## REPORTS OF CASES

DETERMINED BY THE

## HIGH COURT OF AUSTRALIA

1904-1905.

## [HIGH COURT OF AUSTRALIA.]

WILLMANN APPELLANT; PLAINTIFF, AND RESPONDENT. PETERSEN DEFENDANT,

## ON APPEAL FROM THE SUPREME COURT OF QUEENSLAND.

Patent—Subject-matter—Invention—Application of old contrivances to a new use— Combination — Infringement — Specification — Anticipation — Injunction — Damages—Costs—Patents Act (Queensland) 48 Vict. No. 13.

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A combination of two or more known mechanical appliances, the result of which is to effect a new purpose, or to effect an old purpose with greater Sept. 19, 20, efficiency or economy, may be the subject-matter of a patent if it involves some substantial exercise of the inventive faculty.

21, 22. MELBOURNE, Oct. 28.

The appellant claimed an injunction and damages against the respondent for an infringement of two patents. The first was granted in 1899 for "an improved cane-truck dray," and the second in 1900 for "improvements in canetruck drays." The object of both inventions was to facilitate the carriage and loading of cane in cane-fields. They consisted of appliances for enabling trucks fitted with flanged wheels suitable for running on rails to be carried on

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drays fitted with rails to and from tram lines laid in the cane-fields. Somewhat similar contrivances had been previously used in Queensland for the purpose of conveying vehicles fitted with flanged wheels from one place to another on an ordinary vehicle fitted for running on made roads. The object of the appellant's invention was to enable such vehicles to be taken economically and efficiently to any place where an ordinary wheeled vehicle could be taken.

Held, that the appellants' second invention being an adaptation of well-known mechanical contrivances to a new use, or to an old use with greater efficiency or economy, and requiring some substantial exercise of the inventive faculty, was a proper subject-matter of a patent.

Held, further, as regards the defence of anticipation, that the novelty in the mode of the combination, resulting as it did in increased efficiency and economy, was sufficient to entitle the patent to protection against infringement.

Decision of Supreme Court of Queensland, (1904, Q.S.R., 203), reversed, and judgment of *Power J.* (1904, Q.S.R., 194), restored.

On 13th February, 1899, the appellant obtained a grant of patent rights, No. 4799, in the State of Queensland for an invention called "an improved cane-truck dray." The complete specification set forth that "the invention related to a special make of dray, consisting of a frame of iron and wood and cranked axle, the front and back ends being constructed of iron and conforming to the same shape as the axle, and the sides of hardwood.

"Mounted upon the frame longitudinally are two lengths of tram rails set to the same guage as the tram line on the canefield; the whole is mounted upon wheels about ten feet apart, allowing a clear space of about 16 inches between the underside of the frame-work and the ground.

"Shafts are provided, and to the cross-bar at the heel of the shafts a windlass is fixed with chain and hook for hauling up on to the dray the cane-truck and lowering the same when loaded. On the inner side of the wheels each side of dray is a platform with a few steps leading therefrom to provide easy access thereto. The object of the invention is to convey the empty truck from terminus of tram line on the field to the locality of the cut cane, and when loaded to convey same back again." The specification continued:—"My invention obviates the necessity of loading the cane into ordinary carts or drays, unloading from same, and re-loading into tram trucks, the present practice on many canefields.

"In using my invention, at about 10 or 12 feet from terminus of the tram line I trench the ground a little more than the full width of the dray to be about 10 inches deep with a slight incline from the tram line into which I place a log of wood against which the wheels of the dray strike and arrest it at any convenient position. I then fill in the space between the dray and the tram line by placing two lengths of rail on the end of the dray and on to the ground, thus completing the connection with the rails on the dray and the tram line. The empty truck is then hauled up on to the dray by means of the windlass conveyed thereby for loading to any part of the cane-field, and when loaded returned to tram line on to which the loaded truck is lowered by the windlass . . . I declare that what I claim is:—

"The combination and arrangement of parts forming my improved cane-truck dray substantially as herein described and illustrated by drawings."

On 26th April, 1900, the appellant obtained another grant of patent rights, No. 5289, for an invention somewhat similar in construction and manner of working to patent No. 4799. In his complete specification the appellant described the nature and working of his second invention as follows:—

"My invention relates to improvements in cane-truck drays, and forms modifications of my improved cane-truck dray for which I have obtained letters patent No. 4799 dated 13/2/1899, and consists of either a two-wheeled or four-wheeled dray, the frame-work in the two-wheeled dray being constructed of either wood or iron, upon which are bolted or otherwise fixed two tram rails, and in the four-wheeled dray tram rails serve as part of the frame-work, the whole mounted upon suitable wheels and axles . Both the two and four-wheeled drays are provided with windlass for hauling up or lowering the cane-trucks as described in my former specification hereinbefore referred to, and are both used for the same purpose and in a similar manner excepting that in using this invention either as a two or a four-wheeled dray a level crossing is made at any convenient place along the line of tram rails which I term a loading or transferring station, the ground is cut away to a depth of about 13 inches on each side of the tram line, the under side of frame of truck dray being about

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H. C. of A. two inches clear of the tram rails, a pair of special points is placed one end on truck dray and the other end on top of tram rails thus forming a connection between the rails on truck and those of the tram line, and allowing of the loading or unloading of cane trucks to or from dray and rails.

> "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 improvements in cane-truck drays a rectangular frame mounted upon a pair of wheels in combination with two lengths of tram rails secured to the frame and a pair of shafts mounted upon iron stanchions above the level of the frame as herein described and illustrated by drawings."
- "2. In improvements in cane-truck drays a frame consisting of two lengths of tram rails mounted upon and securely fixed thereto, a pair of axles and wheels, the rails being turned up in front and connected by a cross or buffer beam as herein described and illustrated by drawings."

On 15th January, 1904, an action was commenced by the plaintiff against the defendant to recover damages for the infringement of plaintiff's patents No. 4799 for "an improved cane-truck dray," and No. 5289 for "improvements in cane-truck drays," and for an injunction to restrain the defendant from infringing the said patents.

The particulars of breaches delivered with the statement of claim were as follows :--

- 1. The defendant has at divers times since the 1st October, 1903, and prior to the issuing of the writ herein, used a cane-truck dray manufactured according to or in a manner only colourably differing from the inventions comprised in the letters patent held by the plaintiff respectively dated the 13th February, 1899, and the 26th April, 1900, and respectively numbered 4799 and 5289. In particular the defendant has used the said dray continuously from the 1st October, 1903, up to the issuing of the writ herein at his farm, situated at the Six-mile, Homebush, near Mackay, in the State of Queensland.
- 2. The breaches complained of are infringements of the claiming clauses of the said letters patent.

The respondent denied the alleged infringement, and further H. C. of A. pleaded that the invention was not new; that the plaintiff was not the first and true inventor; that the invention was not useful; and that the invention was not one for which letters patent could by law be granted.

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The particulars of objection were:

- 1. The alleged invention was not new.
- 2. Before the date of the said letters patent, about the year 1888, the alleged invention was used by one Thomas Dymond, at Eton, near Mackay, in connection with the Colonial Sugar Refining Company's tram line at that place.
- 3. Before the date of the said letters patent in the year 1884 one Joseph D. Russell at Brisbane made a sketch of the alleged invention, which he showed to one Babbidge, who used the said alleged invention in the form of a wagon to convey tram cars to the tram line in Brisbane. The said Babbidge shortly afterwards used the said alleged invention to convey trucks to the railway line in Brisbane.
- 4. Before the date of the said letters patent the said alleged invention was commonly used in Queensland in the form of railway turning tables at Brisbane and other railway stations in Queensland.
- 5. The said alleged invention was not of any public utility, the only four-wheeled wagon built in accordance with the said letters patent having broken down, and the two-wheeled dray built in accordance therewith having proved clumsy and unwieldy.
- 6. The alleged invention was not one for which letters patent could by law be granted as it showed no improvement over similar drays or wagons in general use at the time of the granting of the said letters patent, and was therefore to the hurt of trade and generally inconvenient.

The action was tried before Power J., in April, 1904, and resulted in judgment being entered for the plaintiff for £4 damages, and an injunction to restrain the defendant from further infringement (1). The defendant appealed from the whole of this judgment to the Full Court of Queensland. The Full Court ordered that the

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On 8th August, 1904, the plaintiff obtained special leave to appeal to the High Court from the judgment of the Supreme Court of Queensland, and the appeal was made on the grounds:—

- 1. That the judgment of the Full Court was against the evidence.
- 2. That the said judgment was contrary to law.
- 3. That upon the evidence the appellant was entitled to judgment.

Stumm (with him E. A. Douglas), for the appellant. object of the plaintiff's invention was to cheapen the process of harvesting cane. Previous methods involved the carting of the cane from the cane-fields to the tram line, unloading from the carts, and reloading on to the trucks. The plaintiff's invention, by carrying trucks on a dray into the cane-fields, obviated the necessity of a double loading. The first claim now relied on is for the dray, the rails, and the windlass, and, if such a combination had ever been used before, it had never been used in working the cane-fields. On the question of ingenuity, the simplicity of the structure was urged as an objection. This would deprive the plaintiff of what is the strongest part of his invention, i.e., the idea. The mechanism is simple; but that makes the process more economical, which forms a further reason for a grant of a patent. Any combination is the subject-matter of a patent if the result be a new, or a better, or a cheaper article: Crane v. Price (2); Boulton and Watt v. Bull (3).

"'Patent' means letters patent for an invention. 'Invention' means any manner of new manufacture the subject of letters patent and grant of privilege within sec. 6 of the Statute of Monopolies, &c. . . . and includes an alleged invention" (48 Vict., No. 13, sec. 3 (1)). Where a person selects one of a class of well-known mechanical contrivances and applies it to a purpose with the result of producing a new article, or an old article in a more economical and expeditious way, he can claim it as the subject-matter of a patent, even though he could not have claimed the machine per se: Adamant Stone and Paving Co.

<sup>(1) (1904)</sup> Q.S.R., 203. (2) 1 Web. Pat. Cas., 393, at p. 409. (3) 2 Bl. H. 463, at p. 497.

Ltd. v. Liverpool Corporation (1). A test of whether there has H. C. of A. been sufficient exercise of the inventive faculty is to inquire whether the patentee has, for the first time, produced a machine adapted for the particular purpose. It does not matter that the difference between that and any machine in prior use be slight: Lyon v. Goddard (2).

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[O'CONNOR J.--Is it open to us to treat this finding as one of law?]

This Court can pronounce the judgment which ought to have been given in the Court below, whether the appeal is on a question of law or fact: Rickman v. Thierry (3).

[GRIFFITH C.J.—An appeal Court ought not lightly to disturb a decision on a question of fact where the inference has been drawn from oral evidence; secus, if from written evidence.]

Frequently, it is the idea itself which is the subject of the patent: Fawcett v. Homan (4); Otto v. Linford (5).

[GRIFFITH C.J.—In Otto v. Linford (5) the invention consisted in the application and use of an inflammable gas mixed with a proper proportion of atmospheric air, and ignited inside the cylinder of an engine by electricity. It was not the effect itself which was patented, but the mechanical means of applying it.]

A new combination of old ideas so as to produce a useful commercial article is good subject-matter: Heine, Solby & Co. v. Coninco Incandescent Light Co. (6); Cannington v. Nuttall (7).

[GRIFFITH C.J.—Is there any authority which lays down the rule that the application of an old invention to a new use is the subject-matter of a patent?]

Brooks v. Lamplugh (8) is an authority for that proposition. Cannington v. Nuttall (7) was a case of the combination of old ideas.

[GRIFFITH C.J.—What was wanted in this case was a contrivance that would make provision for two requirements, viz.—trucks running on rails which are the only possible economical means of

<sup>(1) 14</sup> R.P.C., 11, at p. 21.

<sup>(2) 10</sup> R.P.C., 334, at p. 343; on appeal, 11 R.P.C., 354.

<sup>(3) 14</sup> R.P.C., 105.

<sup>(4) 13</sup> R.P.C., 398, per Lindley, L.J., at p. 405; and per Rigby, L.J.,

at p. 410.

<sup>(5) 46</sup> L.T.N.S., 35.

<sup>(6) 21</sup> R.P.C., 202. (7) L.R., 5 H.L., 205.

<sup>(8) 15</sup> R.P.C., 33, per Smith, L.J., at p. 48.

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H. C. of A. access to the cane-fields with a vehicle drawn by horses that can go when no rails are laid. Portable rails would not be practicable on the whole field. The discovery how to carry such an idea into effect may entitle it to a patent.]

> The plaintiff claims the economical idea coupled with a combination of old inventions.

> [O'CONNOR J.—This was more than transporting trucks. was transporting them in such a way as to facilitate loading and subsequent carriage. The Sugar Company's object was to get the trucks across a tram line. The object here is to apply that principle in agricultural pursuits.]

> The tendency of the Courts is to sustain combination patents where they are obviously for the public benefit: Taylor & Scott v. Annand and the Northern &c. Co. Ltd. (1); Vickers v. Siddell (2). The Supreme Court drew too fine a distinction between the merit to be given an idea and a mechanical contrivance. Though a principle is not patentable, still, when once applied, it can be patented: Cannington v. Nuttall (3). An invention consisting of a combination of contrivances previously in use for the purpose of producing some known article is a good subject-matter if it produces it in a cheaper or more expeditious manner, or of a better or more useful kind: Murray v. Clayton (4). A combination of well-known mechanical contrivances to produce a different result is subject-matter for a patent: Pirrie v. York Street Flax Spinning Co. (5). A patent for a new use of a known contrivance is good, and can be supported if the new use involves practical difficulties which the patentee has been the first to see and overcome by some ingenuity of his own: Gadd v. Mayor of Manchester (6); even though the new use resembles closely the old: Hayward v. Hamilton (7); Thompson v. American Braided Wire Co. (8). the component parts of plaintiff's invention were well known before, but the application of the combination to this purpose has proved of great public utility. It has been held that the applica-

<sup>(1) 18</sup> R.P.C., 53, at p. 62.
(2) 15 App. Cas., 496, per Herschell,

L.J., at p. 501.
(3) L.R., 5 H.L., 205, per Hatherley,

L.J., at pp. 215-216.
(4) L.R., 7 Ch., 570, per James, L.J., at p. 584.

<sup>(5) 11</sup> R.P.C., 429.

<sup>(6) 9</sup> R.P.C., 516. (7) Griff. P.C., 115, per Brett, L.J.,

at p. 120.

<sup>(8) 6</sup> R.P.C., 518, per Herschell, L.J., at'p. 527.

tion of a well-known general principle to a particular purpose to H. C. of A. which it has not been applied before is patentable if the manufacture is new, desirable and of public utility: Dangerfield v. Jones (1).

A well-known appliance may be used to produce a new result altogether, but applied to something so totally different that there is an obvious invention in it: Bumlett v. Picksley (2). Here there has been such a connection of two principles as to form a new process. As to the utility of the invention, this cannot be seriously doubted.

[GRIFFITH C.J.—An invention which saves sixpence or a shilling a ton on cane is undoubtedly useful.]

Feez (with him Hart), for the respondent. The respondent is entitled to judgment on four grounds:—(1) No subject-matter in the patent; (2) want of novelty; (3) want of utility in the thing patented; (4) no infringement—i.e., if the plaintiff is confined to what he claims, the defendant's invention is not an infringement of his. In his second patent the plaintiff claims for "improvements in cane-truck drays." He is confined to the claim in this patent a description of which is given in the specification.

[O'CONNOR J.—Must not this be read as a modification of the other patent?]

No. The infringement claimed is an infringement of the second patent. If an alleged infringement consists in taking part of a combination, it is necessary that the specification should have claimed the part so taken as new: Proctor v. Bennis (3). Whatever is not claimed in the specification is disclaimed. The only claim was for infringement of the second patent. If the second patent had been taken out by another person it would have been bad as not disclosing anything new.

[GRIFFITH C.J.—That would be an infringement of the first.] All the plaintiff claimed in the second invention was the idea of a trolly with rails on it.

[GRIFFITH C.J.—The second may be described as a portable section of a tramway.]

(1) 13 L.T.N.S., 142.

(2) Griff. P.C., 40. (3) 36 Ch. D., 740.

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What the plaintiff claims, and what was known at the time, must be considered. It was known (1) that drays were used with rails on them for carrying trucks, and (2) that trucks could be mounted on drays in the manner adopted by the plaintiff. The only portion of the plaintiff's first invention not previously known was the windlass, but a substitute was used in the form of a block and tackle. It was known that a certain form of vehicle was in existence for conveying trucks from one place to another.

[O'CONNOR J.—The purpose was different. In the case of the Sugar Company the purpose served was that of a turn-table. In this case the trucks could be carried about the field and used in any part of it.

GRIFFITH C.J.—Take the case of dredges. They have never been used in agriculture. Suppose they could be taken on to the field and used, would not that be the subject-matter of a patent?]

Yes, if it were a new use which necessitated ingenuity. In all essential particulars the Homebush article and this are identical. Babbidge's trolly is also identical. The plaintiff's invention was for a purpose analogous to those; it is not necessary to show it was identical.

GRIFFITH C.J.—The patent was not for carting cane about in a dray, but for a portable section of a tram way—a portable section suitable for use in soft and hilly country.]

The defendant contends that there was no invention, but if there was, there was no novelty. If the other inventions (Babbidge's and Homebush) are not patentable, then neither is this one.

[GRIFFITH C.J.—Babbidge had a truck built on four flanged wheels. To get it to the railway line he had to rest it on a lorry or on rails. He had to deliver it complete on the rails with the flange.]

Once it had been found economical to save a loading, it would not require any ingenuity to conceive this design. This is an application of a known article to an analogous purpose without any ingenuity, and therefore is not patentable: Morgan v. Windover (1). To sustain a patent there must be a substantial exercise

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of the inventive faculty: Williams v. Nye (1); Gadd v. Man- H. C. of A. chester Corporation (2). A slight difference in the mode of application is not sufficient to entitle to patent, nor will it be sufficient to take a well-known mechanical contrivance and apply it to a subject to which it has not been hitherto applied: Harwood v. G.N. Railway Co. (3). Here all the elements of the plaintiff's machine were known, and Babbidge's and the Sugar Company's contrivances had been used previously for a very similar purpose: Vickers v. Siddell (4). A combination patent will not be granted unless the result is a machine which will perform novel functions which the parts could not perform separately: Allen v. Oates and Green (5). As far as combination patents are concerned the question is, was a new machine invented? The plaintiff's invention comprised a dray, a windlass and rails. Every portion of that was known before. Letters patent cannot be obtained for a machine which, when once the idea has been conceived, could be manufactured by any skilled workman: Morgan v. Windover (6).

[GRIFFITH C.J.—How do you apply that to this case? was a case of analogy, this of combination. In some cases analogy is the test. In this case analogy only comes in on the question of prior user.

O'CONNOR J.—You cannot have an analogous use because you have never had a combination before.]

A mere combination does not make a new machine, and is not entitled to a patent in the same sense that the new machine is: Kay v. Marshall (7); Slazenger v. Feltham (8). In combination patents there must be sufficient invention to constitute subjectmatter: Williams v. Nye (9). A patent will not be granted for a well-known mechanical contrivance applied merely in a manner analogous to that in which it has been notoriously used: Blakey v. Latham (10). A mere alteration in an existing machine which results in an improvement, but which is only the application of

<sup>(1) 7</sup> R.P.C., 62. (2) 67 L.T., 569. (3) 11 H.L.C., 654.

<sup>(4) 15</sup> App. Cas., 496. (5) 15 R.P.C., 298.

<sup>(6) 7</sup> R.P.C., 139.
(7) 5 Bing. (N.C.), 492.
(8) 6 R.P.C., 234.
(9) 7 R.P.C., 62, per Cotton, L.J., at p. 66.

<sup>(10) 6</sup> R.P.C., 184, at p. 187.

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H. C. of A. known methods to an analogous purpose, is not a good subjectmatter: Longbottom v. Shaw (1). Utility alone in an invention does not entitle it to patent: Ralston v. Smith (2). plaintiff's discovery was only an economical idea which was carried out in an economical way by other people before. New user alone without invention is not sufficient for grant of letters patent: Tickelpenny v. Army and Navy Co-operative Society Ltd. (3); Rickman v. Thierry (4). Here there was no difficulty to overcome and no ingenuity.

> [O'CONNOR J.—In Hinks v. Safety Lighting Co. (5), the only difference was between a flat wick and a round one. The Court will not be astute to refuse a patent where the invention gives great convenience to the public.]

> It all gets back to the question whether or not there has been any invention.

> [O'CONNOR J.—In considering that question it is useful to see how far the article is for the convenience of the public, and of simple and cheap mechanism.]

> The contrivance was merely the result of the employment of well-known inventions. The Judge found there was no ingenuity in the article itself, but only in the method of carting the cane about.

> GRIFFITH C.J.—Is not the use of flanged wheels in agriculture a new purpose?]

> A more skilled application of well-understood tools and wellunderstood processes is not a patentable invention: Dredge v. Parnell (6). In this case it is the adaptation of the same known tools to the same purpose.

> [O'CONNOR J.—You say the purpose is to carry trucks from one point to another. They say the purpose is to carry trucks on drays in a cane-field between the place of cutting and the line.]

> On the question of novelty. It is alleged that the plaintiff's invention was anticipated by the Colonial Sugar Company and one Babbidge. A good test as to the patentability of this article

<sup>(1) 8</sup> R. P. C., 333, per Herschell, L.J., at p. 336. (2) 11 H. L.C., 223.

<sup>(3) 5</sup> R.P.C., 405, per Kekewich, J., at p. 408.

<sup>(4) 14</sup> R.P.C., 105, per Davey, L.J., at p. 121.

<sup>(5) 4</sup> Ch. D., 607.
(6) 16 R.P.C., p. 625, per Halsbury, L.J., at p. 628.

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would be to see whether, if the Colonial Sugar Company had H. C. OF A. used their vehicle after the patent had been taken out, it would have been an infringement: Proctor v. Bennis (1).

[GRIFFITH C.J.—Would that apply to Babbidge's too?]

Yes: the mechanical equivalents are just the same, and the purpose is analogous. The principle of Harwood v. G.N. Railway Co. (2) that it is not sufficient, in order to obtain a grant of patent rights, to take a well-known mechanical contrivance and apply it to a subject to which it hitherto had not been applied, is upheld in the following cases: Losh v. Hague (3); Lane-Fox v. Kensington Electric Lighting Co. (4); Cropper v. Smith (5); Tatham v. Dania (6); and Bamlett v. Picksley (7).

[GRIFFITH C.J.—It always comes back to the question whether or not there has been ingenuity.]

The application of a known article to a purpose analogous to those to which it had before been applied is not good subjectmatter: Horton v. Mahon (8); Brook v. Aston (9).

[GRIFFITH C.J.—In the case of Brook v. Aston (9), as there was no ingenuity in the adaptation, there could be no question of novelty. The faculty of invention is not brought into play in adapting an old invention to an analogous purpose. Assuming there was subject-matter and invention, there must be no anticipation. That would be a complete answer if established.]

The alleged invention here was anticipated by the Colonial Sugar Co. and Babbidge. Nothing can be claimed outside the specification: Bush v. Fox (10); Jordan v. Moore (11). If a skilled workman had his attention drawn to the invention he could have made it. So if a workman at Homebush, knowing the requirements of the cane-fields, could have done it, it is not a patentable invention.

Stumm in reply. A patent is valid where the specification claims a combination of things or instruments which form an

<sup>(1) 36</sup> Ch. D., 740, per Cotton, L.J., at p. 754, per Bowen, L.J., at p. 763.
(2) 11 H.L.C., 654.
(3) 1 W.P.C., 200; 8 L.J., Ex., 251.
(4) (1892) 3 Ch., 424, per Lindley,

L.J., at p. 428.

<sup>(5) 1</sup> R.P.C., 81.

<sup>(6)</sup> Griff. P.C., 213.(7) Griff. P.C., 40.(8) 12 C.B. (N.S.), 437; 31 L.J.,

C.P., 255. (9) 8 E. & B., 478.

<sup>(10) 5</sup> H.L.C., 707. (11) L.R. 1 C.P., 624.

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H. C. of A. apparatus, even though each one by itself may be old and wellknown: Lyon v. Goddard (1). The second specification must be read with the first. The plaintiff's first idea was to save double handling, and his second was to take the trucks about the fields. No one else had thought of that. The second part may be the easier of the two. The idea may be very difficult and the mechanical part of the work very simple. Then comes the question—had he to modify any existing one at the time. Babbidge's could not be used for this purpose. Something had to be added -simply to save labour. Instead of a block and tackle the plaintiff used a windlass.

> [Barton J.—The difficulty of applying those arguments is that you have not claimed any modifications—either the windlass or the construction of the dray.]

> The claim is for everything mentioned in the first specification, and also the second. The plaintiff could not claim the windlass a second time. In Higgs v. Goodwin (2), a patent for pumping water was patented for another and additional purpose.

> [GRIFFITH C.J.—I think that is a patent for a new product. and not for the process. That must be the reason of it, otherwise the decision is quite inconsistent with the other cases.]

> In Fletcher v Glasgow Gas Commissioners (3), it was held that similar mechanism, but for a different purpose to that for which patent was granted, did not amount to an infringement.

> [O'CONNOR J.—Assuming the first specification is good for everything comprised within it, has there been an infringement of that ?]

> Yes; there is only a colourable alteration of it. They have the rail and the windlass. They display ingenuity in themselves.

> [GRIFFITH C.J., referred to Consolidated Car Heating Co. v. Came (4).]

> A specification ought to be regarded in the same manner as any other document which has to be interpreted by the Court. It must be looked at as a whole, and a strained and unnatural interpretation must be avoided: Electric Construction Co. Ltd. v.

<sup>(2)</sup> El. B. & E., 529; 27 L.J., Q.B., (3) 4 R.P.C., 386. 421. (4) (1903) A.C., 509.

Imperial Tramway Co. (1). In Williams v. Nye (2) it would H. C. of A. appear that a person had combined two separate inventions in one.

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[GRIFFITH C.J.—That comes back to the question: What is an invention ?]

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So far the Court has been contented with declaring what is not an invention: Elias v. Grovesend Tinplate Co. (3). A combination may be a good subject-matter of a patent though every part be old: Duckett v. Whitehead (4); Edison-Bell Phonograph Co. v. Smith and Young (5).

Cur. adv. vult.

The judgment of Griffith C.J., and Barton J., was delivered by Griffith C.J.:—

Melbourne, 28th Oct.

This is an appeal from a judgment of the Supreme Court of Queensland, reversing a judgment of Power, J. in favour of the plaintiff, and directing judgment to be entered for the defendant. The action was brought for an injunction to restrain the infringement of two patents, Nos. 4799 and 5289, granted in 1899 and 1900, for inventions respectively described as "an improved canetruck dray" and "improvements in cane-truck drays," and for damages.

The object of both inventions was to facilitate the carriage of sugar cane from the field to the mill. Cane, as we all know, is grown in large fields, from which it is conveyed to mills where the juice is extracted. The weight of the cane is considerable, and the handling of it for the purpose of loading the trucks on which it is carried involves a large expense for labour, one of the principal causes of expense being the necessity for transporting the heavy cane over the soft and often uneven surface of the fields without the advantage of formed roads. In order to minimise this difficulty, it has long been a common practice to lay down main tram roads in various directions through the fields, and to use, in addition, portable tram lines, which can be moved from place to place, as feeders to the main lines. But it was still necessary to convey the greater part of the cane for a consider-

<sup>(1) 16</sup> R.P.C., 631, at p. 638.(2) 7 R.P.C., 62.(3) 7 R.P.C., 455, at p. 463.

<sup>(4) 12</sup> R.P.C., 376, per Esher, L.J.,

at p. 378. (5) 11 R.P.C., 389.

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H. C. of A. able distance before reaching the nearest place to which trucks fitted for running on rails could be brought to receive it. This was sometimes done by hand, and sometimes by means of a dray, in which case a second handling was necessary for loading the cane into the trucks. The plaintiff claims that he conceived the idea of combining the advantages of an ordinary vehicle, with tired wheels capable of being taken over uneven surfaces away from formed roads, with the advantage of a vehicle with flanged wheels designed for running on rails.

The complete specification for patent No. 4799 sets forth that the invention relates to "a special make of dray consisting of a frame of iron and wood and cranked axle, the front and back ends being constructed of iron and conforming to the same shape as the axle, and the sides of hardwood. Mounted upon the frame longitudinally are two lengths of tram rail set to the same guage as the tram lines on the cane field: the whole is mounted upon wheels about 10 feet apart, allowing a clear space of about sixteen inches between the underside of the frame-work and the ground. Shafts are provided, and to the cross-bar at the heel of the shafts a windlass is fixed, with chains and hook for hauling up on to the dray the cane-truck, and lowering same when loaded. On the inner side of the wheels each side of dray is a platform with a few steps leading therefrom to provide easy access thereto." The object of the invention is stated to be "for carrying the empty trucks from terminus of tram lines in the field to the locality of the cut cane, and when loaded, for conveying the same back again." The specification then goes on to describe in detail the construction and mode of use of the appliance, and claims "The combination and arrangement of parts forming my improved cane-truck dray substantially as herein described and illustrated by drawings." The actual vehicle may be described as a low dray with wheels about 10 feet apart, upon which were to be fitted tram rails at the same guage as that used on the tram lines in the cane-fields. cane-truck was to be hauled up by a windlass on to the rails in the dray, which was then drawn by horses to the field, where the cane was loaded directly into the trucks. The dray was then to be drawn back to the tram line upon which the loaded truck was to be let down by means of moveable rails.

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The complete specification of patent No. 5289 sets forth that the invention relates to "improvements in cane-truck drays, and forms modifications of my improved cane-truck dray, for which I have obtained letters patent No. 4799 dated 13/2/99, and consists of either a two wheeled or four wheeled dray, the frame work in the two wheeled dray being constructed of either wood or iron, upon which are bolted or otherwise fixed two tram rails, and in the four wheeled dray tram rails serve as part of the frame work, the whole mounted upon suitable wheels and axles." Then follow detailed explanations of the mode of construction and use, and the claim, so far as material, is for "improvements in cane-truck drays a rectangular frame mounted upon a pair of wheels in combination with two lengths of tram rails secured to the frame and a pair of shafts mounted upon iron stanchions above the level of the frame as herein described and illustrated by drawings."

The defendant denied the alleged infringement. He also denied that the alleged inventions were the subject matter for a patent, or that they were new or useful. At the trial before Power J., that learned Judge found all the issues in favour of the plaintiff, and gave judgment for an injunction with respect to both patents, with £4 damages. He adopted the language of Lindley L.J., in Gadd v. Mayor of Manchester (1):- "A patent for the mere new use of a known contrivance, without any additional ingenuity in overcoming fresh difficulties, is bad, and cannot be supported. If the new use involves no ingenuity, but is in manner and purpose analogous to the old use although not quite the same, there is no invention . . . . On the other hand, a patent for the new use of a known contrivance is good and can be supported if the new use involves practical difficulties which the patentee has been the first to see and overcome by some ingenuity of his own;" and applied them as affording a test to determine whether the plaintiff's invention was new. Evidence had been adduced on the issue of anticipation, which showed that in two instances in Queensland, before the date of the patents, vehicles fitted with flanged wheels had been carried along roads upon other vehicles on which rails had been tempor-

(1) 9 R.P.C., 516, at p. 524.

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arily fixed for their accommodation. The learned Judge thought that the plaintiff had applied a known contrivance to a new use which was distinctly out of the track of any former use, and had obviated certain difficulties in the carriage of heavy loads of sugar-cane over rough country in such a serviceable manner as to display inventive ingenuity. The learned judges who sat in the Full Court thought that the alleged inventions were not the subject matter of patent. The Chief Justice thought that the plaintiff had not discovered anything more than that, by using known appliances in a manner completely analogous to the ways in which they had been previously used, an economy could be effected, and that the new use of the appliance did not involve any ingenuity in overcoming fresh practical difficulties, since that use would be obvious to any person who entertained the idea that it would be cheaper than the old method. Real J., thought that the learned Judge of first instance was of opinion that the mere application of a known contrivance to a purpose other than that to which it had before been applied entitled the plaintiff to succeed; and he proceeded to show (and we quite agree with him) that such an opinion is erroneous. We are not at all sure, however, that this was the ground of the decision of Power J. Real J., had some difficulty in distinguishing the case from the recent case of Heine, Solby & Co. v. The Coninco Incandescent Light Co. (1) decided by Farwell J., which was a case of an adaptation of an old idea to a new purpose, but he regarded that decision as unsatisfactory. For our part we see no reason to doubt that it was rightly decided.

The learned Judges, in the view which they took of the case, had no occasion to distinguish between the first and second patents. In the view which we take of it, however, it is necessary to examine both in some detail. We will deal first with patent No. 4799. The claim in this case is expressly made for the combination as described in the specification, and it is not suggested by the specification that there is anything novel in the mere idea of fitting to the frame of an ordinary vehicle rails upon which another vehicle may rest. In considering whether the substance of an invention has been taken by an alleged infringer, the first

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step in the inquiry is to ascertain in what that substance consists. H. C. of A. In Consolidated Car Heating Co. v. Came (1), Lord Davey, delivering the judgment of the Judicial Committee, said (2):-"In determining the question whether the substance of the invention is taken, it is important to consider the position of the patent with reference to the previous knowledge on the subject. For, if the merit of the invention consists in the idea or principle which is embodied in it, and not merely in the means by which that idea or principle is carried into effect, a machine which is based on the same idea or principle may still be an infringement, although the detailed means adopted for carrying it into effect may be somewhat different"; and again, after referring to the claim made by the inventor (Sewall) in that case, who did not claim that his patent was a pioneer patent: "Giving Sewall full credit for having solved a problem which his predecessors had failed to solve, he cannot be said to have embodied any new idea or principle in his invention. The merit of it lies in the new combination of known features, and the fact remains that the use of the rib was a very material element in the commercial success of Sewall's solution of the problem. It is not proved that his coupler would have achieved that success without it, or that he ever contemplated the omission of it in operating his invention." The alleged infringement consisted in the use of the combination without the rib.

In the present case it is clear that the merit, if any, of the plaintiff's first invention as claimed did not consist in the idea or principle, but merely in the means by which it was to be carried into effect.

In order, therefore, to prove an infringement it would be necessary to show that the defendant had used a cart or machine which, in the words of Lord President Inglis in Gwynne v. Drysdale (3), cited with approval by Lord Davey at page 517 of the case last quoted)," contains all the essential and characteristic features of the patented combination." The evidence in the present case failed to establish any such fact. So far, therefore, as the first patent is concerned the plaintiff's case fails on this ground, and it is unnecessary to further consider the validity of that patent.

<sup>(1) (1903)</sup> A.C., 509.

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Before considering the second patent it will be convenient to state the principles of the law by which its validity must be ascertained. A great number of authorities were cited to us in the argument, most of which were rather instances of the application of accepted rules to the particular facts of the case than expositions of the law. Of those which can be regarded as affording a statement of principles of law, it is only necessary to refer to two or three. In Crane v. Price (1), a case of a patent for a combination, Tindal C. J., delivering the judgment of the Court of Common Pleas (consisting of himself and Coltman, Erskine, and Maule JJ.) said (2): "We are of opinion, that if the result produced by such a combination is either a new article, or a better article, or a cheaper article, to the public, than that produced before by the old method, such combination is an invention or a manufacture intended by the statute, and may well become the subject of a patent." In Harwood v. Great Northern Railway Co., (3) Lord Westbury L.C., said, in moving the judgment of the House of Lords (4): "No sounder or more wholesome doctrine, I think, was ever established, than that which was established by the decisions which are referred to in the opinions of the four learned Judges who concurred in the second opinion delivered to your Lordships, namely, that you cannot have a patent for a well known mechanical contrivance merely because it is applied in a manner or to a purpose which is analogous to the manner or to the purpose in or to which it has hitherto been notoriously used.' In Lane-Fox v. Kensington and Knightsbridge Electric Lighting Co. (5), Lindley L.J., said (6): "An invention is not the same thing as a discovery. When Volta discovered the effect of an electric current from his battery on a frog's leg he made a great discovery, but no patentable invention. Again, a man who discovers that a known machine can produce effects which no one before him knew could be produced by it, may make a great and useful discovery; but, if he does no more, his discovery is not a patentable invention. He has added nothing but knowledge to what previously existed. A patentee must do something more;

<sup>(1) 4</sup> M. &. G., 580. (2) 4 M. & G., pp. 602-3. (3) 11 H.L.C., 654.

<sup>(4) 11</sup> H.L.C., p. 682.

<sup>(5) (1892) 3</sup> Ch., 424. (6) (1892) 3 Ch., pp. 428-9.

he must make some addition, not only to knowledge, but to previously known inventions, and must so use his knowledge and ingenuity as to produce either a new and useful thing or result, or a new and useful method of producing an old thing or a result.

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"On the one hand, the discovery that a known thing—such, for example, as a Planté battery—can be employed for a useful purpose for which it has never been used before is not alone a patentable invention; but, on the other hand, the discovery how to use such a thing for such a purpose will be a patentable invention if there is novelty in the mode of using it, as distinguished from novelty of purpose, or if any new modification of the thing, or any new appliance is necessary for using it for its new purpose, and if such mode of user, or modification, or appliance involves any appreciable merit."

These cases in our opinion establish the following proposition (which when enunciated from the bench during the argument, was assented to by counsel on both sides):—A combination of two or more known mechanical appliances the result of which is to effect a new purpose, or to effect an old purpose with greater efficiency or economy, may be the subject-matter of a patent, if it involves some substantial exercise of the inventive faculty. We proceed to apply this test to the plaintiff's second patent. Upon a fair construction of the specification as a whole, we think the invention claimed is a mechanical contrivance for rendering a section of a tram line portable so that it can be connected with or detached from a corresponding tram line laid on the ground, on which the trucks may be conveyed by steam or horse power to the mill; the essential and characteristic feature of the contrivance being that the tram rails are themselves a part of the structure of the vehicle. This is, in substance, a combination of the ordinary mechanical appliance of a cart running on tired wheels with the mechanical appliance of flanged wheels running on rails. purpose which, according to the evidence, it effects is, perhaps, not a new use or purpose in the sense in which that term is used in the cases, but merely the old purpose of carting heavy crops from the field. But, also according to the evidence, it serves that purpose with greater efficiency and economy than any previously known combination, effecting, indeed, a saving of from sixpence to one shilling a ton in the cost of handling cane.

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Then, was there any substantial exercise of the inventive faculty? This is a question of fact on which different minds may well come to different conclusions. The very fact that no one had before thought of the contrivance leads a long way towards an affirmative conclusion. On the whole we think that there was. The idea is no doubt extremely simple, and one is apt, as Lord Herschell said, to be led astray by the extreme simplicity. But it by no means follows that, because a thing looks so simple when achieved, it was a simple thing either to conceive the idea or to devise the mechanical means necessary for the achievement. We, therefore, think that the second invention was the proper subject-matter of a patent. This view that the plaintiff's second invention consisted in a combination of old appliances to a new use does not seem to have been much pressed upon the Supreme Court. Cases were indeed cited on the subject of inventions consisting of combinations of old appliances, but the argument seems to have been mainly used with regard to the windlass which formed part of the combination claimed under the first patent. This was not pressed before us, and manifestly nothing could be made of the point.

We pass to the question of anticipation. On this point the defendant adduced evidence which, he contended, showed the prior use in Queensland in two instances of a contrivance substantially the same as the plaintiff's invention. He showed that some years ago in Brisbane, the manufacturer of a passenger car for use on a tram way, had conveyed it from the factory through the streets to the tram way upon a lorry on which two rails had been temporarily fixed at the proper gauge, the car having been hauled up on to the lorry by means of a crane. He also showed that some years ago, the owners of a plantation near Mackay, which was intersected by a public road, on each side of which they had laid down tram lines, the ends of which were only separated by the road, had adopted a somewhat similar device for conveying their cane-trucks across the road from one tram line to the other. For this purpose they constructed low embankments at the extremities of the tram lines to raise the trucks to a convenient height above the ground. On a frame fixed on tired wheels, they built up a foundation for tram rails which were laid upon it at the same height from the ground as the rails at the extremity of the two embankments. They then hauled the vehicle with the trucks upon it, to and fro, from one terminus to the other, thus making in effect a moveable extension of the tram lines so as to make them communicate with each other. The contrivance in this instance seems to have been substantially identical with that of the ordinary turntable in use on railways and tramways, the only difference being that the moveable platform was moved longitudinally instead of being turned on a pivot. In both instances the purpose was merely to convey vehicles fitted with flanged wheels from one place to another, in an ordinary vehicle fitted for running on made roads. The main purpose of the plaintiff's invention, on the other hand, is to enable such vehicles to be taken economically and efficiently to any place where a tired vehicle can be taken. Assuming that this is a merely analogous purpose to that already known, we think that the novelty in the mode of the combination, resulting in increased efficiency and economy, is sufficient to bring the invention within the rule. We think, therefore, that the defence of anticipation fails

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The question of infringement does not seem to have been substantially contested at the trial. This is partly to be accounted for by the fact that the plaintiff's two inventions were treated together, and were assumed to cover all vehicles adapted for carrying cane-trucks fitted with tired wheels to and from the field. The alleged infringement consisted in the affixing of a section of tram rails to a vehicle known as a Yankee wagon, which consists of a mere frame-work or under-carriage borne on four wheels, and very lightly and strongly constructed. But, if the view already expressed of the true character of the plaintiff's second invention is a correct one, it is obvious that the defendant's wagon with the rails so affixed was a mere colourable departure from the plaintiff's method of making them part of the implement itself.

On the question of utility as well as on that of infringement both Courts were agreed, and it is not necessary to add anything on that point.

For these reasons we are of opinion that the appeal should be allowed, and the judgment of *Power J.*, restored so far as it

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H. C. of A. relates to patent No. 5289. In the result the plaintiff is substantially successful, but the judgment must be varied by omitting the reference to patent No. 4799, and by limiting the award of costs to the plaintiff by depriving him of costs so far as they were increased by his claim in respect of that patent. The appellant must have his costs of the appeal to the Full Court, and of this appeal, but not including the costs of the motion for special leave, which was unnecessary.

> O'CONNOR J. I also am of opinion that this appeal must be upheld. Concurring as I do in the judgment of my learned brothers, it is unnecessary for me to do more than deal with the one point in the case which has caused me any difficulty, that is to say, whether the plaintiff's invention is such as to legally justify the issue of a patent. Having regard to what is described and claimed in the plaintiff's first patent, I agree with the Chief Justice that there is no evidence of an infringement of that patent. The matter substantially in controversy is the validity of the second patent, and it is to that I shall address myself. Now, what are the essential features of the invention as claimed in that patent? A dray carrying a rail bed, on which is fixed a pair of tram rails set to the same guage as the cane-field line. On these rails rests a truck ready equipped for running on the tram line. The dray is specially constructed for carrying the loaded truck over the rough ground of a cane field, and contains appliances fixed on itself for taking the empty truck from the tram line and placing the loaded truck back on the tram line. The whole apparatus is, as it has been described, "an agricultural implement" intended to convey sugar-cane loaded in the tram truck from the place of cutting in the field to the tram line without a second handling. The question for our consideration is, does the invention so claimed fulfil all the conditions necessary for a valid patent. The law bearing on the case is clear and well established. It would be, I think, difficult to state it in fewer words than in the proposition suggested by the Chief Justice during the argument and embodied in his judgment, namely, "A combination of two or more known mechanical appliances the result of which is to effect a new purpose, or an old purpose with greater efficiency or economy,

may be the subject-matter of a patent if it involves some substantial exercise of the inventive faculty." Amongst the numerous decisions quoted by counsel before us, there are two which better than any others illustrate between them every element of this proposition. One is the judgment of Lord Justice A. L. Smith, who, in delivering the judgment of the Court in Brooks v. Lamplugh (1), says:—" It by no means follows that a patent is bad because an old well-known mechanical contrivance has been brought into use by a patentee. If it were so, very few patents at the present day could be upheld. We think the law upon this subject may be stated thus :- Although there cannot be a valid patent for a well-known mechanical contrivance merely, when it is applied in a manner, or to a purpose, which is not quite the same, but is analogous to the manner, or the purpose, in or to which it has hitherto been notoriously applied (we quote here the words of Lord Westbury in Harwood v. The Great Northern Railway Co., and the same will be found again repeated by the House of Lords in the case of Morgan v. Windover (2)), yet there may be a valid patent, although well-known mechanical contrivances are used, if they are applied in a manner or to a purpose to which they have not been hitherto applied, and which new application results in a new and useful article not theretofore attained. In the first case there is no room for invention; that is, there is what is called no subject-matter. In the second there is room for invention, and if the Court comes to the conclusion that there has been invention in what has been done, then there is good subject matter, and it is no answer to say that, an old well known mechanical contrivance has been used in bringing about the novel and useful result attained." The further illustration of the proposition is to be found in the following words of the judgment of Lord Chief Justice Tindall in Crane v. Price (3), another portion of which has been quoted by the Chief Justice. "There are numerous instances of patents which have been granted where the invention consisted in no more than in the use of things already known, and acting with them in a manner already known, and producing effects already known, but producing

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<sup>(1) 15</sup> R.P.C., p. 33, at p. 48. (2) 7 R.P.C., p. 131. (3) 4 M & G., 580, at p. 603.

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those effects so as to be more economically or beneficially enjoyed by the public." The application of this law to the facts under consideration is in some particulars quite clear. There is nothing new in the combination of the dray and the rail bed carrying a truck on rails. Before the date of plaintiff's patent, it had been used at Homebush by the Colonial Sugar Company, under the circumstances stated by the Chief Justice for the conveying of loaded cane-trucks across a railway line—a distance of little over a chain. It had also been used in Brisbane by one Babbidge, for the conveying of completed tram cars from the place they were built, along a metal road to the tram line on which they were to run. But the plaintiff contends that the merit of his invention consists in the application of this well known combination to a new purpose, or, if not to a new purpose, then to an old purpose with the result of greater efficiency and economy. In my view he has established both branches of that contention. It is, perhaps, unnecessary to decide upon the first branch as he has completely established the second branch of his contention. It is clear on the evidence that the plaintiff's combination has reduced the cost of harvesting the sugar-cane by from sixpence to one shilling a ton of cane. That, I take it, is the best possible proof that his combination has resulted in "greater efficiency and economy" in the process of sugar-cane harvesting. There now remains the test of validity contained in the latter portion of the Chief Justice's proposition, and it is the one in respect of which I have found most difficulty in applying the law to the facts of this case—namely, did the application of the combination of dray, rail-bed, rails and truck, in such a way as to obtain the result of more efficient and more economical cane harvesting, involve a substantial exercise of inventive faculty. Nothing is more difficult than to determine, even roughly, the extent to which inventive faculty has been exercised in attaining a result such as this. Frequently, it is the one further step which makes all the difference between the old cumbrous method, and the new. That step, when taken, may appear simple, and even obvious, but then we are necessarily judging after the event. The difficulties surrounding the determination of such an issue, as well as a safe and reasonable guide in investigation, is to be found in the judg-

ment of Lord Justice Fitzgibbon in Pirrie v. York Street Flax Spinning Co.(1), in which he says: "Next in order comes the serious question of the adequacy of the subject-matter of the patent, or in other words, the question whether the plaintiff has displayed in his invention such an amount of ingenuity as to render him a meritorious patentee. If his invention is novel, and is of mercantile value and utility, that goes a long way to prove his ingenuity, because he has produced a desirable result that nobody ever attained before. I have already referred to the evidence which he gave of study and experiment, and to the evidence of others, who prove that there was a known difficulty to be overcome, a known advantage to be attained, and that several who had experienced the difficulty had been trying to overcome it in different ways, and had not succeeded. The mercantile value of the plaintiff's invention is both the proof and the measure of the extent to which he advanced beyond all previous inventors; and the more of them who tried it, and the farther he advanced upon their efforts, the more clear is the inference that he must have possessed and exercised an amount of ingenuity greater and more meritorious than that of his predecessors. Upon such a subject, lawyers and judges, who are not mechanics, should be slow to deny ingenuity, or to minimise the merit of a mechanical discovery." It seems to me that the method of inquiry used by Lord Justice Fitzgibbon in that case might well be applied to this. We begin with this fact. The saving of double handling in the harvesting of cane was a result the achievement of which was of considerable mercantile value, quite sufficient, one would suppose, to stimulate the inventive faculties of the mechanical experts and farmers engaged in the industry, and yet for years the old methods were followed involving unnecessary expenditure until the plaintiff invented his canetruck dray. The question naturally arises, if there was no substantial exercise of inventive faculty involved in the plaintiff's combination, how is it that no one attempted to use the combination before? Again, the plaintiff himself was a skilled mechanic living and working for some years in a sugar-growing district. That he had applied his mind to the question of economical caneharvesting is apparent from the fact that he had taken out a

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(1) 11 R.P.C., 429, at pp. 443-4.

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H. C. of A. patent for a cane-harvesting dray which had been commercially successful, and also, for a crane for loading cane in the field into drays, and from drays into railway-trucks. In 1887, the idea first occurred to him of taking the truck by dray to the cane in the field. In 1894 or 1895 he thought out in a general way the form of dray that would effect that object. But it was not until the end of 1898 that he devised the details of the combination embodied in his first patent, which he took out in the following year. All this is evidence of inquiry and investigation of the difficulties to be solved in attaining the object which the plaintiff's invention has achieved, and the fact that, with the stimulus of a substantial pecuniary advantage awaiting the discoverer of a solution of the difficulties, the plaintiff himself did not, in the course of his experiments and investigations, solve them earlier, is, I think, under the circumstances some evidence that the solution was at all events not on the surface. That there were difficulties to be overcome in the carrying of a loaded cane-truck, resting only by its wheels upon rails over and through the various inequalities of surface to be met with in a cane-field must be apparent. To combine strength, stability, lightness, and the proper height above the ground in a vehicle which would require in the working of it no more labour or horse power than was economically possible, was the only way of overcoming these difficulties. It may be that no great mechanical skill or ingenuity was necessarily involved in the plaintiff's combination. But it effected the purpose—it overcame the difficulties. Experts, whose evidence seems to be trustworthy. and who were believed by Mr. Justice Power who heard their evidence, have said that the invention involved considerable ingenuity. Under these circumstances, I cannot avoid coming to the conclusion that the plaintiff's combination of known appliances to attain a known result in a more efficient and economical way than heretofore did involve a substantial exercise of the inventive faculty. Holding the opinion, which I have already expressed, that the plaintiff's patent fulfils all the other conditions of validity laid down in the proposition of law enunciated by the Chief Justice, I have came to the conclusion that the plaintiff's second patent is one in respect of which letters patent may legally issue. As it is clear that there has been an infringement of that patent by the defendant, I am of opinion that, on the whole case, the plaintiff is entitled to the damages and injunction awarded him, that the judgment of Mr. Justice Power should be, with the exception mentioned by the Chief Justice, restored, and the appeal upheld. As to costs, I agree with the judgment of the Chief Justice.

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Appeal allowed. Judgment of Full Court reversed. Judgment of Power J., restored with costs of action except so far as they were incurred by the claim in respect of Patent No. 4799. Respondent to pay costs of appeal to the Full Court and of this appeal.

Solicitors for the appellant, Atthow & McGregor, Brisbane, for H. B. Wright, Mackay.

Solicitors for the respondent, Roberts & Roberts, for Alex. G. Stuart, Mackay.

H. E. M.

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[HIGH COURT OF AUSTRALIA.]

DAVIES AND JONES

PLAINTIFFS;

AND

THE STATE OF WESTERN AUSTRALIA . DEFENDANT.

Commonwealth of Australia Constitution Act, [sec. 117]—Discrimination—"Resident "—Administration Act (W. A.)] (1903, No. 13), sec. 86—"Bond fide residents of and domiciled in."

The Administration Act of Western Australia (1903, No. 13) sec. 86, imposes a duty on the final balance of the real and personal estate of the deceased according to fixed rates, and contains a proviso that in so far as beneficial interests pass to persons bond fide residents of and domiciled in Western Australia, and occupying towards the deceased a certain relation-

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PERTH, Oct. 13.

SYDNEY, Dec. 23.

Griffith, C.J., Barton and O'Connor, JJ.