[HIGH COURT OF AUSTRALIA.]

SHAVE . . . . . APPELLANT;
PLAINTIFF,

AND

H. V. McKAY MASSEY HARRIS PROPRIETARY LIMITED . . . . . RESPONDENT.
DEFENDANT,

ON APPEAL FROM THE SUPREME COURT OF VICTORIA.

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MELBOURNE, *May* 10, 13, 14.

SYDNEY, *June* 11.

Rich, Starke, Dixon, Evatt and McTiernan JJ.

Patent—Infringement—Specification—Combination claim—Claim to special combination of parts—Not claim for system or principle of construction—Patentee limited to combination of parts described in claim.

The appellant brought an action against the respondent for the infringement of a patent for an improved reversible stump-jump disc plough. The specifications described the plough as "a plough to do the same work as those at present in use but of much simpler construction and easier to control." The material claim in the specification was: "A stump-jump disc plough comprising, a frame, land wheels supporting said frame, a horizontal spindle carried by said frame, a stump-jump arm pivotally mounted on said spindle, a stem rotatably supported by said stump-jump arm, an axle member on said stem, a cutting disc on said axle member and means for rotating said stem to reverse said disc."

Held that such claim was for a stump-jump disc plough limited to a special combination of parts, and was not a claim for any system or principle of construction combining stump-jump action and reversibility, that the appellant had tied his claim to the spindle described in the claim, and should be limited to the combination of parts which he had described and claimed; that the respondent did not use this combination of parts in its plough, its stump-jump arm being connected to the frame of the plough by a ball joint connection and not by means of a horizontal spindle, and that its plough was not a mere variant or equivalent of the invention claimed by the appellant.

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Per Rich, Dixon, Evatt and *McTiernan* JJ. :—When a combination claim states an invention which gives an old result by a new means, the monopoly is limited, at any rate prima facie, to the new means. But when by a new application of principle the inventor has obtained a new result or thing, even when it be done by a combination, he may claim all the alternative means by which the thing or result may be achieved.

Decision of the Supreme Court of Victoria (*Martin* J.) affirmed.

APPEAL from the Supreme Court of Victoria.

George Frederick Shave brought an action in the Supreme Court of Victoria against H. V. McKay Massey Harris Pty. Ltd., claiming an injunction and damages for an alleged breach by the defendant of the plaintiff's patent for an improved reversible stump-jump disc plough. The defendant denied the infringement and alleged that if there was an infringement it would contend that the letters patent were invalid on the ground (*inter alia*) that the specification of the plaintiff's invention did not sufficiently define the monopoly which the patentee intended to claim, and was ambiguous and uncertain.

The specification for the plaintiff's invention described it as "an improved reversible stump-jump disc plough," and it was described in the specification as "a plough to do the same work as those at present in use but of much simpler construction and easier to control." The specification then described the plough specifically and in detail, by reference to drawings incorporated in it. The first claim, which followed the description, was: "A stump-jump disc plough comprising, a frame, land wheels supporting said frame, a horizontal spindle carried by said frame, a stump-jump arm pivotally mounted on said spindle, a stem rotatably supported by said stump-jump arm, an axle member on said stem, a cutting disc on said axle member and means for rotating said stem to reverse said disc." The claims succeeding the first did no more than claim by reference to it together with some additional factor, and for the purposes of this case the first was the only claim which required to be considered. Instead of this combination of parts, the defendant connected its stump-jump arm to the frame of the plough by a ball joint connection and not by means of a horizontal spindle. A full description of the device employed by the defendant is contained in the judgments hereunder.

The action was heard by *Martin* J., who, while holding that the plaintiff's patent was valid, decided that the defendant's plough did not amount to an infringement of the invention covered by the plaintiff's claims, and, consequently dismissed the action.

From that decision the plaintiff now appealed to the High Court and the defendant cross-appealed.

Fullagar K.C. and *Gamble*, for the appellant.

Latham K.C. and *Dean*, for the respondent.

The arguments sufficiently appear in the judgments hereunder.

Cur. adv. vult.

June 11.

The following written judgments were delivered :—

RICH, DIXON, EVATT AND MCTIERNAN JJ. This is an appeal by the plaintiff, in an action for infringement of a patent, from a judgment dismissing the action. The patent, which dates from 8th May 1924, was granted to the plaintiff in respect of " an improved reversible stump-jump disc plough." The defendants are manufacturers of agricultural implements. They have put on the market a stump-jump disc plough, the discs of which are reversible. The defendant's plough, which is constructed on the same or similar principles to the implement which embodies the plaintiff's invention, is alleged to be an infringement of the first claim of his specification. *Martin* J., who tried the action, decided that the defendant's plough did not amount to an infringement of the invention covered by the plaintiff's claims. The defendant attacked the validity of the plaintiff's patent, but unsuccessfully. The decision of *Martin* J. upholding the patent was, in our opinion, clearly right and calls for no further discussion. The issue upon the appeal is substantially whether, upon a proper construction of the plaintiff's claim 1, the defendant's plough amounts to an infringement. Prior to the plaintiff's invention, stump-jump disc ploughs were well known. Disc ploughs, the discs of which were susceptible of automatic reversal, were not unknown. But no plough had been devised which combined the

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actions of stump-jumping and automatic reversing. A disc cultivator existed in which the discs might be reversed and possessed a stump-jump action, but the reversal required the unscrewing of nuts and was not automatic. The principle of stump-jump mechanism in the case of disc ploughs is to fit the disc or discs upon an arm the fore part of which is pivoted to the frame of the plough, which thus draws the discs. When the discs meet an obstruction the arm permits them to rise and mount it. Before the plaintiff's invention it appears to have been considered necessary to transmit some of the weight of the plough to the discs in order to contribute to their digging into the ground both when commencing a furrow and after jumping an obstacle. This was done by means of spiral springs surrounding a rod descending vertically from the frame to the arm upon which the discs were mounted and meeting it at a point in the vicinity of the axle of the disc. Accordingly the arm was pivoted to the frame of the plough near its fore part so that the disc would be under the frame. Reversing mechanism was less common. The object of reversing the disc of a plough is to cause it, as the plough is drawn up and down a field, always to throw the upturned earth in the same direction. The discs are concave or dished-in on one side. They are placed diagonally to the direction of the plough with the concave side forward. A disc thus throws the earth over in the direction of its concave side. If the disc does not reverse and the plough is turned at the end of a furrow, the earth in the new furrow is turned over on the other side. The plaintiff constructed a plough in which he dispensed with any means of transmitting any part of the weight of the plough to the disc. He relied on the weight of the disc, its shape, and its diagonal position together with the direction in which the tractive force was applied, which, by the lowness of the axle, was made almost horizontal. He was thus able to draw the disc or discs behind the frame of the plough and pivot the stump-jump arm behind the axle and even lower than the axle. In the arm so pivoted he made the actual arm or rod upon which the disc axle is fixed rotate. By a lever he was thus able to reverse the disc. Discs had previously been thrown over from one side to another on an arm pivoted in the direction of the plough's movement. But the only instance in which, prior to the plaintiff's invention, a disc

reversible in this manner was drawn after the plough frame is that of an altogether impracticable American invention never put into effect in Australia. The specification was, however, found in a library and cited as an anticipation. It has no stump-jump mechanism. The specification does not suggest the plaintiff's plough and may be ignored.

In this state of prior knowledge the plaintiff, in describing in his specification what he had invented, contented himself with drawings of his actual implement and a detailed description of the parts and their functions. He described it as " a plough to do the same work as those at present in use but of much simpler construction and easier to control." He appended to the specification a great number of claims. Those succeeding the first do no more than claim by reference to it together with some additional factor, and for the purposes of this case the first only need be considered. That claim is as follows : " A stump-jump disc plough comprising, a frame, land wheels supporting said frame, a horizontal spindle carried by said frame, a stump-jump arm pivotally mounted on said spindle, a stem rotatably supported by said stump-jump arm, an axle member on said stem, a cutting disc on said axle member and means for rotating said stem to reverse said disc." From the drawings and the body of the specification the character of the horizontal spindle plainly appears. It is a rod, about half the length of the axle, to which it is attached at the rear and at a lower level. It is held by bracket arms, immediately next to which the branching lugs of the stump-jump arm are attached to the spindle. The spindle thus forms a hinge upon which the stump-jump arm rises vertically. It also takes up the strain of the lateral pressure upon the disc as it cuts the furrow. From the stump-jump arm, where it is pivoted on the spindle, a lever or arm rises for the purpose of lifting the discs off the ground. From the upper end of this arm or lever a chain or rod is led to a lever upon the frame of the vehicle in front of the ploughman's seat by means of which he can lower or raise the disc to any desired height. This enables him, among other things, to regulate the depth of the furrow. A consideration of the functions of the spindle shows that they may be performed by any form of verticle hinge which can be placed

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sufficiently low and which can take up the lateral strains resulting from the operation of ploughing. For example, if the stump-jump arm branched out laterally and terminated at each side in a ring or eyelet and these eyelets engaged in hooks or other eyelets strongly attached to the axle, they would form a hinge capable of the exact operation required of the spindles. Again, if instead of one long spindle the outer ends of the branches of the stump-jump arm each terminated in a lug pivoted to another lug attached to the axle, a common form of hinge would be provided which would be sufficient for the purposes of the stump-jump arm. The fact is that the essential thing in this member of the plaintiff's plough is a capacity to give vertical movement to the stump-jump arm, to take up lateral strains, and to bear the strain of pulling the disc. Without invalidating his claim, he might, so far as we can see, have described this element in general terms instead of specifically adopting a horizontal spindle. If he had said a horizontal spindle or any other form of hinge, or if, even more generally, he had spoken of an attachment allowing vertical movement on a horizontal axis, we see no reason why his claim should not have survived attack.

The defendant's plough resembles the plaintiff's closely except in the method of attachment of the disc members to the axle. A spindle is not used, except in the lever mechanism for raising the arm. The axle of the disc or discs is attached to a stem, the forward or butt end of which is conical or rounded and is received in a concave socket attached to the axle. In this socket it could move universally, but its movements laterally are limited by other means. It is surrounded by a collar which is fixed to it. Behind this is a bearing in which it may rotate. This sleeve or bearing moves up and down within slipper guides or flanges placed vertically on each side of it. It is these which prevent lateral movement and at the same time admit of vertical movement. The collar prevents the stem slipping through the sleeve or bearing and the slipper guides are furnished with flanges which hold the sleeve or bearing and prevent it from leaving the plough frame. The stem is rotated by means of a lever so that the discs may be reversed. From the sleeve or bearing which in a diminished form is analogous to the plaintiff's arm in which his stem rotates, a lever or arm rises vertically to receive the

attachments by means of which the ploughman may raise or lower the stump-jump arm bearing the disc or discs to the height he desires. This mechanism consists of levers. At the top of the arm or lever which rises from the sleeve or bearing it engages with a rod or arm by means of a pivot or hinge. This rod is fixed to the axle by a spindle which is integral with it and also with another arm which rises therefrom at an angle with the first rod or arm. To its upper end a rod is pivoted which runs down to the foot of a lever upon a ratchet quadrant in front of the ploughman's seat. By this lever and its ratchet he may raise or lower the discs and secure their height. The rod between the foot of the ploughman's lever and the arm rising from the spindle on the axle is so attached to the latter arm that when an obstacle is jumped the rod does not impede the operation. From the under side of the sleeve or bearing in which the stem rotates when the discs are reversed a chain is carried free of the frame of the plough to the swingle-tree to which the horses are attached. The pull of the horses is therefore transmitted directly by this chain to the under side of the stump-jump arm. The chain passes beneath a pulley under the axle so that the tractive force is applied to the arm diagonally and pulls it down. The discs are thus assisted in entering the ground. In the defendant's plough the functions performed by the spindle in the plaintiff's plough are distributed. The tractive power comes through the chain for the most part and not through the spindle. Perhaps a little comes through the frame of the vehicle and is transmitted by the slipper guides and to a very slight extent through the levers of the lifting mechanism. The lateral strains are taken up through the slipper guides and the vertical hinge is supplied by an axis arrived at by means of the rounded end of the stem and the spindle of the lifting lever. In all other respects the plough would constitute an infringement of the plaintiff's claim.

The real question is whether the plaintiff has so tied himself to the horizontal spindle that the mechanism substituted in the defendant's plough saves the defendant from infringement.

An attempt was made before *Martin* J. to identify the spindle which forms the fulcrum in the defendant's plough of the lever lifting the stump-jump arm with the spindle mentioned in the

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plaintiff's claim. We have nothing further to add to the reasons given by *Martin* J. for declining to accede to this contention. Indeed it already appears sufficiently from this judgment that the spindles perform quite different functions. The purpose of the plaintiff's spindle is served in the defendant's plough by the combination of ball and socket and collar, sleeve or bearing, slipper guides and draw chain assisted by the lifting mechanism. Thus the question is whether the alternative construction adopted by the defendants to perform these functions takes the substance of the invention claimed notwithstanding the avoidance of the horizontal spindle. The argument for the plaintiff upon this matter is that the claim discloses an essential idea of which the horizontal spindle is a specific application or manifestation only, and that the monopoly extends to another application of the same essential idea.

Before it was necessary for a patentee to include claims in his specification and when, if he did so, it was for the purpose of better defining his invention, it was natural for the Court to regard the strict wording of a claim as of less importance than at the present time, when it constitutes the legal definition of the patentee's monopoly adopted by him or his advisers as their considered expression of what he claims as his exclusive property. The statement of Sir *William James* L.J. remains true : " The patent is for the entire combination, but there is, or may be, an essence or substance of the invention underlying the mere accident of form ; and that invention, like every other invention, may be pirated by a theft in a disguised or mutilated form, and it will be in every case a question of fact whether the alleged piracy is the same in substance and effect, or is a substantially new or different combination " (*Clark* v. *Adie* (1)). But its application must necessarily be different. "In the old days, when specifications contained no claims, or if they did contain any they contained very few and simple claims, it very often happened that a patentee would describe his invention by reference to numerous features or integers, but the Court could see plainly enough that one or more of those features or integers were not of the essence of the patentee's invention, and in such a case they would not allow a person who had taken all the essential features or integers of the invention to

(1) (1875) 10 Ch. App. 667, at p. 675.

ride off on the plea that he had not taken the unessential integer but had adopted a mechanical equivalent for it" (per *Romer* L.J., *Submarine Signal Co.* v. *Henry Hughes & Son Ltd.* (1)). When a combination claim states an invention which gives an old result by a new means, the monopoly is limited, at any rate prima facie, to the new means. But when by a new application of principle the inventor has obtained a new result or thing, even when it be done by a combination, he may claim all the alternative means by which the thing or result may be achieved.

The difficulty of the present case arises from the fact that an analysis of the plaintiff's stump-jump and reversing combination shows that it does embody a principle or application of principle capable of expression by a number of mechanical alternatives, which in all probability he might have covered successfully by a claim drawn generally, or even by a claim drawn specifically if accompanied by appropriate indications of the nature of the principle embodied. But "it is beyond doubt that an inventor claiming something more than the mere mechanism described is bound to make his intention reasonably clear" (per *Tomlin* J., *British United Shoe Machinery Co.* v. *Gimson Shoe Machinery Co.* [*No.* 2] (2)). "It is not sufficient for the inventor to discover his gold mine—he must also peg out his claim. Outside the pegs, the gold, if it be there, is free to all. This principle is of vital importance in patent law, though it may be that in some of the earlier cases to be found in the books it was not clearly borne in mind" (per *Maugham* J., *Marconi's Wireless Telegraph Co.* v. *Phillips Lamps Ltd.* (3)).

In the present case the plaintiff's specification contains no indication that he sought protection for the application of principle upon which the construction of his implement is based. Indeed it does not even appear from the specification that he appreciated the generality of the mechanical principles it brought together and the existence of variant means of applying them. He sought and secured simplicity of design and to this achievement his spindle contributed much. Whatever gains may be had by departing from his spindle, greater simplicity is not one of them. In our opinion his claim is

(1) (1931) 49 R.P.C. 149, at p. 175-176.
(2) (1928) 46 R.P.C. 137, at p. 159.
(3) (1933) 50 R.P.C. 287, at p. 303.

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for the mechanism he describes. It is not a claim for the construction of a plough embodying the result produced by that mechanism or by any means which consist of substantially similar mechanical ingredients combining for the same end. It does not follow that a form of construction cannot amount to an infringement unless it contains what precisely is a spindle. Obvious mechanical substitutes for the spindle may be merely a disguise or cover under which the reality of the mechanism described in the claim is taken. But the defendant's plough is much more than this. The distribution of functions belonging to the spindle had been accomplished in the defendant's machine in an ingenious manner involving a change in design. For all that appears, the plaintiff's plough may be the source of the defendant's plough, but the ideas which flowed from that source are not entirely included within the claim. For one idea stated in the claim, namely the spindle, others have been substituted. The substitution may not be meritorious. But, owing to a narrowness in the claim, which may be attributable to design or misfortune on the plaintiff's part, the substitution is enough, in our opinion, to take the defendant's plough outside the area of the plaintiff's monopoly.

We think the appeal should be dismissed with costs excluding any additional costs occasioned by the cross-appeal, which should be dismissed also.

STARKE J. The appellant brought an action in the Supreme Court of Victoria against the respondent, claiming an injunction restraining infringement of his letters patent for an improved reversible stump-jump disc plough. The action was tried before *Martin* J., who upheld the validity of the patent, but decided that the respondent had not infringed it. An appeal is brought to this Court from that decision.

It was proved that prior to the grant of the letters patent to the appellant, stump-jump disc ploughs were well known in Australia, and also ploughs with reversible discs. But there was no plough which combined both stump-jump action and reversibility. A stump-jump plough was one so arranged that when the mould boards

or discs—the ploughing elements—encountered an obstacle, e.g., a stump, they would automatically rise over it, and having passed it would re-enter the ground automatically, or by means of apparatus, e.g., springs provided for that purpose. The stump-jump action in disc ploughs was obtained through an arm (on which the discs were mounted) pivoted on the axle or frame of the plough. The discs, by this means, could lift vertically up or down as the obstacle was encountered or passed. A reversible disc plough was one which provided for reversing the position of the discs from one side to the other. In a non-reversible plough, the earth is thrown in two directions, whereas in the reversible plough that is not so.

The appellant's invention was, as already stated, for " an improved reversible stump-jump disc plough." It was described in the specification as " a plough to do the same work as those at present in use but of much simpler construction and easier to control." The specification then describes the plough specifically, and in detail, by reference to drawings incorporated in it. The first claim, which follows the description, is : " A stump-jump disc plough comprising, a frame, land wheels supporting said frame, a horizontal spindle carried by said frame, a stump-jump arm pivotally mounted on said spindle, a stem rotatably supported by said stump-jump arm, an axle member on said stem, a cutting disc on said axle member and means for rotating said stem to reverse said disc." Upon the true construction of this claim, there is no doubt, I think, that it is for a stump-jump disc plough limited to a special combination of parts. It is not for any system or principle of construction combining stump-jump action and reversibility. The question is whether the respondent has infringed this claim.

The respondent has made a stump-jump and reversible disc plough. The plough has an arm by means of which the stump-jump and reversible elements are connected to the frame of the plough by an ingenious ball joint connection, which permits pivotal movement for stump-jump action, and rotary movement for the reversal of the discs. In addition it has means for connecting the draught to the stump-jump, and reversing elements whereby the discs are maintained at work in the ground by the pull of the horses, and rise against

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Starke J.

that pull. In other words, as *Martin* J. said, "the trailing arm" in the respondent's plough "is not horizontal to the ground, and to counteract the upward pull which results from a sloping arm, a draw chain connects the swingle-tree to an attachment below the trailing arm so that the forward movement of the horse exerts a downward thrust on the discs." The stump-jump arm in the respondent's plough is not mounted on a horizontal spindle attached to the frame of the plough, and the traction is taken almost entirely by the pull of the draw chain already mentioned, and not by the horizontal spindle, as in the case of the appellant's plough. A person cannot escape on the ground of non-infringement simply because he has departed in some particular from the combination which has been chosen by the inventor. "But of course there must be a limit, and the limit . . . must be ascertained by considering really what it is that the inventor claims as the subject of his patent" (*Bunge* v. *Higginbottom & Co.* (1); *Walker* v. *Alemite Corporation* (2)). In the present case, the horizontal spindle is an essential feature in the combination of parts claimed by the appellant. The stump-jump arm is pivoted upon it, and stump-jump action depends upon it; moreover, the greater part of the traction is taken by it. The inventor has tied his claim to this spindle, and must be limited to the combination of parts which he has described and claimed. The respondent does not use this combination of parts in its plough: its stump-jump arm is connected to the frame of the plough by the ball joint connection and not by means of a horizontal spindle; indeed, its plough is by no means an obvious variant or equivalent of the invention claimed by the appellant: it required, I should think, a good deal of ingenuity before the design was finally adopted. It follows that the plough made by the respondent is not an infringement of the invention claimed by the appellant in his first claim.

It is unnecessary to consider the other claims, for it was conceded that if claim 1 had not been infringed, then no infringement of the other claims could be established. It is also unnecessary, in the view I take, to consider the validity of the letters patent granted to the appellant. On the materials in evidence in this case, I should think that *Martin* J. was right on that question, but the objection to the

(1) (1902) 19 R.P.C. 187, at p. 198. (2) (1933) 49 C.L.R. 643, at p. 653.

patent's validity may arise in other proceedings and upon other material, and so I express no concluded opinion upon the subject.

The appeal should be dismissed.

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Appeal dismissed with costs excluding any additional costs occasioned by the cross-appeal. Cross-appeal dismissed.

Solicitor for the appellant, *Douglas S. Ritchie.*

Solicitors for the respondent, *Shaw & Turner.*

H. D. W.

Appl *Daemar* v *Industrial Commission of NSW* (1988) 12 NSWLR 45 | Appl *Daemar* v *Industrial Commission of NSW* 90 FLR 469 | Appl *Pluteus (No8) Pty Ltd* v *GJ Coles & Co Ltd* 77 FLR 423 | Appl *Daemar* v *Industrial Commission of NSW* 79 ALR 591 | Cons *Bullock* v *Goodluck* [1983] TasR 226 | Appl *Rajski* v *Wood* (1989) 18 NSWLR 512 | Appl *Commonwealth Trading Bank* v *Inglis* (1974) 131 CLR 311 | Foll *Dosanjh; Ex parte Duus (Trustee of the Estate of Dosanjh)* (1995) 56 FCR 521

Cons *Madden* v *Madden* (1996) 65 FCR 354 | Appl *Minerals Evaluation Network* v *Brosnan* (2002) 31 SR(WA) 225

Appl *Batistatos* v *RTA (NSW)* (2006) 227 ALR 425

[HIGH COURT OF AUSTRALIA.]

COX . . . . . RESPONDENT;

PLAINTIFF,

AND

JOURNEAUX AND OTHERS . . . . APPLICANTS.

DEFENDANTS,

[No. 2.]

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June 21; *July* 1.

DIXON J.

Action—Frivolous and vexatious—Stay of action—Inherent jurisdiction of Court.

Bankruptcy—Action by bankrupt prior to bankruptcy for "personal injury or wrong done to himself"—Bankruptcy Act 1924-1933 (*No.* 37 *of* 1924—*No.* 66 *of* 1933), *sec.* 63 (3).

The inherent jurisdiction of the High Court to stay an action as vexatious is to be exercised only when the action is clearly without foundation and when to allow it to proceed would impose a hardship upon the defendants which may be avoided without risk of injustice to the plaintiff. In exercising its power to stay an action on the ground that it is frivolous and vexatious the Court is not concluded by the manner in which the litigant formulates his case in his pleadings. Such power may be exercised not only where the facts are undisputed, but also in cases where there is a dispute as to the facts.