on or in the vicinity of the anode and the regeneration and recovery of the bisulphate of sodium.

8. In the separation of zinc and manganese by the electrolysis of a concentrated aqueous solution of the sulphates of these metals having a specific gravity of from 1·25 to 1·30 with a direct current of four volts or over, the precipitation of manganese dioxide at the anode and pure reguline zinc at the cathode.

1930

FRENCH'S COMPLEX ORE REDUCTION CO. v. ELECTROLYTIC ZINC PROCESS CO.

Rinfret J.

The object of the specification, as we have seen is to give a clear and distinct statement of what the alleged inventor "claims as new and for the use of which he claims an exclusive property and privilege." The effect of the patent is to grant him, for a fixed period of years, a monopoly in what he has so claimed. The condition for the grant is that the thing so claimed be truly new and useful and that there be given out to the public a correct and full description of the mode or modes of operating the invention, as contemplated by the inventor. To that extent, at least, we do not think the jurisdiction of the courts is limited, as was urged upon us, by section 29 of the Act. By the very terms of the patent, the grant is made "subject to the conditions contained in the Act" and also "subject nevertheless to adjudication before any court of competent jurisdiction." And we take it that unless the claims or the description or both comply strictly with the requirements of the Act, the monopoly should not have been granted, and the patent is accordingly invalid and should be declared null and void.

Obviously the decision on this point depends upon the construction of the specification. It should not be construed astutely. The patent should be approached, in the words of Sir George Jessel "with a judicial anxiety to support a really useful invention" (*Hinks & Son* v. *Safety Lighting Co.* (1); but, on the other hand, the consideration for a valid patent is that the inventor must describe in language free from ambiguity the nature of his invention, including the manner in which it is to be performed; and he must define the precise and exact extent of the exclusive property and privilege which he claims. Otherwise the specification is insufficient and the patent is bad.

Now if we come to examine the specification sent in by French, reading first the description of the invention and looking afterwards to what he has claimed, in accordance with the rule laid down by Lord Hatherley in *Arnold* v. *Bradbury* (2), we find that it describes a process wherein refractory complex zinc lead ores containing manganese are crushed in their crude state; these ores are then subjected to roasting or calcination, and subsequently to leaching or

(1) (1876) 4 Ch. D. 607, at p. 612.

(2) (1871) 6 Ch. App. 706, at p. 707.

lixiviation with water acidulated with sulphuric acid, the resulting solution of the sulphates of zinc and manganese being placed in tanks wherefrom zinc is recovered in metallic form by means of electrolysis. At the same time as zinc is deposited in the electrolytic cells, the sulphuric acid is regenerated in the cells and sent back to the leaching tanks for the dissolving of new ores.

It is therefore a cyclic process for the treatment of zinc lead ores containing manganese by means of electrolysis. But the cyclic process for the recovery of zinc and all the general features of the process described by French had obtained in the prior art. Calcination and leaching in the manner suggested were well known and formed part of the common knowledge. Electrolysis is considered a very simple operation. It is one which had been used in many departments of metallurgy. On the other hand, in the specification no mention is made of purification. It is now conceded to play an important part in the process and Thomas French, the son of the inventor and himself a consulting metallurgist and chemical engineer, emphasized the necessity of purification of the solution (or, as he said, of obtaining a " finished liquor ") before it went into the electrolytic cell. This was in a letter written by him, at the time when he went to Trail, British Columbia, for the purpose of experimenting with his father's process. He had previously carried on operations under the process jointly with his father; and, in that letter, he was answering certain questions that had been asked of him in writing by Mr. Stewart, one of the officers of the Consolidated Mining and Smelting Company of Canada, for whose benefit the experiments were being made.

In explanation of the omission to mention purification, counsel for the appellant argues that leaching includes the purifying of the solution and that a skilled worker at the time of the patent would have understood that purification must therefore be read into the patent as forming part of the leaching operation. That is not what a reading of the specification suggests. It does not convey the impression that the patentee left out in his description anything which he expected craftsmen to read into it. He referred to every step of the operation in the order in which it took place,—

1930

FRENCH'S COMPLEX ORE REDUCTION CO. v. ELECTROLYTIC ZINC PROCESS CO.

Rinfret J.

whether in his own mind such step was a matter of common knowledge or whether it was not. Yet purification is not mentioned. Contrast this with the interpretation of the language of the specification put forward by some witnesses on behalf of the French company, to the effect that the invention consisted in the discovery of the properties of manganese in inhibiting the toxic effect of the impurities in the solution. This would dispense with purification by other means and, instead of inducing one to read such purification into the patent (as urged before us by counsel for the appellant), would rather lead in the other direction. The evidence being undoubtedly that purification is a necessary part of the process, as found by the trial judge, it may well be argued that the absence of any reference to it in the specification amounts to an omission wilfully made for the purpose of misleading.

But the most serious difficulty in the way of the appellant is that of finding in the specification in precise and unambiguous terms, both the nature and ambit of the invention which French claims to have made. The widely different constructions put upon it show in themselves how much it lacks in the clarity which is essential and which is indeed imperatively required by law.

Counsel for the respondent expressed the view that French was making the whole claim of being the inventor of the application of electrolysis to zinc lead ores containing manganese. We do not think he does; but if he did, it would be conclusive against the validity of the patent.

We think the patent is only intended to cover a stage in the treatment by electrolysis. Experts heard on behalf of the French company thought the fundamental idea was the usefulness or beneficial effect of manganese sulphate in the electrolyte. Thomas French was put the question:

> What in your opinion are the essential features of patent 140,402?

The answer was:

> The essential feature is that manganese should be present in the solution.

This answer does not agree with his letter to Mr. Stewart of 12th January, 1915, already referred to. That letter is valuable at least to indicate how Thomas French under-

stood the patent at the time and also what a metallurgist and a chemist reading the specification would understand from it.

It should be remembered that the patent deals with ores containing manganese. It does not pretend to deal with other ores. It will at once be apparent that no patent could issue granting the exclusive privilege of having manganese in a solution of complex zinc lead ores containing manganese. But assuming the beneficial effect of manganese sulphate in the solution, we are unable to find that the patentee made such a broad claim. Had it been made, the claim itself would have been sufficient to defeat the patent.

The appellant's position as to the invention was not so stated at bar by counsel. In the transcript of trial proceedings, Mr. Smart "puts his case in this way":

> Now the electrolysis of a zinc sulphate solution was of course known before; and it was also known before that when zinc sulphate solutions were derived from a complex ore containing manganese there would necessarily be some manganese sulphate in that solution; but this patentee discovered that if that manganese sulphate were maintained in certain proportions and in a certain way that it had a beneficial result; and he added to that discovery a practical means of applying it. Now that in brief is the invention with which we are concerned here.

Mr. Smart maintained that position before this court. It requires some ingenuity to discover that that is what the description of the invention in the specification means. But be it so, while no limit is fixed in the patent, none of the experts regarded the reference in the specification to the proportion of manganese to zinc in the solution as forming part of the alleged invention in the sense that such proportion must be adhered to. We are told by Mr. Witherell that

> the real range * * * is the highest possible degree of manganese to zinc which you can get in the ore, or has been known of, as the maximum; and the minimum is down so fine and so low you could not discover it.

This would amount to claiming the whole range and if the patent were to be so read, it would be obviously bad. Assuming there was ingenuity in the conception of the idea that manganese should be maintained in the solution instead of being eliminated, such conception "coupled with the way of carrying it out" might support a claim for the broad idea; *Hickton's Patent Syndicate* v. *Patents, etc.*,

1930

FRENCH'S COMPLEX ORE REDUCTION CO. v. ELECTROLYTIC ZINC PROCESS CO.

Rinfret J.

Limited (1). Admittedly French does not make such a claim. Neither could he claim all modes of carrying the idea or the principle into effect. In such a case, the words of Baron Alderson in *Neilson* v *Harford* (2), would be apposite:

> In the first place, it is necessary to ascertain what the patentee has claimed as his invention; and, in the next place, if he has claimed the principle and all the modes of applying it, his claim will be indistinguishable from a claim to the principle itself and will be too large.

Further, it is shown that the proportions mentioned in the specification are of no importance; and no intention is apparent on the part of the patentee to ascribe to them any special significance.

According to the appellant's own experts, none of the particular conditions set forth concerning proportion of manganese to zinc, saturation of solution, specific gravity, voltage or acidity have any real bearing as a means for obtaining whatever may be the beneficial effect of manganese. These proportions and these particular conditions were discarded by Thomas French, as appears from his letter to Stewart, while he was conducting operations at Trail, and also by Mr. Witherell in the experiments he made. In fact, the results of the latter would show that greater efficiency was obtained from a solution containing no manganese.

Thus far, while dealing with the specification, we have confined our attention to the description of the alleged invention; but, as was said by Lindley M.R. in *Pneumatic Tyre Co.* v. *Puncture Proof Pneumatic Tyre Co. Limited* (3),

> whether a patentee has discovered a new principle or whether he has not, his monopoly is confined to what he has already invented, and what he has claimed as his invention.

If we turn to the claims, we do not find in any of them the necessity of maintaining manganese, still less of securing in the solution a certain relationship between zinc and manganese sulphates. Each claim begins by the words: " In the electrolytic separation of zinc and manganese." No one reading those claims would imagine that the patentee thereby intended to " claim as new " the idea of preserving man-

(1) (1909) 26 R.P.C. 339, at p. 347.

(2) (1841) 1 W.P.C. p. 342, at p. 355.

(3) (1898) 15 R.P.C. 236, at p. 241.

ganese or a certain proportion of manganese in the hydro-metallurgical solutions of zinc lead ores containing manganese. If the novelty or the utility of the process lay in the use of manganese in certain proportions, French had to claim it in order to secure for that use an exclusive property and privilege. And if he did not claim it, he may be taken to have disclaimed it. At all events, he made no claim for what is now suggested to be the invention, and there is no invention or subject-matter left in what he did claim and the patent is therefore bad.

Assuming that the process was new, no claim was made for the process itself. Results alone are stated in the claims; not the process whereby these results are obtained. Through the operation of the ordinary laws of nature and on account of the inherent properties of manganese, these results are said to happen as a necessary consequence of the process for which no protection is claimed. It would follow that the process, if patentable, was given to the public and, of course, the natural results, for which alone claims were made, were not patentable. So far as they are involved, the grant made was wholly invalid.

To sum up our views, on this branch of the case, we think the specification is insufficient. It fails to comply with the conditions of clarity and distinctness required by section 13 of the Act and does not state in precise and unambiguous terms in what the alleged invention consists. If the descriptive part of the specification be construed as suggested by counsel for the French Company, the claims were not made to conform with it and they are inadequate for that purpose. We can find in the patent no other subject-matter patentable in law. The utility or the beneficial effect of manganese or of certain proportions of manganese are not what French

> claimed as new and for the use of which he claimed an exclusive property and privilege.

At least, he did not clearly and distinctly do so. In the words of Fletcher Moulton L.J., the claim is

> a separate part of the specification primarily designed for delimitation.

British United Shoe Machinery Company Limited v. *A. Fussel & Sons, Limited* (1). The delimitation must be

(1) (1908) 25 R.P.C. 631 at p. 650.

1930

FRENCH'S COMPLEX ORE REDUCTION CO. v. ELECTROLYTIC ZINC PROCESS CO.

Rinfret J.

clearly marked out. And, in conclusion, we will quote the following passage from Lord Halsbury's speech in *The British Ore Concentration Syndicate Limited* v. *Minerals Separation Limited* (1).

> The statute requires it (the specification) to be a distinct statement of what is the invention. In construing a specification one has to remember that it is a document not only assuring a monopoly to the patentee, which but for the statute would be contrary to the common law, but so (also?) prohibiting any one, other than the patentee, doing what he would be free to do, but for the right which is granted, subject to the condition, among other things, that the patentee states distinctly what his invention is. If he designedly makes it ambiguous, in my judgment the patent would undoubtedly be bad on that ground; but even if negligently and unskilfully he fails to make distinct what his invention is, I am of opinion that the condition is not fulfilled, and the consequence would be that the patent would be bad."

The appeal fails and should be dismissed with costs.

Appeal dismissed with costs.

Solicitors for the appellant: *Kavanagh, Lajoie & Lajoie.*

Solicitors for the respondent: *Osler, Hoskin & Harcourt.*

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(1) (1909) 27 R.P.C. 33, at p. 47.