satisfaction of the Clerk of Court by the defenders for repetition in the event of the House of Lords finding them liable in repetition of the said expenses; and decern: Further, allow the decree to go out and be extracted in name of Messrs Smith & Watt, W.S., the agents disbursers thereof."

Counsel for Pursuers (Reclaimers) — Cooper, K.C.—Macmillan. Agent—James Watson, S.S.C.

Counsel for Defenders (Respondents)—C H. Brown. Agents—Smith & Watt, W.S

Friday, February 5.

SECOND DIVISION.

[Lord Salvesen, Ordinary.

WATSON, LAIDLAW, & COMPANY, LIMITED v. POTT, CASSELS, & WILLIAMSON.

Patent—Process—Infringement—Validity—"Insufficient Disclosure"—"False Suggestion"—Necessity for Averment of Particulars in which Specification Insufficient or Misleading.

Held that the defender in an action of interdict against the infringement of a patent was not entitled to maintain that the patent was invalid in respect that the specification did not sufficiently describe and ascertain the nature of the invention and the manner in which it was to be performed, or that the specification was ambiguous and calculated to mislead, without stating these pleas on record and averring specifically and in detail the various respects in which the specification failed to describe sufficiently the nature of the invention and the manner in which it was to be performed, or was otherwise ambiguous or misleading.

Watson, Laidlaw, & Company, Limited, assignees of letters-patent dated 4th May 1903 and numbered 10,034 of that year, granted in favour of James Wright Macfarlane for improvements in centrifugal machines, raised an action against Pott, Cassels, & Williamson, concluding for interdict against infringement of the patent and for damages.

In the complete specification of the patent, which was left at the Patent Office on 30th January 1904, the inventor described his invention as follows—"My invention relates to centrifugal machines of the suspended or 'Weston' type, in which, as hitherto generally constructed, the inner stationary spindle has been suspended by either a metallic or elastic buffer or bearing; a separate elastic buffer being required to assist in controlling the oscillations of such spindle. These means of suspension have hitherto consisted of either cylindrically-shaped elastic buffers or buffers in the form of annular discs, some of which are thicker at the outer edges than at the centre, the

latter being so made and carried that the elements of their surfaces pass through the centre of oscillation of the spindle. Or the spindle has been carried by a combination of a spherical metallic bearing and an annular cylindrical rubber buffer.

"My invention has for its object to provide an improved method of supporting the inner spindle and controlling the estillations, by the provision of a new form of combined elastic buffer-bearing, so that the machine may be run with a much greater unbalanced load than has hitherto been

found possible.

"According to my invention the improved form of combined elastic bufferbearing consists substantially of an annular conical or conoidal rubber buffer carried between a counterpart conoidal collar on the spindle and a counterpart seating in the framing of the machine. The angles of the cones of the collar and seating may be the same, in which case the interposed buffer will be of the same thickness throughout; or the angles of the collar and seating may be different and relatively inclined to any desired degree so that the thickness of the buffer tapers throughout. . . . As hereinbefore stated, I am aware that in certain machines as hitherto constructed the buffers are in the form of a pair of annular discs thicker at the outer edges than at the centre, being thus somewhat triangular in cross section. These buffers, however, are made so that the elements of their surfaces pass through the centre of oscillation of the spindle. On the other hand, the angle of the single buffer necessary to carry out this invention must have a smaller inclination from the vertical than the hitherto fixed direction of inclination permits. In other words, the buffers hitherto in use have been of the nature of comparatively flat annular discs, the elements of whose surfaces passed through the centre of oscillation, whereas the present invention consists in the employment of a cone approaching much more nearly to a cylinder, and whose elements do not pass through the centre of oscillation of the spindle. . . . In the claims the term 'conoidal' is used to indicate either surfaces truly conical or surfaces more or less curved but at the same time approximating the conical, or surfaces which, while in a measure irregular, yet approximate generally the conical.

"Having now particularly described and

ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—1. In centrifugal machines, an elastic buffer, conoidal in form, and so carried that, while supporting the load, it is self-adjusting as to that load, and in its control of oscillation, substantially as described. 2. In centrifugal machines, a combined elastic buffer bearing for the machine spindles, consisting of a rubber buffer, in one or more pieces, having as a whole an annular conoidal form, the elements of the surfaces of which when produced do not pass through the centre of oscillation of the spindle, combined with a counterpart conoidal collar on the spindle and seating in the framing, substantially

as described. 3. In centrifugal machines, a combined elastic buffer bearing for the machine spindles, consisting of an annular conoidal rubber buffer, in one or more pieces, the elements of the surfaces of which when produced do not pass through the centre of oscillation of the spindle, combined with a counterpart conoidal collar on the spindle and seating in the framing, the angles of the inner and outer conoidal surfaces of the buffer, and of the counterpart surface of the collar, and of the counterpart surface of the seating, differing from each other so that the thickness of the buffer varies throughout, substantially as described."

The defenders averred that the patent was invalid in respect of prior use and publication, and further stated—"(Stat. 3) The letters-patent founded on do not disclose any proper subject-matter for a patent. The invention claimed does not show any ingenuity, or any new device of general utility. In particular, none of the advantages alleged by the pursuers in their condescendence to have been procured by the said alleged invention is due to improvements thereby introduced-(1) The conical buffer or sleeve shown in the said alleged invention does not control the gyration and oscillation of the centrifugal so effectually as the form of buffer or sleeve adopted in the original 'Weston' machine. (2) No self-adjustment of the burden put on the machine can result from the form of (3) Absolute adjustment of the wearing parts had already been accom-plished by the original 'Weston' type of buffer, in which a flange or collar on the top of the spindle rests on the rubber buffer, which is supported below by a flange on the bracket. (4) Easy and rapid renewal of the wearing parts results from the tapered formation of the spindle or its collar, which permits of the buffer being easily disen-gaged from the spindle, and this feature has been present in practically all centrifugal machines of the 'Weston' type during the past forty years. (Stat. 4) The specification relative to the letters-patent founded on is misleading, in respect that it does not sufficiently distinguish between what was old, or was in use and known prior to the date thereof, and what was new and claimed as being the invention of the patentee.

The defenders pleaded—"(4) The defenders should be assoilzied, in respect that the letters-patent founded on are invalid, because . . . (2nd) The said alleged invention was publicly known and used prior to the date of the said letters-patent; (4th) The said alleged invention was not the proper subject-matter of letters-patent; (5th) The specification does not sufficiently distinguish what is old from what is claimed as new."

on 5th January 1908 the Lord Ordinary (Salvesen), after a proof, the import of which sufficiently appears from his Lordship'sopinion, infra, assoilzied the defenders.

Opinion.—"The pursuers seek interdict against the defenders infringing certain letters-patent of which they are the

assignees. The defence is that there has been no infringement, and that in any event the patent is invalid on the grounds set forth in plea 4. The question of the amount of damages to be awarded to the pursuers in the event of the defence on the merits failing has by arrangement meantime been held over.

"The letters-patent in question relate to improvements in centrifugal machines of the 'Weston' type'-that being the name of the original inventor. This kind of machine, which utilises centrifugal action for the purpose of separating the liquid from the solid parts of the mass under treatment. consists of a cylinder or basket suspended by means of a solid spindle, or combina-tion of a hollow and solid spindle, the latter being far more generally in use. The basket is made to revolve with great velocity round the solid spindle, and the liquids contained in the revolving mass are separated from the solids and discharged through apertures in the sides of the basket. Owing to the rapidity of the revolutions there is a great tendency to vibration, and also, when the load in the basket is unevenly balanced, to oscillation of the basket. Unless this oscillation and vibration are checked and controlled there is danger of the machine going to pieces when in use. or of its life being shortened. In order to meet these difficulties 'Weston,' in 1867, invented a bearing by which the spindle and its attachments were suspended, and which consisted of a cylindrical rubber bushing enclosed in a metal seating or frame which was attached to the ceiling. The upper part of the solid spindle was enclosed in this cylindrical bushing of india-rubber, and was held in position by means of a flange which rested on the rubber. By this arrangement the necessary freedom of vibration of the spindle was permitted, while at the same time it secured that it should not deviate unduly from the vertical position.

"So long as the rubber bushing was comparatively new this mechanism gave excellent results, and it was largely employed for many years. As the rubber, however, became worn its efficiency in restraining oscillations became impaired. To a certain extent the wearing was compensated for by the pressure of the flange on the top of the rubber bushing, and it was thus in a sense self-adjusting. I am satisfied, how-over, on the evidence, that this self-adjust-ment was of a very limited nature, and only imperfectly compensated for the wear of the rubber at the places where it pressed most against the spindle, and the result was that the spindle became ultimately more or less loose, and was liable to oscillate more and more freely in proportion to the degree to which the rubber bushing became worn.

From time to time, as practical experience was accumulated, various modifications were made upon this bearing. These are shown on the sheets of drawings prepared by the pursuers and defenders respectively. No modification, however, was made on the cylindrical character of the

upper portion of the spindle where it came into contact with the rubber bushing, and all these modifications, like their prototype, became gradually less efficient as the

rubber bushing became worn.

"About 1881 the pursuers, who have for many years extensively manufactured centrifugal machinery, introduced a new form of spindle and corresponding rubber bushings or buffers. They included this form, which is shown on the defenders' sheet of drawings, in a specification for a patent which they lodged in 1891, and in which they claimed (Claim 5) a patent for the improved shape of elastic bearing which they there described. Unfortunately for them, this improvement had already been published by themselves, and they had accordingly to lodge a disclaimer which consisted of a deletion of Claim 5. This new and improved form of rubber bearing introduced by the pursuers was thus admitted by them

to be public property.
"The new form of buffer is shown with sufficient accuracy on the defenders' sheet of drawings. The buffers fitted sheet of drawings. closely into two conical collars on the spindle, and they were supported by a flange in the framework, which projected inwards opposite the cylindrical portion of the spindle connecting the collars. The buffers, which are described as scone shaped by some of the witnesses, or as annular discs, were thus also of a conical form. On the top buffer the weight of the whole basket was suspended, and although there is evidence that by mistake the top buffer was sometimes used by itself, the machine worked unsatisfactorily with only one buffer. It provided the necessary flexibility but did not effectually control oscillation. When both buffers were in use the necessary control was obtained; but as no part of the weight rested upon the lower buffer, it tended to become less effective when worn by use. To provide against this, means were provided, as has already been donein one of the modifications of 'Weston's' arrangement, for screwing up the spindle so as to bring up the lower collar into close contact with the lower buffer. Although this arrangement was used for many years and largely superseded the prior forms, the necessity for the constant adjustment in the way de-cribed was found to be a serious imperfection, because if the adjustment was not accurate the mechanism either vibrated too much or was liable to undue oscillation. When in the charge of an unskilled mechanic the necessity for constant adjustment rendered the machine liable to accidents, or at all events to its being worked under imperfect conditions. Notwithstanding this disadvantage, no improvement on the form of buffer was devised until the pursuers brought out their patent of 1903, under which the present questions have arisen.

"The new form of buffer is described in the specification as of annular conical form, and is carried between a counterpart conical collar on the spindle and a counterpart seating in the framing of the machine. On record the pursuers claim that by this

invention a single bearing was produced which combined the functions of simultaneously supporting and controlling the spindle. In some of the drawings, however, annexed to the specification, they show that the invention may be carried out with two buffers as well as one, or, perhaps more correctly, that the conical rubber buffer may be made in one or more pieces. The pursuers say that the invention was made as the result of numerous experiments, and I am quite prepared to accept the evidence to this effect. Although it looks comparatively simple and obvious now, such a buffer had long been wanted in order to perfect the mechanism by which the spindles of centrifugal machines were suspended, and yet the simple form on which the patentee hit seems never to have occurred to anyone. It advantages, however, are apparent, because the rubber buffer is made to support the whole weight of the basket and its attachments, and as it wears the spindle adjusts itself to the rubber buffer by the mere action of gravitation, while as regards flexibility and control the new form is at least equally good, if not better, than anything that preceded it. In my opinion the invention was a meritorious one. It was absolutely novel, in the sense that no single conical buffer had ever been used for the same purpose, and its utility is demonstrated by the facts that since the patent was granted the pursuers have supplied about 1500 machines with this form of buffer, and that they entirely discarded the older forms, and have in about 150 cases fitted old machines with the new buffer. The form of spindle-head has perhaps to some extent contributed to this success, because it affords suitable accommodation for the ball bearings which have of late years been introduced in connection with these spindles; but be this as it may, I think it is established that the new buffer has practically superseded the older forms. It is the strongest corroboration of this view that the defenders have adopted the same conical form of spindle-head and relative buffer, and consider its continued use by them of sufficient importance to justify them in defending the present case.

"Assuming meantime the validity of the patent, I do not entertain the lightest doubt that the defenders have infringed it. Their mechanism differs only in the most colourable way from that of the pursuers. In the form actually in use by the pursuers they dispense with the flange which was common to all the modifications of the Weston' bearing. They say that at first they used the flange, but that after a short time they found that it was unnecessary. The defenders in their mechanism use the flange, and they say that by its means they transfer some of the weight which would otherwise be distributed over the whole surface of the conical rubber to the top. In my opinion this variation is without importance. The defenders also have a flange at the bottom for the purpose of supporting the buffer, but a similar flange is shown on several of the drawings annexed to the pursuers' specification. The main point, however, is that they have adopted the conical buffer carried between a counterpart conical collar on the spindle and counterpart seating in the framing of the machine, and that is the substance of the pursuers' invention. They make no pretence that they invented this mechanism themselves, and I do not doubt that it was simply a copy with colourable variations of the pursuers' invention, and for the purpose of obtaining orders which the pursuers would otherwise in all probability have secured.

secured.
"The next question relates to the validity of the patent. The first ground of attack is that a single conical buffer used in the same way and for the same purposes as that patented by the complainers had already been disclosed in one of the drawings annexed to 'Weston's' original patent of 1867. If that drawing is examined minutely it does appear to represent the spindle so far as enclosed in the rubber bushing as having a slight taper of not more than one degree. It has, however, been made abundantly plain that this was an error on the part of the draughtsman who made the Queen's printers' copy of the drawings annexed to the specification. The original parchment drawing filed in connection with the patent shows this part of the spindle to have absolutely parallel sides, and the error arises from the fact that below these the spindle is tapered. Besides, it is proved that none of the buffers made according to 'Weston's' specification were ever made of a conical form, and if they had been made with a taper so slight as the drawing discloses they would have been no better than the cylindrical buffers which 'Weston' intended should be used. That he himself did not consider the buffer which he described as sufficient to control the oscillation of the spindle is also shown by the fact that he described a special apparatus for the purpose of checking the gyratory action which he apprehended would result if the basket was caused to rotate with an I attach therefore no unbalanced load. importance to this alleged disclosure, which has probably been discovered for the first time by the respondents in preparing their

"The next ground of attack is a much more serious one. It divides itself into two heads, the first being that the patentee has not disclosed the range of angles to which the conical buffers must be made in order that the best results may be attained; and the second, that he has shown on one of his drawings a conical buffer of so flat an angle that for practical purposes it is useless. The material part of the specification with regard to this matter is as follows--'On the other hand, the angle of the single buffer necessary to carry out this invention must have a smaller inclination from the vertical than the hitherto fixed direction or inclination permits. In other words, the buffers hitherto in use have been of the nature of comparatively flat annular discs, the elements of whose surfaces passed through the centre of oscillation; whereas the present invention consists in the employment

of a cone approaching much more nearly to a cylinder, and whose elements do not pass through the centre of oscillation of the spindle.' It will be observed that this description is of the vaguest and most general The cone must approach much more nearly to a cylinder than in the case of the annular disc formerly employed, and the elements must not pass through the centre of oscillation of the spindle. It is not said how much more nearly, nor is there any indication of the limits on either side. The importance of this appears from the evidence, and I refer in particular to the evidence of the pursuers' leading expert, Professor Hudson Beare, to which they can scarcely take exception. Beare admits that the angle must be within certain limits to be effective. According to his view the patent will only work efficiently if the angle is confined to certain limits. The defined limits within which it will produce good results are somewhere between an angle of 25 degrees and an angle of 10 degrees. The angle to which the pursuers have in fact made their cone is about 10 degrees, but admittedly none of the drawings annexed to the specification show an angle of this kind, the majority showing an angle approximating 25 degrees, and one (fig. 11) showing an angle of about 40 degrees. There is nothing to indicate that the angle of 40 degrees is not as good as the other angles shown on the drawings; yet this, according to Professor Beare's interpretation, is really outside the patent, because it is not 'much more nearly approaching to a cylinder' than the angle of the old scone-buffer, which was an angle of 55 degrees.

"I have put in a condensed form what I take to be a fair summary of Professor Beare's evidence in cross-examination, and I am afraid it is fatal to the validity of the patent. The duty of a patentee is to describe his invention in such a way that a person of ordinary skill in the trade shall be able to carry it into effect without making experiments. Where the whole subjectmatter of the patent consists in the discovery that a cone constructed to a certain angle will give beneficial results, I think the proper angle must in some way be indicated so that the workman may have some-thing definite to go upon. If the patentee here had shown upon his drawings angles ranging from 10 degrees to 25 degrees, I should have been disposed to read these into the specification as defining the approximate angle which would give the results claimed; or, again, if he had said that the best range of angles was from 10 to 25 degrees, but that these might be to some extent varied, I should have held that to be a sufficiently definite disclosure of his invention — The Patent Pipe Founding invention — The Patent Pipe Founding Company v. Richards, 1859, 1 Johns. p. 81. But when the only serviceable angles which he shows upon his drawings range from 24 to 26 degrees-which quite answer the description in the specification-and when he leaves out of view entirely the range of angles down to 10 degrees, which really are the very best angles, I think he violates one

of the conditions on which he obtained his patent, namely, that he should clearly disclose what he claims, so as to prevent others from inadvertently infringing his patent rights. Still more is this the case when he includes amongst his drawings the representation of a cone which, if made according to the drawing, would not merely not give the results which the patentee claims, but would give less good results than had been got by other known contrivances.

"The only other attempt to define the angles which are included in the parent. namely, that they should be such that their elements do not pass through the centre of oscillation of the spindle, is of no value in ascertaining the proper angles for practi-cal purposes. The centre of oscillation must be a point very difficult of ascertainment, for even the experts diff r as to where it should be placed in individual cases, and no ordinary mechanic would be in the least degree guided to the proper angle at which to construct the cone-shaped buffer by being told that the elements of the cone must not pass through the centre of oscillation of the spindle. So far as I can gather, that definition applies equally to cones having angles of 1 degree up to say, 45 degrees. The fact is, that the pursuers seem to have taken out their complete specification before they had perfected their invention by experiment, and it is signifi-cant that they have adopted in practice a cone which differs widely from any of those shown on their drawings

"On these grounds, I have been compelled, I confess very reluctantly, to reach the conclusion that the pursuers' patent is invalid, and accordingly that the defenders

fall to be assoilzied."

The pursuers reclaimed, and argued-The grounds of the Lord Ordinary's judgment were the inventor's failure to specify the particular angles required to get the best results, and the inclusion among the drawings attached to the specification of one showing an angle which was practically useless. Insufficient disclosure, i.e., that the specification did not so describe the invention as to enable a person skilled in the trade to make the thing, and false suggestions, i.e., that the specification contained something which would mislead, e.g., an unworkable method was shown, were doubtless fatal objections to validity of a patent, but the defenders had not averred or pleaded them here, and therefore they could not be sustained— Kerr v. Clark & Company, November 4, 1868, 7 Macph. 51, 6 S.L.R. 63; Mica Insu-1868, 7 Macph. 51, 6 S.L.R. 63; Mica Insulator Company, Limited v. Bruce Peebles & Company, Limited, July 6, 1905, 7 F. 944, 42 S.L.R. 700; Allsopp Flour Process, Limited v. Flour Oxidising Company, Limited, 1907, 24 R.P.C. 349, per Farwell, L.J., at p. 372, Buckley, L.J., at p. 377, 25 R.P.C. 477, per Loreburn, L.C., at 490. Further, these objections failed on the evidence. There was sufficient specification if persons of ordinary skill in the trade if persons of ordinary skill in the trade were able to make the thing in such a way as to produce a beneficial result, and if the

patentee had specified the best means known to him of carrying out the invention, even though further experiments might produce the result in a higher degree—Frost, Patent Law and Practice, 3rd ed., I, p. 214, and cases there cited. A person of ordinary skill could make the thing from the specification here, and the fact that the exact angle was left to the discretion of the workman did not invalidate the patent-Otto v. Linford, 1882, 46 L.T. (N.S.) 35; Badische Anilin und Soda Fabrik v. Levinstein, 1887, 12 A.C. 710, per Halsbury, L.C., at p. 713. If the function were read into the claim. as was perfectly competent, there would be no difficulty in making the invention. It was neither necessary nor possible to specify the angle or range of angles most suitable, for the angle depended on so many considerations, e.g., the weight to be supported, the speed of revolution, &c. There was no false suggestion in the specification. for it was not proved that any result which might be obtained by following the directions in the specification was impracticable. It did not matter if some experiments were necessary to enable the workman to get the hest result for his particular purpose—In-candescent Gas Light Company, Limited v. De Mare Incandescent Gas Light System, Limited, 1896, 13 R.P.C. 301; Edison & Swan Electric Light Company v. Holland, 1889, 6 R.P.C. 243, per Cotton, L.J., at p. 277. Even if it could be shown that one of the drawings attached to the specification was unworkable and was not covered by the specification, the drawing had only to be corrected. The defenders' objection of want of subject-matter resolved itself into failure to disclose. The objection of failure to distinguish between old and new did not invalidate the patent-British United Horse Shoe Machinery Company, Limited v. A. Fussel & Sons, Limited, 1908, 25 R.P.C. 631, per Fletcher Moulton, L.J., at p. 645. Counsel also argued that there was no prior publication, and cited Betts v. Nielson, 1868. L.R., 3 Ch. 429, at p. 433; Shrewsbury and Talbot Cab Company v. Sterck, x, 1896, 13 R.P.C. 44, per A. L. Smith, L.J., at p. 53. Counsel also referred to British Dynamite Company v. Krebs, 1896, 13 R.P.C. 190; Badische Anilin und Soda Fabrik v. La Société Chimique des Usines du Rhone, 1897, 14 R.P.C. 398; Fawcett v. Homan, 1896. 13 R. P. C. 398.

Argued for the defenders (respondents)—The pursuers' patent was invalid. There was no proper subject-matter. The mere carrying out of a known idea to a further extent, even if better results were got, was not a proper subject-matter of letterspatent—Nicoll v. Swears & Wells, 1893, 10 R.P.C. 240; Rose's Patents Company, Limited v. Braby & Company, Limited, February 27, 1894, 21 R. 1107, 31 S.L.R. 474; Beavis v. Rylands Glass and Engineering Company, Limited, 1900, 17 R.P.C. 704; Reynolds v. Herbert Smith & Company, Limited, 1903, 20 R.P.C. 123. There was no subject-matter apart from the angle, and that was not claimed, and therefore the patent was invalid. Even if there were subject-matter, the patent failed because

the specification did not sufficiently disclose the invention. The specification must particularly describe and ascertain the nature of the invention and in what manner it was to be performed—Patents Act 1883 (46 and 47 Vict. cap. 57), sec. 5 (4); Frost, Patent Law and Practice, 3rd ed., i, p. 288; Philpott v. Hanbury, 1885, 2 R.P.C. 33, at p. 38; Clark v. Adie, 1877, L.R., 2 A.C. 315; Sirdar Rubber Company, Limited v. Wallington, Weston, & Company, [1905] 1 Ch. 451, [1906] 1 Ch. 252, 22 R.P.C. 257, 23 R.P.C. 132, 24 R.P.C. 539. The specification must set forth the means by which the result was to be attained, and that could not be done by setting "mechanical problems"—Plimpton v. Malcolmson, 1876, L.R., 3 Ch. Div. 531, per Jessel, M.R., at p. 576. A patentee was bound to disclose the best mode known to him of achieving his result—British Dynamite Company v. Krebs, cit.; Plimpton v. Malcolmson, cit., at p. 580. The pursuer here had not disclosed the angles at which the best results could be obtained, and in one of the drawings (which were part of the specification—Frost, Patent Law and Practice, 3rd ed., i, p. 287) he showed an angle which was impracticable. Further, where an invention comprised a combination of known things the specification must clearly distinguish between new and old-Philpott v. Hanbury; British United Horse Shoe Machinery Company Limited v. A. Fussel & Sons, Limited, cit., per Vaughan Williams, L.J., at p. 644; Kynoch & Company, Limited v. Webb, 1899, 17 R.P.C. 100. Counsel also argued that the patent was invalid in respect of prior use, and cited Paterson v. Gas Light and Coke Company, 1877, L.R., 3 A.C. 239. Counsel also referred to Lane Fox v. Kensington and Knightsbridge Electric Lighting Company, Limited, 1892, 9 R.P.C. 413; Frost, Patent Law and Practice, 3rd ed., i, p. 151.

At advising-

LORD JUSTICE - CLERK — The defenders plead, interalia, that the pursuers' "alleged invention was not the proper subject-matter of letters-patent." The Lord Ordinary is against them on this point, and I am disposed to agree with his Lordship. I also agree with the manner in which the Lord Ordinary has dealt with the question of infringement. But he has decided the case in the defenders' favour upon two grounds maintained by them, "the first being" (as the Lord Ordinary expressed it) "that the patentee has not disclosed the range of angles to which the conical buffers must be made in order that the best results may be obtained; and the second, that he has shown on one of his drawings a conical buffer of so flat an angle that for practical purposes it is useless." Now, there is not a word in the defenders' record to show that they intended to object to the pursuers' specification on the ground of insufficient disclosure or false suggestion. The history of our practice and procedure in such cases was succinctly summarised by Lord President Dunedin in a recent case (Mica Insulator Company, Limited, 1905, 7 F. at p. 949) in which he said—"Now your Lordships are aware that it was long ago laid down by this Court that it was not necessary, under our forms of process, to have a separate statement of the particulars . . . such as is required in England, and that decision was based on the ground that, by our forms, the particulars must be set forth on record, to prevent surprise, with the same distinctness as is required in the separate statement which is necessary in England. I think that that difference has been statutorily recognised in the Patents, Designs, and Trade Marks Act, 1883 . . ." His Lordship then referred to sections 29 and 107 of that Act, and added—"I take that to mean that the requirements of the Act are to apply just as much to Scotland as to England, though the courts in Scotland are not to depart from their own forms of process; so I think the provision for setting forth particulars . . . is just as much a statutory requirement in Scotland as in England, though the form in which it is to be done may be different." It is clear that the matter is not one of mere form or technicality but of real substance; and our Courts have always recognised the necessity of strict pleading in patent cases in order to prevent surprise and mis carriage of justice (e.g., as is shown by the opinions in Kerr, 1868, 7 Macph. 51). Now, according to the requirements of English pleading (which are in substance, though not in actual form, the same as our own), it would not be enough for the defenders merely to plead that the "pursuers' specification does not sufficiently describe and ascertain the nature of the invention and the manner in which the same is to be performed," or that "the specification is ambiguous, and framed in a manner calculated to mislead;" but they would require (if they desired to substantiate such pleas) to state specifically and in detail the various respects in which the specification fails to sufficiently describe the nature of the invention or the manner in which it is to be performed, or is otherwise ambiguous or misleading—Heathfield, 1894, 11 R.P.C. 17; Crompton, 1887, 4 R.P.C. The defenders' record seems, therefore, to be insufficient to support the arguments upon which they were successful in the Outer House, looking to the absence not only of suitable pleas-in-law but also of averments in fact. stands it gives no notice whatever of these matters, and I do not think we can competently deal with such evidence as has crept into the proof in regard to them, or with the forcible arguments which we heard in support of and against the grounds of the Lord Ordinary's judgment. There is no plea which the Court could sustain, and even if there were such a plea there are no averments which would give basis for such a plea to rest on. I gather that under similar circumstances the English Courts would probably refuse a motion for leave to amend particulars, made for the first time in the Court of Appeal — Andrews' Patent, 1907, 24 R.P.C. 349, aff. 1908, 25 R.P.C. 477. But according to our practice we certainly have power to allow

an amendment of record at this stage upon such terms as may be thought just. would therefore be right to give the defenders an opportunity of considering their position, and of tendering (if so advised) a minute of amendment within a specified period, reserving of course meantime as to the pursuers' right to object to the same if tendered, or to lodge answers to it, and also reserving the question of the terms upon which it might be allowed. But if the defenders do not desire to amend, the case must be disposed of upon the footing that there is no evidence competently before the Court upon those matters in regard to which the defenders have not given any notice upon the record.

LORD LOW, LORD ARDWALL, and LORD DUNDAS concurred.

The Court allowed the defenders to lodge an amendment, if so advised, within fourteen days.

Counsel for the Pursuers (Reclaimers) Clyde, K.C. - Sandeman. Agents-Webster, Will, & Co., S.S.C.

Counsel for the Defenders (Respondents)
—Dean of Faculty (Dickson, K.C.)—Macmillan. Agents—J. & J. Ross, W.S.

Thursday, January 28.

FIRST DIVISION.

BOWHILL COAL COMPANY (FIFE), LIMITED v. MALCOLM.

Master and Servant-Workmen's Compensation Act 1906 (6 Edw. VII, cap. 58), sec. 1 (3) and Sched. 1 (16) - Arbitration-Procedure - Demand for Sum Due -Weekly Payment-Award of Slump Sum -Admission by Master of Sum Claimed. with Demand for Finding as to Workman's Recovery and Termination of Compensation.

In an arbitration under the Workmen's Compensation Act 1906, a miner, injured on March 23, 1908, claimed a certain sum as compensation for 25 weeks. His employers lodged a note of defence, in which they, while admitting liability for the sum claimed, averred that the miner had recovered his earning capacity by 13th April 1908, and that on that date he returned to work and had been earning more than before the accident. The employers accordingly asked for an order declaring that their liability had terminated on that date.

Held that the proper course for the arbiter was first to find that the claimant was entitled to compensation amounting to the sum claimed, and thereafter, if the workman admitted recovery, to find that his right to compensation ended on 13th April, and if he denied recovery, to allow a proof.

The Workmen's Compensation Act 1906

(6 Edw. VII, cap. 58), sec. 1 (3), enacts— "If any question arises in any proceedings under this Act as to the liability to pay compensation under this Act . . . or as to the amount or duration of compensation under this Act, the question, if not settled by agreement, shall, subject to the provisions of the First Schedule to this Act, be settled by arbitration, in accordance with the Second Schedule to this Act."

Sched. I (16)—"Any weekly payment may be reviewed at the request either of the employer or of the workman, and on such review may be ended, diminished, or in-

creased. .

Francis Malcolm, miner, Bowhill, Cardenden, Fifeshire, claimed compensation under the Workmen's Compensation Act 1906, from his employers the Bowhill Coal Company (Fife), Limited. The latter being dissatisfied with a decision of the Sheriff-Substitute of Fife and Kinross (HAY SHENNAN), acting as arbiter, took an appeal

by way of stated case.

The case stated—"This is an arbitration under which the Sheriff of Fife and Kinross at Kirkcaldy is asked to award the sum of £1, 15s. 11d. sterling, being compensation for 25 weeks under said Act in respect of injuries sustained by the respondent through an accident arising out of and in the course of his employment with the appellants on 23rd March 1908. The initial writ, the presentation of which to the Sheriff Clerk for a warrant for service was the first step in the process, was presented at Kirkcaldy on 11th July 1908. The appellants (being the defenders therein) were cited to appear in the Kirkcaldy Court on the 22nd of said month, when a note of defence was lodged behalf of the appellants, in which liability for the sum sued for was admitted, and an averment was made that the respondent had recovered his earning capacity by the 13th day of April 1908; that he resumed work on that date; that since then he had been earning more than he did before the date of the accident, but that he had refused to discharge his claim against the appellants in return for payment of said sum of £1, 15s. 11d. The case was continued for hearing till the 27th day of July 1908, and on this date parties were heard and I made avizandum. On 29th July 1908 the appellants lodged in process a minute craving the Court to grant an order, declaring that by the said 13th day of April 1908 the respondent had regained his earning capacity, and asking the Court to terminate his right to compensation in respect of the said accident as at that date (13th April 1908). At the hearing the appellants asked for a diet of proof to be fixed. On 30th July 1908 I issued an interlocutor finding (1) that the respondent claimed compensation for 25 weeks in respect of said accident, amounting in all to £1, 15s. 11d., and that the appellants admitted liability for this sum, but had not paid it; (2) that the respondent made no claim for compensation for any period subsequent to 13th April 1908; and (3) that so far as the respondent's earning capacity subsequent to 13th April 1908 was concerned, there was no