

personal obligation transmitted against him if there is an agreement *in gremio* of the conveyance that the purchaser shall take the place of the debtor in a question with the creditor; and transmitting under this clause of the statute means that the purchaser shall take the place of the original debtor in a question with the creditor. It can mean nothing else, because if there is such an agreement as this clause contemplates, it is to be equivalent to a bond of corroboration. Therefore the whole question we have to consider is, whether in this conveyance from the seller to the purchaser there is an agreement to that effect—that is to say, that the purchaser shall take the place of the debtor, renounce all right to compensate or set-off against any obligation in the conveyance, and become directly liable to the original creditor. It seems to me too clear to require further illustration that there is nothing of the kind in this conveyance. There is an obligation of relief by payment, or of relief otherwise; but whatever the way of relief may be, the relief must be given if the debtor be distressed. But if there be debts which can be set off against this obligation of relief, then it is quite as clear that no payment need be made by the purchaser of the land until his debt which he sets off has been paid or satisfied. That surely was the state of the relative rights prior to the Act. The whole matter is to simplify the conveyance by superseding the necessity of granting a bond of corroboration, and making the agreement to that effect, if it be found to that effect sufficient for that purpose.

The Court recalled the interlocutor of the Lord Ordinary and assailed the defenders.

Counsel for Pursuers—Mackintosh—Ure. Agent—J. Gillon Fergusson, W.S.

Counsel for Defenders Rodger, Watt, & Paul, and Andrew Paul—D. F. Kinnear, Q.C.—Begg. Agents—Morton, Neilson, & Smart, W.S.

Counsel for Defender Rodger—Scott—J. P. B. Robertson. Agents—J. & A. Hastie, S.S.C.

Counsel for Defender Watt—Strachan. Agent—P. S. Malloch, S.S.C.

Saturday, December 3.

## SECOND DIVISION.

[Lord Rutherford Clark,  
Ordinary.

HENDERSON v. CLIPPENS OIL COMPANY.

### Patent—Specification.

The title of a patent bore that it was “for improvements in the destructive distillation of shale or other oil-yielding minerals, and in apparatus therefor.” The specification stated that the patent had for its object “the economical and satisfactory obtainment and application of the heat required for the destructive distillation of shale or other oil-yielding minerals, and it comprises improved arrangements for the utilisation of the spent shale or mineral itself as fuel for supplying the heat.” . . . The claiming clause described as the invention protected

by the patent “the conducting of the destructive distillation of shale . . . substantially according to the system, and by means of the arrangements and apparatus, hereinbefore described.” The application of the spent shale as fuel was admittedly old and not patentable. *Held (rev. Lord Rutherford Clark)* that no new system of distillation apart from the arrangements and apparatus and their use was claimed, but that the claim made was for certain improvements in the way of arrangements and apparatus for carrying out the old form of distillation, that the “system” was merely the method in which the apparatus worked, and that there being novelty and utility in these improvements the patent-right to them should be protected by interdict.

*Observations* on the construction to be applied to specifications.

By letters-patent sealed 7th October 1873 Norman M. Henderson obtained the exclusive privilege for the ordinary term of fourteen years of making, using, and vending an invention for “improvements in the destructive distillation of shale or other oil-yielding minerals, and in apparatus therefor.” At the time of this litigation the right to the letters-patent was vested in Henderson and in William Kennedy.

The specification lodged in pursuance of the conditions of the letters-patent bore—“My said invention has for its object the economical and satisfactory obtainment and application of the heat required for the destructive distillation of shale, or other oil-yielding minerals, and it comprises improved arrangements for the utilisation of the spent shale or mineral itself as fuel for supplying the heat, or a portion thereof.” Then followed a detailed description referring to drawings lodged with the specification of the “best practical arrangements and apparatus as made with my improvements.” The nature of the apparatus, which consisted, shortly speaking, in an arrangement of shale retorts such as to enable the spent shale, which contains little carbon and therefore rapidly loses its heat on any exposure to the open air, to be passed from the upper to the under of two retorts placed vertically (the system being also capable of application to horizontal retorts), and thereby to effect a saving of fuel, is described in the opinion of the Lord Justice-Clerk.

After a detailed description of the apparatus said to form the invention, with references to the drawings lodged with the specification, that document proceeded—“Existing vertical retorts with vertical discharge doors on their outer sides close to their bottoms may be adapted for carrying out my invention by building or forming a chamber in front of each door, and with a lateral passage or opening leading down into the fire chamber, and provided with a valve to close the passage, excepting when the retort is being discharged. Any convenient number of the retorts may be arranged in one building or oven, and the retorts may be horizontal, or inclined if preferred. Any convenient arrangement of discharge door may be used, provided a valve or equivalent screen is interposed between it and the fire chamber, excepting when the spent shale or mineral is being transferred from the retort to the fire chamber. The arranging of one fire chamber in connection with

two or more retorts, as hereinbefore described, is of great importance in carrying out my invention, as is also the discharging of the retorts at different periods and in regular rotation; as with these arrangements the aggregate heat acting is rendered more uniform and regular, while each fresh charge of spent shale or mineral becomes more satisfactorily kindled, and is more easily brought into a proper state of combustion in consequence of mixing with materials already in an advanced state of combustion." Then followed a description of the method of working a set of four retorts according to the specification, and the specification concluded as follows:—"Having thus particularly described my said invention, and the manner of performing the same, I have to state that I do not restrict myself to the precise details herein described or delineated, but that what I believe to be novel and original, and claim as the invention secured to me by the hereinbefore in part recited letters-patent, is—(1) The conducting of the destructive distillation of shale or other oil-yielding minerals substantially according to the system, and by means of the arrangements and apparatus, hereinbefore described. (2) The arranging of two or more retorts in one oven, but with a separate passage or space for the transference of the contents of each retort directly into a common fire chamber, substantially as hereinbefore described. (3) The applying of a valve in the passage or space through which the contents of each retort are transferred to the common fire chamber, such valve being in addition to the door or cover which closes the discharge opening of the retort, substantially as and for the purposes hereinbefore described." A large number of retorts were set up at various places after Henderson's patent was secured, which were arranged and constructed according to his system, and for which he as patentee obtained payment of a licence.

In February 1881 Henderson and Kennedy raised this process of suspension and interdict against the Clippens Oil Company (Limited), and their manager William Young, to have them interdicted from infringing Henderson's patent. The complainers alleged that the respondents were at their works at Pentland, in Midlothian, erecting retorts and relative apparatus, and in doing so were using, without leave or licence of the complainers, the invention set forth in their patent and specification. The respondents denied that they were in any way infringing the complainers' letters-patent, and averred also that Henderson was not the first and true inventor of the alleged invention described in the letters-patent and specification, but that several inventions substantially the same had been described and disclosed in specifications prior in date to the complainers'—in particular, that what was claimed as the invention in the specification was in public use at Fulham Gas-Works many years before 1873. The respondents also averred that the alleged invention did not constitute any material improvement on the system formerly in use, and was not useful or beneficial; further, that there was a substantial difference between the final and the provisional specification.

The respondents pleaded—"(2) The alleged letters-patent of the complainers are null and void,

in respect that (1st) The said Norman M'Farlane Henderson was not the first and true inventor of the said alleged invention. (2d) The said alleged invention was publicly known prior to the date of the said letters-patent. (3d) The said alleged invention was publicly used prior to said date. (4th) The said alleged invention is not practically useful. (5th) The said specification does not distinguish between what is new and what is old. (6th) The said specification is dis-conform to, and the invention therein described is substantially different from, that described in the provisional specification."

After a proof the Lord Ordinary (RUTHERFURD CLARK) on 15th July repelled the reasons of suspension and refused the note. His Lordship appended this opinion to his interlocutor:—"1. The first question to be solved is this, What is the invention claimed by the patentee? The respondents contend that he claims the use of the hot residuum of the retorts as a fuel. If this be so, it is not disputed that the patent is void.

"The title of the patent is for 'Improvements in the destructive distillation of shale or other oil-yielding minerals, and in apparatus therefor.' Here there are two separate matters—first, improvements in the distillation, and second, in the apparatus. To justify the title it would follow that in both respects there is invention; for if there be not improvements in the distillation as well as in the apparatus, the patent would be granted for an invention which is not disclosed in the specification.

"When reference is made to the specification the same distinction is preserved. To use the words of that document, the invention 'has for its object the economical and satisfactory obtainment and application of the heat required for the destructive distillation of shale, and it comprises improved arrangements for the utilisation of the spent shale as fuel.' Here there is a novelty announced in the obtainment of the heat, in the application of it, and in the arrangements for the utilisation of the spent shale. The important matter is that there is novelty in the obtainment of the heat, as distinguished from the mode of its application, and from the arrangements or apparatus.

"On referring to the claiming clauses I find the first to be thus expressed:—"The conducting of the destructive distillation of shale or other oil-yielding minerals substantially according to the system, and by means of the arrangements and apparatus, hereinbefore described.' Here there is a claim for an improved system, as well as for improved arrangements and apparatus. They are all distinct. There can be no question what is meant by apparatus. 'Arrangements' are first spoken of. They consist in the combination of two or more retorts, and in the discharge of the spent shale in regular rotation or in alternations. But there is something more claimed—in the claiming clause under the word 'system,' and in the introductory clause under the words 'obtainment of heat.' I can see no improved system—no improved source of heat, other than that of using the hot residuum of the retorts as a fuel. If this be the just construction of the specification, there is an end of the case.

"2. But assuming that a less comprehensive construction should be put on the specification, another question arises as to the meaning of the

words 'common fire chamber' in the second and third claiming clauses. If they mean a fire chamber in which the fuel obtained from each of the various retorts is received and consumed, then there is no infringement. But the complainers contend that they must be construed as including separate places of combustion, if the resulting heat or products of combustion become mingled and are directed to a common end.

"I cannot adopt the complainers' construction. It appears to me to be very clear that in this specification the word fire-chamber signifies the place where the fuel is burned. This is the natural meaning of the word, and the directions given make it plain to me that it is the meaning in which it is used in this specification.

"3. The patentee claims that his invention may be used with horizontal retorts. He does not specify either in the letterpress or in the drawings the manner of so using it. But I see no mode of using it with horizontal retorts, other than the mode of use which was publicly practised at Fulham Gas-Works in 1854. At least that mode is, in my opinion, comprehended in the specification. Hence the patent is void from prior use.

"4. Other questions were raised, but I do not think it necessary to go into them."

The complainers reclaimed, and argued—The Lord Ordinary had misapprehended the true nature of what the complainers claimed. They did not claim a patent for the discovery that spent shale might be used as fuel. The words "according to the system and by means of the arrangements and apparatus hereinbefore described" must be read together, and must receive their fair meaning as skilled persons would understand it. "System" just meant "apparatus in action." It was not to be set in sharp contrast to arrangements and apparatus. The true subject of the patent was the whole arrangement, whereby doors in retorts, with a contrivance to keep them from being destroyed by the heat—by the presence of air between them—were connected by a novel method so as to enable the shale conveniently to pass from one retort to the other. It was an arrangement of doors in relation to each other that was patented. The canon of construction to be applied was that a fair meaning should be given to the specification so as to make it sensible and useful. *Higgins' Digest of Patent Cases*, Appx. p. 40, and case of *Dudgeon* there cited, and at p. 73; *Plimpton*, p. 41; *Clerk v. Adie*, *ib.* and L.R. 2 App. Ca. 423. In order to have a good specification it was often necessary to describe more than was claimed.—Lord Colonsay in *Morton v. Middleton*, March 20, 1863, 1 Macph. 718. On the other hand, in order to an infringement it was not necessary that the protected invention should be pirated as a whole, and mere trifling differences in the respondents' works would not help them. It was never legal for a person, when the patentee was obliged legally as a condition of his patent to disclose the best mode of working it, to surrender one advantage and pirate all the rest. The taking of a material part of the invention is an infringement.—*Harrison v. Anderston Foundry Company*, 3 R. (H. of L.) 55, *rev.* 1 L.R. (H. of L.) 574. *Fozzwell v. Bostock*, 4 De G. J. and S. 298, 12 W. R. 273, 21 W. R. 764, which had been followed in this Court, was practically reversed by the

House of Lords. See also *Flower v. Lloyd*, 1877, App. to *Higgins' Patent Cases*, 73, and *Weekly Notes*, 1877, p. 132.

Argued for respondents—There was no infringement of the patent, assuming it to be good. So far as there were common elements between the complainers' apparatus and the respondents, these common elements were not of the complainers' invention, but were old. What the respondents were using was a modification of a previous patent of their own. The "common fire chamber" was an essential point of the complainers' patent, and the respondents did not use such. It meant, in the sense of the patent, a space where the shale from various retorts met—a common hearth—and not, as the complainers contended, a process by which heat from various hearths is combined to one effect. The patent was for a combination. If so, the combination must be taken in order to an infringement—*Harrison v. Anderston Foundry Company*, *supra* (in House of Lords). The word "system" could not be supposed to be inserted in a claim without meaning, yet it did not occur in the specification. It meant something different from apparatus. Assuredly this "system" was not new. It was the "system," though not the exact detail of several previous patents. The specification was not entitled to a favourable, but only to a fair construction, and tried by that test it failed.

The Lords made *avizandum* with the case.

At advising—

LORD JUSTICE-CLERK—In all applications for a patent-right there are some conditions required of the applicant, the failure of any of which will render the patent void. He is required to specify his invention in detail, and to make a claim for those features of the thing described which he maintains to be original or novel. It is essential that the invention should be new, and not in use, or generally known before. It must be of general utility. If part of it be old and part new, he must confine his claim to such part of it as is novel. Also, he must so describe the subject-matter of the invention as that a person skilled in the process or manufacture to which it relates can understand and work by it. And lastly, the subject-matter must be of such a nature as a patent may protect.

These and some similar requisites have been the subject of numberless controversies and legal decisions, and have not unfrequently been severely pressed against inventions or discoveries of intrinsic novelty or merit. But this strictness has been thought essential in order that the progress of improvement and the freedom of manufacture may not be impeded by ambiguous and imperfect claims under the monopoly which a patent-right confers.

On the other hand, if the patent-right be for an invention new in itself, and of undoubted public utility, and if the description of it be such that no person of ordinary skill can fail to apprehend its meaning, and construct from it the apparatus required, a court of law will be slow to deprive an inventor of the benefit of his ingenuity by minute verbal criticisms on the phraseology of his specification and claim, or to discover possible ambiguities in the words he has used.

In the case now before us the Lord Ordinary has found that the patent is void, and has explained in his note the essential particulars on

which his opinion is founded. After considering the specification and claim, with the voluminous proof before us, I am unable to agree with that conclusion. I think with Dr Stevenson Macadam that there is a novel and meritorious invention described in this specification and claim, and I am further of opinion that no substantial or material exception can be taken to the form or expression in which these writings are conceived.

I shall first state shortly, in my own words, what I conceive to be the substance of the patent invention. It professes to be a new combination of well-known and familiar mechanical and chemical agents to accomplish a result which had never been previously attained in the process of the destructive distillation of shale or other bituminous substances for the production of oil. The process of distilling bituminous shale by heat generated in furnaces below retorts for this purpose had, as we all know, been practised long before the date of this patent, and this forms no part of the claim here. The old method of conducting this process was by feeding the furnaces with coal, and as in the process of distillation a residuum of spent shale was left at the foot of the retort, this was cleared out and thrown aside by manual labour. As the competition with American petroleum rendered it desirable to economise the process, it was thought that this spent shale itself might be utilised in the furnaces as fuel; and a method was resorted to of transferring the shale by manual labour from the retort, and then using it to feed the furnaces; but it was found that this process not only was cumbersome in itself, but involved the cooling of the shale, and a considerable loss of heat-generating power. Some experiments, all of them unsuccessful, had been made to overcome this obstacle, and it had at the same time been found that when the shale was not separated from the fuel, and the heat of the furnace took direct effect on the bottom of the retort, the effect was prejudicial to the apparatus, and prevented the due regulation of the temperature. At this point the invention of the patentee starts. He has devised a very simple apparatus, by means of which the heated residuum of the shale is discharged at once from the retort into the furnace, and has combined with that operation a contrivance for obviating the effect of the direct contact of the combustion below with the base or foot of the retort. He provides for the top of the furnace and the bottom of the retort two doors of iron, separated by a space which is exposed to the open air. When the shale is to be removed, the door forming the foot of the retort is drawn to the side or removed. That forming the top of the furnace being furnished with a hinge on the outer side, is thrown back on the part of this space which is open to the air, and thereby forms a continuous slide or shoot down which the shale is precipitated into the fire-chamber or furnace below. The doors can then be replaced, and the retorts again charged.

This is the substance of this ingenious though simple invention. There are other minor details, to some of which I shall afterwards advert, and I proceed to consider the exceptions and criticisms which have been made on the patent itself by the Lord Ordinary, and in the argument from the bar.

I remark, however, that in the present case the

patentee has an advantage which does not always occur in such cases. This patent is dated in 1873, or eight years ago. Since that time it has been largely in operation under licences granted by the complainers. We were told that licences had been granted to persons and firms in the trade using 800 retorts—a fact of itself sufficient to show, even apart from the conclusive evidence adduced, the utility of the invention. It shows also quite clearly that there is no obscurity about the specification, and that ordinary skilled workmen have no difficulty in following its directions. To a large extent this fact also raises a presumption of novelty, seeing that persons are not likely to pay for as novel what they knew before. How far it has been anticipated I shall immediately inquire, but meanwhile the objections I proceed to consider are stated against an invention of proved utility, and against a specification which experience has proved to be quite sufficient for its practical purpose.

1. I am very clearly of opinion that the patentee does not claim as his invention the use of the hot residuum of the shale as fuel, and I think the contention is at variance with the plain words used by him. He claims an improved method of using the hot shale. The very words of the title which the Lord Ordinary criticises imply this.

2. The title "Improvements in the destructive distillation of shale or other oil-yielding materials, and apparatus therefor," embraces, not two separate inventions, but the improvement on the distillation effected by means of the use of the apparatus, and in the way described.

3. A similar remark occurs on the criticism made on the specification. "The obtainment and application of the heat required for the destructive distillation of shale" is to be improved by the use of the apparatus described in the specification. I cannot read the words in any other sense.

4. Coming to the claiming clauses, that the words of the first claim—"The conducting of the destructive distillation of shale or other oil-yielding minerals substantially according to the system, and by means of the arrangements and apparatus hereinbefore described"—constitute a claim for a system apart from the arrangement and apparatus. But the system is plainly meant to denote, and in my opinion does denote, with perfect accuracy, the method on which the arrangement and apparatus work. The arrangement and apparatus work on a system—that is to say, when manipulated as described in the specification they will produce the result which is the object of the patentee, and only when so used will the result be obtained. The term is quite correctly used. A system of levers and pulleys signifies not the levers and pulleys themselves, but their combined operation. Here the system is the method of using these moveable doors, and the space between the fire-chamber and the retorts, in the way pointed out by the directions in the specification, with a view to the ultimate result which when so used the arrangements and apparatus were fitted to accomplish.

Nos. 2 and 3 of the claim are not very happily framed, and seem to be a repetition in rather altered phraseology of what was embraced in No. 1. No. 2, in speaking of "the transference of the contents of each retort directly into a common fire-chamber substantially as hereinbefore described," is only repeating the same

thing over again, with more emphasis on the two or more retorts and on the common fire-chamber. And No. 3 deals in like manner with the valve in the open space between the furnace and the retorts. Both might have been well omitted, but they do not appear to me either to enlarge or to restrict the claim. The bearing of the claim for the common fire-chamber on the question of infringement I shall consider immediately.

Lastly, as regards the terms of this specification, it is objected that no method of applying the patent to horizontal retorts is described. It is answered that no such objection was indicated during the proof, and no question was asked on the subject. And it is further said that any workman of ordinary skill could, from the directions in the specification, with ease adapt the invention to horizontal retorts. This allegation I cannot judge of, having no evidence to guide me; but I am unable to affirm that this is not so, and so unable to sustain this ground of challenge.

Such is my view of this specification and claim. I think it very fairly describes and claims the invention which I have shadowed out, and that it claims nothing more. It is only right to say that in addition to the testimony afforded by the public use of the invention, there is a strong body of evidence to the fact that the patent method not only economises fuel, but improves the quality of the oil. The evidence of Macadam, Spencer, Fraser, and of other witnesses of skill, speak to that effect. Dr Macadam says that when he first heard of the invention he thought if it could do what it professed it would well nigh revolutionise the distillation of oil from shales.

The next question is, Was this a new invention—Had it been anticipated?

The case on this head for the respondents is feeble, and need not detain me long. That there had been many attempts to utilise spent shale as fuel is certain, and, as I have said, it is as certain that they were all failures. None of them accomplished what the complainers' method has accomplished, from which it may be inferred that they were not anticipations. The case on this head was reduced to two alleged instances of prior use—A method some years ago at Fulham, and one patented by the respondent Mr Young himself.

In regard to the last it is probably enough to say that it bears no resemblance to the complainers' method, seeing that in it, if I rightly understand it, the furnace and retort form one continuous column, the spent shale falling down to the furnace, without any separation between the fuel and the shale excepting what is called a gas-lute between them. But even had this last contrivance succeeded, which does not seem to have been the case, its operation was entirely different from the casement of the complainers' system. The idea of the Fulham plan was nearer that of the complainers, but it was a very partial and imperfect experiment, and was abandoned after two years. The casement of the complainers' method, open to the outer air, was never resorted to, and in the end the shale at the Fulham Works was not discharged direct from the retorts, but was conveyed to the furnace by a wheeled carriage.

It only remains that I should say a word on the question of infringement. It is contended for the respondent that the process by which the

complainers feel aggrieved is not an infringement of his patent, because he does not use a common fire-chamber, but has a separate furnace for each retort.

This question I have found not without difficulty, but I have in the end come to a clear opinion on it adverse to the respondents. I am of opinion that while all the rest of the method now used by the respondents is a direct and undisguised adoption of that described in the patent, the substitution of a row of furnaces separated by a partition from each other, instead of what the complainer designates a common fire-chamber, is but a colourable device, and will not alter the substantial identity of the respondents' system with that of the patentee.

The term fire-chamber has been the subject of some criticism in the evidence. It is not used in the specification, although it is so in the claim. It is questioned whether it means a common receptacle for the combustion of fuel, or a chamber for the generation of heat common to all the retorts. The fire-chamber of the patentee is not a common receptacle for the spent shale, for it is divided into two separate chambers by a centre partition, so that it is said that the only difference in the respondents' furnace is that there is a partition for each retort. On the other hand, it is not doubtful that in both the heat generated throughout the furnace-range affects all the retorts, although those immediately above the separate furnaces in the respondents' method of course receive most of the heat so produced. It may be, however, that by the respondents' plan some of the advantages of the patented system are discarded, as the shale discharged from each retort will not so certainly find a warm resting-place in the furnace. But I hold the infringement to be substantial nevertheless. What I have now alluded to is not the substance of the invention, but an incident of it, and I cannot hold that its omission or rejection will entitle the respondent to adopt the rest.

LORDS YOUNG and CRAIGHILL concurred.

The Court recalled the interlocutor of the Lord Ordinary, and granted interdict as craved.

Counsel for Complainers—Lord Advocate (Balfour, Q.C.)—J. P. B. Robertson—Guthrie. Agents—Philip, Laing, & Co., S.S.C.

Counsel for Respondents—D.-F. Kinnear, Q.C.—Mackintosh. Agents—Webster, Will, & Ritchie, S.S.C.

Tuesday, December 6.

## FIRST DIVISION.

CAMPBELL v. CALEDONIAN RAILWAY COMPANY.

Process—Jury Trial—Glasgow Winter Circuit—  
9 Geo. IV. c. 29.

A pursuer having in December given notice of jury trial for "the next Circuit Court to be held at Glasgow," the Lords appointed the case to be tried at the ensuing sittings in Edinburgh, because if the notice