

Mr Kinnear, for the reclaimer, stated that though he did not consent to the interlocutor by Lord Shand, dated 6th August 1877, he did not intend to argue the point it decided, unless the Court required him to do so. He wished, however, to bring it under review in case of appeal to the House of Lords.

The LORD PRESIDENT intimated that the matter was settled by statute, which allowed a party to bring up all previous interlocutors when he reclaimed against the last, but he must take his case on that ground, and the objection must be stated now if the judgment of the Court was to be asked on it.

It was thereupon shortly argued for the reclaimer that the petitioner's daughter was an alien, and as such incapable of giving a valid consent to the disentail. This was urged against a prior petition which had been presented for disentail in October 1875. It had been withdrawn, and a second was presented the day after an Act of Parliament containing letters of naturalisation for the parties was passed. It was stated in the respondent's answers that "the said petition was presented and the said Act obtained without notice to the respondent, and the proceedings were taken in such a form as to conceal from the Legislature that the object of the petitioner was to defeat or prejudice rights already vested in the respondent."

The petitioner referred to the case of *The Edinburgh and Dalkeith Railway Company v. Wauchope*, March, 22, 1842, 1 Bell's App. 252, where it was decided that no such notice was required.

LORD PRESIDENT—The general proposition so emphatically given in the case of *The Edinburgh and Dalkeith Railway Company v. Wauchope* I entirely assent to, but I cannot assent to what is stated by their Lordships in their opinions in that case, namely, that the contrary appeared to them to have been held in the Scotch Courts. For I remember in the Second Division of this Court, in a case the name of which I forget, that it was held that no Act of Parliament could be objected to on any such ground as that notice had not been given.

LORDS DEAS and MURE concurred.

LORD SHAND—The private Act was passed in 1877, at a time when there was no pending process of the petitioner, and it was on the 12th of June, after the passing of the Act, the application for disentail was made. Now, in the first place, I am clearly of opinion that we cannot entertain any question after the Act was passed as to whether notice of the intention to apply for it was given or not; and, in the second, that there was no call on the petitioner to give notice to the heirs of entail called in the destination to this estate of her intention to get an Act to alter her status, and to make her and her daughter naturalised subjects, with all the rights of such subjects. The purpose of the statute was to give the petitioner and her daughter the status of naturalised subjects, and I think it is out of the question to say that notice must be given to every one who might be indirectly affected by this status being conferred.

The Court pronounced the following interlocutor:—

"The Lords having heard counsel on the reclaiming note for Mrs Anna Maria Isabella Macleod or Wilson against Lord Adam's interlocutor of 17th November 1867, as also on the said reclaiming note as bringing under review previous interlocutors in the cause, Refuse the said reclaiming note and adhere to the interlocutor under review: Find the petitioner entitled to expenses, with exception of the expenses of the two remits to an actuary and his reports thereon; and remit to the Auditor," &c.

Counsel for Mrs Wilson (Reclaimer)—Kinnear. Agents—Mackenzie & Kermack, W.S.

Counsel for Petitioner and Respondent—Lord Advocate (Watson)—Hall. Agents—Mitchell & Baxter, W.S.

Wednesday, December 19.

SECOND DIVISION.

[Lord Rutherford Clark,
Ordinary.

GILLIES v. DUNBAR.

Patent—Specification, Insufficiency of—Disclaimer—Reference to Drawings which were said to be Essential to the Validity of the Patent.

A party claimed a patent for improvements in screwed bushes or shields for the bung-holes of casks. In his provisional specification he stated his invention to be "an improvement in the bushes or shields for the bung-holes of casks or other vessels," and to consist "in forming a screw or spiral thread on the outside of the shield, of such diameter that it may be screwed into the said hole." In his final specification he repeated the description of his invention *totidem verbis*, and also referred to drawings, which were described to be "one form of the improved bush or shield." He afterwards lodged a disclaimer, the effect of which was that his claim was stated to be "the screwed thread, as hereinbefore described and shown at figures 1 and 2 of the appended sheet of drawings." The features of the invention were stated by the complainer in his evidence to consist of the form of the screw thread and the grade and pitch of the screw. In an action for infringement of the patent, in which the defences were, *inter alia*, insufficient description of the invention, and conformity between the provisional specification and claim as stated in the disclaimer—*held* that the patent was bad, upon the grounds, *inter alia*, (1) (*per* Lords Ormisdale and Gifford) that there was no indication of the invention as now explained in the original specification; and (2) (*per curiam*) that the final specification did not sufficiently describe the invention, as, although the essential features were shown by the drawings, still they were nowhere distinguished from other particulars also shown, nor were they said to be essential.

Opinion per Lord Gifford, that there was a fatal discrepancy between the provisional

specification and the final as altered by the second disclaimer, which was enough of itself to void the patent.

James Gillies, the complainer in this action, held a patent for "improvements in bushes or shields for the bungholes of casks or other vessels, and in the means employed for fixing the same therein," dated the 9th September 1869, and sealed the 1st March 1870.

In the complainer's provisional specification his invention was stated to be as quoted above, and was further described as follows:—"My invention, which relates to an improvement in the bushes or shields for the bungholes of casks or other vessels, and by which they are more securely held therein than hitherto, and also rendered capable of being easily and rapidly tightened at any time, consists in forming a screw or spiral thread on the outside of the shield of such diameter that it may be screwed into the said hole."

The following is the description of the invention as set forth in various parts of the final specification:—"I, the said James Gillies, do hereby declare the nature of my said invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement, reference being had to the accompanying drawings. . . . The first part of my said invention, which relates to an improvement," &c. (*as supra*), "consists in forming a screw or spiral thread on the outside of the shield of such diameter that it may be screwed into the said hole. . . . On the appended sheet of drawings, figure 1 is an elevation and figure 2 a vertical section of one form of the improved bush or shield, which constitutes the first part of my invention. The bush or shield A is formed with a screw or spiral thread B on the outside as shown on the drawing, by which it is fixed in the bunghole of the cask or other vessel, the screw or spiral thread being of such diameter that it may be screwed into the said hole. The hole in the stave of the cask into which the bush is to be inserted is bored or widened out to a taper corresponding to the diameter of the smaller part or bottom of the thread of the bush, so that it may enter the said hole in the stave, and when turned round therein by means of the eccentric tool the screw in the bush cuts a corresponding thread in the hole in the stave, so that it becomes firmly retained therein; thus a tap for cutting the thread in the wood is rendered unnecessary. . . . What I consider novel and original, and therefore claim as the invention secured to me by the hereinbefore in part recited letters patent, is—first, the construction of metallic bushes or shields for the bungholes of casks in such manner that they are held in the said bungholes by means of a screwed thread formed around them, as hereinbefore described and shown at figures 1 and 2 of the appended sheet of drawings."

Thereafter, on 7th December 1874 and on 24th February 1876, the complainer filed two disclaimers and relative memoranda of alterations, the latter of which, after describing the invention in similar terms to those used in the provisional specification (quoted *supra*), then proceeded—"And whereas . . . I have been advised that certain parts of my said invention, as set forth in the first claiming clause, may be construed to include more than was novel and original

at the date of the said letters patent, therefore I am desirous of disclaiming a portion of the said first claiming clause, so that it may not be capable of being so construed as to include and claim anything which was not novel at the date of the said letters patent, as hereinafter set forth." The disclaimer then directed various deletions, the effect of which was to leave his first claiming clause as follows:—"First, the screwed thread, as hereinbefore described and shown at figures 1 and 2 of the appended sheet of drawings."

This was a suspension and interdict at the instance of Gillies against John Dunbar, engineer, Glasgow, who, it was averred, had manufactured and sold, and was still engaged in manufacturing and selling, "bushes or shields for the bungholes of casks or other vessels, the same or substantially the same as, or only colourably differing from, those patented by the complainer.

The respondent, *inter alia*, averred—"Neither the alleged invention described in the said specification, nor the alleged invention described in the same as altered by the said disclaimers and memoranda of alterations, constituted any improvements upon the bushes or shields for the bungholes of casks or other vessels previously known and used. . . . Further, neither the said original specification, or the same as altered by the said disclaimers and memoranda of alterations, sufficiently distinguish between what was old at the date of the letters patent, and what was new or was claimed as new by the complainer. Further, neither the complainer's original specification nor the said specification as altered contains a description sufficient to enable a workman of ordinary skill to practise and obtain the full benefit of the invention therein professed to be described.

The respondent pleaded, *inter alia*—"The alleged letters patent founded on by the complainer are null and void or invalid, in respect:—(1) That the complainer was not the first and true inventor of the alleged invention or inventions described in the said letters patent and specification, or in the same as altered by the said disclaimers and memoranda of alterations. (5) That the complainer does not sufficiently distinguish what is old and not claimed by him from what is new and claimed by him under the said letters patent. (6) That neither the said specification nor the said specification as altered sufficiently discloses the alleged invention therein professed to be described, so as to enable workmen of ordinary skill to practise the same and obtain the full benefit thereof."

On 30th May the Lord Ordinary (RUTHERFURD CLARK) after a proof (the purport of which sufficiently appears from his note appended hereto, and from the opinions of the Court) pronounced an interlocutor in which he repelled the reasons of suspension and refused interdict.

"Note.—The Lord Ordinary regrets this decision, for he thinks that the complainer has the merit of having introduced into the trade the best form of a metallic bush for casks.

"The complainer's patent has been assailed on many grounds. But it is not necessary to examine them all.

"1. The first objection is that the specification as amended claims an invention which was not claimed in the final specification as originally filed. The respondent maintains that, according to the true construction of the original specifica-

tion, the invention consists of a bush with a screw upon it of such a kind that it can be screwed into the bunghole and be firmly retained there, while the invention as claimed in the amended specification is a screw of a particular kind. In other words, as the respondent puts his case, the original invention is a screwed bush, while the invention in the amended specification is a particular screw to be used with bushes.

"On the other hand, the complainer contends that the merit and novelty of his invention consists in a screw of a special construction, and that in the original specification, as in the amended, he claimed no more than that screw as applied to metallic bushes.

"The patent is for 'improvements in bushes,' and in the specification the invention is thus described:—'My invention, which relates to an improvement in the bushes or shields for the bungholes of casks . . . consists in forming a screw or spiral thread in the outside of the shield, of such diameter that it may be screwed into the said hole.' In the part of the specification which gives the manner in which the invention is to be carried into effect, the specification refers to and illustrates certain drawings as shewing 'one form of the improved bush.' The claiming clause describes the invention 'as the construction of metallic bushes' in such manner 'that they are held in the bunghole by means of a screwed thread formed around them, as herein-before described and shewn' in the drawings.

"To the Lord Ordinary it appears that the construction of the respondent is well founded. He cannot find that the complainer describes a screw of any particular class, or that he attaches any merit to any form of screw. Nothing more is required or specified than that the screw shall be on the outside of the bush, and be of such diameter that the bush may be screwed in and held thereby in its place. It is true that a screw of a particular kind is shown in the drawings, but it is nowhere said that only screws of this kind are to be used. On the contrary, the drawings are referred to as showing 'one form' of the invention. The Lord Ordinary therefore conceives that the invention claimed on the original specification was the invention of 'screwed bushes.'

"The complainer relies on the words which state that the invention consists 'in forming a screw on the outside of the shield.' This is said to indicate that the screw is to be so formed that the thread in its convolution will leave a part of the surface of the bush exposed, whereby the bush can be jammed tightly against the stave. The drawings show a screw of this sort, and the special merit of the invention, according to the view of the complainer, consists in the spaces which are left between the threads of the screw, so that the advantage above referred to may be attained. But nothing of all this is said, or even, in the opinion of the Lord Ordinary, indicated in the specification. The words 'formed on the outside' are not, as he conceives, used for the purpose of indicating any particular screw, but in mere contrast to the formation of a screw thread 'on the interior of the shield,' into which, it is said a few lines afterwards, that the exterior thread may, if necessary, be made to work.

"If the Lord Ordinary be right in his construction of the original specification, the complainer's

case necessarily fails. For his specification, as amended, claims a 'screw' which is not within the claim of the original specification.

"2. If, however, the amended specification were to be taken as the original specification, the respondent objects to the validity of the patent that no description is given of the nature of the invention. The complainer repudiates the construction that his claim is limited to the particular screw shown in the drawings, for if it were he might be defeated in the question of infringement. But the Lord Ordinary is unable to find any description of the screw, or how it is to be made, so as to obtain the advantage which is said to result from the invention. He need not repeat what has already been said.

"3 The respondent denies the novelty of the invention. Even taking the complainer's construction, the Lord Ordinary is inclined to think that he has been anticipated by screwed bungs or screws which were in use prior to the letters patent. The Lord Ordinary refers to the specimens Nos. 35 and 86 of process.

"4. The Lord Ordinary does not think it necessary to enter into the other questions which have been raised."

The complainer reclaimed.

Authorities—5 and 6 Will. IV. c. 83, sec. 1; *Ralston v. Smith*, February 21, 23, 24, 1865, 35 L.J., C.P. 49, 13 L.T. (N.S.) 1; *Morton v. Middleton*, March 20, 1863, 1 Macph. 718; *Foxwell v. Bostock*, March 9, 1864, 4 De G. J. and S. 298; *Hinks v. Safety Lighting Company*, November and December 1876, L.R., 4 Chan. Div. 607; *Haworth v. Hardcastle*, 1 Webster Pat. Cases, 485; *Harwood v. Great Northern Railway Company*, May 8, 1860, 29 L.J., Q.B. 193, rev. February 3, 1862, 40 L.J., Q.B. 198; *Hills v. Evans*, 31 L.J., Chan. 457, 466; *Young v. Fernie*, February, March, April, and May, 1864, 10 L.T. (N.S.) 861; *Betts v. Menzies*, 10 Clark's H. of L. Cases, 117; *Dubs & Company v. Thomson*, March 14, 1873, 10 Scot. Law Rep. 332; *Higgins' Dig.* 282, &c.

Respondent's authorities—*Harrisons v. Anderson Foundry*, July 2, 1875, 2 R. 857, June 20, 1876, 3 R. (H. of L.) 55; *Bailey v. Robertson*, February 23, 1877, 4 R. 545; *Newall v. Elliott*, 27 L.J., C.P. 337; *Ralston v. Smith*, quoted *supra*; 5 and 6 Will. IV. c. 83, sec. 1; *Agnew on Patents*, 131, &c.; *Higgins' Dig.* 162, 250-2.

At advising—

LORD JUSTICE-CLERK—I have come in this case to concur in the result of the Lord Ordinary's interlocutor, although I am unable to agree with some of the views which are indicated in the note. I have come to this conclusion with some reluctance, because I am satisfied that in substance the pursuer has discovered a very ingenious and original adaptation of well-known mechanical appliances to produce a result which had never been obtained before as regards the subject to which his patent applies, and its utility and success could not be better demonstrated than by the extent to which the patent article has been admittedly used by all the leading firms in the trade. The patent was obtained in 1870, and has therefore been in use for seven years. Before that time no mechanical contrivance had been discovered capable of producing the results which the pursuer's manufacture has accomplished, or indeed bearing the slightest

resemblance to it, excepting the most remote and accidental. The defender, who at one time was employed by the pursuer to dispose of the patent article, has manufactured on his own account an article which beyond all doubt is nothing but a colourable imitation of that attempted to be patented by the pursuer, and which contains the characteristics which distinguish the invention or adaptation of the pursuer from all previous attempts in that direction. It is therefore with regret that I find the specification of the patent so entirely defective as to be insufficient to afford the pursuer any protection.

The object of the patent was to make an improvement on metallic bushes or shields, which were accustomed to be used in order to protect the edges of bungholes of casks. When these were left without protection the edges of the wood of the stave became jagged and uneven, the bung consequently did not fit, and the liquor leaked. Several attempts were made to remedy this defect by introducing a thin cylinder of metal with a flange at the external rim, and this at first was fastened by being rivetted. This, however, was found to be attended with inconvenience, and the next expedient resorted to was to construct the bush of a diameter slightly larger than the orifice of the cask, and to turn or engrave on it what is called a Whitworth or V screw. This being screwed into the cask, after the orifice had been prepared by a tool, had the effect of describing on the wood of the stave a corresponding V screw, the apex of the wooden thread fitting into the angle between the metallic threads. This was the principle of all the screw bushes which had been used prior to the pursuer's patent. Before considering the terms of the specification, I shall endeavour to describe what I have gathered from the evidence and the argument, coupled with the specification and drawings, to be the true nature of the improvement effected by the pursuer. I shall then consider how far that improvement is sufficiently specified.

The substance of the improvement thus effected rests in this that—whereas in the V screw, in which the hollow between the metallic threads is at the same angle as the apex or summit of the thread, the wooden screw from being sharp-pointed got gradually loose and worn—in the article produced by the pursuer the metallic thread leaves at its base a space or interval between the convolutions, the effect of which is that the wooden screw on the interior of the stave presents the appearance of a truncated wedge, with its end or summit not pointed but flat, exactly corresponding to the space left between the convolutions of the metallic thread. That is the peculiarity of the invention, and it is obtained thus.

There are three essential elements necessary to produce the result intended—first, that the bush shall be of the diameter of the orifice, and that the thread shall be cast upon it, so that whatever portion of the smooth surface of the bush is not occupied by the thread shall be left to come in contact with the wood, and the whole depth of the thread shall be imbedded in the wood; secondly, that the thread of screw must be of a given diameter—that is, the specific diameter contained in the drawing—and thirdly, the thread must be of a specific gradient or pitch—that is, the

identical gradient or pitch contained in the drawing. These three requisites being observed, the bush, whatever its size, will have the qualities of that produced by the pursuer—that is to say, the same space will always be left between the convolutions of the threads, and consequently the flat termination of the wooden screw formed in the stave will have the same amount of contact with the flat surface of the bush.

All these requisites are essential to the pursuer's invention—the raising of the thread on the metallic surface instead of cutting or turning it on the surface as before, the specific diameter of the thread itself, and the gradient or pitch of the convolutions. If the diameter be increased and the pitch remains the same, the space between the threads might be infinitely diminished. The same result would follow if the inclination of the screw was lessened while the diameter of the thread remained the same. The like result would or might follow if the space between the threads were only to bear a fixed proportion to the diameter of the threads. What I apprehend the pursuer to have truly invented was, that with that specific diameter of the thread so formed with that specific pitch, the result he desired would be attained. And it has been attained. As I have already said, the screw bushes, which were supposed to be anticipations, even if with the aid of a magnifier some space between the threads could be distinguished, had not the faintest resemblance to the bush made with a screw of the diameter and inclination shown in the drawings attached to the specification. Any such feature was entirely accidental, and being wholly inoperative was entirely immaterial. On the other hand, it is as clearly proved as any question of fact could well be, that, made with these peculiarities, the bush patented by the pursuer was thoroughly effective.

But when we turn to the specification (it is needless to go through the history of the disclaimers, which do not affect my view of the case in the least), there are two omissions which, in my mind, are entirely fatal to this patent. The first is, the total omission in the words of the description of the element of the pitch of the screw as essential to the improvement; and the second is, that it is impossible to discover from any part of the description, on what principle it is the improvement is effected.

As to the first, I see no difficulty in the fact on which the Lord Ordinary founds, that the claim of the pursuer is to have invented or discovered the thread of the screw for these bushes. It is not merely a thread—any thread—but a thread with the following characteristics—first, that it shall be cast on the surface of the bush; and second, that it shall be of a diameter which is specified. If to this had been added that it shall also be of an inclination which is specified, a thread of this nature was really the substance of a very useful discovery. But the inclination of the thread was quite as material as the other two characteristics, and without it the article could not with certainty have been produced. It is true that the drawing shows the pitch; but there is no indication given in the specification that the pitch is essential, which it is.

I can, however, see some reason to think that the omission was not unintentional. The patent being one for an adaptation of well-known

mechanical agents, necessarily ran the risk of being defeated by a varied adaptation, not absolutely colourable, and yet substantially effecting the same object in the same way. If the patentee had limited himself in the specification to the precise pitch of the screw as shown in the drawing, I can well see that it would have been very difficult to have prevented substantial piracy of the invention under colour of a variation in the pitch. But whatever the reason or motive of the omission may be, I think it entirely fatal to the patent itself.

Even if this were not so, I think the specification entirely defective, in this respect—that no one reading it could discover from its terms the principle of the improvement or the way in which the mechanical adaptations mentioned in it produced the effect which was the object of the patent. Indeed, Mr Fleeming Jenkin, one of the principal witnesses, seems to have doubted whether the pursuer himself was fully aware of what that principle was; and his surmise was probably accurate. The pursuer evidently attached more importance to the fact that his bush could be screwed directly into the cask without previous preparation—an element of convenience no doubt, but hardly one which could be the subject of a patent—than he did to the more original and important results of the adaptation. The space between the threads and the flat surface of the screw in the wood of the stove constituted the peculiarity and the principle of the invention, and to these, from beginning to end of the specification, not even an allusion is made.

On these grounds I think the specification altogether defective. If it had been good, as I have already said, I think it very clearly proved that the improved adaptation was exceedingly useful and entirely original. I think there is no ground for maintaining the plea of anticipation, for the article never had been constructed before. I think the bush constructed by the defender is a direct adoption of the patent article, and that any variation it presents is merely colourable. With the Lord Ordinary, I consider it unnecessary to take any material notice of the plea of variance between the provisional and the ultimate specification. I look upon them indeed as identical. The provisional specification, like the ultimate specification, describes the invention to consist in forming a spiral thread of a specific diameter on the outside of the shield, which is precisely the claim made in the specification itself. Even had the provisional specification been more general and ambiguous in its terms than it is, they would have been quite sufficient to have covered the more precise and detailed description with the attached drawings in the ultimate specification.

LOED ORMDALE—I have come to the same conclusion as that arrived at by your Lordship, but on different grounds.

Various questions have been raised in this case in relation to the validity of the complainer's letters patent. The Lord Ordinary has found the letters patent to be invalid in respect chiefly that the alleged invention is not properly or consistently described and disclosed in the provisional and final specifications.

In order therefore to determine whether the letters patent are exposed to such objections, it is

of importance to know and keep in view what it is the complainer says his invention consists of. And this I think can be done from the explanations given by him and his principal witness Professor Jenkin when examined as witnesses in the case.

The complainer states that his invention "consists of a screw bound round the outer proportions or diameter of the bush, with intervals or spaces sufficient to allow wood between the screws, so that a proper hold might be taken of the wood—that is to say, spaces between the threads of the metal screw, so as to leave behind a good proportion of wood." And after explaining with some detail the three principal features of this alleged invention, and stating two of them, he goes on in answer to a specific question put to him on the point to say—"The drawing refers to the other feature, the space between the different threads;" and again—"The importance of observing the particular features which I have described is not in the specification."

The complainer's principal witness, Professor Jenkin, after explaining what he calls the "jamming action," which he considers the great peculiarity and advantage of the invention, arising from the intervening spaces in the screw, is obliged in answer to a question put to him—"Whether the complainer's description of his screw is such as would strike any mechanic at once as suggesting a peculiarity?"—to say, "I think it would not be sufficient to explain what was meant without the drawing."

I take it therefore to be clear that the peculiarity or novelty of the complainer's alleged invention, and the consequent utility or advantage, consist of the "jamming action" produced by the intervening spaces in his screw, and that this would not be suggested by his description of it in his specifications without the drawings. Taking it to be so, three questions I think arise—first, Is the complainer's provisional specification, looked at by itself, sufficient to sustain the letters patent for the complainer's invention as meaning what he now states it to be? second, Is the final specification, supposing it to be unobjectionable in itself, within the scope of or in a fair and reasonable sense in accordance with the provisional one? and third, Is the final specification unobjectionable, whether taken by itself or in connection with the drawings to which it refers?

In considering these questions it is necessary to keep in view the principles of law bearing upon them, and these I cannot state better than in the words of Professor Bell in his Commentaries, as follows, supported as he is by the authority of the decided cases to which he refers (Bell's Coms., 7th ed., p. 108)—"The patent and the specification must precisely accord with each other. The specification may be more precise and explanatory, but unless the patent describes the invention consistently with the specification, and in terms sufficiently distinct, it is bad. In the former case the patent is challengeable as proceeding on a statement of an invention different from that which the patent is to cover, and being false is ineffectual. In the latter case it is too general to put the public on their guard."

Now, although the provisional specification which constitutes the letters patent as originally enrolled did not require to be so full or precise as the final one, it was at least indispensable that

it should disclose in terms sufficiently intelligible the nature of the invention claimed. Unless it did so, it would be difficult, I think, to understand what object it could serve. Accordingly, the statute (15 and 16 Victoria, cap. 83) which regulates this matter, expressly enacts (section 6) that the petition for a grant of letters patent for an invention shall be accompanied by a provisional specification "describing the nature of the said invention." And the reason of this is obvious, for it is on the faith of this indispensable preliminary statutory condition being complied with that the applicant shall for six months thereafter have the privileges of a patentee during which he may lodge his final or complete specification. But the final or complete specification, although more precise, and in terms of the 9th section of the statute "particularly describing and ascertaining the nature of the said invention, and in what manner the same is to be performed," must, I apprehend, be, in a fair and reasonable sense, within the scope of the original or provisional one. On no other footing could a provisional specification be required, for it is not to be supposed that the object of it was to deceive or mislead the public, including other inventors. And yet if that result was not intended to be excluded—and it can only be excluded by the original specification, however briefly, clearly, and distinctly describing the alleged invention—it could have no legitimate object at all. It is having regard to these considerations that an answer must be given to the first question I have suggested—Is the provisional specification sufficient to sustain the letters patent for an invention such as the complainer now says his is? I feel myself constrained, in concurrence with the Lord Ordinary, as I understand the note to his interlocutor, to answer this question in the negative. I am unable to find, after the most careful and repeated reading of the original specification, any description or indication of the complainer's invention as he and his witnesses now explain it. Nor is this surprising, seeing that he as well as his witnesses, when examined on the point, is obliged to admit that the essential feature of the invention is not to be found in the specification, and is only shown in the drawings. But unfortunately for the complainer, the specification—I mean the provisional one—does not contain any reference whatever to a drawing. Without therefore dwelling on the first question, I take it to be clear that it can be answered only in the negative.

2. And if so, I fear it necessarily follows that the second question, which is, whether the final specification, even supposing it to be unobjectionable in itself, is within the scope of or in accordance with the provisional one, must also be answered in the negative, in respect that it discloses, or at least relates to, something called an invention of which no notice has been given in the original specification. There can be no doubt, I think, that the two specifications must be in essential accordance—only that the final one may describe more fully the particulars of the invention, and in the language of the statute the manner in which the same "is to be performed." But if I am right in holding that the provisional specification does not cover, or disclose, or even indicate, the invention as now explained and claimed by the complainer himself, and supposing that the final specification along with the draw-

ings does, it is obvious that the two cannot be in accordance.

3. But in reality the final specification is not unobjectionable in itself, even with all the aid that the drawings to which it refers are calculated to give it, and therefore the remaining or third question suggested by me as arising for consideration in this case must, like the other two, be also answered in the negative. While it is true that the drawings are referred to in the final specification, and that in the drawings so referred to the intervening spaces in the screw, which are said to constitute the essential feature or one of the essential features of the complainer's invention, without which its novelty or advantage confessedly could not be attained, that feature is nowhere mentioned in the specifications of either of them. And although it is exhibited in the drawings, it is not distinguished from other particulars also exhibited in the drawings, which neither are nor could be said to be inventions of the complainer. Nor is the shield or bush with the screw as exhibited by the drawings claimed as a combination. That indeed was not only not said to be the nature of the complainer's invention, but was expressly stated at the debate not to be claimed by him as his invention.

I have only further to remark, that I am disposed to concur with the Lord Ordinary in thinking, on the proof, that even taking the complainer's own construction of his letters patent, he has been anticipated by screws or screwed bushes, which were in prior use. It rather appears to me that the preponderance of the evidence is to this effect. But it is unnecessary for me to enter into an examination of the evidence in support of this view, considering that I hold the patent to be exposed to the other fatal objections to which I have referred.

On these grounds, I am of opinion that the judgment of the Lord Ordinary is right and ought to be adhered to.

LORD GIFFORD—This case, like most cases involving the construction and application of the Patent Laws, is attended with much difficulty, and the difficulties arise, as they very often do in such cases, from the loose and inaccurate manner in which the patentee has framed his specifications. Indeed, the present case is an example of specifications framed as if the purpose of the patentee was to hide and obscure his invention so as to make it difficult or impossible to discover what the invention really is.

Upon the whole, I have come to the same conclusion as that reached by the Lord Ordinary, that the patent in the present case cannot be sustained, and that no breach of patent has been committed by the respondent. I sympathise, however, in the remark of the Lord Ordinary, that the complainer's form of metallic bush has considerable merit in practical working, and I regret that he cannot be rewarded by sustaining the validity of his patent.

The first objection to the patent is that there is a fatal discrepancy between the complainer's provisional specification and his final or complete specification as altered by the disclaimers. It is said that these two specifications do not describe the same thing. I think this objection is well founded.

In reading the specifications, we may lay out of

view in the meantime two of the inventions originally claimed by the complainer, for in reality the original specification includes three separate articles—(1) a screw bush or shield; (2) a screwed bung to insert into the shield; and (3) a tool or instrument for fixing or tightening the bush in the stave or cask. The second of these, the screwed bung, is now altogether disclaimed, and the tool, though separate questions arise regarding it, has nothing to do with the alleged discrepancy between the provisional and complete specification. Confining attention then to the screwed bush, the invention described in the provisional specification is set forth in these words:—"An improvement in the bushes or shields for the bungholes of casks or other vessels, and by which they are more securely held than hitherto, and also rendered capable of being easily and rapidly tightened at any time;" and the complainer declares that his invention consists "in forming a screw or spiral thread on the outside of the shield, of such diameter that it may be screwed into the said hole." This is absolutely all that is said, and there is no drawing annexed or referred to in the provisional specification, or made part thereof.

Now, I agree with the Lord Ordinary that this is in words a claim for a screw bush with a screw formed on the outside, that is, on that part of it which comes in contact with the wood of the stave, and for nothing else. No particular kind of screw is mentioned, except that it is to be on the outside of the bush, and of such diameter that it may be screwed into the hole, and certainly every bush with a screw on the outside and screwing into the hole in the stave will answer, and will fully answer, the whole description in the specification. It is true, and it appears in evidence, that at the date of the provisional specification screw bushes were known and in use in the trade, and it may be that in construing a specification an inventor is not presumed to claim as new what was publicly and well known, but the misfortune is that here the inventor claims nothing else. He claims either a screwed bush or nothing at all, for he mentions no particular screw, except that it must be of such diameter that it will screw into the hole; and we have no means, and the public have no means, from the provisional specification, of knowing what it is that the inventor claims, excepting that it is a screw bush to be screwed into the stave, and this includes necessarily all screw bushes which will so screw into the staves of the cask.

The complete specification, as originally filed, is really in accordance with this large claim. It repeats, *totidem verbis*, in what the invention consists, and it claims "the construction of metallic bushes or shields for the bungholes of casks in such manner that they are held in the said bungholes by means of a screwed thread formed around them, as herein before described and shown at figures 1 and 2 of the appended sheet of drawings;" and the drawing is said to shew "one form of the improved bush or shield, which constitutes the first part of my invention." Now, if the case had stood here the patent would have been invalid, the invention claimed being previously in use, as being for a screw bush, no particular kind of screw being mentioned, but all screws being included, one out of many forms being shewn in the drawing. As screw bushes were previously in use the claim could not have been sustained.

This blunder was apparently discovered, and the complainer tried to rectify it by a disclaimer, in which, ingeniously enough, carrying on the words of the claim by means of deletions, he made his claim read, not the construction of bushes with screws on the outside, but to be simply the "screwed thread, as hereinbefore described and shewn at figures 1 and 2 of the drawings;" so that, instead of being a patent for screwed bushes, he attempts to convert it into a patent for a particular screw thread which was not in and which could not be discovered from the provisional specification. I am of opinion that this is not allowable. The provisional specification must really describe the invention, and not merely mention the thing to which the invention is to be applied. According to the complainer's argument, a provisional specification claiming "improvements on the steam-engine" would entitle him to claim in the complete specification any special valve or detail which he might choose to select, and described in drawings then for the first time filed. No doubt some latitude is to be allowed to an inventor, but I think the latitude claimed here really exceeds all reasonable limits, and would introduce a looseness which would really destroy provisional specifications altogether. The provisional specification must describe the invention. Here it does not do so.

Still further, if the invention really consisted in any peculiarity in the screw, this should have been mentioned and described in the complete specification more particularly than by a mere reference to a drawing, which no doubt shews a screw, but also shews many other things; and which, giving effect to all the disclaimers, is still described as "one form" of the invention. The truth seems to be that although a good form of screw happens to be shewn on the drawing, this specialty, to use Professor Jenkin's words (and he is the complainer's leading witness), "did not occur to the patentee's mind." He was thinking of his original bush with any form of screw, as originally claimed by him, and the advantages of this special form of thread is a mere incident, and was not meant to be claimed in the provisional or in the complete specification as originally filed. The use of a disclaimer is not to change the subject-matter of a patent, but only to lop off some separable matter erroneously claimed.

It may also be a serious question, Whether, supposing the special form of thread to be the true subject of the patent, it must not be specially claimed as such, or at least specially described as such, and not merely shewn with a great many other things upon a drawing which is described as "one form of the invention?" This is calculated, if not intended, to mislead the public, who cannot possibly find or discover in what the invention really consists.

The next point of importance is, Whether, supposing the special thread to be well patented, it has not been anticipated by screwed bungs in use prior to the date of the patent? Here also I agree with the Lord Ordinary that threads substantially the same as the complainer's were in prior use. I do not think that any of the prior patents disclose specifically this special thread, but although not contained in prior specifications, I think it is sufficiently proved the thread was in prior practical use. Thus, the screw bushes made by Hurrell after his brother joined him in the

manufacture were really practically the same as the complainer's. This is admitted by the complainer's witness Professor Jenkin, who, on being shewn an old bush of Hurrell's, says,—“I think an action might be raised on that” (meaning an action for infringement of patent). “It is very like it. The thread is a similar thread, and it is put on to a taper. The difference is merely one of proportion.” I do not need to go into the evidence. The truth is that the anticipation of the complainer's thread was very likely to be made in practical manufacture as opposed to mere theory. It was simply the adoption of a wood screw for the outside of the bush, that is, a screw for screwing into wood, instead of a Whitworth or metal screw for screwing into metal, the difference being that the threads of a wood screw have a much wider interval between them than the threads of a metal screw. This difference has been known immemorially, the object, being to leave a space of wood or interval between the convolutions of the screw uncut and undisturbed by the screw, and this is precisely the object of the complainer's thread. The complainer simply did in his drawing what Hurrell's brother had done in practice, varying in this respect from Hurrell's patent, that is, he applied a wood screw, and not a metal screw, to the outside of the screw bush, and the practical advantage of this was that a portion of the wood was left undisturbed, by jamming upon which a watertight junction was obtained. All this is explained in the evidence, to which I need not specially refer.

If I am right in these two points, they are sufficient for the determination of the case. The pursuer's patent is bad in itself, and what he now claims was in prior use.

I am much more doubtful as to whether the tool claimed by the patentee was or was not new at the date of the patent. There is very great similarity between it and those founded on as anticipations. The differences are merely in the details of construction. The mode of action is precisely the same. They are not only the same in principle, but they take hold of the inside of the bush really in the same way and by the same action of the hand. I do not think that anything turns on the mere detail of how the cam is jammed, and whether it is fastened to the spindle, or whether it moves on a separate axis. In both cases its eccentricity in the act of turning tightens the tool in the interior of the bush, and thus the bush is grasped and forced round.

There are other questions in the case into which I do not deem it necessary to go. It was not contended that the complainer's patent could be read as a patent for a combination. The complainer does not say he has made a new bush as a whole. He now confines himself under his disclaimers to a new thread on a bush. But even if he could claim as for a combination, he would fail on the question of infringement, for it is not asserted that the respondents have taken his drawing as a whole. Separately, the question of infringement is one of nicety, for if the complainer is limited to the thread shewn on his drawing, which is a V thread, with equal sides, and forming equal angles with the wood, then it can hardly be said that the respondent's thread, which is different in several respects, is a mere colourable alteration. There are substantial ad-

vantages attending the form used by the respondents, which is not a thread with equal angles on both sides, but a thread one side of which is perpendicular to the bush. On the whole, I am for adhering to the Lord Ordinary's judgment.

The Court adhered.

Counsel for Complainer (Reclaimer)—Solicitor-General (Macdonald) — Balfour — J. P. B. Robertson. Agents—Dewar & Deas, W.S.

Counsel for Respondent—Asher—Mackintosh. Agents—Davidson & Syme, W.S.

Thursday, December 20.

SECOND DIVISION.

SPECIAL CASE—SHARPE'S TRUSTEES AND KIRKPATRICK AND OTHERS.

Succession—Residuary Legatee—Legacy—Intention of Truster.

A truster bequeathed to A. “£2000, and to each of his brothers £1000.” A. was the third of eight brothers, the eldest of whom was appointed one of two residuary legatees under the settlement. *Held*, upon a construction of the terms of the deed, that it was not the truster's intention that the eldest brother should take a legacy of £1000 in addition to his share of the residue.

Intention—Whether Chargeable on Legacies where Payment Postponed.

A testator left directions to his trustees to realise his estate and pay certain legacies out of the proceeds. Before they could realise his estate the trustees had to establish their right to it by a litigation, and did not realise it for two years after his death. *Held* that interest on the legacies was due from the date of realisation at the rate of 5 per cent., but not earlier.

This was a Special Case arising out of certain provisions in a deed of instructions by the late William Sharpe of Hoddum to his trustees. Mr Sharpe died on December 18, 1875, leaving a trust-disposition and settlement, in which he conveyed his whole means and estate to John Gillespie, W.S., and Henry Gordon, Sheriff-Clerk of Dumfriesshire, to be applied according to the provisions of certain holograph instructions by him. In order to complete their title to the estates the trustees raised the actions reported of date March 10, 1877, 4 R. 641, 14 Scot. Law Rep. 405, in which they were successful. Having completed their title by recording the disposition granted to them in obedience to the decision of the Court in that case, they exposed the lands for sale and sold them, according to the truster's instructions, with entry at Martinmas 1877, for a sum of £240,895. Mr Sharpe left personal estate to the amount of £10,701.

The deed of instructions by Mr Sharpe ran, *inter alia*—“That being, I deem, a sufficient instruction to sell, I now proceed to instruct my trustees as to the distribution of the price, viz., of the price of the heritage, I