

generation, growth, labour, or thought, or by the operation of involuntary causes, as the *products* of the seasons, or of the farm; the *products* of manufactures, the *products* of the brain.”

It is submitted that a patent for a product is valid when the claim of the patentee to the product involves a claim to the use of a newly invented art, (*y*) which is the real invention of the patentee; but a patent for a product would be bad in law, if the claim amounted to a claim to something which, though new, is not, in fact, the result of the exercise of an art invented by the patentee.

The following three hypothetical examples may be taken as illustrating the submission above made.

First, suppose a man finds a deposit of ore which is new to science, and contains a metal never isolated by chemists before. The discoverer of the ore applies to it a perfectly well-known process of refining and treatment which has been applied to other ores before, but he obtains, to his astonishment, the new metal, instead of what he expected, some known metal, *e.g.*, iron. Could he prevent, by means of a patent, other people from obtaining the new metal in the same way from similar ore, should they find it on their land? It is submitted he could not do so. The discoverer of the new ore could not have a patent for the application of the old process to the new-found ore, for it is *ex hypothesi* a mere analogous use, (*z*) though it yields a result which in a sense is new. To grant the man a patent which would enable him to stop others from applying the old process to the new-found ore, and so obtaining the new metal, would be unduly to curtail the right of the public to apply the old process to any ore which comes to their hands, and would surely be “mischievous to the State . . . by hurt of trade and generally inconvenient,” and consequently void at Common Law, as stated in the sixth section of the Statute of Monopolies. (*a*) The new metal is not a new product, in the sense of an article made by a new art. In the words of *Cotton, L.J.*, (*b*) “a thing is not to be called new, in the sense of *Crane v. Price*, simply because that particular thing has never been

Products.

When a claim for a product is good and when bad.

(*y*) See p. 24 *ante*; see also *Kopp v. Rosenwald*, (1902) 19 R. P. C. 211.

(*z*) See p. 81 *post*.

(*a*) p. 3 *ante*.

(*b*) *Blakey v. Latham*, (1889) 6. R.

P. C. 187; see also *Thierry v. Riekmann*, (1895) 12 R. P. C. 547-548; judgment of *Kay, L.J.*; *Rockliffe v. Priestman*, (1898) 15 R. P. C. 155.

Products. seen before. To be new, in a patent sense, it is necessary
 ——— that the novelty must show invention.”

Secondly, take the case of a man who by the exercise of invention produces a new machine—*e.g.*, a gig-mill, as in *Moser v. Marsden*. (c) This is a product produced as the result of labour and thought. The claim to the new machine is good. The real invention here was the arrangement, in combination, of parts forming the new and useful machine, and it is this *art* which is really protected by the claim to the product or machine.

Thirdly, take the case of a new chemical dye. Suppose a chemist by experiment finds a process of treating certain salts never treated in the same way before, and thereby obtains a new compound which is a valuable dye. After describing how he obtains the new product he could, no doubt, claim the product as a “new manufacture” within the Statute of Monopolies, provided that the claim to the product, when construed as it must be by reference to the specification as a whole, (d) is really a claim to the product produced substantially by the exercise of the new art or process which is the real invention, and the novelty of which is evidenced by the novelty of the result. (e)

In the first supposed case the claim to the new product could not be supported, because it does not involve a claim to any new invented *art*; whereas in the second and third cases the claim to the product could be sustained because it does involve a claim to a new invented *art*.

Ambit of
legitimate
claim to a new
product,

It is submitted that a claim to a new product, which under the circumstances of the case is a legitimate one, does not secure to the patentee protection against all means or methods of producing it, which, upon a fair construction of the specification, have not been directly, or by analogy, described and claimed. That is to say, where the product legitimately claimed is a *new* one, the Courts would give to the patentee protection in respect of all means of producing the new product which could be fairly said to be analogous to the

(c) (1893-96) 10 R. P. C. 205, 350; 13 R. P. C. 24.

(d) p. 277 *post*.

(e) In *Farbenfabriken vormals Friedrich Bayer & Co. v. Chemische Fabrik von Heyden*, (1905) 22 R. P. C. 501, the plaintiff's specification was construed as claiming, as a new manufacture, a new body (acetyl salicylic acid) quite apart from any process for

producing it. The Court held the patent bad on the ground that the so-called new body was not new but was known at the date of the patent. The point that the claim to the product irrespective to any process for producing it, in itself, invalidated the patent does not appear to have been taken at the bar.

means or method described in the specification, but would not extend the ambit of the claim further. Combinations.

In the case of a claim to a new means or method of producing an *old* product the Courts restrict the patentee very closely to the new means or method described. (*f*) a new means of producing an old product.

COMBINATIONS.

The art of combining two or more parts, whether they be new or old, or partly new and partly old, so as to obtain a new result, or a known result in a better, cheaper, or more expeditious manner, is valid subject-matter if it is presumable that invention in the sense of thought, design, or skilful ingenuity was necessary to make the combination. A new combination is subject-matter.

In fact, many of the most important inventions, from a practical and commercial point of view, are inventions of this kind, being merely the combination in a new way of new or old, or partly new and partly old, parts.

The *ratio decidendi* for holding valid such grants of letters patent is, that there is sufficient evidence of the presumption of thought, design, or skilful ingenuity in the invention and novelty in the combination. (*g*)

The merit of a new combination very much depends on the result produced. When a very slight alteration turns that which was practically useless into what is useful and important, the Courts consider that, though the invention was apparently small, yet the result being the difference between failure and success, it is fit subject-matter. (*h*) Thus, the mere placing of two flat wicks parallel to each other in an oil lamp, two concentric round wicks having been previously

(*f*) Cf. p. 53 *ante*.

(*g*) *Boulton v. Bull*, (1795) 2 H. & Bl. 487; *Dav. P. C.* 199; *Bovill v. Moor*, (1815) 2 Coop. App. Cas. 56; *Dav. P. C.* 361; 2 Marsh, R. 211; *Brunton v. Hawkes*, (1820) 4 B. & Ald. 541; *Huddart v. Grimshaw*, (1803) *Dav. P. C.* 265; 1 W. P. C. 85; *Lister v. Leather*, (1857) 8 E. & B. 1004; 27 L. J. Q. B. 295; *Hill v. Thompson*, (1817) 1 W. P. C. 237; *Lewis v. Davis*, (1829) C. & P. 502; 1 W. P. C. 488; 1 Carp. P. C. 471; *Saunders v. Aston*, (1832) 1 Carp. P. C. 510; *Carpenter v. Smith*, (1841) 1 W. P. C. 338; *Allen v. Rawson*, (1845) 1 C. B. 551; *Bovill v. Keyworth*, (1857) 7 E. & B. 725; 29 L. T. 194; *Spencer v. Jack*, (1862-64) 3 De G. J. & S. 346; 11 L. T. N. S. 242; *Morton v. Middle-*

ton, 1 Court of Session, 3rd series, 721; *Foxwell v. Bostock*, (1863) 4 De G. J. & S. 298; *Wright v. Hitchcock*, (1870) L. R. 5 Ex. 37; 39 L. J. Ex. 97; *Murray v. Clayton*, (1872) L. R. 7 Ch. 570; *Watling v. Stevens*, (1886) 3 R. P. C. 37; *Moseley v. Victoria Rubber Co.*, (1887) 4 R. P. C. 251; *Procter v. Bennis*, (1887) L. R. 36 Ch. D. 740.

(*h*) *Hinks v. Safety Lighting Co.*, (1876) L. R. 4 Ch. D. 615; *R. Bell's Patent*, (1846) 1 Moo. P. C. N. S. 49; *Wallington v. Dale*, (1852) 7 Exch. 888; *Moss v. Malings*, (1886) 3 R. P. C. 373; *Edison v. Woodhouse*, (1887) 4 R. P. C. 79; *Patent Exploitation, Ltd. v. Siemens Brothers & Co., Ltd.*, (1904) 21 R. P. C. 549.

Combinations.

combined, and flat wicks being perfectly well known, has been held sufficient to merit a patent; (i) so also has the substitution of a filament, carbonised before formation, for a thin rod in an incandescent electric lamp; (j) the alteration, in the shape of the handle of a tennis racket; (k) and the combination of a basin and chamber, formerly separated, forming an automatic-flushing device, which, for the purpose, was a great improvement on all others known at the date of the patent, since the combination allowed the putting in the chamber of a tipper so large that it protruded into the basin and gave a very strong vertical flow. (l)

In the words of *Tindal*, C.J., (m) there are numerous instances of patents which have been granted where the invention consisted in no more than the use of things already known and acting with them in a manner already known, and producing effects already known, but producing those effects so as to be more economically or beneficially enjoyed by the public. (n)

Objection to the use of the word "combination" in *Crane v. Price*.

In *Crane v. Price* (o) a patent for a new combination of the use of the known hot-air blast with the use of the known anthracite or stone-coal in the process of smelting iron was declared valid by *Tindal*, C.J. (p) *James*, L.J., in the case of *Murray v. Clayton*, (q) took objection to the use of the word "combination" by *Tindal*, C.J., in *Crane v. Price*, but agreed with the principle of the decision of the learned Chief Justice in the following words: "No doubt this case (*Crane v. Price*) has been questioned, but, if I may be permitted to say so, with all respect to the very powerful tribunal which decided that case, I have never been satisfied with the decision. That, however, is simply because I could not see how the word 'combination' could be properly applied to the introduction of a particular kind of fuel into a machine which had been patented for the use of every kind of fuel in the making of iron; and neither I, nor, so far as I am aware, any other

(i) *Hinks v. Safety Lighting Co.*, (1876) L. R. 4 Ch. D. 615.

(j) *Edison v. Woodhouse*, (1887) 4 R. P. C. 92; *Edison v. Holland*, (1889) 6 R. P. C. 243.

(k) *Moss v. Malings*, (1886) 3 R. P. C. 373. But see 6 R. P. C. 232.

(l) *Ducketts v. Whitehead*, (1895) 12 R. P. C. 187, 376.

(m) *Crane v. Price*, (1842) 4 M. & G. 580; 1 W. P. C. 409.

(n) *E.g.*, *Hall's Patent*, (1817) 1 W.

P. C. 97; *Derosne's Patent*, (1830) 1 W. P. C. 152; *Hill's Patent*, (1863) 3 Mer. 629; *Daniell's Patent*, *Godson Pat.* 274.

(o) (1842) 4 M. & G. 580; 1 W. P. C. 393; 12 L. J. C. P. 81.

(p) But see p. 55 *ante*.

(q) (1872) L. R. 7 Ch. 570; L. R. 15 Eq. 115; 21 W. R. 498, 42 L. J. Ch. 191; see also *Lyon v. Goddard*, (1893) 10 R. P. C. 316.

Judge has ever questioned the principle upon which that case was decided.”

When the result of 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 a combination may well become the subject of a patent.” (r)

For example, in *Hayward v. Hamilton*, (s) a patent for an improved pavement light was upheld by the Court of Appeal, under the following state of facts. Pavement lights, prior to the date of the patent, had been made by fastening in an iron frame, by certain ledges, certain lumps of glass of a rhomboidal or rectangular form, or sometimes in a bull’s-eye shape. It occurred to the inventor that it would be a very good thing to take prisms such as were used in a camera obscura, and put the prism forms into an old iron frame, fitted in the old way. The consequence of this arrangement was that the perpendicular rays of light falling upon the horizontal surface were reflected from the inclined surface, and were so caused to enter into a room, cellar, or any other place that it was desired to illuminate. It was proved in evidence that prisms had been used as deck lights in ships, in cameras, and that a man named *Darke* had put one in the shutter for the purpose of directing an intense pencil of light to fall upon his work, whilst doing some fine metallic work, the rest of the room being dark. The Court of Appeal upheld *Hayward’s* patent, on the ground that his pavement light was a new manufactured thing, and though all the parts were old, the introduction of the old prism constituted a new and improved result, and the combination was good subject-matter. The judgment of *Bramwell*, L.J., contains the following passage :—

“It seems to me then that the plaintiff really is an inventor ; he has found out something. He makes an article that was not made before. This particular case may be, no doubt, upon the verge, but one cannot help making this remark, that it is very strange, if it is no invention, that it has never been done before. Why has it never been done before ? Why, because nobody had found it out, which I take to be equivalent to invention.”

In *Morgan v. Windover*, (t) the House of Lords held a

(r) Per Tindal, C.J., *Crane v. Price*, 1 W. P. C. 409; see also *Murray v. Clayton*, (1872) L. R. 7 Ch. 584; 1 W. P. C. 71 n.; p. 163 *post*.
 (s) (1879-81) *Griff.* P. C. 115.
 (t) (1888) 7 R. P. C. 131.

Combina-
tions.

A combination, the result of which is a new, better, or cheaper article than that produced by an old method, is good subject-matter ;

Combinations.

patent bad for applying "C" springs to the front wheels of a carriage when they had been previously applied to the back wheels. The case was decided on the view that what was claimed was not a new combination of "C" springs on both back and front wheels, but the mere analogous use of the old "C" spring as regards the front wheels, it having been used on the back wheels. Had the claim been for the new combination, the patent might possibly have been supported on the above principle.

In *Fawcett v. Homan*, (u) the patentee produced by a new and useful combination of old parts a self-supporting concrete floor not abutting on lintels, which, if the lintels were removed, would still be a fire-proof floor. The Court of Appeal reversing the Court below held that the objections of want of novelty and subject-matter urged against the patent failed.

also a new combination which attains an old result in a simpler manner.

A combination of parts which attains an old result in a manner similar to that in which a previous known combination attained it, but which is simpler and more direct in its operation, is good subject-matter—*e.g.*, a combination of detector mechanism in a machine for winding, doubling and twisting yarn or thread, whereby a detector lever was enabled to stop the winding at once on the breaking of a thread without the intervention of any intermediate parts. (x)

New combination of materials previously used for same purpose, or new method of applying such materials, may be good subject-matter.

A new combination of materials previously in use for the same purpose, or a new method of applying such materials, will support a patent, but the inventor must claim only the new combination, under pain of vitiating his grant. (y) The combination must also be the outcome of invention. The mere addition to a well-known article of an old and well-known part for an old and well-known purpose without invention will not do. (z)

Claim to use of an old thing in a particular combination.

When a thing is old, but has not been used for the particular purpose for which the patentee uses it, a claim may be valid for its use in the particular combination described, but the patentee will be strictly limited to the particular arrangement shown. Thus, where a friction clutch or

(u) (1896) 13 R. P. C. 268, 398.

(x) *Boyd v. Horrocks*, (1886-89) 5 R. P. C. 557; 6 R. P. C. 152; 9 R. P. C. 77.

(y) *Hill v. Thompson*, (1817) 8 Taunt. 375; 3 Mer. 622; 1 W. P. C. 232; *Murray v. Clayton*, (1872) L. R. 7 Ch. 584; *Patents Exploitation, Ltd.*

v. American Electrical Novelty and Manufacturing Co., Ltd., (1903) 20 R. P. C. 697; *Patent Exploitation, Ltd. v. Siemens Brothers & Co., Ltd.*, (1902) 20 R. P. C. 225; 21 R. P. C. 541; chap. v.

(z) *Wood v. Raphael*, (1896) 13 R. P. C. 730.

apparatus was old, but had never been previously employed in a hoisting machine, the House of Lords held a patent valid which claimed protection for an arrangement by which the friction clutch was adapted to and employed in a hoisting machine, but the House held also that the patentee could not patent the mere idea of so employing it, or obtain a monopoly of its use in such a machine, apart from the particular method of using it which he described. (*a*)

Combina-
tions.

Each of the parts of which the combination consists may, in itself, be old, (*b*) or some of the parts may be old and some new, (*c*) or the whole of the parts may be new. (*d*)

Novelty of
parts not
necessary.

If a new combination consists of some new parts, together with others which are old, or entirely of new parts, the patentee may claim as his invention the combination as a whole, and also each of the new parts separately, but a claim to the combination will not entitle him to a new part separately, nor will a claim to a new part separately entitle him to the combination. (*e*)

A new combination which will support a patent may consist merely in the omission of something from an old combination, when that something was previously thought to be essential, and the omission required the exercise of invention on the part of the person making it; (*f*) or similarly it may consist in the addition to an old combination of a part (*g*) even though previously used for a similar purpose; (*h*) if making the addition was an act of invention (*i*)—*e.g.*, if the addition of a device to an old combination enables results to be attained that could not be attained before. (*k*)

In what a new
combination
may consist.

(*a*) *Morris v. Young*, (1895) 455, 462.

(*b*) *Lister v. Leather*, (1857) 8 E. & B. 1004; 27 L. J. Q. B. 295; *Bovill v. Moor*, (1815) 2 Coop. App. Cas. 56; Dav. P. C. 361; 2 Marsh R. 211; *Bovill v. Keyworth*, (1857) 7 E. & B. 725; 3 Jur. N. S. 817; *Crane v. Price*, (1842) 4 M. & G. 580; 1 W. P. C. 377; 12 L. J. C. P. 81.

(*c*) *Potter v. Parr*, 2 B. & S. 216 *n.*; *Harrison v. Anderston Foundry Co.*, (1876) L. R. 1 App. Cas. 574; *Clark v. Adie*, (1873) L. R. 2 App. Cas. 327; *Nordenfelt v. Gardner*, (1884) 1 R. P. C. 61.

(*d*) *Lister v. Leather*, 2 El. & Bl. 1004; *Clark v. Adie*, (1873) L. R. 2 App. Cas. 327.

(*e*) p. 256 *post*; *Lister v. Leather*, (1857) 8 El. & Bl. 1004; 27 L. J. Q. B. 295; *Foxwell v. Bostock*, (1863) 12 W. R. 723; 4 De G. J. & S. 298; *Harrison v. Anderston Foundry Co.*,

(1876) L. R. 1 App. Cas. 574; *Clark v. Adie*, (1873) 2 App. Cas. 328; *Westinghouse v. Lancashire and Yorkshire Ry. Co.*, (1884) 1 R. P. C. 239.

(*f*) *Russell v. Cowley*, (1834) 1 W. P. C. 459; 1 Cr. M. & R. 864; *Minter v. Mower*, (1835) 6 A. & E. 703; 1 W. P. C. 142; *Booth v. Kennard*, (1856) 1 H. & N. 527; 2 H. & N. 84; *Saxby v. Gloucester Waggon Co.*, (1881) L. R. 7 Q. B. D 305; 50 L. J. Q. B. 577; *Pneumatic Tyre Co. v. Tubeless Tyre and Capon Heaton, Ltd.*, (1897) 15 R. P. C. 74, 237; 16 R. P. C. 77.

(*g*) *Morris v. Bransom*, (1776) 2 W. P. C. 51; Bull N. P. 76.

(*h*) *Vickers v. Siddel*, (1890) L. R. 15 App. Cas. 496; 7 R. P. C. 292.

(*i*) *Ibid.*; p. 70 *ante*; *Wood v. Raphael*, (1896) 13 R. P. C. 730.

(*k*) *Moser v. Marsden*, (1895) 13 R. P. C. 30.

Combina-
tions.

The parts of which a combination consists may be old or new processes, and the combination of such processes will support a patent if the result be new and useful. (l)

Thus in *Cannington v. Nuttall*, (m) *Pocheron's* patent for "improvements in the manufacture of glass" was upheld by the House of Lords on the ground of subject-matter. The invention consisted in the combination of a tank, instead of pots, the fire placed laterally to the tank instead of immediately beneath it, and a channel formed all round the tank in order that the atmospheric air might circulate freely and exert a cooling effect. Lord *Westbury*, in moving the judgment of the House, said: "Now, the only thing that appears to have been regarded by the patentee as a new discovery (apart from the apparatus) was the application of the external air to the sides of the tank. It was a discovery, certainly, but it was a thing for which, independently of the other apparatus, probably no patent could have been obtained. . . . The refrigerating effect of the air upon the sides of the tank was not a thing for which, *per se*, a patent could be claimed; but an apparatus so constructed as to bring into operation that particular property of the external atmospheric air, so as to produce a most useful effect, constitutes an invention to which the merit of novelty attaches, and for which a patent may be taken out."

Special re-
arrangement
of old parts.

A special rearrangement of old parts acted upon as described by the patentee may constitute a new combination, which will support a patent—*e.g.*, *Birch's* sewing machine, (n) or *Evans' mattress*, the novelty of which consisted in the arrangement of the coiled supporting springs in an oblique or diagonal position, and in opposite directions from the centre of each end, in such a manner as to direct the tension from all the springs on to the middle portion of the wire mesh: whereas formerly such springs had been arranged parallel with the length of the mattress. (o) The combination of known ingredients so arranged as to satisfy definite conditions, the combination of the ingredients in the manner and form pointed out in the specification being new, is good subject-matter. (p)

(l) *Cannington v. Nuttall*, (1871) L. R. 5. E. & I. App. 205; *Moseley v. Victoria Rubber Co.*, (1887) 4 R. P. C. 241.

(m) (1871) L. R. 5 E. & I. App. 205.

(n) *Birch v. Harrop*, (1896) 13 R.

P. C. 615; see p. 70 *ante*.

(o) *Evans and Taunton, Ltd. v. Hoskins and Sewell, Ltd.*, (1904) 21 R. P. C. 675.

(p) *Patent Exploitation Co., Ltd. v. American Electrical Novelty and*

A definite relative arrangement of parts may also be of the essence of the invention in the case of a new combination by placing the parts in particular positions. (*q*) But in one case (*r*) it was held that, on the facts, there was no invention in altering the position of the centre of a bent lever in an old combination, and in another case (*s*) it was no invention to substitute a pivot for a hinge in a nail-punching machine. Neither is there invention in merely relatively altering parts which have been used in combination for an analogous purpose before. (*t*)

Combina-
tions.

Definite rela-
tive arrange-
ment of parts.

A combination which differs only from a previous combination in that there is substituted an equivalent part or process in the place of some part or process found in the prior combination, is good subject-matter when the equivalent part or process judged by the standard of public knowledge at the date of the prior patent is not obviously and demonstrably an equivalent, (*u*) but if the equivalent judged by the standard of public knowledge at the date of the patent is obviously an equivalent the mere substituting it in the combination would most probably be an infringement, and is not subject-matter for a fresh patent. (*x*)

Substitution
of equivalents
in prior com-
binations.

The following may be taken as instances of patents which have been held void on the ground of lack of subject-matter, the novelty being merely the substitution of one equivalent for another in an old combination of parts or processes, and requiring the exercise of no invention. *Rushton's* patent for "improvements in the manufacture of artificial hair," which consisted of the use of Russian tops or similar wool in the manufacture of chignons, which were formerly made from

Examples of
patents held
void as being
merely for
substitution
of known
equivalents.

Manufacturing Co., Ltd., (1903) 20, R. P. C. 697; Patent Exploitation Co. Ltd. v. Siemens Brothers & Co., Ltd., (1902) 20 R. P. C. 225; 21 R. P. C. 541.

(*q*) *Muirhead v. Commercial Cable Co.*, (1894) 12 R. P. C. 54; see *Reason Manufacturing Co. v. Ernest F. May, Ltd.*, (1902) 19 R. P. C. 409; 20 R. P. C. 205.

(*r*) *Herrburger v. Squire*, (1889) 6 R. P. C. 194.

(*s*) *United Horse-shoe and Nail Co. v. Swedish Horse-nail Co.*, (1889) 6 R. P. C. 1.

(*t*) *Savage v. Harris*, (1896) 13 R. P. C. 364.

(*u*) *Unwin v. Heath*, (1855) 5 H. L. Cas. 505, 522, 543; *Budische Anilin und Soda Fabrik v. Levinstein*, (1885) 2 R. P. C. 90; see p. 353 *post*.

(*x*) See p. 353 *post*; *Bateman v. Gray*, (1853) Macr. P. C. 102; *Electric Telegraph Co. v. Brett*, (1851) 10 C. B. 838; 20 L. J. C. P. 123; *Ormson v. Clarke*, (1862) 13 C. B. 339; 14 C. B. 490; *Stevens v. Keating*, (1847) 1 Ex. R. 339; 17 L. J. Ex. 122; *Gamble v. Kurtz*, (1846) 3 C. B. 435; *Walton v. Potter*, (1841) 1 W. P. C. 586; *Russell v. Cowley*, (1834) 1 W. P. C. 463; *Morgan v. Seaward*, (1836) 1 W. P. C. 171; *Bovill v. Moore*, (1815) Dav. P. C. 405; *Hill v. Thompson*, (1818) 1 W. P. C. 242; *R. v. Lister*, (1826) *Webster on Patents*, 80; *Hancock v. Moulton*, (1852) *Johns. Pat. Man.* 6th ed. 251; *Cochrane v. Braithwaite*, 3 *Lon. Journ. N. S.* 42; *Neilson v. Harford*, (1841) 1 W. P. C. 310.

Combina-
tions.

mohair. (y) *Amet's* patent for "improved means of distending articles of dress," which consisted in making the hoops of a petticoat of steel instead of whalebone. (z) *Horton's* patent for "improvements in the construction of gas-holders," which consisted in forming a joint of double-angle iron instead of two pieces of single-angle iron. (a) *Parkes'* patent for "improvements in lamps," which consisted in the substitution of a hinge for a slide in a known glass lamp. (b) *Fletcher's* patent for "improvements in apparatus for cooking and heating by means of gas," which consisted merely in the substitution of a hinge for a slide. (c) *Jensen's* patent for "improvements in oil boxes or lubricators for revolving and other parts of machinery," which consisted in the alteration of a known combination of an oil-box with a piston actuated by a screw for the purpose of forcing the oil out, by substituting in the place of the piston a screw filling the whole of the box. (d) *Brunton's* patent for "improvements in the manufacture of ship's anchors," &c., which consisted merely in making the two flukes in one with a thickness of metal in the middle sufficient to pierce with a hole for the insertion of the shank instead of joining the flukes by welding them to the shank, as was done formerly. (e) *Tickelpenny's* patent for "improvements in, and connected with, the construction and support of fire-proof floors and ceilings," which consisted merely in filling known hollow iron columns with water. (f) *Brown's* patent for "improvements in punching nails for shoeing horses and other animals," which consisted merely in the substitution of a pivot for a hinge in a nail-making machine. (g) *Winby's* patent for "improvements in points and crossings for tramways," which consisted in the introduction of a spring for a weighted lever in a switch arrangement for a tramway crossing. (h) *Nuttall's* patent for a beer barrel tap, which substituted a gauze strainer for a

(y) *Rushton v. Crawley*, (1870) L. R. 10 Eq. 522.

(z) *Thompson v. James*, (1863) 32 Beav. 570.

(a) *Horton v. Mahon*, (1862-61) 16 C. B. N. S. 141; 31 L. J. C. P. 255.

(b) *Parkes v. Stevens*, (1869) L. R. 8 Eq. 358.

(c) *Fletcher v. Arden*, (1888) 5 R. P. C. 46.

(d) *Jensen v. Smith*, (1884) 2 R. P. C. 249.

(e) *Brunton v. Hawkes*, (1820) 4 B.

& Ald. 541.

(f) *Tickelpenny v. Army and Navy Co-operative Society*, (1888) 5 R. P. C. 405.

(g) *United Horse-shoe and Nail Co. v. Swedish Horse-nail Co.*, (1888) 6 R. P. C. 1; See also *Deutsche Nähmaschinen Fabrik Vorm Wertheim v. Pfaff*, (1899) 7 R. P. C. 251.

(h) *Winby v. The Manchester, &c., Steam Tramways Co.*, (1890) 8 R. P. C. 61.

metal strainer to keep impurities floating in the beer out of the tap. (*i*) Improvements.

IMPROVEMENTS.

If a man takes an existing and already known manufacture, *e.g.*, a machine or process, and by the exercise of invention makes an alteration, which really is novel and an improvement, whether it be the addition to, (*k*) the omission from, (*l*) or only the rearrangement of (*m*) old parts, the alteration so made is a fresh arrangement. It is now established beyond doubt that such an improvement, provided that it be new and useful, may be the subject-matter of a patent. (*n*) Improvement may be subject-matter.

As was pointed out by Lord *Mansfield*, (*o*) if there could be no patent for an improvement on an existing invention, that objection would go to repeal almost every patent that was ever granted.

Though an improvement on the subject of a prior and existing patent may be the subject of a second, the second patentee must wait till the expiration of the first grant before he can use the prior invention without the licence of the prior patentee. (*p*) Patentee of improvement may not be able to use original invention without licence.

It may be argued that if a subsequent patent for a combination includes part of an invention already protected it infringes on the property of another, and so is a violation of his right, and ought to be held illegal on account of his interest, and further because the second patent prolongs the monopoly granted by the first. The following Argument against legality of patents for improvements.

(*i*) *Nuttall v. Hargreaves*, (1891) 8 R. P. C. 273, 450.

(1856) 1 H. & N. 527.

(*m*) p. 72 *ante*.

(*k*) *Morris v. Branson*, (1776) Bull, N. P. 76; 1 Carp. P. C. 30; 1 W. P. C. 51; *R. v. Arkwright*, (1785) 1 W. P. C. 71; *Boulton v. Bull*, (1795) 2 H. Bl. 463; *Dav. P. C.* 162; *Hornblower v. Boulton*, (1799) *Dav. P. C.* 221; 8 T. R. 95; *Ex parte Fox*, (1812) 1 V. & Br. 67; 1 W. P. C. 431; *Bovill v. Moore*, (1815) 2 Coop. Ch. Ca. 56; *Dav. P. C.* 361; 2 Marsh, R. 211; *Lister v. Leather*, (1857) 8 E. & B. 1017; *Ralston v. Smith*, (1865) 11 H. L. C. 223; *Fox v. Dellestable*, (1866) 15 W. R. 195; *Moser v. Marsden*, (1895) 13 R. P. C. 30.

(*n*) *R. v. Arkwright*, (1785) *Dav. P. C.* 61; 1 W. P. C. 64; *Hill v. Thompson*, (1817) 8 Taunt. 375; 2 B. & Mo. 448; 1 W. P. C. 232; *Lewis v. Davis*, (1829) 3 C. & P. 502; *Boulton v. Bull*, (1795) 2 H. Bl. 489; *Harmar v. Playne*, (1809) 11 East, 101; *Craue v. Price*, (1812) 1 W. P. C. 410.

(*o*) *Morris v. Branson*, (1776) Bull, N. P. 76; 1 W. P. C. 51.

(*l*) *Russell v. Cowley*, (1843) 1 W. P. C. 463, 465; *Wallington v. Dale*, (1852) 7 Exch. 888; *Booth v. Kennard*,

(*p*) *Ex parte Fox*, (1812) 1 V. & B. 67; 1 W. P. C. 431 *n.*; *Fox v. Dellestable*, (1866) 15 W. R. 195; *Crane v. Price*, (1842) 4 M. & G. 580; 1 W. P. C. 410; 12 L. J. C. P. 81; *Lister v. Leather*, (1857) 8 E. & B. 1017.

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ments.

words of Lord *Campbell* form a complete answer to this contention:—

“The patent for an improvement on an invention, already the subject of a patent, if confined to the improvement, is not an infringement of the former patent. The use of the improvement with the former invention, during the existence of the former patent, without licence, would be an infringement; but with licence, that also would be lawful, as in constant experience. Indeed, the objection was carried to the extent that a patent for an improvement on a patented invention of the same patentee would be void; but this rests only on the assumption that the improvement cannot be distinguished from the invention on which it is made. The assertion that all patents for improvements on existing patents must be void is obviously untenable. The third argument on this point, that a patent for an improvement on a patent is void as contrary to policy because it prolonged the monopoly granted by the first, till the last expired, is already virtually answered. The monopoly in the second patent is for the improvement only; and the use of the former invention without the improvement is free at the expiration of the first patent.” (*q*).

Patent for improvement no proof of inutility of original invention.

The fact of a patent for an improvement on an existing invention having been obtained is not proof of the inutility of the original patent, and does not throw the original invention open to the world. (*r*)

Ambit of patent for improvement.

If a person obtains a patent for an improvement on a known process, he is protected against the use of his improvement with the original process, however much it is further altered and improved by subsequent discoveries, so long as it remains substantially the same. (*s*)

Patentee must claim only the improvement.

The patentee of an improvement must be very careful not to lay claim in his specification to the old art or invention which he alleges he has improved, but he must limit his claim to the new art or invention produced by his labour; otherwise he will render his patent void, as claiming in part that which is not new. (*t*)

(*q*) *Lister v. Leather*, (1857) 8 E. & B. 1017.

(*r*) *Thomson v. Batty*, (1889) 6 R. P. C. 100; *Edison v. Holland*, (1889) 6 R. P. C. 243.

(*s*) *Electric Telegraph Co. v. Brett*, (1851) 10 C. B. 881.

(*t*) p. 251 *post*; *Hill v. Thompson*, (1817) 8 Taunt. 375; 2 B. Mo. 448; 1 W. P. C. 229; *Bovill v. Moor*, (1815) 2

Marsh, 211; Dav. P. C. 361; *Minter v. Mower*, (1835) 1 W. P. C. 142; *Williams v. Brodie*, (1785) Dav. P. C. 26; 1 W. P. C. 75; *Hornblower v. Bolton*, (1799) 8 T. R. 103; *Jessop's Case*, 1 W. P. C. 42 n.; Dav. P. C. 182, 203; *Crano v. Price*, (1842) 1 W. P. C. 413; (1857) *Lister v. Leather*, 8 E. & B. 1004; *Kynoch v. Webb*, (1899) 17 R. P. C. 100, 108.

Thus if the real invention is an improvement on an existing machine, the claim must be for the improvement, and must not include a claim to the old machine, which would render the patent bad; (u) and, moreover, the patentee's exclusive right cannot be permitted to exceed the exact terms of his claim as construed with reference to the rest of his specification. (v)

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—

In order that an improvement may be good subject-matter it is absolutely necessary that there be the presumption of some degree of invention having been required to make the improvement. (y) Thus, in the case of a patent granted to *J. White* for "improvements in ladies' mourning bonnet and hat falls," which claimed forming both sides of ladies' mourning bonnet and hat falls alike by applying thereto the fold above the bottom fold on each side thereof, as explained, the patent was held void on the ground of want of invention, *Malins*, V.C., saying: "Whereas formerly the fold was sewn on one side only, now it is sewn on both sides, so that whichever way it is turned it has a good side outwards. There is no invention in it. However meritorious as an improvement, which might probably have been registered for one or two years, it is not the subject of a patent." (z)

Invention necessary to support a patent for an improvement.

So, an improvement which consists merely in the application of a more skilful and efficient mode of working a known process will not be subject-matter when the application is obvious. (a) Thus, in *Patterson v. The Gas Light and Coke Co.*, (b) in reference to a claim in the specification of a patent for "improvements in the purification of coal gas," which claimed "a method or system of employing lime purifiers in the manner hereinbefore described, whereby the contents of all the said purifiers, or of any required number of them, can be converted into sulphides of calcium, and also (if required) be maintained in that condition," *James*, L.J., delivering the judgment of the Court of Appeal, said:—

Mere working direction though valuable is not subject-matter.

Per James, L.J.

"There is in that no suggestion of any new apparatus—of any new process. There is no device or scheme of any kind. Lime purifiers in succession were in general, almost universal,

(u) *Leggott v. McGeech*, (1893) 10 R. P. C. 429, 435; p. 251 *post*; *Kynoch v. Webb*, (1899) 17 R. P. C. 100.

(x) See judgment of Lord Watson, *Brown v. Jackson*, (1895) 12 R. P. C. 324; *Kynoch v. Webb*, (1899) 17 R. P. C. 100.

(y) *Blakey v. Latham*, (1889) 6 R.

P. C. 188; *Thierry v. Riekman*, (1895) 12 R. P. C. 548; 14 R. P. C. 105.

(z) *White v. Toms*, (1867) 37 L. J. Ch. 204.

(a) *Tetley v. Easton*, (1857) 2 C. B. N. S. 706.

(b) (1875) L. R. 2 Ch. D. 834.

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use wherever lime could be freely used. . . . What he (the patentee) claims to have discovered is, that if the carbonic acid, which is the first thing taken up by the lime, is not wholly taken up at the beginning, and is allowed to enter the last purifier or purifiers, it in fact poisons the latter, decomposes the sulphide of calcium already formed, disengages the other sulphur absorbed by the sulphide, and of course fills the gas again with the sulphur impurities which had been removed. This is a very valuable working caution and direction, but it is impossible to make anything more of it than a working caution and direction. It really amounts to nothing more than a direction to be sufficiently liberal in the use of the caustic lime in the first stage, and an instruction that the moment it is so far carbonated as not to arrest the carbonic acid it should be removed and a fresh supply of lime got. It may be a direction and an instruction of the greatest possible value and utility, but it is utterly impossible to make such a direction and instruction, however valuable, the subject of a patent."

Per Lord
Blackburn.

The decision of the Court of Appeal was affirmed by the House of Lords, and Lord *Blackburn* observed :—

"The appellant appears, from what he says in his specification, to be of opinion that, if he first discovered the theory and reason of that which had before been done empirically, he is entitled to a patent. I need hardly point out that this is a mistake; if by reason of knowing the theory he is enabled to make some improvements, he may take out a patent for those improvements, but he cannot take out a patent to prevent others using what they had used before, though empirically." (c)

Mere use of
known ma-
chine in a more
beneficial
manner is
not subject-
matter.

In another case it appeared that in the process of calendering woven fabrics the use of a roller and a bowl, and the method of regulating the relative speed of their motions, were well known at the date of the patent. In the process of *calendering* a smooth roller was used, and the speeds of the roller and bowl were different, whilst in the process of *embossing* a roller with a pattern on it was used, and the speeds of the roller and bowl were equal. A patent was obtained for a combination of a patterned roller with a bowl, the roller and bowl moving at unequal speeds. It was held by the Court of Common Pleas and the House of Lords that the alleged invention was not the proper subject-matter of a grant of letters patent, as it was nothing more than the use

(c) L. R. 3 App. Cas. 246, p. 56 *ante*.

of an existing machine in a more beneficial manner than previously. (*d*)

Neither is there invention in a mere adaptation of a well-known idea, in a well-known manner, for a well-known purpose, without ingenuity, though the adaptation effects an improvement, which supplants articles already in the market, and is commercially very successful. (*e*) Nor is there invention in what is merely a more skilled application of well understood tools and processes, though the alleged inventor is thereby able to satisfy a want felt by persons in a particular trade. (*f*)

It is to be noticed that an improvement in the sense in which the word has been used in the foregoing pages is not always the subject of the invention when the word is used in the title of letters patent—*e.g.*, the title may be “improvements in the manufacture” of a certain article, the object being either the production of the article of a better quality, or at a lower price, and yet the means by which that object is attained may be some entirely new art, or some machine totally different from anything before known or used for the manufacture of that article. Such a title may refer to novelty in a machine, novelty in an improvement on a machine, or a new combination. (*g*)

When an invention is an improvement on an existing invention the amount of the improvement does not affect the validity of a patent granted in respect of it; if there is an improvement, however small, which is the outcome of invention, that is quite sufficient to support the patent. (*h*)

In *Sykes v. Howarth*, (*i*) a patent for “improvements in fancy rollers of machines for carding wool and other fabrics” was held valid. Before the invention, the machines used for carding wool, &c., consisted of a series of large cylinders on which smaller cylinders revolved, the last of the series of smaller cylinders termed a “fancy roller” was used to raise the fibre on the surface of the larger roller. The rollers were covered with “cards” (strips of leather thickly studded with short wires). These cards were cleaned by means of a hand-scraper, a method objectionable because of the fact that the

Improvements.

Mere adaptation of a well-known idea is not subject-matter.

Meaning of “improvement” as used in titles of letters patent.

Amount of improvement does not affect validity.

Examples.

(*d*) *Ralston v. Smith*, (1860) 9 C. B. N. S. 117; 11 H. L. Ca. 223. P. C. 625.

(*e*) *Longbottom v. Shaw*, (1888-91) 5 R. P. C. 497; 6 R. P. C. 143; 8 R. P. C. 333; *Carter v. Leyson*, (1902) 19 R. P. C. 473.

(*f*) *Dredge v. Parnell*, (1899) 16 R.

P. C. 625.

(*g*) See p. 265 *post*.

(*h*) See *Alderson, B.*, in *Morgan v. Seaward*, (1836) 1 W. P. C. 172, 186.

(*i*) (1879) L. R. 12 Ch. D. 826; 48 L. J. Ch. 769; see also *Murray v. Clayton*, (1872) L. R. 7 Ch. 570.

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person using the scraper had to stand at the side of the machine, and was therefore unable to draw the scraper in an exact line with the "gates" of the "cards" (passages between the wires), and some cards were liable to be injured. The improvements for which the patent was granted consisted in the introduction of wide spaces between the cards, which produced an exhaust current of air, and made the rollers operate in their function as fancy rollers. Also the fancy rollers were applicable and employed for cleaning the other card-covered cylinders.

In *Heath v. Unwin*, (*k*) the defendant was charged with infringing the plaintiff's patent, which was for "certain improvements in the manufacture of iron and steel," consisting, *inter alia*, in the use of carburet of manganese in any process, whereby iron is converted into cast steel. The alleged infringement consisted in the substitution of the elements of carburet of manganese in the place of the carburet of manganese itself in the plaintiff's process. The evidence showed that the elements combined first in the crucible and formed carburet of manganese, which then acted on the iron in the same way as the ready formed carburet of manganese introduced according to the plaintiff's original process. The Court of Exchequer Chamber, taking this view of the evidence, reversed the decision of the Courts below, and held that the process had been infringed; but the House of Lords, having had the assistance of the opinions of the Judges, (*l*) reversed the decision of the Court of Exchequer Chamber. The process, as carried out by *Unwin*, was a great improvement on that mentioned in the plaintiff's patent, being much neater and effecting a considerable reduction in the cost of the steel; and it was held to be no infringement of the plaintiff's process, and would, therefore, probably have of itself formed the subject of a patent.

NEW USES OF OLD APPLIANCES.

New use of old
appliance may
be subject-
matter.

The question whether a new use of an old appliance is competent to form the subject-matter of a valid patent must in each particular instance be answered in the affirmative or negative according as invention and ingenuity are present or absent in the new application. (*m*)

(*k*) (1843) 2 W. P. C. 216, 218, 221, 223, 228, 236, 279; 5 H. L. 505.

(*l*) (1854) 2 W. P. C.; 5 H. L. C. 505.

(*m*) See pp. 30-42 *ante*.

If the new use requires no exercise of invention, *i.e.*, if it is merely analogous to a use of the known thing made before, then a patent cannot be validly granted in respect of it; (n) but if the new use is one which lies so far outside and removed from those previously made as necessarily to imply the exercise of invention it will be perfectly good subject-matter. (o)

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of Old Ap-
pliances.

Lord *Lindley*, then *Lindley*, L.J., referring to the numerous cases bearing upon new uses of old things, stated the result of them thus :

Result of cases
referring to
new uses
stated by
Lindley, L.J.

“These cases, and many others which might be cited, establish the following propositions :

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

(n) *Losh v. Hague*, (1838) 1 W. P. C. 207; *R. v. Cutler*, (1816) 14 Q. B. 372 n.; *Macr. P. C.* 133; *Tetley v. Easton*, (1852) 2 C. B. N. S. 706; 26 L. J. C. P. 269; *Patent Bottle Envelope Co. v. Seymer*, (1858) 5 C. B. N. S. 164; 28 L. J. C. P. 22; 5 Jur. N. S. 174; *Kay v. Marshall*, (1839) 2 W. P. C. 71, 79; *Horton v. Mabon*, (1862) 31 L. J. C. P. 255; 12 C. B. N. S. 437; 16 C. B. N. S. 141; *Ormson v. Clarke*, (1862) 32 L. J. C. P. 8; 13 C. B. N. S. 337; 32 L. J. C. P. 291; 14 C. B. N. S. 475; *Willis v. Davison*, (1863) 1 N. R. 234; *Harwood v. G. N. Ry. Co.*, (1860) 2 B. & S. 194, 222; 11 H. L. C. 654; *Ralston v. Smith*, (1865) 11 H. L. C. 223; *Jordan v. Moore*, (1866) L. R. 1 C. P. 624; *Parkes v. Stevens*, (1869) L. R. 5 Ch. 36; *Cropper v. Smith*, (1884) 1 R. P. C. 90; *Sharp v. Bauer*, (1886) 3 R. P. C. 196; *Rowcliffe v. Longford Wire Co.*, (1887) 4 R. P. C. 281; *Albo-Carbon Light Co. v. Kidd*, (1887) 4 R. P. C. 535; 5 R. P. C. 581; 6 R. P. C. 194; *Blakey v. Latham*, (1889) 6 R. P. C. 184; *Longbottom v. Shaw*, (1889) 6 R. P. C. 143; *Morgan v. Windover*, (1888) 5 R. P. C. 304; 7 P. O. R. 131; *Calvert v. Ashburn*, *Pract. Mech. Journ.* vol. vii. 2nd ser. p. 97.

(o) *Hartley's Case*, 2 H. Bl. 493; *Brunton v. Hawkes*, (1820) 1 Carp. P. C. 405; *Hall v. Jarvis*, (1822) 1 W. P. C. 100; *Kay v. Marshall*, (1839) 2 W. P. C. 71, 79; *Walton v. Potter*, (1841) 1 W. P. C. 597; *Muntz v. Foster*, (1844) 2 W. P. C. 103; *R. v. Cutler*,

(1816) *Macr. P. C.* 124; *Bush v. Fox*, (1852) *Macr. P. C.* 164, 178; 5 H. L. C. 707; *Pow v. Taunton*, (1845) 9 Jur. 1056; *Steiner v. Heald*, (1851) 6 Exch. R. 607; 11 Jur. 875; 20 L. J. Ex. 410; *Mackelcan v. Rennie*, (1862) 13 C. B. N. S. 52; *Penn v. Bibby*, (1866) L. R. 2 Ch. 127; 36 L. J. Ch. 455; *White v. Toms*, (1867) 36 L. J. Ch. 204; 17 L. T. N. S. 399; *Rushton v. Crawley*, (1870) L. R. 10 Eq. 522; *Newton v. Vaucher*, (1851) 6 Exch. 865; *Reynolds v. Amos*, (1886) 3 R. P. C. 215; *American Braided Wire Co. v. Thompson*, (1887) 4 R. P. C. 316; 5 R. P. C. 113; 6 R. P. C. 518; *Pirrie v. York Street Flax Spinning Co.*, (1893) 10 R. P. C. 31; 11 R. P. C. 429; *Adamant Stone and Paving Co. v. Corporation of Liverpool*, (1897) 14 R. P. C. 21; *Tucker v. Kaye*, (1891) 8 R. P. C. 58, 230; *Embossed Metal Plate Co. v. Saupe*, (1891) 8 R. P. C. 355; *Fairfax v. Lyons*, (1891) 8 R. P. C. 401; *Longbottom v. Shaw*, (1888) 5 R. P. C. 497; 6 R. P. C. 143, 510; 8 R. P. C. 333; *Wilson v. Union Oil Mills*, (1892) 9 R. P. C. 57; *Baker v. Kinnell*, (1892) 9 R. P. C. 441; *Nicoll v. Swears*, (1893) 10 R. P. C. 240; *Sudbury v. Lee*, (1894) 11 R. P. C. 58; *Rose's Patents Co. v. Braby*, (1894) 11 R. P. C. 198; *Singer v. Rudge Cycle Co.*, (1894) 11 R. P. C. 463; *Shaw v. Barton*, (1895) 12 R. P. C. 282; *Rickmann v. Thierry*, (1896) 14 R. P. C. 105; *Haws v. Harding*, (1897) 14 R. P. C. 105.

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pliances.

invention, no manner of new manufacture within the meaning of the Statute of James.

2. On the other hand, 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. An improved thing produced by a new and ingenious application of a known contrivance to an old thing is a manner of new manufacture within the meaning of the statute. Under which of these rules any particular case falls depends on its own special circumstances, and is often a question of very great difficulty, giving rise to considerable difference of opinion, as in the well-known bustle case *American Braided Wire Co. v. Thompson*, 6 R. P. C. 518. But the rules themselves are intelligible enough. Their application involves a correct estimate of the degree of ingenuity which amounts to invention. The difficulty of saying where invention sufficient to support a patent exists and where it does not is well known to all persons conversant with patent law." (p)

The same by
Lord Davey.

Lord *Davey*, in reference to *Willson's* patent for improved metallic carbides applicable for use in the production of acetylene, and means for producing the same, stated the law thus :

"I fully agree with the conclusion which has been come to by Lord Justice *Stirling*, whose words I am very glad to adopt. He says this : ' Now, in order that Mr. *Willson* might obtain a valid patent, he is, according to the law as here stated, to produce a mode of using his discovery, in which there is novelty in the mode of user as distinguished from novelty of purpose, or some new modification of the thing, or some new appliance necessary for using it for the purpose, and that such mode of user or application involves some appreciable merit. Mr. *Willson* takes out a patent, and in order to carry out his discovery he directs the use of some pre-existing kind of furnace, particularly the *Siemen's* furnace. But that again is not enough unless there is novelty in the mode of using it. Was there then novelty in the mode of using it? To that it seems to me that *Willson's* own American Patent of 1892 affords an answer. He had there pointed out the very mode of using *Siemen's* arc furnace, which is described in this Patent of 1891, and had gone as far as to indicate that it might be applied to the manufacture of calcium carbide. At the most what he did was to make an analogous use of the mode of user

(p) *Gadd v. Mayor, &c., of Manchester*, (1892) 9 R. P. C. 524.

that was pointed out in the Patent of 1892, and nothing more.'” (q)

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of Old Ap-
piances.

It is obviously impossible to frame any rule which will serve as a guide to show at once whether any particular instance is one involving invention or not. The authorities are, necessarily, decisions on particular cases, and are useful only as affording some guide to the correct conclusion in any particular instance coming under consideration. Each case must be decided on its own merits, and with reference to its own especial circumstances. (r)

No rule
possible.

There may be an element of novelty in an alleged invention, and yet that novelty may consist only in the new occasion or new use to which an old and well-known thing or method is applied. The principle—*i.e.*, the method of operation, or order of combination—of the alleged new invention may have been discovered and applied before, though not on precisely the same occasions and uses, or with the same materials. If the new application is nothing more than a double use, and shows nothing beyond the mere skill of a constructor in adapting a well-known method to different occasions, the patent cannot be supported.

If there is no novelty in the effect produced, but the occasion only is new, then the use to which the known thing or method has been applied is simply analogous to what was done before; but if the effect is new, then the first application of the known thing or method may constitute the subject-matter of a valid patent.

For a patentee to succeed in upholding his patent, it is necessary for him to show, not merely newness in the sense of doing a thing which has not been done before, but he must show newness in the shape of novelty by producing a thing which, it may be presumed, requires some exertion of mind that could properly be called invention. To apply an old tool to a new material could not be the subject of a patent, although all mankind had been previously using another sort of tool which produced a much inferior effect, and although, therefore, the new application of the old tool had the merit in it that it produced a useful result in the easier working of a material to which that tool had not been applied before: since

Novelty in the
sense of doing
what has not
been done
before is not
in itself
sufficient.

(q) Acetylene Illuminating Co., Ltd.
v. United Alkali Co., Ltd., (1901) 22
R. P. C. 156.

R. P. C. 205; Morgan v. Windover,
(1887) 4 R. P. C. 426; see also p. 39
ante.

(r) See Lister v. Norton, (1886) 3

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the new use of the old tool was merely for an analogous purpose to that which all mankind knew it was useful for before, although the application might be new, it could not be said that the application was a novelty, in the sense of invention, which would sustain a patent. (s)

Apprehension
of a new use
may be inven-
tion.

In some cases, however, the apprehension of the new use of the old thing is invention sufficient to support a patent for the new use—*e.g.*, the application of an old thing to remove a defect in an old machine (t) or the use of retorts inclined at a particular angle for the purpose of saving labour and expense in gas-making though inclined retorts had been used before for purposes other than gas-making. (u) As a matter of law where different machines of a certain class or character are well known, if a person selects and applies one specially adapted for the purpose to effect a new object, and with the result of producing a new article, or an old article in a substantially more expeditious and economical way than it was produced before, then he may probably claim as subject-matter of a patent that machine as applied to the new object even though he could not have claimed the machine, *per se*—that is to say, without limitation as to its application. (x) And a means of using an old machine which the world had not known the benefit of before may be fit subject-matter for a patent. (y)

In the following cases, patents which, in each instance, related to some new application of an old thing or method, were declared invalid, on the ground of lack of invention and consequent want of proper subject-matter.

Cases in which
patents for
new uses were
held bad.

Kay v. Mar-
shall.

In *Kay v. Marshall*, (1836) 2 W. P. C. 36, 39, 47, 48, 69, 71, 77, 79; 8 L. J. C. P. 261, (z) it appeared that before the patent flax and other fibrous substances were spun with machines, by which the reach was varied according to the staple or fibre of the article to be spun, and that it had been a fundamental principle of dry spinning, known and used before the granting of the patent; and, further, that the reach used in cotton spinning had been less than two and a half inches. The real

(s) *Tatham v. Dania*, (1869) Griff. P. C. 213, judgment of Willes, J.

(t) *Edison-Bell Phonograph Corporation v. Smith*, (1894) 11 R. P. C. 398, 399.

(u) *Automatic Coal Gas Retort Co. v. Mayor, &c., of Salford*, (1897) 14 R. P. C. 450.

(x) See *per Romer, J.*, *Adamant*

Stone and Paving Co. v. Corporation of Liverpool, (1896) 14 R. P. C. 21.

(y) *Kay v. Marshall*, (1841) 2 W. P. C. 84; *Jandus Arc Lamp and Electric Co., Ltd. v. Arc Lamp Co.*, (1905) 22 R. P. C. 277, 298.

(z) See also *Blakey v. Latham*, (1889) 6 R. P. C. 187; *Thierry v. Rickmann*, (1895) 12 R. P. C. 548.

question in the case was whether, with public knowledge in the state above indicated, a patent could be upheld for placing the retaining rollers, and the drawing rollers, of a spinning machine, which was known and in use before, within two and a half inches of each other, and the Court of Common Pleas held that it could not. *Tindal*, C.J., in delivering the judgment of the Court, said : (a)

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*Kay v. Mar-
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“The application of a reach of two and a half inches to the spinning of flax, when in a state of maceration, by which the fibre of flax will not hold together beyond two and a half inches, does not appear to us to be any new invention or discovery, but is merely the application of a piece of machinery, already known and in use, to the *new* macerated state of flax. . . . And if a patent, taken out for that object separately, would be invalid, so also a patent taken out for an invention consisting of two distinct parts, one of which is the precise object, would be void also. . . . If a part of what is claimed is not properly the subject of a patent, or is not new, the whole must be void.”

In *Losh v. Hague*, (1837) 1 W. P. C. 200 ; 5 M. & W. 387, which was an action brought for the alleged infringement of a patent for “improvement in the construction of wheels for carriages *to be used on railways*,” it was objected by the defendant that Losh was not the true and first inventor ; and it was proved that wheels made on the same principle as that claimed by the patent had been previously known, though they had never been used on railways. The jury by their verdict upheld this objection on the part of the defendant. Lord Abinger, C.B., in directing the jury, referred to the case of *Hall v. Jarvis*, (1822) 1 W. P. C. 100, and said : “That was the application of a new contrivance to the same purpose ; but it is a different thing when you take out a patent for applying a new contrivance to an old object, and applying an old contrivance to a new object—that is a very different thing. In the case the learned counsel put, he says, ‘If a surgeon goes into a mercer’s shop and sees the mercer cutting velvet or silk with a pair of scissors with a knob to them, he, seeing that, would have a right to take out a patent in order to apply the same scissors to cutting a sore or a patient’s skin.’ I do not quite agree with that law. I think if a surgeon had gone to him and said, ‘I see how well your scissors cut,’ and he said, ‘I can apply them instead of a lancet by putting a knob at the end,’ that would be quite a different thing, and he might get a patent for that ; but it would be a very extraordinary thing to say that because all mankind have been accustomed to eat soup with a spoon, a man could take out a

(a) 2 W. P. C. at p. 75.

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*Regina v.
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patent because he says you might eat peas with a spoon. The law on the subject is this: that you cannot have a patent for applying a well-known thing, that might be applied to fifty thousand different purposes, for applying it to an operation which is exactly analogous to what was done before. Suppose a man invents a pair of scissors to cut cloth with, if the scissors were never invented before he could take out a patent for it. If another man found he could cut silk with them, why should he take out a patent for that?"

In *Regina v. Cutler*, 4 Q. B. 372; Macr. P. C. 124; 3 C. & K. 215, the patent was for improvements in the construction of the tubular flues of steam boilers and the patentee claimed the application of iron tubes coated with copper or brass to this purpose. It having been proved that such tubes were not new and that there was no novelty in the manner in which they were applied in the flues, since uncovered tubes had been applied in the same way before the date of the patent, Lord *Denman*, C.J., and *Wightman*, J., on different occasions held that this was the mere application of a known article to a new use, the mode of application having been previously employed in applying analogous articles to the same purpose, and could not therefore be the subject of a valid patent.

Bush v. Fox.

In *Bush v. Fox*, Macr. P. C. 164; 23 L. J. Ex. 275; 24 L. J. Ex. 251; 5 H. L. Cas. 707, the patent was for "improvements in the means of, and in the apparatus for, building and working under water," and the patentee claimed "the mode of constructing the interior of a caisson in such manner that the workpeople may be supplied with compressed air, and be able to raise the materials excavated, and to make or construct foundations and buildings, as above described." The defendant proved that the apparatus described in a prior patent was the same in all material respects as the plaintiff's caisson, the mode of working was the same in both cases, and they differed only in their application, the prior patent being for excavating and sinking shafts, &c., on land, the plaintiff's for sinking, excavating and constructing foundations under water. In directing the jury, *Pollock*, C.B., said: "I am of opinion, upon the evidence as it now stands, that the said supposed invention in the declaration mentioned was not an invention of a certain manner of new manufacture in processes and forms as the plaintiff has alleged. I think that an invention must be a production of something that can be used or sold or made use of for some purpose, or some method which results in something of the same sort. And I think that a man cannot, if he has applied—supposing this to be a new application—an old invention, or part of an old invention, to a new purpose, obtain a patent for such an application. Now, if the construction of this caisson, or pile ,

or whatever it is to be called, is to be looked upon as old, and the object of the patent is for applying it to a new purpose, that is not a manufacture: and the application is such an operation (if so it can be called) that nothing new which results from it can, I think, be the subject of a patent. . . . I think if one man invents a new mode of looking at the moon, somebody else cannot take out a patent for using the same mode to look at the sun, nor for any mere application of it to a different purpose. If a man were to take out a patent for a telescope to be used for making observations on land, I do not think any one could say, 'I will take out another patent for that telescope to be used for making observations on the sea.' I therefore direct you, that, in point of law, in my judgment, the supposed invention was not an invention of any manner of new manufacture in manner and form as the plaintiff has alleged." This ruling was affirmed in the Exchequer Chamber and the House of Lords.

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It must be noticed that the learned Judges did not refer to the question of the amount of invention required to adapt the caisson which had been previously used on land to the use under water. If this had required the expenditure of any considerable amount of ingenuity no doubt the patent would have been supported on the ground of subject-matter. From the report of the case it must be concluded that the jury below were of opinion that the evidence showed the application of the caisson under water did not imply the exercise of any ingenuity, but it must be observed that the Court of Exchequer Chamber and the House of Lords upheld the decision of the Court of first instance, not on the ground of mere analogous use, but because the specification describing the mode of construction of a machine for a particular purpose was to be considered as claiming the machine itself, which the evidence showed was old.

In *The Patent Bottle Envelope Co. v. Seymer*, (1858) 5 C. B. N. S. 164; 28 L. J. C. P. 22, the patent was for "improvements in the manufacture of cases or envelopes for covering bottles." The claim was for "the combination of mechanism, and the making of envelopes for bottles, as herein described." The defendants worked a patent for "improvements in the manufacture of cases or packings for bottles or jars," in which they employed a mould or mandril similar to the plaintiff's, and this was the infringement complained of. In delivering the judgment of the Court of Common Pleas, *Willes*, J., said: "The fact that the mould or mandril constitutes part only of the plaintiff's process does not of itself affect the question. The infringement of any part of a patent process is actionable, if that part is of itself new and useful, so as that it

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Envelope Co.
v. Seymer.

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might be the subject-matter of a patent, and is used by the infringer to effect the object, or part of the object, proposed by the patentee. The question, therefore, is, whether the plaintiffs could have taken out a patent simply for applying a model or mandril in the form of a bottle, or, indeed, a bottle itself, in making envelopes for bottles. We are of opinion that they ~~could not.~~ The use of a model or mandril, for producing given forms of pliable materials, was admitted at the trial, and indeed, without such admission, is well known to have been for ages common and usual in various arts. Such use was part of common knowledge, and a model or mandril for purposes similar to that of this patent was an ordinary and well-known tool. It is merely in respect of the sort of material to which it is applied, and the form of the utensil produced by it, that the plaintiff's application of the model possesses any novelty. The application of a well-known tool to work previously untried materials, or to produce new forms, is not, in my opinion, the subject-matter of a patent. The observations of the Court, in giving judgment in the recent case of *Tetley v. Easton*, (1857) 26 L. J. C. P. 269, sustained this proposition. Indeed, to hold the contrary might tend to produce oppressive monopolies in the application of old and well-known implements to new materials, without any further novelty or merit than the discovery of the material or the form into which it is to be worked. Such discovery is not, in our opinion, one of a new 'manufacture' within the statute of James, and a patent for it alone cannot be maintained."

Brook v. Aston.

In *Brook v. Aston*, (1857) 8 E. & B. 478 ; 27 L. J. Q. B. 145 ; 28 L. J. Q. B. 875 ; affirmed 5 Jur. N. S. 1025, the action was brought for the infringement of a patent for "improvement in finishing yarns of wool or hair, and in the finishing of woven fabrics." The defendant pleaded that it was not the working or making of any manufacture for which letters patent could by law be granted. The specification stated : "This invention has for its object an improvement in finishing yarns of wool or hair, and consists in causing *yarns of wool or hair*, whilst distended and kept separate, to be subjected to the action of rotatory beaters, or burnishers, by which such yarns will be burnished or polished on all sides." Then followed a description and drawings of the machinery, showing the manner in which the threads were distended and kept separate, and were passed over a revolving circular brush, on their way to some rapidly revolving beaters or burnishers, which gave smoothness to their surface. The first claim was : "causing yarns of wool or hair, whilst distended and kept separate, to be subjected to the action of rotatory beaters or burnishers, whereby the fibre is closed and strengthened and the surface effectually polished."

The defendant put in evidence the specification of a former patent granted to *W. L. Brook*, and *C. Brook*, in 1853, for certain improvements in finishing cotton and linen yarns, and in the machinery connected therewith. This specification stated: "Our improvements relate, first, to a method of finishing *cotton and linen* yarns by the application of friction, produced by a peculiar combination of horizontal brushes, with revolving beaters or burnishers, the yarns being extended from end to end, instead of being dressed in the hank or skein, by which means a more perfect adhesion of the fibre with smoothness and a *glacé* effect is produced. The yarns or threads are wound upon a roller at one end of the machine, and pass through the operation of sizing, as in common use, and thence to the finishing end of the machine." The jury found for the plaintiff.

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On application to the Court of Queen's Bench, a rule *nisi* to enter a nonsuit was made absolute, Lord *Campbell*, C.J., saying: "It may well be that a patent may be valid for the application of an old invention to a new purpose, but to make it valid there must be some novelty in the application. Here there is none at all. We may suppose that the specification of 1853, instead of extending to cotton and linen yarns, had been confined to cotton yarns only. Could, in that case, a new patent have been supported for applying the same process precisely to linen threads? It is clear it could not. In all the cases in which a patent has been supported there has been some discovery, some invention. It has not been, as in this case, merely the application of the old machinery, in the old manner, to an analogous substance. That cannot be the subject of a patent, and this patent claiming it is void."

On a writ of error being brought in the Court of Exchequer Chamber, *Cockburn*, C.J., said: "Our duty is to look to the two specifications, and construing them in the best manner, to see whether the second involves any infringement of the first. I am of opinion that it does. The second patent includes every material portion of that which was the subject-matter of the first. Mr. *Bovill* has argued on the assumption that the sizing process, which is omitted in the second patent, was an essential part of the first. But I cannot look upon it in that light. . . . There is a *glacé* appearance produced on the linen, and not in the wool. But the main purpose, which is to give strength to the matter operated on, is the same in both. . . . The polish is no essential part of the patent."

Martin, B., said: "The question is, whether there was any evidence to go to the jury at the end of the plaintiff's case. . . . I quite concur in the judgment of the Court of Common

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Pleas in the *Patent Bottle Envelope Co. v. Seymer*, (1858) 28 L. J. C. P. 22, that the application of a well-known tool to work previously untried materials, or to produce new forms, is not the subject of a patent. When a machine is well known it becomes in fact a tool. I am therefore of opinion that the application of this machinery to woollen yarn is not the subject of a patent."

Willes, J., said: "I am of the same opinion. The machinery is admitted to be the same in the two patents; the thing operated upon in each is the same, or similar, the one being vegetable, the other animal fibre. The *modus operandi* is the same, namely, by friction, and the result aimed at is the same—the improvement of the thread or yarn to be produced by the friction of the brushes or beaters—the two patents are, in my opinion, for similar, if not for identical purposes."

Bramwell, B., said: "The two specifications are substantially identical. Doing to wool identically the same thing which has been done to linen or cotton is not, in my opinion, a new manufacture."

Harwood
v. Great
Northern
Railway Co.

In *Harwood v. The Great Northern Railway Co.*, (1860) 2 B. & S. 194, 222; 11 H. L. Cas. 654; 29 L. J. Q. B. 193; 31 L. J. Q. B. 198; 35 L. J. Q. B. 27, a patent for the purpose of connecting the rails of railways by "fishes" was held void on the ground that similar fishes had been previously used to fasten pieces of timber together in the construction of bridges, and also in various articles of machinery. *Willes, J.*, in the Court of Exchequer Chamber, held the invention was the mere application of an old contrivance in the old way to an analogous subject without novelty or invention in the mode of applying such old contrivance to the new purpose. On the appeal to the House of Lords, Lord *Westbury, L.C.*, thus expressed himself: "The question is, whether there can be any invention in taking that thing which was a fish for a bridge and having applied it as a fish to a railway. Upon that I think the law is well and rightly settled, for there would be no end to the interference with trade and with the liberty of adopting any mechanical contrivance if every slight difference in the application of a well-known thing should be held to constitute ground for a patent. There is the familiar contrivance of the button to the button-hole taken from the waistcoat or the coat, which may be applied in some particular mechanical combination in which it has not hitherto been applied. But it would be an idle thing, if it were possible, to take a well-known mechanical contrivance and by applying it to a subject to which it has not hitherto been applied, to constitute that application the subject of a patent to be granted as for a new invention. No sounder or more wholesome doctrine, I think, was ever established than that which was

established by the decisions referred to in the opinions of the four learned Judges who concur in the second opinion delivered to your Lordships—namely, that you cannot have a 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 purpose in or to which it has been hitherto notoriously used.”

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In *Jordan v. Moore*, (1866) L. R. 1 C. P. 624; 35 L. J. C. P. 268, the question was whether the application of wooden planking to the iron frame of a ship (without any peculiarity in the nature of the planking) could be the subject of a patent. The Court of Common Pleas held it could not, on the ground that it was not only the substitution of one well-known and analogous material for another—that is, wood for iron—to effect the same purpose on an iron ship, but it was the application of an old invention—viz., planking with timber, which was formerly done on a wooden frame—to an analogous purpose, or rather the same purpose on an iron frame, and *Harwood v. Great Northern Railway Co.* (1860) 2 B. & S. 194, 222; 11 H. L. Cas. 654; 29 L. J. Q. B. 193; 31 L. J. Q. B. 198; 35 L. J. Q. B. 27, was directly in point, and decisive against the patent.

Jordan v.
Moore.

In *Parkes v. Stevens*, (1869) L. R. 5 Ch. 36; L. R. 8 Eq. 358; 38 L. J. Ch. 627, Lord *Hatherley*, L.C., held that the adaptation of a sliding door to a spherical lamp—sliding doors having been previously applied to cylindrical lamps and other glazed surfaces—could not of itself be the subject of a patent.

Parkes v.
Stevens.

Horton v. Mabon, (1862) 12 C. B. N. S. 437; 16 C. B. N. S. 141; 31 L. J. C. B. 255, the patent sued on was held void by the Court of Common Pleas, and on appeal the Court of Exchequer Chamber upheld the judgment below, and came to the conclusion that what the plaintiff claimed as part of his invention was merely the substitution of *double angle iron* for two pieces of *single angle iron*, in the formation of hydraulic cups or joints to telescopic gas-holders. It was matter of general knowledge that the cups might be formed by riveting two pieces of *single angle iron* to a plate, and the Court held that the mere substitution of *double angle iron*—an article well known in the trade—was not an invention for which a patent could be granted.

Horton v.
Mabon.

In *Ormson v. Clarke*, (1862) 13 C. B. N. S. 337; 14 C. B. N. S. 475; 32 L. J. C. P. S. 291, the patent was for “an improvement in the manufacture of cast tubular boilers,” and the invention consisted in causing the upright tubes and the lower hollow ring (which connected the tubes together at their lower ends) to be cast at one time, and thus form one casting. It appeared that similar boilers had been previously made in

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*Bamlett v.
Picksley.*

several pieces, which were afterwards fastened together by means of cement. The Court of Common Pleas and on appeal, the Court of Exchequer Chamber, held that the alleged invention, which was merely the casting in one piece that which used formerly to be cast in several pieces, was not proper subject-matter.

In *Bamlett v. Picksley*, (1875) Griff. P. C. 40, the patent related to improvements in machines for both reaping and mowing, and the alleged invention consisted in making the cutting knife revolve quicker for mowing grass than for cutting corn. This was accomplished by the application of an arrangement of shaft and wheels identical with one used by a previous inventor in a hay-making or tedding machine, for the purpose of driving the tossing rakes slower or faster at will. The patent was declared void on the ground that the alleged invention was not proper subject-matter.

*Philpot v.
Hanbury.*

In *Philpot v. Hanbury*, (1885) 2 R. P. C. 33, an action for the infringement of a patent for "improvements in apparatus for use in drafting patterns for ladies' dresses and under garments," *Grove, J.*, held that the state of public knowledge at the date of the plaintiff's specification, disclosed by three prior specifications, made his claim to be for what was virtually an application of a known method in a known way, or in a variety of ways open to everybody else.

*Sharp v.
Brauer.*

In *Sharp v. Brauer*, (1886) 3 R. P. C. 193, the plaintiff's patent was for "a new or improved window screen or blind," and the specification stated that the invention related to screens or blinds for windows, and the improvement consisted in forming them of cardboard, millboard, &c. The evidence showed that similar screens were old and well known, and all that the patentee had done was to apply them in an obvious way to a window.

*Rowcliffe v.
Longford
Wire Co.*

In *Rowcliffe v. Longford Wire Co.*, (1887) 4 R. P. C. 281, a patent for "improvement in frames for woven or elastic wire net mattresses" was declared invalid on the ground that the patentees claimed merely a rectangular framework which differed only from the old four-post bedstead in not having any legs or posts, by sliding the transverse piece not in grooves but on the top of the sides, and by making the foot and head, instead of being flush with the sides, raised above the sides.

*Albo-Carbon
Light Co. v.
Kidd.*

In *Albo-Carbon Light Co. v. Kidd*, (1887) 4 R. P. C. 535, the patent called in question by the defendant related to the use of solid naphthaline for the purpose of enriching gas, and the patentee claimed "The use of solid naphthaline, prepared in the form of sticks, rods or pellets, for the enrichment of combustible gas, substantially as herein described." The defendant proved that liquid naphthaline prior to the patent had

been used for the purpose for which the patentee used solid naphthaline, and that solid naphthaline had been prepared before the patent as a well-known article of commerce.

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In *Calvert v. Ashburn*, Pract. Tech. Journ. vol. vii. 2nd ser. p. 97, it was held, that as caustic alkali had been previously used to dissolve gluten in the manufacture of *starch*, it was not the subject-matter of a patent to apply caustic alkalis to dissolve gluten in the manufacture of *size* from flour.

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Calvert v.
Ashburn.

In *Herrburger v. Squire*, (1888) 5 R. P. C. 581; 6 R. P. C. 194, it was held that the mere alteration of the arc in which a damper for a pianoforte string was worked, though useful, was not proper subject-matter, on the authority of *Kay v. Marshall*, (1836) 2 W. P. C. 36.

Herrburger v.
Squire.

In *Blakey v. Latham*, (1889) 6 R. P. C. 29, 184, it was held that to put a plate on the heel of a boot, which had been previously used on the toe, was not subject-matter.

Blakey v.
Latham.

In *Longbottom v. Shaw*, (1888-91) 5 R. P. C. 497, 6 R. P. C. 143, 510, 8 R. P. C. 333, a patent which related to reels or frames for holding pile or other fabrics was declared void by the Courts below and the House of Lords under the following circumstances. The invention claimed by the patentee consisted in forming a row of hooks upon a foundation piece of metal, either by stamping the hooks out of the metal, or by soldering the hooks on to the metal in a groove and then attaching the row of hooks so formed to a reel or frame for the purpose of holding the pile. It was admitted that reels or frames with a row of hooks were well known at the date of the patent, and also that the idea of attaching a row of hooks to a strip of metal so that the strip of metal with the hooks could be applied when required was not new, though it had in fact never been applied to reels or frames. It was proved in evidence that the plaintiff had effected an improvement, and that the article produced by him had supplanted the old article in the market; but there was no evidence that the defects of the old article had been much felt, or had caused a demand for an improved article, or that attention had been called to the removal of those defects.

Longbottom
v. Shaw.

In *Morgan v. Windover*, (1888) 5 R. P. C. 304; 7 R. P. C. 131, the Court of first instance and the Court of Appeal upheld a patent for turning springs, which had been formerly used at the back of carriages, and inverting them and putting them to the front of carriages in such a manner as not to interfere with the fore wheels and their motion in turning the carriage. The Court thought that there was invention in selecting the proper spring to effect the desired purpose of giving horizontal motion, and in adopting it in the proper way to the carriage. The House of Lords, however, held the

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Windover.

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Tucker v.
Kaye.

patent void on the ground that it was merely the application of a known article to an analogous purpose without any ingenuity, and that it was not patentable, though advantages were produced which were not produced before.

In *Tucker v. Kaye*, (1891) 8 R. P. C. 58, 230, the patent was for a door lock consisting of a combination with the main bolt urged forwards by a spring, a detent holding the bolt back when the door is open, but released by the projection on the striking plate in the act of closing the door. Each part of the combination was old, but in the prior locks the mechanism for moving the catch was placed at the side and the bolts projected or protruded. The Courts held that no invention was required to change the side action to a facial action, and to provide bolts which did not project or protrude; and the patent was therefore bad for want of subject-matter.

Embossed
Metal Plate
Co. v. Saupe.

In *Embossed Metal Plate Co. v. Saupe*, (1891) 8 R. P. C. 355, a patent for embossing thick metal plates by stamping them from the reverse side on to a soft indiarubber pad was declared void upon proof that, at the date of the patent, it was old to emboss thick metal sheets between non-elastic dies; also to emboss thick metal by tools upon pitch; and it was also old to emboss thin plates between engraved rollers and indiarubber.

Fairfax v.
Lyons.

In *Fairfax v. Lyons*, (1891) 8 R. P. C. 401, a patent for mechanical means for moving targets was declared void on the ground that substantially similar means had been used for the same purpose before.

Wilson v.
Union Oil
Mills Co.

In *Wilson v. Union Oil Mills Co.*, (1892) 9 R. P. C. 57, the patentee sought to protect a process for bleaching and deodorising soda made from soda and "railway grease," which is dark in colour and has a bad smell, by the application of chlorine or boiling hypochlorite of soda to it. It was proved that hypochlorite of soda had been used for bleaching other kinds of soap, and that chlorine water had been used to bleach cotton-seed soap. The patent was therefore void as being for a mere analogous use.

Baker v.
Kinnell.

In *Baker v. Kinnell*, (1892) 9 R. P. C. 441, it was held that a certain joint having been applied to hot-water coil pipes, there was no invention in making the mere analogous application of the joint to boiler tubes in which the heat was applied outside the tubes.

Nicoll v.
Swears.

In *Nicoll v. Swears*, (1893) 10 R. P. C. 240, riding-habits having been made with a burstable seam part way up, the discovery that if the burstable seam was extended further up—*i.e.*, right up to the waist—it would work very much better was held not to be subject-matter as being merely the use of a known contrivance for a known purpose.

In *Sudbury v. Lee*, (1894) 11 R. P. C. 58, the patentee claimed, in the manufacture of hose, half-hose, and socks, the addition, during the process of manufacture, of one or more widenings to the upper portion of the backs of the heels thereof, so as to make the said heels conform more closely to the shape or contour of the heel of the human foot. The Court held that widening, being an old process, and an obvious method of shaping the upper parts of the heels of hose, although it had never been so employed before the date of the patent, the invention, though useful, was not subject-matter, and the action was dismissed.

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Sudbury v.
Lee.

In *Rose's Patent Co. v. Braby*, (1894) 11 R. P. C. 198, a patent for a portable oil spray lamp for use in large public works where the aid of a powerful light is required, which claimed the application of known mechanical principles to the creation of pressure on the surface of water (which had been previously used for the purpose of creating pressure on the surface of oil) for the purpose of neutralizing a back-pressure, was held bad on the ground that there was no patentable subject-matter. It was further held that the system of a continuous current being known, there was no merit in producing it from steam and not from oil, nor in applying a current of steam to produce an oil spray.

Rose's Patent
Co. v. Braby.

In *Singer v. Rudge Cycle Co.*, (1894) 11 R. P. C. 463, the mere application of an old locking device to the front wheel of a bicycle for the purpose of locking the steering gear when the bicycle was at rest was held not to be subject-matter in face of the fact that the same locking device had been used formerly for the purpose of locking the steering gear when the bicycle was being ridden.

Singer v.
Rudge Cycle
Co.

In *Shaw v. Barton*, (1895) 12 R. P. C. 282, the patentee claimed wire rings for use in securing elastic tyres on bicycles and other wheels in which the joints were made by inserting the two ends of the wire into a longitudinal split-tube and then introducing solder along the split. Joints of the same kind had been used in ordinary wire work for lamps, hats, and also for centrifugal machines revolving at the rate of 1000 times a minute. The Court held that, though the patentee had made an improvement on the joints previously used for bicycle wheels, there was not sufficient invention to support a patent for the analogous application of such joints to bicycle wheels.

Shaw v.
Barton.

In *Riekman v. Thierry*, (1896) 14 R. P. C. 105, the coating of an eyelet for boots with celluloid and so producing an eyelet which was very useful and largely adopted, was held by the House of Lords, though not unanimously and differing from both Courts below, not to be subject-matter, having regard to the fact that studs and the upper part of lacing hooks had

Riekman v.
Thierry.

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of Old Ap-
pliances.**

Cases in which
patents for
new uses were
held bad.

*Haws v.
Harding.*

*Waterson v.
W. A. Lloyd's
Cycle Fittings,
Ltd.*

*Hoffnung v.
Salisbury.*

*Cooper & Co.
(Birmingham)
Ltd. v. Bae-
deker.*

*Dredge v.
Parnell.*

*Case v.
Cressy.*

*Carter v.
Leyson.*

been treated in the same way, and the patentee made no claim to any particular process, but claimed merely "any eyelet of any metal if covered with celluloid or any similar material."

In *Haws v. Harding*, (1897) 14 R. P. C. 105, the combination of various old parts to form a watering pot possessing alleged advantages was, in the absence of any special novelty and advantage arising from the combination, held not to be subject-matter.

In *Waterson v. W. A. Lloyd's Cycle Fittings, Ltd.*, (1899) 16 R. P. C. 277, the mere application to the side of a bicycle pedal, for the purpose of adjustment to a wide or narrow tread, of a contrivance previously described as applicable to the adjustment of the toe piece of a pedal was held to be no invention.

In *Hoffnung v. Salisbury*, (1899) 16 R. P. C. 375, the application of a known form of spring in a known way to a bicycle head lamp instead of to a hanging or hub lamp was held to be no invention.

In *Cooper & Co. (Birmingham), Ltd. v. Baedeker*, (1899) 16 R. P. C. 363; 17 R. P. C. 209, the patentee claimed making felt handles for velocipedes by first grooving a piece of sheet felt longitudinally at intervals, then bending the same and securing the uniting ends together so as to form a felt cylinder grooved from end to end on the outside, which is or is not afterwards reduced towards the ends substantially as set forth. It appeared that the material and its application to handles were both old, and also the method of its creation into a handle, or part of a handle, was old. Under these circumstances the Courts held there was neither novelty nor invention, and the patent consequently failed on the ground of subject-matter.

In *Dredge v. Parnell*, (1887) 15 R. P. C. 84; 16 R. P. C. 625, the Courts below and the House of Lords were unanimous in holding that the application of the use of a band knife, in its ordinary function as a cutter of piles of substances, to necktie linings when such linings to be cut were clamped together with guides, was not subject-matter, though the application was a very desirable one and largely adopted by the trade.

In *Case v. Cressy*, (1900) 17 R. P. C. 255; 18 R. P. C. 419, it was held that the use of a kind of fence, which had previously been notoriously used on land, as a groyne on the foreshore was a useful discovery of a fresh use for the old form of fence but not an invention, and the patent was consequently declared void.

In *Carter v. Leyson*, (1902) 19 R. P. C. 473, the Court of Appeal reversing the Court below held that affixing an old

pronged socket to a candlestick base so as to form one entity and to supply a demand, though, in fact, new and useful, was not an invention which could support the patent.

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In *British Thomson-Houston Co. v. Mayor of Manchester*, (1903) 20 R. P. C. 461, it was proved that at the date of the patent the following facts were all known:—First, the principle of a magnetic blow-out for rupturing an electric arc formed upon breaking circuit; secondly, that the magnet employed might be either a permanent magnet or an electro-magnet, and one with either an iron core or an air core; thirdly, that close proximity of the magnet to the arc which it was desired to rupture was important in that the strength or influence of the magnetic field was largely increased by proximity; fourthly, that proximity increased the probability of the arc springing from the electrode to the magnet itself; fifthly, that if there were close proximity to the electrode, from which the arc might spring, the remedy was insulation; and, lastly, that material which is an insulator to an electric current is not an insulator to magnetic influence. The patentee described the object of the invention as being to increase the efficiency and certainty of operation of arc rupturing devices by permitting them to be brought very close to the point where the arc may form, and he claimed, "In a magnetic arc rupturing device a shield of insulating material located between the surfaces of the electrodes and adjacent conducting surfaces of the device by which the arc is disrupted, as and for the purpose described." The Courts held that on the above facts there was no invention in using such a shield in the manner and for the purpose claimed.

Cases in which
patents for
new uses were
held bad.

British Thom-
son-Houston
Co. v. Mayor of
Manchester.

In *Baxter v. Marsden*, (1904) 22 R. P. C. 18, a patent for the substitution of a top drive for a bottom drive in a known double screen stone-breaking and ore-crushing machine was held bad, because it was proved that top driving was old, as applied to single screen machines, and top and bottom drives were interchangeable alternatives perfectly familiar to engineers.

Baxter v.
Marsden.

In *McLay v. Lawes & Co., Ltd.*, (1905) 22 R. P. C. 199, it appeared that calcium sulphate in the form of gypsum had, at the date of the patent sued on, been used and was well known as one of the factors in the manufacture of composition for the covering of boilers, and that calcium sulphate produced by precipitation as a waste product in the manufacture of tartaric acid was chemically substantially the same as gypsum—though physically there might be a slight difference in that the precipitated form was more finely divided than the ground gypsum. The Court held that the patentee's claim, which really amounted to a claim for the use of the waste product instead of native

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Lawes & Co.,
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—
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old appliances
which are not
analogous to
previous
ones.

gypsum in the known process, was bad for want of subject-matter.

The preceding cases are all illustrations of the rule that a patent cannot be obtained for a mere analogous use of a known thing. When, however, the new use produces an important effect never before produced, or develops or makes practical some new property of matter not previously known, the new use is not analogous to the former uses, and the novelty of the agent becomes immaterial, and a good patent may be granted in respect of such a use. The subject of the patent is really the new art, consisting of the production of the new effect, or the utilisation of the new property of matter, by the use of the known and old thing, and the monopoly is granted as a reward to the patentee for the invention and ingenuity which it is implied he has exercised in making this new application.

There are cases in which an old and known thing is used to produce a new result, when applied to something which is so totally different to anything to which it was previously applied that there is an obvious invention in making the application—*e.g.*, though it was known that macaroni pipe could be made by spinning tough dough into a pipe, an invention of a method of taking red-hot iron and spinning that into pipes in the same manner, might be the subject-matter of a patent. (*l*)

A patent for making salicylic acid by the alleged application of a known process was declared valid, when it appeared that no one before the patentee had ever practically or theoretically taught the world how to make, out of such abundant and cheap materials as soda, carbolic acid, carbonic acid gas, and hydrochloric acid, the rare and expensive thing, salicylic acid; no one had ever taught the world the simple and chemical truth that all that was required to effect this, was to make the carbonate of soda perfectly anhydrous and perfectly desiccated. (*c*)

Applications
of newly dis-
covered quali-
ties of natural
or artificial
products.

Mere advan-
tage in a new
use is not
sufficient to
support a
patent.

When unknown qualities possessed by a natural or artificial product are discovered, and, from the result of experiments, applied to useful purposes, such application is the proper subject-matter of letters patent. (*d*)

It should be carefully borne in mind that in order to support a patent for a new use of a known thing there must be

(*b*) See *Bamlett v. Picksley*, (1875) L. R. 14 Ch. D. 230; 50 L. J. Ch. 126.
Griff. P. C. 40, 42.

(*c*) *Von Heyden v. Neustadt*, (1880) (*d*) See pp. 58, 59 *ante*.

evidence that some invention was required to make the alleged analogous application; and it is not sufficient to point out that advantages are obtained which were never before produced. (e)

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In this connection, Lord *Watson*, in supporting a motion in the House of Lords that the judgment of the Court of Appeal in *Morgan v. Windover* (f) should be reversed, referred to the decision of the House in *American Braided Wire Co. v. Thompson* (g) in the following terms: "The learned Judges do not appear to me to have sufficiently considered the principle enunciated by Lord *Westbury*, and accepted by this House in *Harwood v. Great Northern Railway Co.*, to the effect that there cannot be a patent 'for a well-known mechanical contrivance merely when it is applied in a manner and 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.' Your Lordships had recent occasion to consider that principle in *Thompson v. American Braided Wire Co.* (h) In that case, although your Lordships were not agreed in the result, there was no difference of opinion as to the soundness of the rule which formed the ground of the judgment in *Harwood's Case*. The majority, of whom I happened to be one, rested their judgment upon the fact, which they held to be established, that the particular forms of 'dress improvers' specified and claimed were not *mere* applications of wire braid to an analogous purpose, but that the patentee in his peculiar modes of adapting the old material to its new, though analogous, use had exercised and exhibited a degree of inventive ingenuity just sufficient to protect him from the incidence of the rule. It was for that reason only that the patent was sustained." (i)

In the following cases, patents which, in each instance, related to some new application of an old thing or method were declared valid on the ground that there was some invention in making the new application.

Cases in which
patents for
new uses were
held good.

In *Muntz v. Foster*, (1844) 2 W. P. C. 96, it appeared that at the date of the plaintiff's patent, alloys of zinc and copper were known, but it was not known that an alloy consisting of zinc and copper, in certain definite proportions, by virtue of its

Muntz v. Foster.

(e) See *Cole v. Saqui*, (1883) 7 R. P. C. 489; *Blakey v. Latham*, (1889) 6 R. P. C. 29; *Morgan v. Windover*, 7 P. O. R. 131.

(f) (1890) 7 R. P. C. 131.
(g) (1889) 6 R. P. C. 518.
(h) *Ibid.*
(i) (1890) 7 R. P. C. 136.

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Cases in which
patents for
new uses were
held good.

Muntz *v.*
Foster.

Penn *v.* Bibby.

oxidating properties, was especially adapted for sheathing the bottoms of ships, which was the object of the invention. The novelty consisted in this, that the patentee by an experiment ascertained that a mixture of the alloy of zinc with copper, in certain definite proportions, has the effect of producing a better sheathing than the copper sheathing previously in use, by reason and by means of its oxidating just in sufficient quantities, and not too much, so as to wear away and impair the sheathing and render the vessel unsafe, but enough at the same time to keep by its wearing the bottom of the vessel clean from the impurities which before attached to it. *Tindal, C.J.*, was of opinion that the subject-matter was good, and the jury by their verdict upheld the patent.

In *Penn v. Bibby*, (1866) L. R. 1 Eq. 548; 2 Ch. 127, the patent related to the construction of hard wood bearings for the shafts of screw propellers. The complete specification described the manner of performing the invention by reference to drawings, and stated (in substance): The inner surfaces of the bearings for a propeller shaft are grooved to receive strips or fillets of wood, which project beyond the inner surfaces of the metal bearings, and allow the water to circulate in the channels so formed. The wood is by preference *lignum vitæ*, the grain being either longitudinal with the fillets, or at right-angles to the bearing surfaces thereof. In other words, the bearings are not continuous metal surfaces, as previously constructed, but a series of wooden fillets or ridges, having water spaces between them, which support the rubbing action of the shaft. It was further stated that the several pieces of wood employed in a bearing might be inclined to the axis instead of parallel to it as shown. Also, that it was not essential that the fillets of wood should be fitted in the interior of fixed metal bearings, as a like effect would be obtained if they were attached to the shaft and revolved therewith, in metal bearings, in the manner shown in the drawings. The claim was "the employment of wood in the construction of the bearings, and brushes for the shafts of screw and submerged propellers, as herein described." The defendant objected, but without success, that this was not subject-matter because the alleged invention was merely the new application of an old and well-known thing, and alleged, as examples of old use, certain grindstones and water-wheels.

Lord *Chelmsford, L.C.*, dismissed an application for a new trial, which was made on the ground (*inter alia*) that the invention was not the subject-matter of a patent, saying, "The criterion given by Lord *Campbell*, in *Brook v. Aston*, (1857) 8 E. & B. 485, has been frequently cited (as it was in the present argument), that a patent may be valid for the application of an old invention to a new purpose; but to make it valid there must be some novelty

in the application. I cannot help thinking that there must be some inaccuracy in his Lordship's words, because, according to the proposition as he stated it, if the invention be applied to a new purpose there cannot but be some novelty in the application. In every case of this description one main consideration seems to be, whether the new application lies so much out of the track of the former use as not naturally to suggest itself to a person turning his mind to the subject, but to require some application of thought and study. Now, strictly applying this test to the present case, it appears to me impossible to say that the patented invention is merely the application of an old thing to a new purpose. The only examples of old use alleged by the defendant were in grindstones and water-wheels. No doubt these have what may be called bearings; but they are of a totally different character, and for a totally different object from the bearings patented. It is difficult to believe that bearings of this description could ever have suggested the application of wood to bearings of screw propellers in the way described in the patent. It is, to my mind, not merely a different application, but something in itself essentially different. It has been found that, in the mode of constructing screw propellers by making metal work upon metal they soon wore out, and occasioned a violent, irregular motion on the vessel. Mr. Penn devised the plan of placing fillets of wood upon the inner surface of the bearings, so as to prevent the shaft coming into contact with the metal of the bearings, and so as to admit of the water flowing freely between the shaft and the inner surfaces of the metal bearings, thereby keeping the wood constantly lubricated. The success of this invention has been proved in a remarkable manner. It would be an extraordinary fact if an invention of this kind, so long wanted, and of such great utility, should have been lying in everybody's way who knew anything of the construction of water-wheels or grindstones, and yet should never have been discovered."

In *Steiner v. Heald*, (1851) 6 Exch. 620; 20 L. T. Ex. 410; 17 Tur. 875, it appeared that, prior to the plaintiff's patent, a dye called *garancine* had been extracted by a certain process from *fresh* madder. The plaintiff found that it could be extracted by the same process from "*spent*" madder—*i.e.*, madder which had been used in dyeing, and which up to the date of the plaintiff's patent had always been regarded as a waste product. The defendant pleaded that this was no manner of new manufacture, and at the trial the Judge directed the jury to find for the defendant, thereby treating the conclusion to be derived from the evidence as one of law. But the Court of Exchequer granted a new trial, being of opinion that it was a question of fact whether *fresh* madder

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Newton v.
Vaucher.

and *spent* madder were so much alike chemically as to be practically the same thing. And if they were not the same thing, then it might require invention to make the application of the old process to the new substance.

In *Newton v. Vaucher*, (1851) 6 Exch. 865; 21 L. T. 305, the defendant was the owner of a patent for an improvement in packing hydraulic and other machines by means of a lining of soft metal, the effect of which was to make certain parts of the machine air and fluid tight. The plaintiff discovered that soft metal had the effect of diminishing friction, and of preventing the evolution of heat, when applied to the surfaces in contact of machines in rapid motion, and subject to pressure, and obtained a patent of later date than the defendants, whereby he claimed as his invention the making or constructing the boxes within which the journals or axles of machinery are to move, by providing them with rims or fillets along their edges, &c., and the lining such boxes with soft metal. The Court held that the plaintiff's application of the soft metal differed essentially from that of the defendant, and that the plaintiff's patent was valid.

Reynolds v.
Amos.

In *Reynolds v. Amos*, (1886) 3 R. P. C. 215, the patent was for "improved appliances to be used in the manufacture of ensilage," and the invention and value of the process consisted in obtaining the requisite pressure with heaps of ensilage by means of chains furnished with a peg contrivance for retaining the pressure. Before the plaintiff's patent nobody had ever proposed to deal with fodder in the way he did, and his process enabled him to sell for 7s. what the defendant had to charge £3 10s. for. Though the use of chains was sufficiently obvious, *Bacon, V.C.*, held the patent a good one, but he did not in his judgment refer to the fact that the use to which the chain was applied was not one so analogous to the old uses, and self-evident, as not to call for a considerable amount of invention, and he seems to have considered that there was a new combination.

American
Braided Wire
Co. v. Thomp-
son.

In *American Braided Wire Co. v. Thompson*, (1887-89) 4 R. P. C. 316; 5 R. P. C. 113; 6 R. P. C. 518; a patent for "improvements in bustles or dress-improvers" was declared void by the Court of first instance, but the decision was reversed by the Court of Appeal, and a majority of the House of Lords saw no reason for dissenting from the decision of the Court of Appeal, which was accordingly upheld. The invention consisted substantially in the application of tubular sections of braided hard wire to bustles. A specification was produced which specified certain applications of braided wire to satchel-handles and other articles, and mentioned that the material might be applied to bustles. On the hearing of the

appeal fresh evidence was adduced as to the state of public knowledge at the date of the patent, from which it appeared that the application of braided hard wire to cushions and pillows had been specified, and that it was known that hard wire could be braided in the same manner as soft wire—*i.e.*, in a tubular form on a core—but that there had not been any use of tubular sections of braided hard wire within the realm. The majority of the House of Lords held that the invention was not the mere application of a known thing to an analogous use, but that sufficient ingenuity to support the patent was shown by the patentee's combination in the adoption of tubular wire braids (though a known elastic material) and their application in substitution for other known elastic materials in making bustles, the result obtained being a complete article, effective and capable of being manufactured and sold cheaply.

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pliances.

Cases in which
patents for
new uses were
held good.

American
Braided Wire
Co. v. Thomp-
son.

In *Pirrie v. York Street Flax Spinning Co.*, (1893) 10 R. P. C. 34; 11 R. P. C. 429, it appeared that paper tubes had been used in the *dry* spinning of cotton and other yarns, and that the patentee had adapted paper tubes to the *wet* spinning of flax and other yarns. The novelty and real invention was the combination of the paper tube with a wooden pivot, bobbin, or socket, serving as a support for the tubes during the process of winding, which would otherwise lose its shape and become useless from the moisture of the yarn, and adapting the paper tubes, previously used only in the *dry* spinning of cotton and such yarns to the *wet* spinning of flax. Two useful results were thus achieved: (1) Greater adhesiveness of the yarn to the tube when wound; (2) Superior cheapness—and the validity of the patent was upheld.

Pirrie v. York
Street Flax
Spinning Co.

In *Adamant Stone and Paving Co. v. Corporation of Liverpool*, (1897) 14 R. P. C. 21, it appeared that the patentee had, by the selection of a known form of filter press from amongst others of a less suitable kind and by its application to the purpose of moulding cement slip, produced from cement a stone or stone-like substance, which was thus produced in a quicker and more economical way than any known before, and being cheap could be used as a paving material and was of great commercial importance. The patent for the process was under these circumstances upheld.

Adamant
Stone and
Paving Co.
v. Corporation
of Liverpool.

In *Brooks v. Lamplugh*, (1897) 15 R. P. C. 33; 16 R. P. C. 41, the House of Lords did not differ from the judgments below which held the use of the old and well-known trussed beam, but in a particular way, in the base framing of a bicycle saddle was good subject-matter, notwithstanding that such a trussed beam had been used in bridge construction.

Brooks v.
Lamplugh.

In *Geipel v. Lord Mayor, &c., of Manchester*, (1903), 21 R. P. C. 41, the defendants urged that the alleged invention

Geipel v. Lord
Mayor, &c., of
Manchester.

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Cases in which
patents for
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Heine, Solly
& Co. v. Coninco
Incandescent
Light Co.

Halden v. Hall.

Antivibration
Incandescent
Lighting Co.,
Ld. v. Cross-
ley.

was merely the combination of a spring with an expansive steam tap, with the object of avoiding jamming or straining of the valve seating, common to all taps, and that since a spring had been used prior to the patent to obviate this difficulty there was no invention in doing what the plaintiff claimed. The Judge held, however, that the arrangement of the new combination was invention, and the patent was therefore valid. (*k*)

In *Heine, Solly & Co. v. Coninco Incandescent Light Co.*, (1904), 21 R. P. C. 202, the Courts held that the new application in an automatic gas lighter of an old form of covering to protect the igniting pellets from the action of the atmosphere, which application resulted in the production of a new commercial article, involved sufficient inventive ingenuity to support the patent.

In *Halden v. Hall*, (1904) 21 R. P. C. 609, though trunnions had at the date of the patent been used with flat frames and with slightly curved frames for sun printing and also in connection with many cylinders of various kinds, the application of trunnions to a known form of cylinder used in conjunction with an arc light for producing drawings by photography was held good subject-matter. It appeared that trunnions had never been used in connection with any apparatus such as was described in the plaintiff's specification, and beyond doubt the apparatus was new and useful, and the trunnions were for the first time applied to the cylinder in question for a particular advantageous purpose.

In *Antivibration Incandescent Lighting Co., Ld. v. Crossley*, (1904) 22 R. P. C. 157, 441, it was established that the evil effects of vibration in incandescent gas lamps had long been felt, and that many contrivances for breaking the rigid connection between the source of vibration and the mantle had been tried without success when the patentee hit upon the simple plan of using a flexible feeding tube in conjunction with an elastic or spring suspension for the lamp as an antivibrator, and thereby solved the problem. Under these circumstances, notwithstanding that incandescent lamps had been previously fed by flexible tubes, which, however, had been applied for the purpose of enabling the lamp to be carried about, and not with the object of mitigating or destroying vibration, and elastic or spring suspension was a well-known device for lessening vibration, the Courts decided that the patentee's use of a flexible tube with a fixed elastically suspended lamp was a patentable invention.

(*k*) See also In the Matter of Geipel's Patent, (1904) 21 R. P. C. 379.

CHAPTER III.

NOVELTY.

NOVELTY AT COMMON LAW.

It is absolutely essential that every invention capable of sustaining a grant of letters patent must be new at the time the grant is made. The novelty of the invention is, in fact, in every case in which a patent is in practice granted, part of the consideration in exchange for which the Crown; (a) acting on behalf of, (b) and for the benefit of, the public, (c) gives the monopoly conferred by the grant. Novelty an
essential at
Common Law.

The Sovereign has no prerogative extending to anything injurious to his subjects, (d) nor can he by his patent do wrong, (e) or enable another to do so. (f)

Everybody has alike a *prima facie* right to make experiments, and to use in any manner he pleases any invention which is the product of his skill or good fortune. The grant of letters patent vesting in one individual the exclusive privilege of making, using, exercising and vending an invention, curtails this *prima facie* right of the public, for it excludes the rest of the public from using that invention, even though they should, quite independently of the information contained in the patentee's specification, make it for themselves. It is, therefore, only equitable that the public should receive some consideration in return for the curtailment of their rights which the patent thus effects. *Prima facie*
right of public.

The only consideration which the patentee gives to the public is a knowledge of the invention, which they are at liberty to use freely after the expiration of the term for which the patent is granted. If the invention were not new, it is quite evident the patentee would not have given to the public Consideration
fails if inven-
tion is not new.

(a) *Harmar v. Plaync*, (1807) 14 Ves. 131, 136.

(b) *Ibid.* 132.

(c) *Bac. Abr. tit. Prerog.*; Year Book, 40 Edw. III. fol. 18.

(d) *Finch*, 84.

(e) 1 Co. R. 44^b, 45^b; *Noy*, R. 182; 3 *Shep. Abr.* 48.

(f) *Godb.* 254.

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any consideration at all, for the invention being public property at the date of the patent, the public would be in the same position after its expiration that they were in before it was granted. The patent would, therefore, be void for want of consideration. A patent may be considered as, in effect, a bargain made by the Crown on behalf of the public (*g*) on the one hand, and the patentee on the other, and, as in the case of other contracts not made by deed, it would upon this view be void if there were no consideration for the grant. (*h*) In the language of Lord *Loughborough*, L.C., "A bargain without consideration is a contradiction in terms and cannot exist." (*i*)

Common Law
authorities.

The Common Law, as expressed in the cases decided before the passing of the Statute of Monopolies, required that an invention should possess the element of novelty in order to render a patent for it valid. (*k*)

(*g*) *Harmar v. Playne*, (1807) 14 Ves. 132; *Tubes, Ld. v. Perfecta Seamless Steel Tube Co., Ld.*, (1902) 20 R. P. C. 9, 96.

(*h*) *Rann v. Hughes*, (1797) 7 T. R. 350 *n.*; *Anson on Contracts*, 68.

(*i*) *Myddelton v. Lord Kenyon*, (1794) 2 Ves. Jr. 408.

(*k*) It was contended in *Darcy v. Allin*, (1602) Noy, R. 178; 1 W. P. C. 6, decided in 1602, that: "where any man, by his own charge and industry, or by his own wit or invention, doth bring any *new* trade into the realm, or any engine tending to the furtherance of a trade *that never was used before*, and that for the good of the realm, that in such cases the King may grant to him a monopoly patent, for some reasonable time, until the subjects may learn the same, *in consideration of the good that he doth bring by his invention to the Commonwealth*, otherwise not."

In *Hastings' Patent* (Noy, R. 182; 1 W. P. C. 6), it appeared that a patent was granted to Mr. Hastings in consideration that he brought in the skill of making frisadoes, as they were made in Haarlem and Amsterdam, beyond the seas, *being not used in England*, and on action brought for the infringement of the patent it was upset on the ground that such frisadoes as Mr. Hastings' were made in England before the date of the patent.

In *Humphrey's Patent* (Noy, R. 183; 1 W. P. C. 7), the Court of Exchequer Chamber held that, if the sieve or

instrument for melting lead which formed the subject of the patent were used in this country before, the patentee should not have the sole use thereof.

In *Moore's Reports* (p. 672), it is laid down that the King cannot grant a patent to restrain people in their usual trades and occupations; and that no occupation can be prohibited or put in monopoly, *but only such things as are newly invented* by the skill of man.

In *The Clothworkers of Ipswich Case*, (1615) Godb. R. 252; 1 Roll R. 4, it was decided that: "If a man hath brought in a new manufacture, and a *new* trade within the kingdom in peril of his life, and consumption of his estate or stock, or if a man hath made a *new* discovery of anything; in such cases the King of his grace and favour in recompence of his costs and travail, may grant by charter unto him that he only shall use such a trade or traffique for a certain time, *because at the first the people of the kingdom are ignorant, and have not the knowledge or skill to use it*; but when the patent is expired the King cannot make a new grant thereof. For when the trade is become common, and others have been bound apprentices in the same trade, there is no reason that such should be forbidden to use it." And again: "Of a *new invention* the King can grant a patent:" but "*where there is no invention* the King cannot by his patent hinder any trade."

The power retained to the Crown, by the Statute of Monopolies, of granting patents for inventions, is limited to granting patents and grants of privilege "of the sole working or making of any manner of *new* manufacture within this realm, to the true and first inventor and inventors of such manufacture, which others at the time of making such letters patents and grants shall not use." (l) Thus, it appears that, in virtue of this statute, as well as of the Common Law, novelty is a requisite of a valid patent, for the section concludes with the statement that the grants thereby allowed "shall be of such force as they should be if this Act had never been made and of none other."

Novelty at
Common
Law.

Limit of
Crown's autho-
rity to grant
patents for
inventions.

Novelty requi-
site by statute
as well as
Common Law.

The section provides that (1) the subject of the grant must be a manufacture which is *new* within this realm; (2) the grantee must be the true and *first* inventor; and (3) the subject of the grant must be a *new* manufacture which others shall not use. All these three conditions necessarily imply the element of novelty.

We have seen (m) what is the meaning of the words "true and first inventor," and that they do not imply that the grantee must necessarily be the man who actually first made the discovery, but that, if he be the man who first published the invention within this realm, he is deemed to be the true and first inventor within the legal meaning of the term.

Although the grantee be the true and first inventor, the patent will be void if he has allowed the invention to be used by others before obtaining the grant, and there is a "sound distinction in the abstract" between the two issues raised by a denial that the patentee is the true and first inventor and that the invention has not been used before. (n) Moreover, in an action for the infringement of the patent, each ought to be pleaded separately if either party desires to rely on both. (o)

Prior use by
others renders
patent bad.

The fact that the prior use relied upon was only in conjunction with the patentee will not save the patent, unless it be also established that the person other than the patentee who made the prior use was under terms of secrecy, or otherwise in a fiduciary relationship towards the patentee. (p)

The grantee may, in fact, have made the discovery himself

(l) 21 Jac. I. c. 3, s. 6.

(m) pp. 5-19 *ante*.

(n) *The Househill Co. v. Neilson*,
(1843) 1 W. P. C. 689; *Cornish v.*

Keene, (1835) 1 W. P. C. 507.

(o) *Ibid.*; see chap. viii. *post*.

(p) *Hoe v. Foster*, (1838) 16 R. P. C.
33, 38.

Public
Know-
ledge.

without assistance from any source other than his own ingenuity. Yet, if it turn out that the invention was the property of the public before, although unknown to the patentee, his patent will be void, for it is not because a patentee does not know what was in existence before that he can get a monopoly; otherwise, as a learned Judge once said, a patentee would get a patent for exclusive ignorance instead of exclusive knowledge. (*q*)

It should be borne in mind that not every novelty which is useful can be the subject-matter of a patent: the novelty must be *de jure* as well as *de facto*. (*r*) A thing is not patentable merely because it is new and useful and has not been made before; to be patentable the novelty must show invention. (*s*)

PUBLIC KNOWLEDGE.

Meaning of
public know-
ledge.

If the public once become possessed of an invention, by any means whatever, no subsequent patent for it can be granted, either to the true and first inventor himself or to any other person. In such circumstances the public cannot be deprived of the right to use the invention, and a patentee could not give to the public any consideration for the grant, as the public already possess everything he could give. It is not necessary that the invention should be used by the public as well as known to the public; if the invention and the mode in which it can be used has been made known to the public, it is public property, and any subsequent patent in respect of it would be invalid. (*t*)

If some of the public, therefore, not under terms of secrecy or confidence to the inventor, become, at any time before the date of the patent, acquainted with the invention, this will be quite sufficient to render the grant void; and the question in an action upon a patent, the validity of which is put in issue on the ground of previous publication, is: "Is it the fair

(*q*) *Young v. Rosenthal*, (1881) 1 R. P. C. 32.

(*r*) See p. 31 *ante*; *Ralston v. Smith*, (1866) 11 H. L. C. 223; *Chamberlain and Hookham v. Mayor, &c., of Bradford*, (1903) 20 R. P. C. 673, 687; *Brook v. Ashton*, (1857) 8 Ell. & B. 472; 27 L. J. Q. B. 145; 28 L. J. Q. B. 175; *Longbottom v. Shaw*, (1888) 8 R. P. C. 333; 6 R. P. C. 143; 5 R. P. C. 497; *Riekman v. Thierry*, (1896)

14 R. P. C. 105; *Rowcliffe v. Priestman*, (1898) 15 R. P. C. 155; *Klaber's Patent*, (1902) 19 R. P. C. 174; *Carter v. Leyson*, (1902) 19 R. P. C. 478.

(*s*) See p. 29 *ante*; *Thierry v. Riekman*, (1895) 12 R. P. C. 548.

(*t*) *Patterson v. The Gas Light and Coke Co.*, (1875) L. R. 3 App. Cas. 239; *Humpherson v. Syer*, (1887) 4 R. P. C. 414.

conclusion from the evidence that some English people, under no obligation of secrecy (*u*) arising from confidence or good faith towards the patentee, knew of the invention at the date when the plaintiff took out his patent?" (*v*)

Public
Know-
ledge.
—

Jessel, M.R., in *Plimpton v. Malcolmson*, (*w*) discussing the question, What is meant by a thing being known to the public in England, said—

Per *Jessel, M.R.*

“Here, again, we must have recourse to authority, and also must consider what the principle is that is to be deduced from the authorities. When you say a thing is known to the public, and part of common knowledge, of course you do not mean that every individual member of the public knows it. That would be absurd. What is meant is, that if it is a manufacture connected with a particular trade the people in the trade shall know something about it; if it is a thing connected with a chemical invention people conversant with chemistry shall know something about it. And it need not go so far as that. You need not show that the bulk or even a large number of those people know it. If a sufficient number know it or if the communication is such that a sufficient number may be presumed or assumed to know it, that will do. Now, how are they to know it? They are to know it by being told of it, or informed of it in some way. You may show that they know it by showing that the trade had commonly used it. That is the best evidence you can have. You may show the thing was known because it was used and brought into practice, which is a case I have not now to consider. But you may show that they knew it in another way—that it was published or made known to the public. I use the word ‘published’ in that sense. How made known to the public? It has been held that if it is in a specification, certainly in a modern specification, which has been enrolled in the Patent Office, and not published besides, that will do. And it has also been held that, as a common rule, if the description has been printed in *England*, and published in *England*, in a book which circulates in *England*, that will do. But, after all, it is a question of fact. The Judge must decide, from the evidence brought before him, whether it has, in fact, been sufficiently published to come within the definition of being made known within the realm.”

It has been shown (*x*) that an invention may be perfectly good subject-matter for a patent, though some or all of the

Test of
novelty.

(*u*) p. 140 *post.*
(*v*) Per *Fry, L.J.*, *Humpherson v. Syer*, (1887) 4 R. P. C. 407, 414;
Tickelpenny v. Army and Navy Co-

operative Society, (1888) 5 R. P. C. 405.
(*w*) (1876) L. R. 3 Ch. D. 556.
(*x*) p. 71 *ante*.

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ledge.
—

parts of which it consists may be old, if the entire combination is a new manufacture. The proper test as to the novelty of the invention is whether the subject-matter claimed *as a whole is new*, though it may consist of old parts, provided the patentee does not claim them, but only the combination of the old with the new. (y)

Per Lord
Hatherley, L.C.

Lord *Hatherley*, L.C., in *Cannington v. Nuttall*, (z) stated the test of novelty in the following words:—

“Few things come to be known now in the shape of new principles, but the object of an invention generally is the applying of well-known principles to the achievement of a particular result not yet obtained, and I take it that the test of novelty is this: Is the product which is the result of an apparatus for which the inventor claims letters patent effectively obtained by means of your new apparatus, whereas it had never before been effectively obtained by any of the separate portions of the apparatus which you have combined into one valuable whole for the purpose of effecting the object you have in view?”

Per Lord
Westbury, L.C.

Lord *Westbury*, L.C., in *Hill v. Evans*, (a) referring to the principle upon which prior publication will vitiate a subsequent patent for an invention, said:—

“The invention must be shown to have been before made known. Whatever, therefore, is essential to the invention must be read out of the prior publication. If specific details are necessary for the practical working and real utility of the alleged invention, they must be found substantially in the prior publication. Apparent generality, or a proposition not true to its full extent, will not prejudice a subsequent statement which is limited, accurate, and gives a specific rule of practical application. The reason is manifest, because much further information, and therefore much further discovery, are required before the real truth can be extricated and embodied in a form to serve the uses of mankind. It is the difference between the ore and the refined and pure metal which is extracted from it. . . . Upon principle, therefore, I conclude that the prior knowledge of an invention to avoid a patent must be a knowledge equal to that required to be given by a patent—viz., such a knowledge as will enable the public to perceive the very discovery and to carry the invention into practical use.”

(y) *Newton v. The Grand Junction Railway Co.* (1846) 5 Exch. 331; 20 L. J. Ex. 427 n.; *Cannington v. Nuttall*, (1871) L. R. 5 H. L. 205; 40

L. J. Ch. 739.

(z) (1871) L. R. 5 H. L. 216.

(a) (1862) 13 L. J. Ch. 457.

In *Betts v. Menzies*, (b) Lord Westbury explained the principle thus :—

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Know-
ledge.

“I pass on to the next conclusion which is involved in the answer of the learned Judges to your Lordships’ question, and that conclusion, I think, is also of great importance to the law of patents because it results from that opinion that an antecedent specification ought not to be held an anticipation of a subsequent discovery, unless you have ascertained that the antecedent specification discloses a practicable mode of producing the result which is the effect of the subsequent discovery. Here we attain at length to a certain undoubted and useful rule. For the law laid down, with regard to the interpretation of a subsequent specification, is equally applicable to the construction to be put upon publications or treatises previously given to the world, and which are frequently brought forward for the purpose of showing that the invention has been anticipated. The effect of this opinion I take to be this, if your Lordships shall affirm it, that a barren, general description, probably containing some suggested information, or involving some speculative theory, cannot be considered as anticipating, and as therefore avoiding, for want of novelty, a subsequent specification or invention which involves a practical truth, productive of beneficial results, unless you ascertain that the antecedent publication involves the same amount of practical and useful information.” (c)

The mere statement of the desirability of achieving an unobtained result does not invalidate a patent for an invention which actually achieves that result. (d)

Statement that a result is desirable is no anticipation.

Also an alleged anticipation which is merely a scientific curiosity of no practical value for the purpose for which the patentee proves his invention to be practically valuable will not destroy the subsequent patent, e.g., the unguent *œsypus* described by *Dioscorides* was no publication of *Lanolin*, which formed the subject-matter of a valid and valuable patent. (e)

Mere scientific curiosity is no anticipation.

A combination which is, in fact, capable of yielding a result which has never been observed and appreciated by any person using the combination is not a publication which will vitiate the patent of a man who perceives the result, points it out

Combination capable of yielding unobserved result does not anticipate invention which utilises it.

(b) (1862) H. & C. 154.

P. C. 84.

(c) See also per Lord Chelmsford, L.C., *Betts v. Neilson*, (1868) L. R. 3 Ch. App. 435.

(e) *Benno Jaffé und Darmstaedter Lanolin Fabrik v. Richardson*, (1893) 11 R. P. C. 93, 261; see also *Young v. Fernie*, (1863) 4 Griff. 577, 611.

(d) *Thomson v. Batty*, (1889) 6 R.

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ledge.

and utilises it. (*f*) Thus, *Hopkinson's* patent for the three-wire system for the economic distribution of electricity was not anticipated by a previous and similar arrangement of three wires, which had only been used for the purpose of working lamps in "wings," as was evident from the fact that the return cable was of thick section. This did not anticipate the patentee's discovery that the three-wire system could be used to effect a great saving, by making the centre and return cable of thin cross section, and using it according to the patentee's plan shown in the specification. (*g*) Again, when the invention of the patentee is a combination which is designed for a particular class of purposes, and is the first combination actually applied with success to carry out such purposes, then prior similar combinations, not identically the same, are not considered publications of the combination which actually does accomplish the patentee's object. The Courts consider that in such a case invention was requisite to make the necessary alterations from the old combinations to enable them to be applied to the object the patentee had in view. (*h*)

A patent for an apparatus, which is suitable for a particular and novel purpose—*e.g.*, disinfecting by steam at high pressure—for which no previous apparatus is suited, and is also stated in the specification to be suited for a purpose for which a previous and very similar apparatus is suited, is not vitiated by that previous apparatus if the claim is confined to the use of the new apparatus for the new purpose. (*i*).

WANT OF NOVELTY IN PART.

Consideration
is entire.

The consideration upon the strength of which a patent is granted is in law said to be "entire," that is, a failure of part of the consideration will have the same effect on the validity of the patent as the failure of the whole consideration would have. Hence it follows that, if the patent includes more than one head of invention, the want of novelty in any one of those heads will invalidate the whole on the ground of failure of part of the consideration. (*j*) And that, if, in the case of a single

(*f*) *Hopkinson v. St. James's and Pall Mall Electric Light Co.*, (1893) 10 R. P. C. 46, 60.

(*g*) *Ibid.*

(*h*) See *Chadburn v. Mechan*, (1895) 12 R. P. C. 120, 134.

(*i*) *Lyon v. Goddard*, (1893) 10 R. P. C. 121, 334; 11 R. P. C. 354, at p. 362.

(*j*) *Turner v. Winter*, (1787) 1 W. P. C. 77; 1 T. R. 602; *Bloxam v. Elsec*, (1825) 6 B. & C. 178; 1 Carp. 444; *Morgan v. Seaward*, (1837) 1 W. P. C.

invention, the subject-matter of an individual claiming clause turns out to be old the patent will be rendered entirely void. (k)

Want of
Novelty
in Part.

In either of the above cases the patent would also be void on the ground of false suggestion, for, before the grant was made, the patentee in his application must have declared himself to be in possession of an invention of which he, or, in the case of a joint application, one or more of the applicants, claimed to be the true and first inventor or inventors, and which was not in use by any other person or persons. (l) Moreover, the patent contains an express condition avoiding it in the event of the representation as to true and first inventor, and prior use, turning out to be untrue. (m) Although the Statute of Monopolies invalidates a patent in the event of there being no novelty in the invention, and consequently the patent would be void so far as related to that which was old, yet the principle on which the patent has been held to be void altogether in the event of a material part turning out to be old is that "the consideration for the grant is the novelty of all, and, the consideration failing, or, in other words, the Crown having been deceived in its grant, the patent is void, and no action maintainable upon it." (n)

Consideration
is entire.

For example, in *Brunton v. Hawkes* (o) the patent was for an invention of improvements in the manufacture of ships' anchors, windlasses, and chain cables. At the trial it was proved that the mode of manufacturing anchors described in the plaintiff's specification had never been applied before to ships' anchors. But it had been applied to the adze anchor and the mushroom anchor. These anchors are used only for the purpose of mooring floating lights or vessels intended to be stationary; and are never taken on board. The jury found a verdict for the plaintiff, and the defendant obtained a rule nisi for a new trial, which the Court made absolute. In delivering judgment, *Abbott, C.J.*, said:—

196; *Kay v. Marshall*, (1837) 2 W. P. C. 71; *Cropper v. Smith*, (1884) 1 R. P. C. 87; 2 P. O. R. 61; *Fairfax v. Lyons*, (1891) 8 R. P. C. 401.

(k) *Crossley v. Beverley*, (1829) 1 W. P. C. 106; *Hill v. Thompson*, (1817) 8 Taunt. 382; 2 B. Moore, 443; *Morgan v. Seaward*, (1837) 1 W. P. C. 192; *Manton v. Parker*, (1815) Dav. P. C. 327; 1 W. P. C. 192 n.; *Bloxam v. Elsee*, (1825) 6 B. & C. 169; 1 Carp. 444; *Roberts v. Heywood*, (1879) 27 W. R. 454; *Gibson v. Prand*, (1842)

1 W. P. C. 636; *Hill v. Tombs*, (1881) Engineer, 51, p. 274. Under the Act of 1883 patents do not usually comprise more than one invention. See pp. 241 and Vol. II. p. 8.

(l) p. 297 *post*.

(m) See Form of letters patent in Appendix.

(n) Per Parke, B., in *Morgan v. Seaward*, (1837) 2 M. & W. 544; Mur. & H. 55; 1 Jur. 527; 1 W. P. C. 196.

(o) (1820) 4 B. & Ald. 541.

Want of
Novelty
in Part.

Consideration
is entire.

Judgment of
Abbott, C.J.,
in Brunton v.
Hawkes.

“ I think that so much of the plaintiff's invention as respects the anchor is not new, and that the whole patent is therefore void. The mode of joining the shank to the flukes of the anchor is to put the end of the shank, which is in the form of a solid cylinder, through the hollow and conical aperture, and it is then made to fill up the hollow and to unite itself with it. Now that is precisely the mode by which the shank of the mushroom anchor is united to the mushroom top, by which the shank of the adze anchor is united to its other parts. It is indeed the mode by which the different parts of the common hammer and the pickaxe also are united together. Now a patent for a machine each part of which was in use before, but in which the combination of the different parts is new, and a new result produced, is good, because there is a novelty in the combination. But here the case is perfectly different : formerly three pieces were united together ; the plaintiff only unites two, and, *if the union of those two had been effected in a mode unknown before, as applied in any degree to similar purposes, I should have thought it a good ground for a patent ;* but unfortunately the mode was well known and long practised. I think that a man cannot be entitled to a patent for uniting two things instead of three, *when that union is effected in a mode well known and long practised for a similar purpose.* It seems to me, therefore, that there is no novelty in that part of the patent as affects the anchor, and if the patent had been taken out for that alone I should have had no hesitation in declaring it bad. Then, if there be no novelty in that part of the patent, can the plaintiff sustain his patent for the other part as to the mooring chain ? As at present advised, I am inclined to think that the combination of a link of this particular form with the stay of the form which he uses, although the form of the link might have been known before, is so far new and beneficial as to sustain a patent for that part of the invention, if the patent had been taken out for that alone. But inasmuch as one of the things is not new, the question arises whether any part can be sustained. It is quite clear that a patent granted by the Crown cannot extend beyond the consideration of the patent. The King could not, in consideration of a new invention in one article, grant a patent for that article and another. The question then is, whether, if the party applies for a patent, reciting that he has discovered improvements in three things, and obtains a patent for these three things, and in the result it turns out that there is no novelty in one of them, he can sustain his patent. It appears to me that the case of *Hill v. Thompson*, which underwent great consideration in the Common Pleas, is decisive upon that question. In that case the patent was granted to the plaintiff for the invention of certain

improvements in the smelting and working of iron; and the Court of Common Pleas appears to have considered that the improvement introduced by the plaintiff into what may properly be called the smelting of iron was the obtaining iron from that cinder and slag which before had been thrown away as refuse, and that may be considered as new. It appeared, however, that the plaintiff claimed further the merit of having discovered that the application of lime in certain stages of the process would cure a disease common to all iron, not merely to that which he was to produce, but to iron originally manufactured from the fresh ore. Now it turned out that that was not a discovery, for the application of lime to iron made from the cinder, originally used in making ore, was known and practised before. No two things can be more distinct in their nature than the obtaining of iron from a material from which it was impracticable to obtain it before, and the cure or prevention of a disease to which all iron was subjected. In that case, however, the Court of Common Pleas held that, admitting there was novelty in the one, yet as there was no novelty in the other, the patent was wholly void. The only difference between that case and this is, that here the plaintiff, instead of saying that he has made certain improvements, states the improvements; but still he claims the merit of having invented improvements in all the three, and that they are new; and the consideration of the patent is the improvement in the three articles, and not in one; for an improvement in only one of them would render the patent bad. The consideration is the entirety of the improvement of the three; and if it turns out there is no novelty in one of the improvements the consideration fails in the whole, and the patentee is not entitled to the benefit of that other part of his invention."

Want of
Novelty
in Part.

Consideration
is entire.

Though want of novelty in an essential part of the consideration (p) invalidates a patent, if a specification claims an old thing for use only in connection with, and as subsidiary to, something else which is new, want of novelty in the old thing forming the basis of the subsidiary claim does not invalidate the grant. (q)

Claim to an
old thing is
not fatal if
subsidiary to
something
new.

Thus, in *Plimpton v. Spiller*, (r) a patentee claimed first a mode of applying rollers and runners to the footstand of skates so that they might be cramped or turned so as to cause the skate to run in a curved line by the canting or tilting of the footstand; and secondly, the mode of securing the runners and making them reversible, as described. The

(p) p. 113 ante.
(q) p. 260 post.

(r) (1877) L. R. 6 Ch. D. 412; co
p. 260 post.

Analogous Uses. Novelty and Discovery. Court of Appeal held that, assuming there was nothing novel in the mode of securing the runners to the footstand, yet the want of novelty in the second claim did not invalidate the patent, because the second claim was for a subsidiary invention to be used only in connection with the principal invention.

ANALOGOUS USES.

Prior analogous use may or may not be publication.

A perfectly valid patent may be obtained for an invention which consists in a new application of a thing which was perfectly well known before. Of course the application which is the subject of the subsequent patent must be totally distinct and novel as compared with any application previously made, and it is always a question of evidence as to whether former applications are so analogous to the one claimed by the subsequent patentee as to amount virtually to the same and so render his patent bad as claiming that which is in fact not new. (s) The use of a thing for one purpose is not an anticipation of a patent which claims the use of the same thing for a totally different purpose. (t)

NOVELTY AND DISCOVERY.

Distinction between novelty and discovery.

There is a great distinction between novelty and discovery; for a thing may have been discovered before, and in that sense not be new, but if the previous discovery has never been made public, or substantially used, it will not be sufficient to upset the patent of a subsequent discoverer on the ground of want of novelty. (u)

This will appear from a contrast of *Dollond's Case* (x) with *Tennant's Case*, (y) and *R. v. Arkwright*. (z) In *Dollond's Case* the question was, "Who was the true inventor within the meaning of the statute? *Hall* had made the discovery in his closet, but had never made it public; and, on this ground, *Dollond's* patent was confirmed. In *Tennant's Case* the great utility of the invention, which related to bleaching, was proved by the evidence of persons engaged in the trade. On the other hand, a bleacher near Nottingham deposed that

(s) pp. 80-98 *ante*.
 (t) *Ibid.*; *Westley v. Tolley*, (1894) 11 R. P. C. 602; *Mathews v. Parmenter*, (1896) 13 R. P. C. 511.
 (u) *Hill v. Thompson*, (1818) per Dallas, J., Holt, N. P. C. 636; 2 Moore,

429; 8 B. Taunt. 382; 1 W. P. C. 244; see also p. 136 *post*.
 (x) (1776) 1 W. P. C. 43.
 (y) (1795) 1 W. P. C. 125 n.
 (z) (1785) 1 W. P. C. 71.

he had used the same means of preparing bleaching liquor for six years previous to the date of the patent, but that he had kept his method a secret from all but his two partners and his two servants concerned in preparing it. In addition to this, different conversations were proved to have passed between *Tennant* and a chemist of Glasgow, before the patent, and in these conversations the chemist had suggested to *Tennant* the basis of the improvement in question. Under these circumstances, *Tennant* was deemed not to be the inventor, and a nonsuit was obtained. In the case of *Arkwright's* patent, with respect to a particular roller forming part of a machine, the evidence was that *Arkwright* had been told of it by one *Kay*; that, being satisfied of its value, he took *Kay* as a servant, kept him for two years, employed him to make models, and afterwards claimed it as his own invention, and made it the foundation of a patent. The same fact was proved as to a crank, which had been discovered by a person of the name of *Hargreave*, which also had been adopted by *Arkwright*. And although it had been made use of to some extent before by a few, a general ignorance with respect to it was proved by a great number of persons in the trade. *Buller, J.*, was of opinion that, though it might be perfectly true—that is, the general ignorance as to these improvements—it signified nothing; the fact that the witnesses on the part of the defendant had not heard of those improvements was no contradiction of previous knowledge and previous use by others.

Anticipation and Publication.
—

ANTICIPATION AND PUBLICATION.

It must also be noticed that there is a great distinction between anticipation and publication. An invention has been anticipated when it has been previously made; and it has been published when it has been previously made and disclosed. In the case of *Dollond's* patent, (a) *Hall's* discovery was an anticipation of *Dollond's*, but not a publication of it, whereas in *Tennant's Case*, and *R. v. Arkwright*, (b) the subject of the patent, in each, had not only been anticipated, but had also been published before.

Distinction between anticipation and publication.

(a) p. 116 ante.

(b) p. 116 ante.

Equiva-
lents.
Redis-
covery of a
Lost Art.

—
Prior use of
equivalents
may or may
not be pub-
lication.

EQUIVALENTS.

If an invention differs only from a previous invention in that for one part in the former invention there is substituted an equivalent, though somewhat different part in the latter, the mere substitution of the equivalent will not be sufficient to sustain a patent for the second invention, if the analogous parts were known at the date of the first patent to be equivalents; (c) but any person may obtain a patent, valid as regards novelty, for the use of equivalents, which were not taken to be equivalents at the time the patent for the former discovery was granted. (d)

REDISCOVERY OF A LOST ART.

Is the redis-
covery of a
lost art a
patentable
novelty?

It may be questioned whether if an invention had been formerly used and abandoned many years ago, and the whole thing had been lost sight of, such a state of facts would prevent, on the ground of want of novelty, a person who subsequently rediscovered the invention from obtaining a valid patent in respect of it.

There does not appear to be any judicial decision one way or the other on this point, which was noticed by Lord *Lyndhurst*, L.C., in *The Househill Co. v. Neilson*. (e) The House of Lords in that case purposely refrained from expressing an opinion on the question, which did not then call for decision. It would appear from an application of the principles in this chapter discussed, that if the invention has ever been the subject of a patent less than fifty years old, or has been described in some written document, which can be produced, the fact that the invention has been lost sight of, and not been used by the public for a long time, will not enable a later discoverer to obtain a patent for it, as he would clearly not be the true and first inventor. (f) A state of facts might, however, be supposed in which the case would be different. For instance, (g) an encaustic tile or a particular kind of stained glass might be perfectly well known to exist at the present day, but the mode of producing the tile, or the particular kind

(c) *Heath v. Unwin*, (1854) 5 H. L. Cas. 505; 2 W. P. C. 279; see p. 73 ante.

(d) *Heath v. Unwin*, (1854) 5 H. L. Cas. 505, 538; *Badische Anilin und*

Soda Fabrik v. Levinstein, (1885) 2 R. P. C. 90; see p. 73 ante.

(e) (1843) 1 W. P. C. 717.

(f) See p. 72 ante.

(g) 1 W. P. C. 718 n.

of glass, might be a long-lost art. In such a case, if an inventor newly discovers the art of producing the encaustic tile, or the particular kind of glass, there does not appear to be any rule of law depriving the Crown of the right to grant a patent securing to the inventor the monopoly of the art which he may have discovered. For it must be observed that the fact of the existence of the result which the alleged newly discovered art produces only proves conclusively that *an art* of producing that result must have been previously known, not that *the art* which the patentee has described was ever before practised. There may be many ways of arriving at a known result, and, as has been pointed out, (*h*) each one of those ways, provided they are all different, may be the subject of a patent. (*i*) If the existing result convey at once to an observer information as to the way in which it was obtained, and that way is an exercise of the art which the patentee has described, then the previous existence of the result would make the patent void, there being no consideration given to the public. In such circumstances the patentee would only have described an invention which the public was already possessed of, as shown by the existence of the result. (*j*)

Prior User.

PUBLICATION BY PRIOR USER.

It is evident that a knowledge of an invention cannot possibly be communicated to the public until the invention has been completed either by the patentee or some one else before him, and it therefore follows that any experiment made prior to the date of the patent, which resulted in failure, or only a partial success, cannot, even though published, amount to a disclosure of a perfected discovery. A machine which is useless, and a failure, is not an anticipation of a similar machine effecting the object for which the useless machine was designed, though there may be a degree of similarity in the details of the two. (*k*)

Prior unsuccessful experiment or useless machine is no publication.

Thus, a machine designed by the patentee to be used for

(*h*) p. 63 *ante*.

(*i*) See *Morgan v. Windover*, (1888) 5 R. P. C. 306.

(*j*) See *Milner's Patent*, (1898) 15 R. P. C. 205.

(*k*) *Cornish v. Keene*, (1835) 1 W. P. C. 508; *Househill Co. v. Neilson*, (1843) 1 W. P. C. 673; *Murray v. Clayton*, (1872) L. R. 7 Ch. 570; 15

Eq. 115; 1 W. R. 498; 42 L. J. Ch. 191; *Tangye v. Stott*, (1865) W. N. 1886, p. 63; *Jones v. Pearce*, (1832) 1 W. P. C. 124; *Stead v. Williams*, (1843) 2 W. P. C. 135; *Barlow v. Bayliss*, (1875) 1 Griff. P. C. 44; *Shaw v. Jones*, (1889) 6 R. P. C. 336; *Cannington v. Nuttall*, (1871) L. R. 5 H. L. 205.

Prior User. the novel process of disinfecting by steam at high pressure, was held not to be anticipated by a very similar machine which was structurally incapable of being used with steam at high pressure. (l)

A mere experiment, supposed by the person making it to be fruitless, and abandoned because it was not brought to a complete result, will not prevent a more successful investigator, who adds the last link of improvement towards bringing it to a state of perfection, from maintaining a patent for the invention; (m) nor does the publication of a method of achieving a particular result vitiate a patent for achieving that result by different means involving the exercise of invention. (n)

Law of anticipation by experiments stated by Tindal, C.J.

Tindal, C.J., in *Cornish v. Keene*, (o) stated the law of anticipation by experiments in the following words:—

“A man may make experiments in his own closet for the purpose of improving any art or manufacture in public use; if he makes these experiments and never communicates them to the world, and lays them by as forgotten things, another person who has made the same experiments, or has gone a little further, or is satisfied with the experiments, may take out a patent, and protect himself in the privilege of the sole making of the article for fourteen years; and it will be no answer to him to say that another person before him made the same experiments and therefore that he was not the first discoverer of it, because there may be many discoverers starting at the same time, and many rivals that may be running on the same road at the same time, and the first which comes to the Crown and takes out a patent, it not being generally known to the public, is the man who has a right to clothe himself with the authority of the patent and enjoy its benefits.”

And again, the same learned Judge directed a jury that a mere experiment, or a mere course of experiments, for the purpose of producing a result, which is not brought to its completion, but begins and ends in uncertain experiments, is not such an invention as should prevent another person, who is more successful or pursues with greater industry the chain

(l) *Lyon v. Goddard*, (1893) 10 R. P. C. 121, 334; 11 R. P. C. 354.

(m) *Galloway v. Bleadon*, (1839) 1 W. P. C. 529; *Jones v. Pearce*, (1832) 1 W. P. C. 124; *Tangue v. Stott*, (1865) W. N. 1886, p. 68; *Stead v. Williams*, (1813) 2 W. P. C. 135; *Hills v. London Gas Light Co.*, (1860) 5 H. & N. 312; *Otto v. Linford*, 46 L.

T. N. S. 39.

(n) pp. 62-64 *ante*; *Hills v. London Gas Light Co.*, (1861) 5 H. & N. 312; *Otto v. Linford*, (1881) 46 L. T. N. S. 39; *Hullett v. Hague*, (1831) 1 Carp. R. 501; 2 B. & A. 370; *Minter v. Mower*, (1835) 1 W. P. C. 140.

(o) *Cornish v. Keene*, (1835) 1 W. P. C. 508; but see Vol. II. chap. i.

in the line that has been laid out for him by the preceding Prior User. inventor, from availing himself of it, and having the benefit of it. (p)

It is a question of fact in each case whether a prior user, which is relied on as a publication of the invention claimed by a subsequent patentee, was a complete publication or only an incomplete experimental user. (q)

An invention abandoned must be *prima facie* presumed not to have been completed, but to have rested in experiment and trial; but if it was completed it does not signify whether it was completely abandoned, or whether it was continued to be used down to the very date of the patent, provided that it was published. (r)

The following cases illustrate this point:—

In *Taylor's Patent*, (1896) 13 R. P. C. 482, it appeared that the patentee had made certain experimental trials of the patented article (a grate) in his own house, and also had used the complete article in the presence of visitors to whom it had been explained. The Court held that though part of the use relied on to invalidate the patent was merely experimental, yet there had also been public user before the date of the patent, and so made an order for its revocation.

In *Jones v. Pearce*, (1832) 1 W. P. C. 122, the patent called in question was for "improvements in wheels for carriages," and the defendant proved at the trial that, prior to the date of the plaintiff's patent, wheels similar to those described in the specification had been made by a Mr. *Strutt*. *Patterson, J.*, directed the jury that if they were of opinion that Mr. *Strutt's* invention was an experiment, that he found it did not answer, and ceased to use it altogether, and abandoned it as useless, and nobody else followed it up, and that the plaintiff's invention, which came afterwards, was his own invention, and remedied the defects of Mr. *Strutt's* wheel, then there was no reason for saying that the plaintiff's patent was not good.

(p) *Galloway v. Bleadon*, (1839) 1 W. P. C. 529; see also *Bereton v. Richardson*, (1884) 1 R. P. C. 165; *Moseley v. Victoria Rubber Co.*, (1887) 4 R. P. C. 211; *Humpherson v. Syer*, (1887) 4 R. P. C. 184, 188; *Morgan v. Windover*, (1887) 4 R. P. C. 417; 5 R. P. C. 295; 7 R. P. C. 131; *Edison v. Swan*, (1889) 6 R. P. C. 277; *Winby v. Manchester Tramways Co.*, (1889) 6 R. P. C. 359; 7 R. P. C. 30.

(q) *Mathews v. Parmenter*, (1896) 13 R. P. C. 514; *Williams v. Gowan*, (1895) 12 R. P. C. 387; *Hagginmacher v. Watson*, (1897) 14 R. P. C. 349,

631; *Dutton v. Brierley*, (1897) 14 R. P. C. 685; *Dowler v. Keeling*, (1898) 15 R. P. C. 214; *Haskell Golf Ball Co., Ltd. v. Hutchison*, (1905) 22 R. P. C. 477; 23 R. P. C.

(r) *The Househill Co. v. Neilson*, (1843) 1 W. P. C. 709, 713; *Galloway v. Bleadon*, (1839) 1 W. P. C. 525; *Morgan v. Windover*, (1888) 5 R. P. C. 295, 303; *Dowrance v. Fletcher*, (1899) 16 R. P. C. 150; *Crossley v. Coates*, (1904) 21 R. P. C. 282; *Haskell Golf Ball Co., Ltd. v. Hutchison*, (1905) 22 R. P. C. 477.

Publication by experiment or abandoned user is a question of fact.

An invention abandoned is presumed to have been a failure.

Illustrative cases.

Taylor's patent.

Jones v. Pearce.

Prior User.

Publication
by experiment
or abandoned
user is a ques-
tion of fact.
Illustrative
cases.

*Carpenter v.
Smith.*

*Househill Co.
v. Neilson.*

In *Carpenter v. Smith*, (1841) 1 W. P. C. 534, Lord *Abinger*, C.B., expressed the same thing thus: "A man is entitled to a patent for a new invention, and if his invention is new and useful he shall not be prejudiced by any other man having invented that before and not made any use of it; because the mere speculations of ingenious men, which may be fruitful of a great variety of inventions, if they are not brought into actual use, ought not to stand in the way of other men equally ingenious who may afterwards make the same inventions and apply them."

In *Househill Co. v. Neilson*, (1843) 1 W. P. C. 673, the Lord Justice-Clerk *Hope* had directed the jury to the effect that a prior abandoned user of the invention was not fatal to the validity of the patent, and, on the finding of the jury, had entered a verdict for the plaintiff. The defendant company thereupon appealed to the House of Lords, and the House held that the direction of the learned Lord Justice-Clerk was bad in law, and reversed the judgment of the Court of Session. The judgment of Lord *Brougham* contains the following passage (1 W. P. C. 713):—

"Now, see how this mistake, with respect to the abandonment and continuance, arose. If an invention has not been completed, but if it all rests in experiment and trial, then it is a most material circumstance as a test whether any given act of a party other than the invention [*sic*, inventor] was trial or complete invention; it is a most salutary and important test to apply with a view to ascertain that, to see whether he abandoned or continued it. If he abandoned it, if he gave it up altogether, and for twenty or thirty years did nothing, it is a very strong presumption that it was only experimental—not an invention completed. But suppose it was complete, and suppose it is admitted not to have been a trial—suppose it is allowed to have been an invention executed, if I may so speak, not merely executory, or not merely in the progress of invention, but an invention completed—then it is one of the greatest errors that can be committed, in point of law, to say that, with respect to such an invention as that, it signifies one rush whether it was completely abandoned or whether it was continued to be used down to the very date of the patent. Provided it was invented and publicly used at the time, twenty or thirty years ago, in this case forty years ago, it is perfectly immaterial, not immaterial to the second question, the second condition—namely, whether it was used or not at the time of the granting of the patent—but totally immaterial to the other question, which is equally necessary to be ascertained in the inventor's favour, whether or not he was the first and true inventor—for he must be the first and true inventor, as well as the only

person using it at the time, otherwise he is not entitled to the letters patent. Therein lies the error which has been committed by the learned Judge." **Prior User.**

In *Walton v. Bateman*, 1 W. P. C. 619, (s) the validity of *Walton's* patent for "improvements in cards for carding wool, cotton, silk, and other fibrous substances," was questioned, on the ground that the improvement consisting in using caoutchouc as a substitute for leather as an elastic bed in which to fix the teeth, was not novel. It appeared in evidence that a certain material called "*Hancock's* patent leather," had been manufactured and sold prior to the date of the patent, and it was contended that this "*Hancock's* patent leather" was substantially the same thing as the elastic bed in which the teeth of the plaintiff's cards were fixed, and further, that *Hancock's* material had been supplied to certain manufacturers during a period of about a year and a half, several years before the date of the plaintiff's patent, and that it had been used in the construction of cards, but had not been so used since that time. *Cresswell*, J., said to the jury: "Supposing that the article did embody the principle of the plaintiff so as to present to persons using it the properties, qualities, and advantages in principle of that article which the plaintiff makes, the question for you will be whether that use is not to be considered rather in the nature of an experiment than of any public user of the article, so as to deprive the plaintiff of the fruit of his discovery in respect of this manufacture."

Publication by experiment or abandoned user is a question of fact.

Illustrative cases.

Walton v. Bateman.

And, in *Stead v. Williams*, (1843) 2 W. P. C. 135, the same learned Judge observed: "I take it that there is a great difference between the knowledge of an invention as a thing that would answer and was in use, and the knowledge of it as a mere experiment that had been found to be a failure, and thrown aside. If a person has had a scheme in his head and has carried it out, but after a trial has thrown it aside, and the thing is forgotten and gone by, then another person re-introducing it may, within the meaning of the Act, be the inventor and the first user of it, so as to justify a patent." **Stead v. Williams.**

In *Hills v. London Gas Light Co.*, (1860) 5 H. & N. 312, the finding of the jury that one *Croll* had by means of the method for which the plaintiff had subsequently obtained a patent, purified many thousand feet of gas, but that this user was by way of experiment only, saved *Hills'* patent from being upset on the ground of want of novelty. And the Court refused to grant a new trial, the judgment containing the following passage: "The word 'experiment,' in the cases referred to, has been used, not as the sole test upon a matter of this sort, but

Hills v. London Gas Light Co.

(s) See also *Tangye v. Stott*, W. N. 1866, p. 68; 14 W. R. 128, 386.

Prior User.

Publication by experiment or abandoned user is a question of fact. Illustrative cases.

Re Adamson's patent.

as indicating a class of practice, and for the purpose of showing that if there has been a user of an invention not of a substantial character, but in the character of an experiment, then, although the thing has been done before, it does not preclude a person from taking out a patent for it; so that although what *Croll* did may not have been strictly in the nature of an experiment, still the jury have so found it, and we cannot grant a new trial." (t)

In *Re Adamson's Patent*, (1856) 6 De G. M. & G. 420; 25 L. J. Ch. 456, on the other hand, where a person invented certain machinery during the fulfilment of a contract for the building of a pier, and used that machinery for four months in a place to which the public had access, before applying for the patent, and, after the utility of the machinery in question had been determined and profit had been derived from the public user, made an application, he was held not to be entitled to a patent.

Experimental user, though pecuniarily profitable, is not necessarily publication.

An inventor may, in certain cases, derive pecuniary profit from an experimental user of his invention before applying for protection, without rendering his patent subsequently obtained deficient on the ground of want of novelty. Thus, in the case of *Newall's* patent for "improvements in apparatus employed in laying down submarine electric telegraph wires," experiments on dry land were necessarily not sufficient to prove the utility of the apparatus for the purpose for which it was designed, and *Newall* accordingly tested the practicability of the invention during the laying of a submarine cable under a Government contract. The Court held that this user, notwithstanding the fact that *Newall* had unavoidably disclosed it to others and had derived profit from it, was only experimental, and did not prevent him obtaining a valid patent for the invention. (u) The point in *Newall's* case is that there the experimental trial was to prove and test the utility of the invention itself in contradistinction to the working efficiency of a complicated machine, constructed according to an invention already known to be useful. This distinguishes *Newall v. Elliott* from the above-cited case of *Re Adamson's Patent*, or a case like *Hoe v. Foster*, (v) where it was unsuccessfully sought to establish that certain preliminary trials and alterations in a complicated machine constructed according to an invention subsequently patented, but at the date of the trials

(t) See also *Lewis v. Marling*, (1829) 10 B. & C. 22; 4 Car. & P. 57; 1 W. P. C. 493.

(u) *Newall v. Elliott*, (1858) 4 C. B.

N. S. 269; see also *Morgan v. Seaward*, (1837) 1 W. P. C. 194.

(v) (1898) 16 R. P. C. 33.

known to be useful, were only experiments which did not invalidate the subsequently obtained patent. The preliminary trials were made by persons other than the patentee (though probably only in conjunction with the patentee) and not under terms of secrecy towards him; and the machine satisfactorily performed its functions before the date of the patent and was not constructed for the purpose of testing the utility of the invention which was already established.

Apart from experimental user it is to be observed that it is competent for a person himself before the date of a patent to use the invention, the subject of the grant, in either or both of two ways. First, he may use it openly in such a manner that the user will convey to the mind of any one seeing it a knowledge of what the invention consists, *c.g.*, if the alleged invention relate to the particular construction of a lock, any person who has before the date of the patent so constructed a lock, and publicly used it in this country so as to exhibit the construction, will thereby have published the invention, and any subsequent patent for it could not be sustained. (*x*) Secondly, the inventor may so use his invention that the user will not enable any one seeing it to discover in what the invention really consists—*c.g.*, in the case of a chemical invention, a dye for instance, the dye might be produced and known, but the existence of it would not demonstrate the method according to which it was prepared, and no person other than the manufacturer in possession of the secret would be able to produce it—in such a case it is submitted, for reasons which will appear hereafter, (*y*) that such a user would not prevent the manufacturer, though it might prevent another person who should discover the secret, from obtaining a patent valid on the ground of novelty for the invention. (*z*) Thus, a prior user of an invention may be made in public or in secret. It is well settled law that, if the invention has been used publicly, a subsequent patent would, under sec. 6 of the Statute of Monopolies, be void, (*a*) whereas if the user has only been secret, the grant *may* be sustained, (*b*) and this

Prior User.

Prior user of the invention by the patentee himself.

(*x*) See *Carpenter v. Smith*, (1841) 1 W. P. C. 539, 534; also *Stead v. Williams*, 2 W. P. C. 136; *Heath v. Smith*, (1854) 2 W. P. C. 278; *Honiball v. Bloomer*, (1854) 10 Exch. 588; *Honiball's Patent*, (1855) 2 W. P. C. 209; *Young v. Fernie*, (1863) 4 Giff. 577; *Bereton v. Richardson*, (1884) 1 R. P. C. 177; *Poulton's Patent*, (1906)

23 R. P. C. 183.

(*y*) pp. 135-137 *post*.

(*z*) See *Hancock v. Somervell*, (1851) 39 Newton, L. J. 158.

(*a*) *Cornish v. Keene*, (1835) 1 W. P. C. 508.

(*b*) *Dollond's Case*, (1776) 1 W. P. C. 43; but see p. 136 *post*.

Prior User. whether the user has been by the inventor himself, (c) or by a manufacturer for the inventor under terms of secrecy to him, (d) or his workmen. (e) It may be open to question, however, as to whether if a patentee has made profit by a prior secret user of the invention, he has not thereby rendered his subsequent patent null and void. (f)

Prior public use of one specimen sufficient to invalidate the patent. Meaning of "public use and exercise," per Lord Abinger.

The public use of only one specimen of a patented article, (g) even if by only one person, (h) is quite sufficient to invalidate a subsequent patent.

Lord *Abinger*, explaining to a jury what in the patent law sense is meant by the "public use and exercise" of an invention which will render a subsequent patent void on the ground of want of novelty, used the following words:—

"I think that what is meant by 'public use and exercise' is this: a man is entitled to a patent for a new invention, and if his invention is new and useful, he shall not be prejudiced by any other man having invented that before, and not made any use of it; because the mere speculations of ingenious men, which may be fruitful of a great variety of inventions, if they are not brought into actual use, ought not to stand in the way of other men equally ingenious who may afterwards make the same inventions and apply them. A great many patents have been taken out, for example, upon suggestions made in a celebrated work by the Marquis of *Worcester*, and many patents have been derived from hints and speculations by that ingenious author. But yet, as he never acted upon them, as he never brought out any machines whatsoever, those patents are good. So that the meaning of these words, 'public use,' is this: that a man shall not by his own private invention, which he keeps locked up in his own breast, or in his own desk, and never communicates it, take away the right which another man has to a patent for the same invention. Now, 'public use' means this: that the use of it shall not be secret, but public. . . . If a man invents a thing for his own use, whether he sells it or not—if he invents a lock, and puts it on his own gate, and has used it for a dozen years, that is a public use of it. If it were otherwise, see what

(c) *Smith v. Davidson*, (1857) 19 Court of Sessions, 2nd ser. 691; *Bentley v. Flemming*, (1844) 1 Car. & K. 587.

(d) *Morgan v. Seaward*, (1837) 1 W. P. C. 187; *Useful Patents Co. v. Rylands*, (1885) 2 R. P. C. 235; *Humpherson v. Syer*, (1887) 4 R. P. C. 407; *Kurtz v. Spence*, (1888) 5 R. P. C. 161.

(e) *Betts v. Menzies*, (1857) 1 E. & E. 1008.

(f) See pp. 135-137 *post*.

(g) *Honiball v. Bloomer*, (1854) 10 Exch. 538; *Honiball's Patent*, (1855) 2 W. P. C. 201, 209; *Carpenter v. Smith*, (1841) 1 W. P. C. 530, 534; *Young v. Fernie*, (1863) 4 Giff. P. C. 577; *Bereton v. Richardson*, (1884) 1 R. P. C. 177; *Sinnett's Patent*, (1898) 15 R. P. C. 761.

(h) *Stead v. Williams*, (1843) 2 W. P. C. 136; *Heath v. Smith*, (1854) 2 W. P. C. 278.

the consequences would be. If Mr. *Davies* has a lock which he directed to be made and put on his gate sixteen years ago at least; if that was not a public use which prevented a man from taking out a patent, any man might go and take a model of that lock, and get a patent for it. How can he be the inventor of it? Because, to obtain a patent, a man must be the inventor; and if it has been once in public use (that is, used in a public manner, not used by the public), yet if it has been used by half a dozen individuals or one in a public manner, any man having access to it, how can he be said to be the inventor if by merely gaining access to that he takes out a patent? . . . A man cannot be said to be the inventor of that which has been exposed to public view, and to which he might have had access if he had thought fit. . . . If you are of opinion (not that they were generally adopted by the public and used by the public, for that in my opinion is a perfect fallacy) that the use of them is public, and the exercise of the invention was public, and not kept secret so that the public might have no benefit from it, then I think that part of the issue you ought to find for the defendant." (i) The jury found for the defendant, and on a motion for a new trial, on the ground of misdirection, the Court of Exchequer approved of the statement of the law made by Lord *Abinger*, *Alderson, B.*, adding these words: (k) "Public use means a use in public, so as to come to the knowledge of others than the inventor as contradistinguished from the use of it by himself in his chamber." (l)

Prior User.

Per *Alderson, B.*

To rebut the claim of novelty, it is not necessary to show that the invention has been used by the public; it is quite sufficient to establish that it has been used in public as contradistinguished from being used in secret, (m)—*e.g.*, to show that an article has been openly manufactured (n) or exhibited in a workshop, (o) where all or some of the workmen knew the process of its manufacture, or that a model has been exhibited to persons interested in the subject-matter of the invention without any concealment, secrecy, or confidence, (p)

Use in public not necessarily use by the public, avoids a patent

(i) *Carpenter v. Smith*, (1841) 1 W. P. C. 530, 534, 535, 540.

(k) 1 W. P. C. 542.

(l) See *Croysdale v. Fisher*, (1884) 1 R. P. C. 21.

(m) *Carpenter v. Smith*, (1841) 1 W. P. C. 530; *Stead v. Williams*, (1843) 2 W. P. C. 136; *Stead v. Anderson*, (1846) 2 W. P. C. 149; *Hancock v. Somervell*, 39 *Newton, L. J.* 158; *Honiball v. Bloomer*, (1854) 2 W. P. C. 199; *Young v. Rosenthal*, (1884) 1 R. P. C. 32.

(n) *Croysdale v. Fisher*, (1884) 1 R. P. C. 17; *Lister v. Norton*, (1886) 3 R. P. C. 199; *Heath v. Smith*, (1854) 3 E. & B. 256; *Betts v. Neilson*, (1868) L. R. 3 Ch. 436.

(o) *Humpherson v. Syer*, (1887) 4 R. P. C. 407; but see *Electroplating Apparatus Co. v. Holland*, (1901) 18 R. P. C. 527.

(p) *Winby v. The Manchester, &c., Steam Tramways Co.*, (1891) 8 R. P. C. 61.

Prior User. or that the article has been used in a private house under such circumstances that visitors thereto could comprehend the invention. (q)

The following are illustrative cases :—

Tennant's
case.

In *Tennant's Case*, (1798) 1 W. P. C. 125, the patent was for a method of using certain calcareous earths instead of alkaline substances, by neutralising the oxygenated muriatic acid used in bleaching, &c. The great utility of the invention, and the general ignorance of bleachers with respect to such bleaching liquor before the date of the patent, were established in evidence. It was, however, proved that a bleacher had used the same means of preparing his bleaching liquor for five or six years prior to the date of the plaintiff's patent, and that he had kept his method a secret from all but his two partners and two servants concerned in preparing it; and a chemist deposed that having, in 1796, had frequent conversations with the plaintiff on the means of improving bleaching liquor, he had in one of them suggested that he would probably attain his end by keeping the lime water constantly agitated; that the plaintiff afterwards had found the method successful and embodied it in his claim. Lord *Ellenborough*, C.J., who tried the case, nonsuited the plaintiff, holding that the above evidence established a prior publication of the invention.

Losh v. Hague.

Losh v. Hague, (1838) 1 W. P. C. 202, was a case in which damages were sought for the infringement of *Losh's* patent for "certain improvements in the construction of wheels for carriages to be used on railways," and it was established, to the satisfaction of the jury, that wheels made on the same principle as those claimed by *Losh*, had been constructed before the date of his patent, though they had not been previously used on railways. The invention was, under these circumstances, held not to be novel, Lord *Abinger*, C.B., pointing out to the jury that if the wheels had been made and sold to any one individual, it made no difference though the public did not want them, because there were no railways, and they were not adapted to any particular use to which at that time the public could apply them (1 W. P. C. 205).

Muntz v.
Foster.

In *Muntz v. Foster*, (1844) 2 W. P. C. 96, it was proved that *Muntz* discovered, in a particular combination of metals made before, a hidden virtue or quality which had never before been noticed, and in consequence of this discovery he was enabled to apply the metal to a new and useful purpose, and thereby became entitled to a patent for the application, under the name of "an improved manufacture of metal plates for strengthening

(q) *Taylor's Patent*, (1836) 13 R. P. C. 432; *Stead v. Williams*, (1843) 2 W. P. C. 136.

the bottoms of ships or other such vessels." *Tindal*, C.J., in *Prior User*.
 summing up to the jury, used these words: "I look upon the invention to consist in this, that *Muntz* has by an experiment ascertained that a certain mixture of the alloy of zinc with copper will have the effect of producing a better sheathing by reason and by means of its oxidating just in sufficient quantities—that is, not too much, so as to wear away and impair the sheathing and render the vessel unsafe, but enough at the same time to keep by its wearing the bottom of the vessel clean from those impurities which before attached to it. And if it was shown, as it possibly might be, that sheets had been made of metal before, in the same proportions which he had pointed out, and if this hidden virtue or quality had not been discovered or ascertained, and consequently the application never made, I cannot think the patent will fail on that ground. I look upon it that there is as much merit in discovering the hidden and concealed virtue of a compound alloy of metal as there would be in discovering an unknown quality which a natural earth or stone possessed. We know by the cases that have been determined that where such unknown qualities have, from the result of experiments, been applied to useful purposes of life, that such application has been considered as the ground, and proper ground, of a patent; and therefore when I come to that part of the case in which they seek to show this is not so, because these metal plates have been invented before—that is, persons have used them before—in my judgment it will not go far enough, unless they can show there has been some application of them before to this very useful purpose. . . . I do not think that the circumstance of showing that the combination of these two materials in a metal plate will of itself destroy this patent, when no attention at the time was paid to the purpose for which this patent was taken out, and it was made merely in the ordinary course of melters of metal for the various and ordinary purposes of life. I do not think that the circumstances of showing that in the long time that has passed before us in the different, and, I may say, infinitely varying, combinations that must have been made for the various purposes for which brass and other metal was manufactured for ordinary and common purposes of life—to call a workman to show that on some occasion or occasions he had combined them in those proportions for another and different purpose; it does not appear to me that such destroys the patent."

Muntz v. Foster, (1844) 2 W. P. C. 96, is to be distinguished from *Losh v. Hague*, (1838) 1 W. P. C. 203, in that in the former case the patent was for a result which had been arrived at casually before, and there was merit in discovering a hidden virtue in the result which made it applicable to a particular

Muntz v. Foster and Losh v. Hague distinguished.

Prior User.
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purpose and capable of sustaining a patent, whereas, in the latter case, the result was known before, but the application to the particular purpose (which was self-evident) was not made because the occasion had never arisen, and the patent was therefore held void.

Lewis v.
Marling.

In *Lewis v. Marling*, (1829) 10 B. & C. 22 ; 4 Cas. & P. 57 ; 1 W. P. C. 493, the patent related to a shearing machine in which the novelty consisted in shearing from list to list. It was proved at the trial that a similar machine had been made previously to the patent, and was tried by a person called on behalf of the defendant, but he did not think it answered, and soon discontinued the use of it. It was also proved that a model had been sent over from America and shown to a few persons, but no machine was made from it, and also that a specification had been brought over from America and two persons employed to make a machine from this, which, however, was never completed, so that, before the patentee's, no machine was publicly known or used in this country for shearing from list to list. Lord Tenterden, C.J., directed the jury that if it could be shown that the patentees had seen the model or specification, that might answer the claim of invention, but there was no evidence of that kind, and he left it to the jury to say whether the machine had been in public use and operation before the patent was granted, and they found that it had not.

On a motion for a rule *nisi* for a new trial this direction of Lord Tenterden, C.J., was approved of, Bayley, J., saying : "If I make a discovery and am enabled to produce an effect from my own experiments, judgment, and skill, it is no objection that some one else had made a similar discovery by his mind, unless it has become public. So if I introduce a discovery *bonâ fide* made, I may have a patent for it, though a person might have received previously a communication from abroad which would have enabled him to have made the machine."

Heath v. Smith.

In *Heath v. Smith*, (1854) 2 W. P. C. 268, it was proved that the process included in the plaintiff's claim had been practised by five manufacturers in the course of their trade before the date of the patent, and that whilst two of these manufacturers had kept the process a secret and the other three had practised it openly, it was not generally known till the plaintiff stated it in his specification. The Court of Queen's Bench held that there had been a public use of the process and that the patent was consequently invalid.

Abandoned
prior user
avoids a
patent.

As has been already stated, (r) it is not necessary to show that the prior use relied on was continued up to the date

(r) p. 121 *ante*.

of the patent, for if there be a complete anticipation, by prior use, the abandonment of it is nothing, yet when it is a question whether there really was a machine perfected in accordance with the alleged invention, the fact that it had never been used for a number of years before the patentee took out his patent is most material, as leading to the conclusion that that which was made many years ago was not a machine in accordance with the invention. (s)

An inventor who, before applying for a patent, uses his invention in such a manner as to convey to the public a knowledge of it, or allows it to be used by the public, will thereby render his patent just as invalid on the ground of want of novelty as if a prior public use and exercise by persons other than himself were shown to have existed. (t) But after the inventor has sent in his application for a patent, and the same has been accepted, and before the patent is sealed, he is justified in using the invention in public, and will not by such use render the grant void; but he is not entitled to use, in connection with the apparatus manufactured according to the invention, the word "patent" until his complete specification has been accepted. (u) Any use or publication during the period of provisional protection of an invention for which an application has been made in fraud of the true and first inventor, will not invalidate a patent granted to him. (v)

An inventor may, before making application for a patent, entrust his invention to another person, bound to him by terms of confidence and secrecy, for the purpose of making experiments, with a view to rendering the invention more perfect and efficient, and such an experimental user, though to a certain extent a user in public, will not necessarily invalidate a subsequent patent. (x)

The combined effect of Art. 4 of the International Convention of 1883, (y) secs. 103 and 104 of the Act of 1883, and sec. 1 of the Act of 1901, is to protect any person who has duly registered

(s) Per Lord Brougham, *The Househill Co. v. Neilson*, (1843) 1 W. P. C. 673; *Tangyo v. Stott*, (1865) W. N. 1866, p. 68; *Morgan v. Windover*, (1888) 5 R. P. C. 303; *King, Brown & Co. v. Anglo-American Brush Co.*, (1889) 6 R. P. C. 414; pp. 119-124, ante.

(t) p. 125 ante.

(u) 46 & 47 Vict. c. 57, ss. 14, 15; *R. v. Townsend*, (1876) 13 R. P. C. 265; In Row on the prosecution of *Crow v. Wallis*, (1886) 3 R. P. C. 1;

and *R. v. Crampton*, (1886) 3 R. P. C. 367, the complete specification had not been accepted.

(v) See 46 & 47 Vict. c. 57, s. 35, Vol. II. p. 216.

(z) *Bentley v. Flemming*, (1844) 1 Car. & K. 578; *Morgan v. Scaward*, (1837) 1 W. P. C. 193, 195; *Humpherson v. Syer*, (1887) 4 R. P. C. 414; *Useful Patents Co. v. Rylands*, (1885) 2 R. P. C. 262.

(y) See Appendix, Vol. II.

Applicant for a patent provisionally protected against public use of the invention.

Fiduciary communications of invention prior to application.

Foreign applicant protected against publication.

Prior User. an application for a patent in any of the States of the Union, during a period of twelve months from the date of such application, against the ordinary consequences of publication of the invention in this country. Such a person has a right of priority to a British patent at any time before the expiration of such period of twelve months from the date of his application in the foreign State, notwithstanding that in the meanwhile the invention may have been published in this country.

It must be remembered that the period of twelve months, during which protection from publication is afforded to the inventor, dates from the first application in one of the States of the Union, and not from the last of several applications in different States.

Exhibition of invention at industrial or international exhibitions prior to application for a patent.

If an inventor desires to exhibit at an industrial or international exhibition an invention for which he has not applied, but intends to apply, for protection by letters patent, he can do so without thereby rendering his subsequent patent, if obtained, null and void, by proceeding under sec. 39 of the Patents, &c., Act, 1883, and Rule 27 of the Patent Rules, 1903. The section of the Act referred to enacts that the exhibition of an invention at an industrial or international exhibition, certified as such by the Board of Trade, or publication of any description of the invention during the period of the holding of the exhibition, or the use of the invention for the purposes of the exhibition in the place where the exhibition is held, or the use of the invention during the period of the holding of the exhibition by any person elsewhere, without the privity or consent of the inventor, shall not prejudice the right of the inventor, or his legal personal representative, to apply for, and obtain, provisional protection and a patent in respect of the invention, or the validity of any patent granted on the application, provided that both the following conditions are complied with, namely :

(a) The exhibitor must, before exhibiting the invention, give the Comptroller the prescribed notice of his intention to do so

(b) The application for a patent must be made before or within six months from the date of the opening of the exhibition.

Rule 27 of the Patent Rules, 1903, (z) provides that the inventor shall give to the Comptroller notice in writing of his intention to exhibit, publish, or use the invention, as the

(z) See Appendix. Vol. II.

case may be, and for the purpose of identifying the invention in the event of an application for a patent being subsequently made, the inventor shall furnish to the Comptroller a brief description of his invention, accompanied, if necessary, by drawings, and such other information as the Comptroller may in each case require. Prior User.

The fact of an inventor having kept his invention secret, after it has been brought to completion, does not, at any rate if there has been no profitable use of it, (a) deprive the Crown of its right to grant a patent on the application of such inventor, (b) but delay on the part of the applicant is extremely undesirable, because it is always possible that some one else may make an application first, and so get a prior right to a patent. (c) Delay in applying for a patent is undesirable.

If an inventor manufacture and offer for sale an article made in accordance with his invention before the date of his patent, even though no sale actually take place, he will thereby, if the nature of the invention can be understood from an inspection of the article, publish his invention and deprive himself of any right to become a patentee in respect of it. (d) Offering for sale is publication;

The public sale of a single specimen of a patented article before the date of the patent is sufficient to render the grant null and void, (e) though the sale was for export, (f) or as an experiment to ascertain whether there would be a demand for the article. (g)

But if the article does not on the face of it show the manner in which it was made, it may be doubted whether such a manufacture and offering for sale by the inventor himself would deprive him of his right to a subsequent patent for the process of manufacture, (h) and the bare fact of the article having been made before the patent was obtained would not alone render it bad. (i) but not if the article sold or offered for sale does not show the manner of its manufacture.

(a) See p. 135 *post*.

(b) *Bentley v. Fleming*, (1844) 1 C. & R. 587; *Bowman v. Taylor*, (1834) 1 W. P. C. 293.

(c) *Hancock v. Somervell*, (1851) 39 Newton, L. J. 158.

(d) *Oxley v. Holden*, (1860) S. C. B. N. S. 666; *Wood v. Zimmer*, (1815) 1 Holt, N. P. C. 57; 1 W. P. C. 44; *Morgan v. Seaward*, (1837) 1 W. P. C. 194; *Mullins v. Hart*, (1852) 3 Car. & K. 297; *Lister v. Norton*, (1886) 3 R. P. C. 192, 207; *Lifeboat Co. v. Chambers*, (1891) 8 R. P. C. 418.

(e) *Horniball v. Bloomer*, (1885) 2

R. P. C. 199; *Germ Milling Co. v. Robinson*, No. 2, (1886) 3 R. P. C. 399; *Hollins v. Capper*, (1888) 5 R. P. C. 289.

(f) *Carpenter v. Smith*, (1842) 1 W. P. C. 541.

(g) *Lister v. Norton*, (1886) 3 R. P. C. 207.

(h) See p. 135 *post*; *Hancock v. Somervell*, (1851) 39 Newton, L. J. 158.

(i) *Bramah v. Harcastle*, (1789) Holroyd, 81; *Lewis v. Marling*, (1829) 4 C. & P. 57; *Moss v. Malings*, (1886) 3 R. P. C. 378.

Prior User. Publication is always a question of fact. In one case the manufacture of two pairs of paddle-wheels, under an injunction of secrecy, which were sold, boarded up, and shipped abroad, was held to be no publication. (*k*)

It has been held that when delay has arisen in the granting of a patent from causes over which the patentee had no control, the manufacture by him of articles made according to, and before the date of the patent, for sale after the seal of the Patent Office has been obtained, will not vitiate the patent. (*l*)

Loan of an article for the purpose of experiment need not be publication.

The loan of an article for the purpose of experiment, before the application for a patent in respect of it, need not amount to publication sufficient to avoid the patent when obtained.

Thus, in *Bentley v. Fleming*, (*m*) it appeared that a machine manufactured according to the invention had, before the date of the patent, been lent by the patentee to a friend for the purpose of trial, and that the machine was fixed in a room in a mill to which workpeople had access. *Cresswell, J.*, who tried the case, held that the machine having been merely lent for the purpose of testing it, the use of it did not under the circumstances amount to a publication of the invention.

Manufacture by one person confidentially related to another.

In *Morgan v. Seaward*, (*n*) the Court of Exchequer thought that the manufacture of two pieces of machinery for a person connected in business with the patentee, under an injunction of secrecy and their user abroad, might not be such a publication as would vitiate a subsequent grant.

When an article has been manufactured and openly sold in England, even though it be manufactured and sold expressly for exportation abroad, the article has been published, and a subsequent patent for it will consequently be bad for want of novelty; but this must not be taken to mean that if a man abroad employ an agent in England to see if he can get an article manufactured according to a particular model, not with a view of making it public at all, but with the object of taking out a patent for it himself, he is thereby disentitled to the invention afterwards, because he employs a workman to assist him in it; or that if he had failed entirely some other man might not make the invention in England. (*o*)

(*k*) *Morgan v. Seaward*, (1837) 1 W. P. C. 187.

(*l*) *Betts v. Menzies*, (1862) 4 Jur. N. S. 477.

(*m*) (1844) 1 C. & R. 587.

(*n*) (1837) 1 W. P. C. 195.

(*o*) Per Lord Abinger, C.B., in *Carpenter v. Smith*, (1841) 1 W. P. C. 536.

It has been held that the prior user of an invention in a colony forms no legal bar to the granting of a patent for the same invention in this country. (p)

We have now to consider the question whether the fact of an inventor having made pecuniary profit by a secret user of his invention before the date of a subsequent grant of letters patent will render the grant invalid.

The question has never been judicially decided, though Lord Campbell, C.J., is reported, in *Heath v. Smith*, (q) to have given expression to the following *obiter dictum*: "If one party only had used the process, and had brought out the article for profit, and kept the method entirely secret, I am not prepared to say that then the patent would have been valid." And in *The Germ Milling Co., Ltd. v. Robinson*, (r) the plaintiff elected to be nonsuited, on his own evidence of prior user of the invention, the validity of which was in contest, and did not take up the position of such prior user being secret.

The above remarks of Lord Campbell, C.J., must, from the context, be assumed to refer to a user by a person other than the patentee, and so do not directly bear on the question now under consideration. It is submitted, from the first principles of the patent law, that there does not appear any reason why an inventor should not be capable of receiving a grant of letters patent from the Crown at any time before he has disclosed his invention to the public and enabled them to practise it for themselves. The bargain between the patentee and the Crown (s) is, that the former discloses his invention and the manner in which it is to be performed, in exchange for a patent for a limited period from the latter, and it is evident that the patentee is capable of carrying out his part of the bargain, whether or not he has derived profit from what has hitherto been a secret use of the inventor.

The argument (t) that the patentee, by keeping the invention secret and making profit by its use before applying for a patent, would thereby obtain a monopoly longer than fourteen years, or the usual duration of the grant, is not at all conclusive; for it must be remembered that the Crown offers patent grants as rewards for the disclosure of useful inventions and the means

Prior User.

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Prior user in colony no legal bar.

Prior secret profitable user by the inventor.

(p) *Rolls v. Isaacs*, (1878) L. R. 19 Ch. D. 268.

(q) (1854) 2 W. P. C. 278; but see *Miller's Patent*, (1898) 15 R. P. C. 213. See also *Wood v. Zimmer*, (1815) G. P. C. 502.

(r) (1836) 3 R. P. C. 254, 259.

(s) p. 106 *ante*.

(t) *Morgan v. Seaward*, (1837) 194; *Germ Milling Co. Ltd. v. Robinson*, (1886) 3 R. P. C. 408, 409.

Prior User. of performing them, for the public good, and it does not go into the past history of the inventor and insist on his having made the discovery within any fixed time prior to his application, but merely requires that it shall be a new manufacture which others shall not use. (*u*) Further, the patentee has no legal monopoly until the patent is granted.

Moreover, the bare fact of an article having been made before a patent for its manufacture is obtained does not alone render the grant void, (*v*) and it would be absurd to hold that profit would render public that which otherwise would have been a secret use, though of course the fact of profit having been derived might influence the Court against the contention of secrecy. Again, the argument that common law rights of workmen are abridged by such a grant as that now under consideration is surely futile. Publication is, of course, a question of fact, but it would scarcely be possible to maintain that the invention had been kept secret if the patentee had, before the grant, employed workmen, other than those perhaps in a specially and strict fiduciary relationship to himself, to carry the invention into effect.

Distinction
between prior
secret user by
the inventor
and by others.

There is a considerable difference between a prior secret user of the invention, which is subsequently patented, by a person other than the patentee and by the patentee himself. If it be established that a person or persons other than the patentee were in the habit of using the invention, though secretly, for the purposes of trade before the date of the grant, such prior secret user renders the patent void on the ground that the invention does not fulfil the requirements of the sixth section of the Statute of Monopolies, (*x*) as being one "which others at the time of making such letters patent and grants shall not use." (*y*) Thus in *Tennant's Case* (*z*) a secret user by persons other than the patentee was held to vitiate the grant. And in the more recent case of *Cheetham v. Oldham* (*a*) the prior sale of hats in appearance the same as those treated by the patentee's process, but from which it could not be conclusively inferred that the patentee's process had been used, together with the statements of the defendant's witnesses to the effect that such process had been used in their manufacture,

(*u*) 21 Jac. I. c. 3, s. 6.

(*v*) *Bramah v. Hardcastle*, (1789) Holroyd, 81; 1 Carp. P. C. 168; *Morgan v. Seaward*, (1835) 2 M. & W. 558; 1 W. P. C. 44 *n*.

(*x*) p. 3 *ante*.

(*y*) See *Heath v. Unwin*, (1854) 2 W. P. C. 276, 278; *Cornish v. Keene* (1835) 1 W. P. C. 511.

(*z*) (1798) 1 W. P. C. 125.

(*a*) (1890) 7 R. P. C. 124.

was held to invalidate the patent. (b) For some time after the date of the Statute of Monopolies—*i.e.*, until the reign of Queen Anne—*publication* of the invention was not made a condition of the grant of the patent. (c) And patents were sometimes granted for the introduction of a *secret* trade or mystery, (d) but it may be doubted whether such patents were really valid, for, if there was no publication, the public obtained no benefit in return for the grant. (e)

A question closely connected with the above is, will the publication in this country of an article made *abroad* be a publication of the *invention* by the exercise of which the article was made? If the article made abroad shows on the face of it how it was made, its sale in this country is a publication of the invention; (f) but there is authority for saying that such will not be the case if the article does not show on the face of it how it was made. It is submitted that it is a false argument to say that if the article which forms the subject of the grant has been imported, sold, and used within the realm, the Crown cannot grant the whole profits of the invention without prejudicing the rights of the merchant, retailer, or user within the realm. In the first place the Crown does not purport to grant the whole profits of the invention, but only the profits arising from it during the period for which the patent is granted. Further, no rights of the merchant, retailer or user within the realm would be interfered with by a subsequent grant, because the continued sale or user of articles made and imported before the patent would not be an infringement. (g) The patent would only apply to articles actually made within, or imported into, the realm after the date of the grant. Of course proof that such imported articles were in fact made according to the patent and so infringements might in some cases be a matter of practical impossibility. (h)

In *Hancock v. Somervell* (i) it was sought to upset *Hancock's* patent for improvements in the preparation of caoutchouc consisting in combining sulphur with it, and thus rendering it elastic at all temperatures. The evidence established the

(b) See also *Hill v. Thompson*, (1818) 1 W. P. C. 240; *Cornish v. Keene*, (1835) 1 W. P. C. 511.

(c) *The Small Patents*, (1606) 1 W. P. C. 9; *Bailey v. Robertson*, (1878) L. R. 3 App. Cas. 1074.

(d) *Mansell's Patent*, (1624) 1 W. P. C. 19.

(e) See p. 106 *ante*.

(f) *Jenson v. Smith*, (1885) 2 R. P. C. 249; *Miller's Patent*, (1898) 15 R. P. C. 205.

(g) See p. 335 *post*.

(h) See *infra* and p. 467 *post*.

(i) (1851) 39 *Newton*, L. J. 158.

Prior User. fact that shoes had been imported from America made of caoutchouc which on analysis was found to contain sulphur as well as oxide of lead and other ingredients. Prior to the plaintiff's patent samples of caoutchouc prepared by sulphur were sent to England by one *Goodyear* of New York, and were shown to *Hancock*, but the secret of their manufacture was not communicated to him. It was attempted to negotiate a sale of the invention to *Hancock*, but this was never completed. *Goodyear's* agent left the samples with *Hancock* under the impression that it would not be possible for him to discover the secret of their manufacture. As the result of experiments, *Hancock*, however, discovered that sulphur made caoutchouc elastic at all temperatures, and he then obtained his patent for his method of manufacturing it. *Williams, J.*, directed the jury to say whether, supposing the shoes to have been manufactured in England, they could have been made without infringing the plaintiff's patent, and made use of the following words: "The defendants do not deny that *Hancock* is to be considered the inventor, notwithstanding *Goodyear* had previously made the discovery, provided the invention had not been published or in use in this country before the date of the patent. The defence consists of this: not only had *Goodyear* discovered the invention first, but also that the invention had been substantially published and was in use—not in secret use, but in public use—before the date of the patent; that the material being in public use, the ready means of performing the invention were also necessarily before the public; because it is said the article presented in itself such means of knowledge to the public as to enable any one of ordinary competence to reproduce the article. If you should be of opinion that the material was in use before the date of the patent, then the question resolves itself into this: What is your opinion as to whether the publication of the material was substantially a publication of the invention? If you should find that the material was in public use, but that notwithstanding the invention remained still a matter to be discovered, in my opinion the plaintiff's case would not be affected by the circumstance of the material being in public use. If, on the other hand, you should think not only that the material was in public use (and I should here say that I do not think it is necessary that the use should be actual sale—if it were in public use it need not be sold; it would be sufficient, for instance, if it were in use, hanging about the country for the

purpose of attracting customers): if you should think, also, **Prior User.**
 that the material being so in use it was so palpable how you
 could make it when you got the material, that substantially
 the disclosure of the material was a disclosure of the means
 of making it; if you do not think that, then I think the
 plaintiff's case is unaffected by the circumstance of the
 material being before the public in the way I have been
 describing." The jury found a verdict for the plaintiff, and
 his patent was accordingly upheld.

In the recent case of *Sunlight Incandescent Gas Lamp Co. v. Incandescent Gas Light Co.*, (*k*) *Wills, J.*, held that *Rawson's* patent for stiffening incandescent gas mantles was not anticipated by the prior importation into this country of *Clamond's* magnesium baskets, stiffened by substantially the same process, because an inspection of the baskets did not disclose the process according to which they were stiffened.

The foregoing cases appear to establish that the prior use of a foreign made and subsequently patented article is not a publication of the invention, if the article does not on the face of it show how it was constructed—i.e., the patentee is capable under such circumstances of communicating to the Crown an invention, which is a new manufacture within the sixth section of the Statute of Monopolies. It may be urged, however, that a patent so obtained is bad, because the Crown has been deceived in its grant seeing that the applicant has, on application, to declare that the invention is not in use by any other person or persons to the best of his knowledge and belief. (*l*) There are two answers to this contention. First, if the circumstances permit, that the declaration is true from all points of view, because the use of the articles in question was unknown to the applicant. Secondly, the fact is that the invention is the art of producing the article and not the article itself, (*m*) and it is, therefore, true that the invention was not in use within the realm by any other person or persons. If it be urged that the Courts, over and over again, restrain the use of foreign made goods as being infringements of British patents, the reply consists in the consideration that such infringement is restrained on the ground not of direct use of the invention, but for the reason that the use in this country of the foreign made article causes loss of profit to the patentee. (*n*) It must be borne in

(*k*) (1897) 14 R. P. C. 757.

(*l*) Vol. II. p. 315.

(*m*) p. 24 ante.

(*n*) See *Von Heyden v. Neustadt*, (1880) L. R. 14 Ch. D. 230; p. 376 post.

Personal
Communi-
cations.
Prior
Docu-
ments.

mind that the consideration for the grant is the information how to do something which the public did not know how to do before, viz., how to produce the article, (*o*) and that an act which, if done after the grant, would amount to an infringement of a patent is not, necessarily, a publication of the invention. (*p*)

PUBLICATION BY PERSONAL COMMUNICATIONS.

Prior com-
munications
made by the
patentee
personally.

When a patentee has communicated his invention to others before applying for a patent, it is always a question of evidence whether the communications were of a fiduciary nature, and whether the persons to whom they were made have kept faith with the patentee, or whether the communications were made to individuals as members of the public, or such individuals have broken faith with the patentee by publishing the invention to the world at large. In one case (*q*) it was proved that the patentee had, before application for a patent, confidentially communicated the invention to nine separate people, but the Court of first instance and the Court of Appeal held on the facts there was no publication which vitiated the patent. In another case it appeared that the patentee entrusted his invention—a pince-nez—to an optician in Paris, whose employe showed it to a third party, who wrote a description of it in a French scientific publication, three or four copies of which came over to this country and were in public libraries before the date of the patent. The House of Lords held that under these circumstances the patent was bad for want of novelty. (*r*)

PUBLICATION BY DOCUMENTS.

Books and
documents as
means of pub-
lication.

Besides the different ways heretofore indicated, a knowledge of an invention may be made the property of the public, so as to render a subsequent patent for it void on the ground of want of novelty, by a description of it being contained in a printed or written book or document or specification published in this country in such a manner that the public have access

(*o*) p. 174 *post*.

(*p*) See p. 152 *post*.

(*q*) *Gadd v. Mayor. &c., of Manchester*, (1892) 9 R. P. C. 249, 516, see also *Pilkington v. Yeakley Vacuum*

Hammer Co., (1901) 18 R. P. C. 459, 463.

(*r*) *Pickard v. Prescott*, (1892) 9 R. P. C. 195; A. C. (1892) 263; see also *Blank v. Footman*, (1888) 5 R. P. C. 653, 656.

to such document or specification, and may, therefore, be presumed or assumed to have a knowledge of its contents. (s)

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ments.

There is a considerable difference as to the effect on the question of publication of an invention between the production of a machine made prior to the date of the patent and a document published before that date. In the former case the production of a machine made for a particular purpose, which would accomplish, when used, results which were not thought of when it was made, might possibly, without any user, be an anticipation of a patent for the application of the machine to produce such results. It would be a question of evidence as to whether it required invention to make the application. If the machine were used in such a way as to make clear to the public what it would effect, it would be a sufficient publication to defeat any subsequent patent for any such result. (t)

Difference
between a
prior machine
and a prior
document as
publications.

In the case of a written document it is not apparent, except from the language thereof, what results the contemplated machine would accomplish. It is not sufficient to defeat a patent to say that, if a machine were made by following the description in a document, something in that machine would anticipate the invention of the patentee, unless that something is apparent from the description itself. When the publication is in writing, and in writing only, it is necessary to show that a person conversant with such matters, on reading it, would find a reasonably clear description of the invention in the writing alone. If it be necessary that the machine should be made in order that the publication may be seen, the subsequent inventor is not obliged, when his attention is called to a mere writing, to make a machine from it in order to see what will be the effect. If the document is to invalidate the subsequent patent, it must contain on the face of it a description of the invention. (u)

It has been held that an invention is published if a description of it is contained in a foreign book which has been

Foreign books.

(s) *Rex v. Arkwright*, (1785) 1 W. P. C. 72; *Huddart v. Grimshaw*, (1803) 1 W. P. C. 86; *Jones v. Berger*, (1843) 1 W. P. C. 550; *Cornish v. Keene*, (1835) 1 W. P. C. 507; *Heurteloup's Patent*, (1836) 1 W. P. C. 553; *Dobbs v. Penn*, (1849) 3 Exch. Rep. 427; *The Househill Co. v. Neilson*, (1843) 1 W. P. C. 573; *Plimpton v. Malcolmson*, (1876) L. R. 3 Ch. D. 531; *Plimpton v. Spiller*, (1877) L. R. 6 Ch. D. 412; *Lawrence v. Perry*, (1885) 2 R. P. C. 180; *United Horseshoe and Nail Co.*

v. Stewart, (1885) 2 R. P. C. 122, 133; *Harris v. Rothwell*, (1887) L. R. 35 Ch. D. 429.

(t) *Fawcett v. Homan*, (1896) 13 R. P. C. 410.

(u) *Hills v. Evans*, (1862) 31 L. J. Ch. 457; 4 De G. F. & J. 288; *Betts v. Menzies*, (1862) 10 H. L. Cas. 152-154; *Betts v. Neilson*, (1868) L. R. 3 Ch. App. 435; *Otto v. Linford*, (1881) 46 L. T. N. S. 44; *Gaulard and Gibbs' Patent*, (1888) 5 R. P. C. 535.

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circulated in England, (*x*) in such a manner that some English people may be fairly supposed to know of it, (*y*) whether the foreign book be in a foreign language or English; (*z*) but it would appear that if the foreign book is in a remote language with which very few English people would be acquainted, it might not amount to such a publication as would vitiate a subsequent patent. (*a*)

Publication in a foreign book, only four copies of which were sent over to this country and exposed for sale (only one copy of which was actually sold), has been held sufficient to vitiate a patent. (*b*)

Unnecessary to prove that the patentee ever saw the prior book or document relied on.

In order to invalidate a patent on the ground of prior publication in a book or document, it is not necessary to show that the patentee actually derived his knowledge of the invention from such prior book or document; it is quite sufficient to show that the prior book or document was open to public inspection before the date of the patent. (*c*)

Thus, where an American book was kept in a private room at the Patent Office, and not entered in the donation book or in the catalogue, (*d*) it was held that there was not sufficient publication to upset an English patent. (*e*) Again, the fact that a French book containing a description of an invention was mentioned in catalogues distributed in this country, was held, in the absence of any proof that a single copy of the French book had ever been brought to this country, to be no publication of the invention. (*f*) If, however, the foreign book or document is catalogued and in a library to which the public have access, it will amount to a publication of the invention, though only one person has seen it, (*g*) or it is the only copy accessible to the public. (*h*)

Publication by prior document is always a question of fact.

The question whether a particular document has really become part of the stock of public knowledge, or at any rate

(*x*) *Reg. v. Seine*, 40 *Newton*, L. J. 71; *The United Telephone Co. v. Harrison*, (1882) L. R. 21 Ch. D. 720.

(*y*) *Harris v. Rothwell*, (1887) L. R. 35 Ch. D. 429; remarks of Cotton and Lindley, L.JJ.

(*z*) *Lang v. Gisborne*, (1862) 31 *Beav.* 133; *United Telephone Co. v. Harrison*, (1882) L. R. 21 Ch. D. 720; *Otto v. Steele*, (1884) L. R. 31 Ch. D. 241; *Harris v. Rothwell*, (1887) L. R. 35 Ch. D. 416.

(*a*) *Harris v. Rothwell*, (1887) L. R. 35 Ch. D. 426.

(*b*) *Lang v. Gisborne*, (1862) 31

Beav. 133.

(*c*) *Stead v. Williams*, (1844) 2 W. P. C. 142.

(*d*) *Plimpton v. Malcolmson*, (1876) L. R. 3 Ch. D. 531.

(*e*) See *Plimpton v. Spiller*, (1877) L. R. 6 Ch. D. 412.

(*f*) *Otto v. Steele*, (1887) L. R. 31 Ch. D. 241.

(*g*) *Harris v. Rothwell*, (1887) L. R. 35 Ch. D. 426; 3 R. P. C. 383; 4 R. P. C. 225.

(*h*) *United Telephone Co. v. Harrison*, (1882) L. R. 21 Ch. D. 721, 731.

part of the knowledge of that portion of the public interested in the invention, is in every case a matter of evidence. (i) In the words of *Tindal*, C.J. :—

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ments.

“The existence of a single copy of a work, though printed, brought from a depository where it has long been kept in a state of obscurity, would afford a very different inference from the production of an encyclopædia or other work in general circulation. The question will be whether, on the whole evidence, there has been such a publication as to make the description a part of the public stock of information.” (k)

It is idle to lay down any general canon of what will be the result of a given case. The effect, extent, and operation of the document by which the invention is supposed to be communicated to the public in this country, so as to anticipate the invention of the person who first takes out letters patent for the invention, vary infinitely, as the facts must vary. In a great variety of instances it may very well be that the mere fact of an invention being completely disclosed in a written paper and that written paper brought into this country would, notwithstanding those circumstances, not in the smallest degree amount to publication, and would not interfere with a patent afterwards taken out. In other cases the inference, which is simply a question of fact, may be irresistible that the invention was communicated in the strictest sense to the public in such a way as to prevent the operation of letters patent taken out after the date of that publication. (l)

In *Plimpton v. Malcolmson*, (m) the facts proved were that a copy of a book published in America containing a short description of the invention forming the subject of the patent in dispute was sent over to this country before the date of the patent, and placed in the library of the Patent Office, but it was not entered in the catalogue of the library, and was not placed on the shelves of the room to which the public had access, but in a private room; and it was also proved that

(i) *The Househill Co. v. Neilson*, (1843) 1 W. P. C. 673; *Stead v. Williams*, (1844) 2 W. P. C. 137; *Stead v. Anderson*, (1846) 2 W. P. C. 147; *Plimpton v. Malcolmson*, (1876) L. R. 3 Ch. D. 531.

(k) *Stead v. Williams*, (1844) 2 W. P. C. 143; see also *Plimpton v. Malcolmson*, (1876) L. R. 3 Ch. D. 531; judgment of Jessel, M.R., at p. 561, and his explanation of the dictum of

Romilly, M.R., in *Lang v. Gisborne*, (1862) 31 Beav. 133; see also *Plimpton v. Spiller*, (1877) L. R. 6 Ch. D. 412; *Von Heyden v. Neustadt*, (1880) 50 L. J. N. S. Ch. 126; *United Telephone Co. v. Harrison*, (1882) L. R. 21 Ch. D. 720.

(l) See observations of Halsbury, L.C., in *Pickard v. Prescott*, (1892) 9 R. P. C. 195.

(m) L. R. (1876) 3 Ch. D. 531.

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the book did not come to light till ten years or more after the date of the patent. Under these circumstances, *Jessel*, M.R., held that there had not been such a publication of the invention as would deprive the man who first made it known in this country of that merit—the only merit so far as an importer is concerned—which consists in making known a useful invention to the public. This decision was in a subsequent case (*n*) upheld by the Court of Appeal.

Document is sometimes public property the moment it is written.

A document containing a description of an invention may under some circumstances, however, be public property from the moment it is written. For example, where a referee appointed by Act of Parliament to inspect the works of the London Gas Companies, whilst engaged in the prosecution of his duties discovered a process for purifying gas and obtained a patent for the invention, after the report of himself and his co-referees embodying the principle of the process had been drawn up, it was held by the House of Lords that the patent was void for lack of novelty, because the report conveying a knowledge of the invention had become public property from the time it was written. (*o*)

Terms of art used in different documents may not have the same meaning.

It is not always possible to predict of two documents which make use of terms of art *ipsissimis verbis* the same, that they describe the same invention, if they were composed at different periods. For it must not be forgotten that terms of art are liable to constant changes of meaning during the progress and development of any particular department of science, and therefore, in considering whether a description in an earlier published book or document is really the same as that in a later specification, it must be carefully ascertained that the terms of art used in the two denote the same thing. In the words of Lord *Westbury*: “ Even if there is identity of language in two specifications, and (remembering that those specifications describe external things) even if the language is *verbatim* the same, yet if there are terms of art found in the one specification, and also terms of art found in the other specification, it is impossible to predict of the two with certainty that they describe the same identical external object, unless you ascertain that the terms of art used in the one have precisely the same signification, and denote the same external objects at the date of the one specification as they do at the date of the other.” (*p*)

(*n*) *Plimpton v. Spiller*, (1877) L. R. 6 Ch. D. 412.

Co., (1856) L. R. 3 App. Cas. 239.

(*o*) *Patterson v. Gas Light and Coke*

(*p*) *Betts v. Menzies*, (1862) 10 H. L. Cas. 152.

A document which upon its true construction points away from the use of a certain thing, or the use of a certain thing in a particular manner, cannot be successfully pleaded as a publication of an invention which consists in the use of the thing, or in its use in a particular manner. (q)

Prior Documents.

Document which points away from the patentee's claim is no publication. Provisional specifications.

Provisional specifications which are filed in the Patent Office and subsequently abandoned by the applicant, are under the present practice never published. Consequently, an abandonment of a provisional specification will not amount to a publication of the invention, which may form the subject-matter of a subsequent patent. (r)

The Courts have power to order the production of an abandoned provisional specification if it is required in the interests of justice—*e.g.*, when in an action on a subsequent patent the defendant pleads invalidity by reason of his own prior user, and states that he has filed but abandoned a provisional specification for the thing which he alleges he used about the date of the abandoned provisional specification, and which he contends was an anticipation of the plaintiff's claim. (s)

Power of Court to order production of abandoned provisional specifications.

An invention covered by any patent granted on an application to which sec. 1 of the Patents Act 1902 applies is not deemed to have been anticipated by reason only of its publication in a specification deposited pursuant to a prior application made in the United Kingdom not less than fifty years previously, or of its publication in a provisional specification of any date not followed by a complete specification. (t)

Sec. 1 of Patents Act, 1902.

In *Lister v. Norton*, (x) the facts were these: the plaintiff, on 24th July 1880, under the Act of 1852, filed a provisional specification of an invention for "improvements in the manufacture of pile fabrics in imitation of sealskin and other similar fabrics." This specification was abandoned by the plaintiff, and on the 21st January 1881 he filed a second provisional specification of an invention for "improvements in the manufacture of velvets and of pile fabrics in imitation

(q) See *Nobel's Explosives Co. v. Anderson*, (1895) 12 R. C. P. 164; *Morris v. Young*, (1895) 12 R. P. C. 461; *Monnet v. Beck*, (1897) 14 R. P. C. 777; *Badische Anilin und Soda Fabrik v. La Société Chimique des Usines du Rhône*, (1897) 14 R. P. C. 875.

(r) 48 & 49 Vict. c. 63, s. 4; *Oxley*

v. Holden, (1860) 8 C. B. N. S. 666; *Lister v. Norton*, (1886) 3 R. P. C. 199.

(s) *Pneumatic Tyre Co. v. English Cycle and Tyre Co.*, (1897) 14 R. P. C. 851.

(t) See *Kaye v. Chubb*, (1888) 5 R. P. C. 641, 648; 2 Edw. VII. c. 34, s. 2.

(x) (1886) 3 R. P. C. 199.

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ments.

of sealskin and other similar materials." On the 21st July 1881 he obtained a grant of letters patent on his provisional specification of 21st January 1881. The invention claimed consisted in a new combination of materials for use in the manufacture of the fabrics referred to—the employment of a mixture of mohair and silk in the raw state, combined and blended before spinning. It was held that, assuming the invention in the two provisional specifications to be identical, the abandonment of this first provisional specification did not avoid the patent which was granted, *i.e.*, dated, within the period of provisional protection secured by the first provisional specification, even if actual user during such period could be shown. (*y*)

Not necessary
to prove that
a prior pub-
lished inven-
tion has been
actually used.

A prior description, which has become the property of the public, of a machine or combination, though that machine or combination has never been actually made and publicly used, will render a subsequent patent for that machine or combination bad both on the ground that the patentee is not the true and first inventor, and because the invention is not new. (*z*)

As has been shown, the subject of a patent is really the art of producing the new and useful result, (*a*) and it is not necessary to avoid a patent that the art should have actually been put in practice—*i.e.*, the machine, for instance, made by the exercise of it, need not have been constructed, provided that the public are, at the date of the patent, in possession of full and sufficient information to enable them to produce, without the exercise of further invention, the result claimed by the patentee. (*b*) The question whether a description has really become the property of the public so as to vitiate a subsequent patent is therefore always one of evidence, when that description has not been acted upon and no machine has been made in accordance with it. (*c*)

Lord *Blackburn*, in the House of Lords, (*d*) pointed out that in order to vitiate a patent on the ground of want of novelty it is not necessary that the invention should be used by the public as well as known to the public. If the invention and the mode in which it can be used have been made known to the

(*y*) See also *Oxley v. Holden*, (1860) 8 C. B. N. S. 666; 30 L. J. C. P. 68; *Stoner v. Todd*, (1876) L. R. 4 Ch. D. 58.

(*z*) *Frearson v. Loc*, (1878) L. R. 9 Ch. D. 92.

(*a*) p. 24 *ante*.

(*b*) p. 108 *ante*.

(*c*) *Humpherson v. Syer*, (1887) 4 R. P. C. 407; *Tickelpenny v. Army and Navy Co-operative Society, Ltd.*, (1888) 5 R. P. C. 405.

(*d*) *Patterson v. Gas Light and Coke Co.*, (1875) L. R. 3 App. Cas. 239.

public by a description in a work which has been publicly circulated (*e*) or a specification duly enrolled, (*f*) it avoids the patent, though there is no proof that the invention was ever actually put in use.

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ments.

If the document relied on as a publication contain *merely a suggestion* of the invention, it will be immaterial to the novelty of a subsequent patent, which will only be upset on the ground of prior publication, if the document contain a description which is such that the invention could be easily carried out from it. (*g*)

Mere sugges-
tion is not
publication.

The law requires the inventor in the specification which he is compelled to lodge at the Patent Office (*h*) to describe his invention and the mode of performing it in language so accurate and explicit as will enable an ordinary and intelligent workman in the trade, to which the invention relates, to put it in practice. The question arises as to whether it is necessary that a document containing an alleged anticipation of a subsequently patented invention should be framed in language equally accurate and explicit as that which is required in the specification itself. In other words, will an alleged anticipating document, which is sufficiently accurate and explicit to enable a highly skilled person to perceive without effort and perform the invention, though it is not intelligible to a less skilled ordinary workman, amount to a prior disclosure of the discovery which will render a subsequent patent void on the ground of want of novelty?

In *Betts v. Menzies* (*i*) it was held that an antecedent description must disclose a practicable mode of producing the result of the subsequent discovery if the description is to be held sufficient to invalidate the subsequent patent. In this case *Dobbs'* specification was relied on as an anticipation of *Betts'*, but it was not contended that the former would enable any skilled person to perform the invention. It appeared that proportions and subsidiary processes not disclosed by *Dobbs*

(*e*) *Stead v. Williams*, (1844) 7 M. & G. 818, 812; 2 W. P. C. 141.

(*f*) *Bush v. Fox*, (1856) 5 H. L. C. 707; *Betts v. Menzies*, (1862) 10 H. L. C. 117.

(*g*) *Woodcroft's Patent*, (1846) 2 W. P. C. 23; *Betts v. Menzies*, (1862) 10 H. L. Cas. 117; *Betts v. De Vitre*, (1862) 11 L. T. N. S. 445; *Von Heyden v. Neustadt*, (1880) L. R. 14 Ch. D. 230; 50 L. J. N. S. Ch. 126; *Stoner v. Todd*, (1876) L. R. 4 Ch. D. 58; *Moseley v. Victoria Rubber Co.*, (1887)

4 R. P. C. 252; *Bray v. Gardner*, 4 P. O. R. 405; *Haslam v. Hall*, (1888) 5 R. P. C. 19; *Ehrlich v. Ihlee*, (1888) 5 R. P. C. 450; *Thompson v. American Braided Wire Co.*, (1887) 4 R. P. C. 316; 5 R. P. C. 113; 6 R. P. C. 518; *Winby v. Manchester, &c., Steam Tramways Co.*, (1889) 6 R. P. C. 359; *Shaw v. Jones*, (1889) 6 R. P. C. 336.

(*h*) 46 & 47 Vict. c. 57, s. 3; see chap. v.

(*i*) 10 H. L. Cas. 152.

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ments.

were necessary. *Dobbs'* was held not to be an anticipation of *Betts'*. The information given would clearly not enable *any one* without experiments to perform the invention, and the point of it being intelligible to a skilled person was not raised at the Bar.

As was remarked by Lord *Abinger*, (*k*) many patents have been taken out upon suggestions contained in a celebrated work by the Marquis of *Worcester*, and from hints and speculations from the same author, and his Lordship seemed of opinion that these patents would have been good as regards anticipation by the Marquis of *Worcester*. All the Marquis did in his writings was to make suggestions and speculations, not to describe perfected inventions in language which would disclose them, as such, to any one, however skilled he might be. This is a very different thing to a description of an invention in terms that would enable skilled persons, though not the ordinary workman, to perceive and carry it out.

Sufficiency of
description
necessary in
an anticipating
document.

The real point to be considered in determining whether a prior description is sufficiently explicit to vitiate a subsequent patent is: will the prior description enable any person, *without the exercise of invention*, to carry out the alleged new discovery? It may be that a given prior description will enable a highly skilled person to perform an invention for which a patent is subsequently taken out, whereas a less skilled ordinary workman in the trade would not be able to carry the invention into effect from the hints and suggestions contained in that prior description. If the highly skilled person has to exercise any ingenuity or invention to enable him to arrive at the result achieved by the patentee, it is submitted, the prior description is not one which will vitiate a subsequent patent; otherwise it is. It must be borne in mind that the sufficiency or insufficiency of a specification does not afford a crucial test as to whether there is publication of an invention by it or not. (*l*)

Rule in *Hills*
v. Evans.

Lord *Westbury*, L.C., in *Hills v. Evans* (*m*) first laid down authoritatively the rule on the subject of what must be the nature of an antecedent paper publication in order that it may be held sufficient to anticipate and to vitiate a subsequent patent on the ground of want of novelty. The rule in *Hills v. Evans* has been slightly modified and brought up to date by

(*k*) *Carpenter v. Smith*, (1811) 1 W. R. P. C. 313.
P. C. 534.

(*l*) *King, Brown & Co. v. Anglo-American Brush Corporation*, (1891) 9

(*m*) 4 De Gex, Fisher and Jones, 289.

subsequent cases. The following extract from the judgment of *Lindley, L.J.*, in *Savage v. Harris*, (*n*) contains a clear statement of what the law upon the subject now is :—

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ments.

“I cannot do better than refer to the well-known judgment of Lord *Westbury* in the case of *Hills v. Evans*, which is to be found in 4 De Gex, Fisher, and Jones, at page 289. He says: ‘I have therefore to consider and to give my opinion upon the question that has been argued, namely, whether there be or be not anything in these specifications which has rendered the plaintiff’s invention matter of public knowledge, and therefore matter of public property, anterior to the granting of the patent. I was extremely desirous to ascertain, in the course of the argument, whether any clear rule has been laid down on the subject of what shall be the nature of the antecedent publication which shall be held sufficient to anticipate and to vitiate a subsequent patent on the ground of want of novelty.’ After saying that a specification is not to be distinguished in principle from any other publication, he says: ‘The question, then, is—What must be the nature of the antecedent statement? I apprehend that the principle is correctly thus expressed.’ I will show that that has been corrected more recently. ‘The antecedent statement must be such that a person of ordinary knowledge of the subject would at once perceive, understand, and be able practically to apply the discovery without the necessity of making further experiments and gaining further information before the invention can be made useful. If something remains to be ascertained which is necessary for the useful application of the discovery, that affords sufficient room for another valid patent.’ And after commenting on the statute of James, he goes on: ‘The information as to the alleged invention given by the prior publication must for the purposes of practical utility be equal to that given by the subsequent patent. The invention must be shown to have been before made known. Whatever, therefore, is essential to the invention must be read out of the prior publication. If specific details are necessary for the practical working and real utility of the alleged invention, they must be found substantially in the prior publication.’ With the exception to which I have called attention—I mean about the ordinary workman—that is the law. Mr. Justice *Grove* was the first to call attention to the fact that there might be prior anticipation by publication, although the specification was defective in the directions given to the workman. His judgment upon that point will be found in *Philpott v. Hanbury*, 2

Statement of
the present law
by *Lindley*,
L.J.

(*n*) (1896) 13 R. P. C. 368.

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ments.

R. P. C. 43, and it has been adopted. I do not know whether expressly or not, but the same criticism and the same observations will be found in the House of Lords cases for 1892, at page 378, in the case of the *Anglo-American Brush Electric Light Corporation v. King, Brown & Co.*, 9 R. P. C. 313. The question there was whether a specification of one *Varley* was an anticipation of the plaintiff's patent, and Lord *Watson* says this: 'I do not think it necessary to deal with the conflict of testimony as to the sufficiency of *Varley's* specification for the guidance of a skilled workman. The Lord Ordinary was of opinion that the appellants had failed to prove that part of their case. But I agree with his Lordship and with the learned Judges of the First Division in holding that the sufficiency or insufficiency of the specification for that purpose does not afford a crucial test of prior publication. Every patentee, as a condition of his exclusive privilege, is bound to describe his invention in such detail as to enable a workman of ordinary skill to practise it, and the penalty of non-compliance with that condition is forfeiture of his privilege. His patent right may be invalid by reason of non-compliance, but it certainly does not follow that his invention has not been published. His specification may, notwithstanding that defect, be sufficient to convey to a man of science and employers of labour information which will enable them, without any exercise of inventive ingenuity, to understand his invention and to give a workman the specific directions which he failed to communicate. In that case I cannot doubt that his invention is published as completely as if his description had been intelligible to a workman of ordinary skill.' With that correction of Lord *Westbury's* judgment, the judgment stands, and, applying it to this case, I confess I cannot see what on earth there is in the plaintiff's specification which is not to be found in *O'Connor's*; I do not say in actual words, but to anybody who reflects upon it and thinks about it and grasps it." (o)

Evidence of a skilled person, with knowledge of the patent, as to anticipations.

When, however, a skilled person with the knowledge of the patentee's specification produces a successful result and says he obtained it by following only the directions of an old and unused paper anticipation, the Courts look very carefully at such evidence before accepting it. (p)

(o) See also *Cassel Gold Extracting Co. v. Cyanide Gold Recovery Syndicate*, (1895) 12 R. P. C. 256; *Gadd v. Mayor of Manchester*, (1892) 9 R. P. C. 532; *Shrewsbury and Talbot Cab Co. v. Sterckx*, (1896) 13 R. P. C. 53; *Edison v. Holland*, (1887) 5 R. P. C. 459; 6 R. P. C. 243;

Dick v. Ellams Duplicator Co., (1899) 16 R. P. C. 414, 423; 17 R. P. C. 196.

(p) *Plimpton v. Malcolmson*, (1876) L. R. 3 Ch. D. 573-576; *Defries v. Sherwood*, (1897) 14 R. P. C. 321; see pp. 462, 464 *post*.

In *Otto v. Linford* (q) a prior specification was relied on as a publication of the invention claimed by *Otto*. *Brett*, L.J., said that the question to be considered was whether the prior specification, fairly read by a person conversant with such matters, would give a reasonably clear description of the latter invention. In other words, supposing it to relate to a machine, would it give such a reasonably clear description of a machine that would accomplish what the machine of the later inventor effected.

Prior Documents.

Unless all essential features of the invention are disclosed by an anticipating document it will not be a publication.

In *Stoner v. Todd*, (r) it appeared that a certain provisional specification contained a partial description of a piece of mechanism which was not mentioned in the corresponding complete specification. A subsequent patent was taken out for the piece of mechanism, and this was held not to be invalidated by the incomplete description in the prior provisional specification.

In the words of Lord *Westbury*: "An antecedent specification ought not to be held to be an anticipation of a subsequent discovery, unless you have ascertained that the antecedent specification discloses a practicable mode of producing the result which is the effect of the subsequent discovery; (s) and in the language of Lord *Wensleydale*, 'the mere production of a notion that a particular article might be made, without any information or means of knowledge communicated to the public, does not prevent a subsequent first inventor of those means from taking out a patent.'" (t)

In order that a description in a prior document may invalidate, on the ground of want of novelty, a subsequent patent, it is necessary that *all* the essential features of the alleged invention should be disclosed by the prior document. Thus, a patented process for "improvements in the manufacture of grooved tyres for wheels" consisted in rolling a flat bar of iron so as to get it into a curved form with flanges set up upon each side, and then to roll so as to get the curved form into a flat base, but not so as to get merely rectangular flanges, but to roll (which necessitated rollers of a novel and peculiar kind) so as to get flanges at an acute angle to the flat base; or, if not at an acute angle, by rolling, to get flanges with bead-shaped heads whereby to produce an iron tyre with an

(q) 46 L. T. N. S. 35.

(r) L. R. 4 Ch. D. 58.

(s) *Betts v. Menzies*, (1881) 10 H. L. Cas. 154; see also *Woodcroft's Patent*, (1846) 2 W. P. C. 23.

(t) *Betts v. Menzies*, (1862) 10 H. L. Cas. 157; see also *Muntz v. Foster*, (1844) 2 W. P. C. 105; *Galloway v. Bladen*, (1839) 1 W. P. C. 501; *Thomson v. Batty*, (1889) 6 R. P. C. 81.

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ments.

undercut dovetailed section which would grip the india-rubber tyre and would have a flat base in order that it might accurately fit on to the felloe of the wooden wheel and that the india-rubber might lie perfectly flat upon it when extended round it. This was held not to be anticipated by a specification which did not disclose the attainment of the undercut dovetailed section, though it did disclose the attainment of the other essential features. (*u*)

Highly scien-
tific inven-
tions.

With reference to the publication of a highly scientific—*e.g.*, a chemical—invention it is to be remembered that there are two distinct forms of literature on the subject: the systematic scientific literature, and the technical literature; and the distinction is one very important to be borne in mind in dealing with such patents, since publications having reference to chemical science will be studied by scientific chemists, but speaking generally such publications are not sought after and studied by the practical working chemists. (*x*)

The existence of a chemical patent wherein the combined effect of two or more chemicals is claimed, in order to bring about a desired result, does not by any means, necessarily, constitute an anticipation of a subsequent discovery that by the use of any one of the named chemicals the desired result can be attained, and *à fortiori* when the compound of the two has failed to do so, for there are any number of cases known in chemistry where two things when put together act very differently from what they do apart. (*y*)

Though an
anticipation
might be an
infringement,
it is not neces-
sarily a pub-
lication.

It does not at all follow that an unused paper anticipation which, if carried out, might be held to be an infringement of a subsequent patent, is an anticipation of that subsequent patent. A clumsy imitation of a patented machine or a patented article may be an infringement, although it is not such as would have been, if prior in date, an anticipation defeating an inventor's right to a patent. (*z*) Thus, in the case of *Welch's* patent for holding on bicycle tyres by inextensible wire rings, it was objected that this was anticipated by a prior specification of *Latta*. Two figures in *Welch's*

(*u*) *Shrewsbury and Talbot Cab Co. v. Sterckx*, (1895) 12 R. P. C. 336; 13 R. P. C. 44.

(*x*) *Badische Anilin und Soda Fabrik v. Levinstein*, (1885) L. R. 29 Ch. D. 384.

(*y*) In judgment of C. A., *Cassel Gold Extracting Co. v. Cyanide Gold Recovery Syndicate*, (1895) 12 R.

P. C. 256.

(*z*) *Caldwell v. Van Vlissingen*, (1851) 9 Hare, 421; *Murray v. Clayton*, (1872) L. R. 7 Ch. 585; *Daw v. Eley*, (1865) L. R. 3 Eq. 492, 501 *n.*; *Newton v. Grand Junction Ry. Co.*, (1846) 5 Ex. 334; *Pneumatic Tyre Co. v. East London Rubber Co.*, (1896) 14 R. P. C. 103; 14 R. P. C. 573.

specification, showing extreme cases of the application of his invention, approximated in appearance to a figure in *Latta's* specification. From *Latta's* specification, however, it was clear that he proposed to use the wires—of which he had three—for a different object to *Welch*—viz., to hold on the tyre by means of the pressure of the wires and rubber on the rim; and *Latta* further stated that if any one of his wires were cut the tyre would still be held on. This clearly showed that his object was different to *Welch's*, and as there was no evidence of user of *Latta's* invention the Court held that it did not anticipate *Welch*—though, no doubt, if after *Welch's* patent some one adopted *Latta's* figure and was really intending to use *Welch's* invention, and merely putting in the third wire as a colourable distinction, such conduct would be an infringement of *Welch's* patent. (a)

Though a documentary publication may not be an anticipation of a subsequent patent, notwithstanding that it describes the main features of the invention, still such a publication may very much narrow the ambit of the patentee's claim; and an alleged infringer may consequently be held not to have infringed, whereas had it not been for the prior publication he might have been an infringer. (b)

A document which is not a publication may narrow the ambit of the claim.

A general statement that a class of bodies will effect a certain purpose is no anticipation of an invention which consists in the application of one member of the class which possesses particular advantages not shared by the other members of the class. (c) So also the use in a particular way of a limited number of a larger class of bodies mentioned in a prior document may form the subject-matter of a valid patent when the inventor has, by the particular use of the limited suitable members of the class, been enabled to produce a new result. (d)

General statement as to a class no publication of selection of a particular member.

A drawing alone which has been published so as to become the property of the public is quite sufficient to invalidate a subsequent patent, if the drawing is intelligible to machinists

Drawings.

(a) *Pneumatic Tyre Co. v. East London Rubber Co.*, (1896) 14 R. P. C. 77, 102; 14 R. P. C. 573.

(b) *Automatic Weighing Machine Co. v. Knight*, (1889) 6 R. P. C. 113; *Automatic Machine Co. v. Combined Weighing Machine Co.*, (1889) 6 R. P. C. 120; *Automatic Weighing Machine Co. v. National Exhibitions Association*, (1892) 8 R. P. C. 345; 9 R. P. C. 41; *Automatic Weighing Machine Co. v. International Hygienic Society*, (1889) 6 R. P. C. 475; *Vorwerk v.*

Evans, (1890) 7 R. P. C. 265; *Beavis v. Rylands Engineering Co.*, (1900) 17 R. P. C. 711.

(c) *Hills v. The London Gas Light Co.*, (1857) 27 L. J. Ex. 60; 5 H. & N. 312; 29 L. J. Ex. 409; *Wylie and Norton's Application*, (1896) 13 R. P. C. 97; see p. 41 *ante*.

(d) *Lancashire Explosives Co. v. Roburite Explosives Co.*, (1895) 12 R. P. C. 470, 478; 13 R. P. C. 429; 14 R. P. C. 303.

Prior
Docu-
ments.

and enables them by its aid alone to make the machine indicated; (e) and a description that will enable competent workmen to carry out an invention will vitiate a subsequent patent for that invention, even though at the time of the prior description no one did use the machine made according to the description, provided that its use is indicated in such description. (f)

Description of
a useless ma-
chine is no
publication of
a useful one.

If a prior description when completely carried out results in the production of an impracticable and useless machine, it will be no anticipation and publication of the result arrived at by a subsequent inventor which is both practicable and useful. (g) It might well be that the description of a machine which was useless without the application of a subsequent discovery would vitiate a later patent taken out for the same machine upon the same description, but after the discovery which rendered it practicable had been published and become general knowledge, and a thing which the public would apply from the description in question when read in the light of that essential knowledge. (h)

So also if the alleged anticipation describes a machine which has a practical defect, and a subsequent invention removes that defect, the prior description is no publication of the later invention. Thus, in the case of a sewing machine to be used for stitching boots, a prior description of a machine in which a forked looper and an auxiliary looper were used and the thread was presented to the point of the needle, was relied on to defeat the patent of the plaintiff. The auxiliary looper and the presentation of the thread to the point of the needle were shown to be defects, and the plaintiff's invention, according to which he removed the auxiliary looper and presented the thread to the notch of the needle instead of to the point, and so removed the defect, was held to be good subject-matter of a valid patent. (i)

Invention may
be partly pub-
lished by one
document and
partly by
another.

An invention may be anticipated partly by one prior publication and partly by another, so that in the result the whole

(e) *Herrburger v. Squire*, (1889) 6 R. P. C. 194; *Electrical Construction Co. v. Imperial Tramways Co.*, (1900) 17 R. P. C. 53; cf. *Lewis and Stirkler's Patent*, (1896) 14 R. P. C. 24, in which, on the facts, a drawing was held no publication.

(f) *United Telephone Co. v. Harrison*, (1882) L. R. 21 Ch. D. 720; 51 L. J. Ch. 705. judgment of Fry, J.;

see p. 147 *ante*.

(g) See pp. 151, 119, *ante*.

(h) *Tubeless Pneumatic Tyre and Capon Heaton, Ltd. v. Trench Tubeless Tyre Co.*, (1899) 16 R. P. C. 313; *Gaulard and Gibbs' Patent*, (1890) 7 R. P. C. 367; see p. 220 *post*.

(i) *English and American Machinery Co. v. Union Boot and Shoe Machinery Co.*, (1894) 11 R. P. C. 137, 367.

invention may have been previously published. It is not, however, allowable to take a mosaic construction of previous publications, and thereby deny the want of novelty in an invention, which consists in the construction of a whole, the component parts of which have never before been put together in the manner shown by the subsequent inventor. (*k*)

Prior Documents.
—

Two or more documents which are public knowledge, and which indicate discussion, invention, or discovery in the same line may be honestly taken together and form a publication of a subsequent alleged invention; but it is not allowable, for the purpose of showing the publication of a combination which has never in fact existed or been described prior to the time the patentee discloses his invention, to piece together parts of prior documents which describe things now found to be useful, but which were never before intended to be put in combination. (*l*)

Mosaic of extracts from prior documents not a publication.

James, L.J., delivering the judgment of the Court of Appeal in *Von Heyden v. Neustadt*, (*m*) and commenting on a number of extracts and papers relied on as evidence of the prior publication of the invention which was the subject of the action, said—

“We are of opinion that if it requires this mosaic of extracts from annals and treatises spread over a series of years to prove the defendant’s contention, that contention stands thereby self-condemned. . . . And even if it could be shown that a patentee had made his discovery of a constructive process by studying, collating, and applying a number of facts discriminated in the pages of such works, his diligent study of such works would as much entitle him to the character of an inventor as the diligent study of the works of Nature would do.”

It is to be remembered that there is no case in which a new commercial article consisting of a *de jure* new combination of parts produced for the first time has been held to be published by a separate description of any one or more of those parts alone, or of some combinations of them. (*o*) It is no detraction from the merit of an inventor to point out that one detail is to be found in one obscure

(*k*) *Neilson v. Betts*, (1871) L. R. 5 H. L. 1; 40 L. J. Ch. 317; *Von Heyden v. Neustadt*, (1880) 50 L. J. N. S. Ch. 126; *Young v. Fernie*, (1866) 4 Giff. 577; L. R. 1 H. L. 36.

(*l*) See *Otto v. Linford*, (1881) 46

L. T. N. S. 35.

(*m*) (1880) 50 L. J. N. S. Ch. 128.

(*o*) *Otto v. Linford*, 46 L. T. N. S. 35; *Pneumatic Tyre Co. v. Casswell* (1896) 13 R. P. C. 375.

Prior
Docu-
ments,
—

specification, and another detail in another, and so on, and to say that all he had to do was to put these things together. The getting of the idea, and the putting together of that idea, with the mechanical means of attaining it, may constitute invention. (p)

(p) *Fawcett v. Homan* (1896) 13 R. P. C. 410

CHAPTER IV.

UTILITY.

UTILITY AT COMMON LAW.

THERE do not appear to be any words in the sixth section of the Statute of Monopolies directly implying that the subject of a patent must be an invention which is useful, but "utility" is a condition imposed by the Common Law quite independently of enactment. Utility is a requisite at Common Law.

The Crown in exercising any of its prerogatives must do so for the good of the public, otherwise it would be acting contrary to the law. (a) The Sovereign has no power to charge its subjects, or abridge any of their liberties, excepting it be for their benefit, or in exchange for a sufficient consideration. (b) It is evident that during the continuance of a patent, which grants to the patentee and his nominees the sole use and enjoyment of the invention forming the subject of the grant, the public are not able to exercise the invention without the licence of the owner for the time being of the patent, even though they should, independently of the information contained in the specification, (c) make the discovery for themselves, and if they desire to procure articles made according to the invention they are obliged to pay whatever price the owner of the patent right chooses to demand. (d) The Sovereign in making the grant really acts on behalf of the public, (e) and it is therefore only equitable that they should obtain some consideration in respect of the benefit they confer on the grantee.

The subject-matter of every patent must be an art, (f) and if such art is incapable of producing useful results in its application to any of the purposes in respect of which the grantee claims protection, it is clear that the public can get

(a) Bac. Abr. tit. "Prerog."

(b) 2 Rol. Abr. 172, s. 20.

(c) See chap. v. *post*.

(d) As to compulsory licences, see

Vol. II. p. 136.

(e) Per Lord Eldon, L.C., in *Harmar v. Playne*, (1809) 14 Ves. 130, 136.

(f) p. 24 *ante*.

Utility at
Common
Law.

Utility is requi-
site at Com-
mon Law;

no benefit from its application, and the grant will be therefore void on the ground that the necessary consideration for its support is wanting.

Moreover, every patent contains a recital to the effect that the Sovereign, being willing to give encouragement to all arts and inventions which may be for the public good, is pleased to condescend to the applicant's request. It is the evident intention, therefore, that the patentee should give as a consideration to the public an art or invention which is for their good, whereas one devoid of utility would not be. In this latter case the Crown would have been deceived in its grant, which would be void on the ground of the failure of part of the consideration in respect of which the grant was made, (*g*) that is to say, because there was no utility in the invention. (*h*)

It is, of course, the subject of the patent—*i.e.*, the art by the exercise of which the manufactured articles are produced, which must possess the quality of utility. (*i*) The utility of the articles produced by the exercise of the protected art is necessarily the measure of the utility of the art itself, for an art incapable of yielding useful results cannot possess this quality, which is essential for its protection by letters patent.

It is requisite at Common Law, as stated in cases earlier and later than the Statute of Monopolies, that an invention to be capable of substantiating a patent shall possess the element of utility. (*k*)

(*g*) Vin. Abr. Prerog. M.C.

(*h*) p. 166 *post*.

(*i*) See Palmer v. Wagstaff, Newton, L.J., vol. xliii. p. 151.

(*k*) It was argued in Darcy v. Allin, (1602) Noy, R. 182, that when a man brings into the realm any new trade, and that for the good of the realm, the King may grant him a monopoly for a reasonable time "in consideration of the good that he doth bring by his invention to the commonwealth, otherwise not."

And again, in Sheppard's Abridgment (Part iii. p. 61), it was stated that the King may for a reasonable time grant a monopoly patent for a new trade or device, or any new engine tending to the furtherance of it, for the good of the realm.

In *a scire facias* to repeal a patent, Buller, J., held that it was a question for the jury to decide whether the only new part of the machinery described in the specification was material or useful, and that if they came to the

conclusion that such was not the fact the patent was void. The jury gave their verdict against the patent, and on the motion for a new trial no objection was taken to this direction of the Judge (*R. v. Arkwright*, Dav. P. C. 138).

In *Boulton v. Bull*, (1795) 2 H. Bl. 463; Dav. P. C. 162, Rooke, J., said the public had a right to receive a meritorious consideration in return for the protection which the patent claimed.

In *Turner v. Winter*, (1785) 1 T. R. 602; Dav. P. C. 151, Ashurst, J., stated that a patent would be contrary to law were it not for the advantages which the public derive from the communication of the invention.

In *Manton v. Parker*, (1815) Dav. P. C. 327, Thomson, L.C.B., holding the plaintiff's patent void on the ground of the utility of the invention having failed, nonsuited him.

In *Manton v. Manton*, (1815) Dav. P. C. 333, Gibbs, L.C.J., held that in

As we have seen, (l) the Statute of Monopolies did not confer any new right on the Crown, but only reserved to it the privilege which it had long enjoyed before the statute, of granting monopolies in respect of new inventions, and the concluding words of the reserving clause (m) expressly declared that such privileges are not to be "contrary to the law, nor mischievous to the State by raising the prices of commodities at home, or hurt of trade, or generally inconvenient." And the section concludes with a declaration that grants made in virtue of the power thereby reserved to the Crown shall be "of such force as they should be if this Act had never been made, and of none other," clearly indicating that all the provisions imposed by the Common Law were to be preserved, whether expressly mentioned in the Act or not. Thus the element of utility is as much a requisite, since the passing of the statute, as it was before it, for the enactment made no difference in this respect, and every case relative to utility decided since the statute is a fresh declaration of the Common Law on the subject.

Utility at
Common
Law.
—
and is pre-
served by the
Statute of
Monopolies.

Sir *Edward Coke*, commenting on the words "mischievous to the State by raising the prices of commodities at home," in 21 Jac. I. c. 3, s. 6, says: "In every such new manufacture as deserves a privilege there must be *urgens necessitas* and *evidens utilitas*," and that the reason why such a privilege is good in law is "because the inventor bringeth to and for the commonwealth a new manufacture by his invention, costs, and charges, and therefore it is reason that he should

order to support a right to the exclusive enjoyment of a patent, it is necessary that the party who takes out a patent should show that the invention is useful to the public.

In *Bovill v. Moore*, (1815) Dav. P. C. 399, the same learned Judge held that it was necessary that the plaintiff should prove that his invention was useful.

In *Huddart v. Grimshaw*, (1803) Dav. P. C. 265, *Ellenborough, C.J.*, held that in order to support the patent the invention ought to be beneficial to the public.

In *Brunton v. Hawkes*, (1820) 4 B. & Ald. 541, *Abbott, C.J.*, put it to the jury to say whether the invention was useful. And in *Russell v. Cowley*, 1 W. P. C. 459, *Lyndhurst, C.B.*, said that the first question respecting the invention was whether it was new and useful; and the rest of the Court concurred in this statement.

In *Hill v. Thompson*, (1817) 1 W. P. C. 235, *Eldon, L.C.*, concurred in the direction of *Dallas, J.*, to the jury who tried the case in the Court of Common Pleas, that the invention to support a patent must be useful. And in *Minter v. Wells*, 1 W. P. C. 129, *Alderson, B.*, stated the same fact. And again, in *Morgan v. Seaward*, 2 M. & W. 544; *Mur. & H.* 55; 1 *Jur.* 527; 1 W. P. C. 170, the same learned Judge said, that if the invention was useful it was a subject to be protected by patent; but if it was of no use then it was not a subject to be protected by patent.

In *Neilson v. Harford*, (1841) 8 M. & W. 806; 1 W. P. C. 331, the Court of Exchequer held that a machine produced according to the invention must be beneficial to the public in order that the patent may be valid.

(l) p. 1 *ante*.

(m) s. 6.

Utility at
Common
Law.

Patents only
used for pur-
pose of ob-
structing
improvements
are void.

have a privilege for his reward (and the encouragement of the like) for a convenient time."

It scarcely admits of doubt that a patent for a useless invention which might be employed for the purpose of obstructing improvements would be void as being "prejudicial or inconvenient to our subjects in general" within the meaning of the first proviso in the grant itself, (n) and might, consequently, be annulled under the terms of that condition. It might also be annulled as being "mischievous to the State, to the hurt of trade, and generally inconvenient" within the meaning of the Statute of Monopolies.

Thus *Parke, B.*, (o) assigned as the reason why the law requires an invention to be useful in order to merit protection by patent, "that a grant of a monopoly for an invention which is altogether useless may well be considered as 'mischievous to the State, to the hurt of trade, or generally inconvenient' within the meaning of the Statute of Jac. I., which requires, as a condition of the patent, that it should not be so, for no addition or improvement of such an invention could be made by any one during the continuance of the monopoly without obliging the person making use of it to purchase the useless invention."

It has been stated that on a review of the cases it may be doubted whether the question of utility is anything more than a compendious mode, introduced in comparatively modern times, of deciding the question whether the patent be void under the Statute of Monopolies. So in *Palmer v. Wagstaff*, where the evidence showed (p) that the patent, the subject of the action, had never been worked, and no attempt had been made to bring the articles, manufactured according to the method stated in the specification, before the public, and that the patent was only being used for the purpose of stopping the defendant from making improvements in the manufacture of candles, *Pollock, C.B.*, said that in legal language it is a fraud on the law of patents for any person to take out a patent with a view to the obstruction of improvements. And again, the same learned Judge in *Crossley v. Potter* (q) held that a patent for an invention which is merely to obstruct every subsequent improvement, which is to step in and prevent the exercise of the ingenuity of mankind and the

(n) Vol. II. p. 373.

(o) *Morgan v. Seaward*, (1836) 1 W. P. C. 197.

(p) (1853) *Newton, L.J.*, vol. xliii.

p. 131.

(q) (1853) *Macr. P. C.* 240.

introduction of other inventions adapted to the particular subject to which the invention may be applicable, could not in his judgment be supported.

Utility at
Common
Law.

The ground of the above dicta of *Pollock*, C.B., appears to be the assumption that the patentee is under the obligation of using the invention within the realm, and, if required, of licensing subsequent inventors to do so. It is submitted that, apart from the provisions of sec. 3 of the Patents Act of 1902, the patentee is not under any such obligation at common law, or in consequence of any statutory enactment. In order that a patent may be found void under the first proviso of the grant it is essential that the alleged invention *per se* must be shown to be "prejudicial or inconvenient to our subjects in general." The fact that the patentee, in the exercise of his common law rights (which are, of course, now curtailed by sec. 3 of the Patents Act 1902) to allow or prohibit the actual working of a new and useful patented invention at will, does, in a sense, actually prejudice some subsequent inventor, or other person desirous of using it, is not sufficient. Such prejudice to the subsequent inventor, or other person, does not arise from the nature of the alleged invention, but from the manner in which the patentee, acting within his common law rights, chooses to conduct his business, and there is no prejudice to the King's subjects in general within the meaning of the proviso. If, however, an alleged invention which is not useful were put in monopoly, the grant would obviously be "mischievous to the State, to the hurt of trade, and generally inconvenient," as well as "prejudicial to our subjects in general," and *ipso facto* void both under the terms of the sixth section of the Statute of Monopolies and the proviso in the patent. This will appear from a consideration of the fact that a subsequent inventor who had perfected the useless invention could not use the result of his skill without paying royalty to the patentee of the useless invention, who would thus be enjoying a privilege though having made no invention for the public good, and, consequently, having deceived the Crown in its grant. (r) It is further submitted that the real ground of the decisions in *Palmer v. Wagstaff* and *Crossley v. Potter* should have been the presumption of want of utility arising from non-user.

It is to be remembered that not every useful novelty is

(r) p. 158 *ante*.

Meaning
of Utility
in Law.

patentable. To be patentable the novelty, besides being useful, must be the outcome of inventive ingenuity. (s)

It is not necessary that the invention should be actually put in practice, and the articles produced by its exercise sold, in order that the requisite utility in the invention to merit protection by letters patent may be established; it is quite sufficient if there is evidence to the effect that the invention, if put in practice, would produce useful results. (t)

MEANING OF UTILITY IN LAW.

Utility does
not mean
abstract
utility;

The kind of utility which the law requires that an invention must possess to make it fit subject-matter for a patent is not abstract utility.

In a case in which the validity of a patent for improvements in the manufacture of stays and corsets was questioned, on the ground that the invention was not useful, *Grove, J.*, directed the jury that, though they might be of opinion that stays are very bad things in themselves, they ought not to say that the invention was useless for that reason, for utility in law means "an invention better than the preceding knowledge of the trade as to a particular fabric." (u)

or necessarily
an improve-
ment from
all points of
view.

This definition given by *Grove, J.*, requires some modification, for it may well be that a person might produce a new article not so good as the best of its kind, but still *good* and readily sold because it is cheaper. It is submitted that an article which is *good* and cheaper, by reason of its manufacture, than an intrinsically *better* prior article may be sufficiently useful to support a patent on the ground of utility. (x) Further, it is no objection to a patent on the ground of want of utility, provided the thing is useful for the purpose for which the patentee intends it, to point out that it has not come into general use because something else more recent has been preferred. Comparative utility in this sense has

(s) *Brook v. Aston*, (1857) 8 Ell. & B. 478; *Ralston v. Smith*, (1865) 11 H. L. C. 223; *Chamberlain and Hookham v. Mayor, &c., of Bradford*, (1903) 20 R. P. C. 673, 687; *Riekman v. Thierry*, (1896) 14 R. P. C. 185; p. 30 *ante*.

(t) *Otto v. Linford*, (1881) 46 L. T. N. S. 39; *United Telephone Co. v. Bassano*, (1886) 3 R. P. C. 313; *Ehrlich v. Ihlee*, (1888) 5 R. P. C. 450; *Edison v. Holland*, (1889) 6 R. P. C. 277.

(u) *Young v. Rosenthal*, (1884) 1 R. P. C. 34, 41; see also *Manton v. Parker*, (1815) Dav. P. C. 327; 1 W. P. C. 192 n.; *Manton v. Manton*, (1815) Dav. P. C. 348; 1 W. P. C. 192 n.; 1 Carp. P. C. 278.

(x) See judgment of *Buckley, J.*, *Welsbach Incandescent Gas Light Co. v. New Incandescent (Sunlight Patent) Gas Light Co.*, (1900) 17 R. P. C. 252, which practically adopts the above submission.

nothing to do with it so long as the thing is useful for the purpose intended. (*y*) It would appear that an "invention" is useful in the eye of the law when it is capable of commercial existence as a process of manufacture, (*z*) or the public are thereby enabled to do something which they could not do before, or to do something which they could do before, but in a more advantageous manner; (*a*) provided always that the thing in question is not contrary to the law, nor mischievous to the State by raising prices of commodities at home, or hurt of trade, or generally inconvenient. In short, an invention is patentable which offers to the public a useful choice, (*b*) *i.e.*, useful in some cases though not in all cases, unless the patentee has represented it as useful in all cases. (*c*)

Meaning
of Utility
in Law.

When the validity of a patent is put in issue, in an action at law, on the ground of lack of utility, it is not always necessary, for the purpose of supporting the patent, to establish that the invention is *commercially* useful. The reason why it has not been adopted in commerce may be that it has been immediately superseded by simpler and better or cheaper constructions, involving the same principle. (*d*) There is in fact in many cases no necessary relationship between the commercial pecuniary success of an invention and its utility in patent law; (*e*) but, of course, when the question is one of improvement by reason of cheaper production, the consideration of commercial utility is of the very essence of the patent, and the thing claimed has not really been invented unless that condition has been fulfilled. (*f*)

Commercial
utility.

The circumstance that an invention has not come into general use merely raises a strong presumption against its utility, (*g*) and commercial success is not necessarily evidence-

(*y*) *Fawcett v. Homan*, (1896) 13 R. P. C. 405.

(*z*) *Wilson Brothers Bobbin Co. v. Wilson & Co., Ltd.*, (1902) 20 R. P. C.

(*a*) See note (*u*) *ante*.

(*b*) *Welsbach Incandescent Gas Light Co. v. New Incandescent (Sunlight Patent) Gas Light Co.*, (1900) 17 R. P. C. 252; *Ward v. Hill*, (1901) 18 R. P. C. 481; 20 R. P. C. 189.

(*c*) *Ward v. Hill*, (1903) 20 R. P. C. 199, 203.

(*d*) *Galloway's Patent*, (1843) 1 W. P. C. 724; *Bovill v. Moore*, (1815) Dav. P. C. 361; *Otto v. Linford*, (1881) 46 L. T. N. S. 41; *United Telephone Co. v. Bassano*, (1886) 3 R. P. C. 313; *Ehrlich v. Ihlee*, (1888) 5 R. P. C. 450;

Edison v. Holland, (1889) 6 R. P. C. 277; *Wilson v. Union Oil Mills*, (1891) 9 R. P. C. 70.

(*e*) *Badische Anilin und Soda Fabrik v. Levinstein*, (1887) L. R. 12 App. Cas. 712; *Ehrlich v. Ihlee*, (1888) 5 R. P. C. 450; *Kurtz v. Spence*, (1887) 5 R. P. C. 182; *Fawcett v. Homan*, (1896) 13 R. P. C. 274; *Atkins and Applegarth v. Castner-Kellner Alkali Co.*, (1901) 18 R. P. C. 295.

(*f*) See *Badische Anilin und Soda Fabrik v. Levinstein*, (1887) 12 App. Cas. 712; see also 1 W. P. C. 71 *n.*; pp. 12, 69 *ante*.

(*g*) *Morgan v. Seaward*, (1837) 1 W. P. C. 185; *Tetley v. Easton*, (1852) Macr. P. C. 56.

Amount of utility. Invention must be Useful as Specified. ———

that the subject-matter of the patent, though useful, is the outcome of *invention* and so fit to support the patent. (*h*)

An alleged invention which differs from a prior invention only in that it contains an ingredient which does neither good nor harm does not possess sufficient utility to merit a patent. (*i*)

AMOUNT OF UTILITY.

Slight amount of utility is sufficient to support a patent.

The law does not require that an invention, to be worthy of a patent, must possess any definite amount of utility; but it has been decided, over and over again, that a very slight amount of utility will be sufficient (*k*) provided that the Crown has not been deceived as to the extent of the utility of the invention. (*l*) Thus, when the validity of *Galloway's* patent for improvements in steam-engines came into question, *Alderson, B.*, told the jury, with regard to the utility of the invention, that the question for them to decide was, whether the steam-engine was a useful invention, and that he thought, if *Galloway's* engine was of a different construction from any other steam-engine, and of any use to the public, that was sufficient. (*m*)

INVENTION MUST BE USEFUL AS SPECIFIED, AND FOR THE PURPOSE STATED.

Invention is useless unless it does what the patentee states it will do.

The patent will be void unless the invention be useful exactly as it is specified by the patentee, notwithstanding that it may be useful in a modified form, (*n*) or in conjunction with some subsequently discovered material or device. (*o*) In other words, the question always is, Does the invention really do, when put in practice by a competent man, what it assumes to do? And unless the public are enabled to do what the inventor says they can do by means of his invention

(*h*) p. 108 *ante*; *Fawcett v. Homan*, (1896) 13 R. P. C. 274.

(*i*) *Lawrence v. Perry*, (1885) 2 R. P. C. 184.

(*k*) *Philpot v. Hanbury*, (1895) 2 R. P. C. 37; *Plimpton v. Malcolmson*, (1876) L. R. 3 Ch. D. 582; *Otto v. Linford*, (1881) 46 L. T. N. S. 35; *Scott v. Hambling & Co.*, (1897) 14 R. P. C. 123.

(*l*) *Pirrie v. York Street Flax Spinning Co.*, (1893) 10 R. P. C. 39;

11 R. P. C. 429.

(*m*) *Morgan v. Seaward*, (1836) 1 W. P. C. 172, 186.

(*n*) *Tolson v. Speight*, (1896) 13 R. P. C. 718; *Wilson Brothers Bobbin Co., Ltd. v. Wilson & Co., Ltd.*, (1902) 20 R. P. C. 1.

(*o*) *Tubeless Pneumatic Tyre and Capon Heaton, Ltd. v. Trench Tubeless Tyre Co., Ltd.*, (1899) 16 R. P. C. 291, 312.

—i.e., the invention is useful for the purpose for which the inventor intended it—the patent is void. (*p*)

Invention
must be
Useful as
Specified.

The fact that one mode of carrying out the invention described by the patentee in his specification is preferable to, and more useful than, other modes described, all being useful, is no objection to the patent. (*q*) Neither is a patent invalid merely because it turns out that the most sanguine expectation of the patentee is not realised in full. (*r*) When an invention does what it is intended by the patentee to do, and the end attained is itself useful, the invention is a useful one. A patent for such an invention is not to be held bad for want of utility, by comparing it with other known methods or things which may be preferred to it. An invention may be useful, although, owing to other circumstances, the public will not use it; but if they do use it no better proof of utility can be had, (*s*) and the fact that a defendant has attempted to infringe a patent is most cogent evidence as to its utility. (*t*)

Upon the point that an invention must be useful, as specified, and for the purpose for which it is stated by the patentee to be useful, the following passage from the judgment of Lord Lindley, then Lindley, L.J., in *Lane Fox v. Kensington and Knightsbridge Electric Lighting Co., Ltd.*, (*u*) with reference to the facts of that case, may be quoted with advantage:—

“The utility of the alleged invention depends, not on whether by following the directions in the complete specification all the results necessary for commercial success can be obtained, but on whether by such directions the effects which the patentee professed to produce could be produced, and on the practical utility of those effects. Can it be said that the invention, as described in the amended specification, was, in 1878, a practically useful addition to the then stock of inventions? To judge of utility the directions in the amended specification must be followed, and if the result is that the object sought to

(*p*) *Cornish v. Keene*, (1835) 1 W. P. C. 507; *Morgan v. Seaward*, (1837) 1 W. P. C. 185; *Easterbrook v. Great Western Ry. Co.*, (1885) 2 R. P. C. 210; 3 R. P. C. 94; *Badische Anilin und Soda Fabrik v. Levinstein*, (1887) 4 R. P. C. 462; L. R. 12 App. Cas. 712, 719, 720; *Wilson v. Union Oil Mills*, (1892) 5 R. P. C. 70; *Fawcett v. Homan*, (1896) 13 R. P. C. 268; *Tubeless Pneumatic Tyre and Capon Heaton, Ltd. v. Trench Tubeless Tyre Co., Ltd.*, (1899) 16 R. P. C. 201;

Atkins and Applegarth v. Castner-Kellner Alkali Co., (1901) 18 R. P. C. 295.

(*q*) *Miller v. Searle*, (1893) 10 R. P. C. 106.

(*r*) *Saccharin Corporation v. Chemical and Drugs Co.*, (1899) 17 R. P. C. 38.

(*s*) *Fawcett v. Homan*, (1896) 13 R. P. C. 405.

(*t*) *Lucas v. Miller*, (1885) 2 R. P. C. 155; *Miller v. Barker*, (1893) 10 R. P. C. 111.

(*u*) (1892) 9 R. P. C. 417.

Invention
must be
Useful as
Specified.

be attained by the patentee can be attained, and is practically useful at the time when the patent is granted, the test of utility is satisfied. Utility is often a question of degree, and always has reference to some object. 'Useful for what?' is a question which must be always asked, and the answer must be, 'Useful for the purposes indicated by the patentee.' See, per Lord Chief Justice *Tindal* in *Cornish v. Keene*, 1 W. P. C. on p. 507; *Edison v. Holland*, 6 R. P. C. 243; *Badische Anilin und Soda Fabrik v. Levinstein*, 12 App. Cas. on pp. 712, 719, 720. An invention may be useful as indicating the direction in which further progress is to be expected, and yet that same invention may be useless for any other purpose; useless, that is, as an invention without further developments and improvements which have not occurred to the patentee. This is, in my opinion, the real truth with respect to the plaintiff's invention as now claimed by him. He made a distinct and important step in advance. The plaintiff was the pioneer; he showed others the road to be followed, but he did not give the traveller the information necessary to enable him to travel on it. There were difficulties to be overcome which the patentee did not foresee, and against which he naturally made no provision. There is an enormous mass of conflicting evidence upon the possibility of obtaining practically useful results by following the directions contained in his specification. Much of the evidence adduced against the patentee merely goes to show that by following the directions in the specification you cannot produce such good results as are produced by the defendants. This obviously is wholly immaterial. . . . I have studied the whole evidence with all the care I can bestow upon it, and have come to the conclusion that the plaintiff had not in 1878 invented what he now says he had—namely, a practical method of keeping the electro-motive force in the mains constant at about 100 volts by means of secondary batteries and dynamos used simultaneously as described."

Lack of utility
in an essential
part is fatal.

If any material part of the representation, with regard to utility, upon the strength of which a patent was granted, turns out to be untrue, the patent will be void, because of the partial failure of the consideration, (x) and also on the ground that the representation being false, the Crown has been deceived in its grant. (y) In the words of *Dallas, J.*: "If any part of the alleged discovery, being a material part, fail (the

(x) *Hill v. Thompson*, (1817) 8 Taunt. 375; 2 B. Moore, 448; 1 W. P. C. 232; *Bloxam v. Elsee*, (1825) 1 Car. & P. 558; 9 Dowl. & Ry. 215; 6 B. & C. 169; 3 L. J. (O. S.) Q. B. 93; *United*

Horse-shoe and Nail Co. v. Swedish Horse-nail Co., (1889) 6 R. P. C. 8.

(y) *Morgan v. Seaward*, (1836) 2 M. & W. 561; 1 W. P. C. 172.

discovery in its entirety forming one entire consideration) the patent is altogether void." (z)

So if a patentee claims several inventions under different claiming clauses, and it turns out that any one of them, which is an essential part of the consideration for the grant, is useless, the patent is void. (a)

Thus, in the case of *Manton v. Parker*, 1815, (b) the whole purpose for which the invention, in the specification, was said to be useful, failed, and the patent was declared to be consequently void. The invention was "for a hammer of an improved construction, for the locks of all kinds of fowling-pieces and small arms," and a material part of the invention consisted in a means of letting out the air from the barrel and causing a communication between the powder in the pan and in the barrel. The evidence, however, showed that the powder passed through the same hole as the air; and *Thomson, L.C.B.*, held that the utility of the invention, and the purpose of the hole, as described in the specification, wholly failed; for the purpose of the hole as described was to let the air pass through, and, at the same time, secure the powder from passing through.

Again, in *Easterbrook v. The Great Western Railway Co.*, (c) the main object of an invention of "improvements in machinery and apparatus for actuating and controlling railway points and signals" was to prevent points and signals being set antagonistic to each other. The defendants, who set up the invalidity of the patent, upon the ground (*inter alia*) of absence of utility in the invention, proved at the trial that the apparatus could be so worked as to give conflicting signals, or signals conflicting with the points. The Court held that the patent was bad, because the invention was not only not useful, but dangerous.

In *Turner v. Winter* (d) the plaintiff's patent was declared void, on the ground that it claimed to produce three different things by one and the same process; and the evidence distinctly showed that the process would not produce one of them (white lead) at all. On a motion for a new trial, made in the Court of King's Bench, *Ashurst, J.*, laid down that:

Invention
must be
Useful as
Specified.

Illustrations.

(z) *Hill v. Thompson*, (1817) 8 Taunt. 375; 2 B. Moore, 448.

(a) *Morgan v. Seaward*, (1836) 1 W. P. C. 171; 2 M. & W. 558; *Simpson v. Holliday*, (1866) L. R. 1 H. L. 315; *Templeton v. Macfarlane*, (1848) 1 H.

L. C. 595; *United Horse-nail Co. v. Stewart*, (1885) 2 R. P. C. 122, 132.

(b) *Dav. P. C.* 327; 1 W. P. C. 192 n., 481 n.

(c) (1885) 2 R. P. C. 201.

(d) (1787) 1 T. R. 602; 1 W. P. C. 77.

Invention
must be
Useful as
Specified.

—
Illustrations.

“If the process, as directed by the specification, does not produce that which the patent professes to do, the patent is void.” And *Buller, J.*: “If the patentee says that by one process he can produce three things, and he fails in any one, the consideration of his merit, and for which the patent was granted, fails, and the Crown has been deceived in the grant.”

Bloxam v. Elsee (e) was an action brought for the infringement of two patents belonging to the plaintiff. Both patents were, however, held void on the ground that the second depended on the first, which was bad for want of utility. The judgment of *Abbott, C.J.*, who tried the case, was to the effect that by the patent (the first patent) it appeared that the patentee had represented to the Crown that he was in possession of a machine for making paper in single sheets, without seam or joining, from one to twelve feet and upwards wide, and from one to forty-five feet and upwards in length. Upon this representation the patent was granted. The consideration for the grant was the invention of a machine for making paper in sheets of width and length varying within the limits designated. If any material part of the representation was not true, the consideration had failed in part, and the grant was consequently void, and a defendant in an action for infringement had a right to say that it was so. If the representation was (as the learned Chief Justice thought it was) that paper of various widths might be obtained from one and the same machine, the evidence must be looked to to discover whether the patentee was possessed of a machine, or of the invention of a machine, capable of accomplishing that object, and, unfortunately, the evidence showed that he was not. The patentee was at the time possessed of one machine and one only, and that adapted to one degree of width and one degree only. And he was not then possessed of any method by which different degrees of width might be manufactured by that machine or by any other.

A patent, the title of which was “improvements in steam-engines, and in machinery for propelling vessels, which improvements are applicable to other purposes,” was declared void by the Court of Exchequer on the ground that, upon the face of the patent as set out in the record, it appeared that an improvement in steam-engines was suggested by the

(e) (1825) 1 Car. & P. 558; 9 Dowl. & Ry. 215; 6 B. & C. 169; 3 L. J. (O. S.) Q. B. 93.

patentee, and that the jury having found that the invention was not an improvement in steam-engines, though it was an improvement in machinery for propelling vessels, the grant was void for false suggestion. (f)

Again, in another case in the Court of Exchequer, Lord Abinger, C.B., directed the jury to consider whether an invention of improvements in wheels for railway carriages was worth a patent or not, or whether the improvements were, as the defendant alleged, only trifling and insignificant alterations. The jury found that there were substantial improvements in the invention, but, had they come to the opposite conclusion, the Court would no doubt have declared the patent bad on the ground of false suggestion.

If an invention is useful for the generality of purposes for which it is stated in the specification so to be, the fact that it is altogether useless for one purpose falling within the statement will not necessarily vitiate the patent.

Thus, in *Haworth v. Hardcastle* (g) the patent was for "certain machinery, or apparatus adapted to facilitate the operation of drying calicoes, linens, or other similar fabrics," and on a motion for a nonsuit and to set aside a verdict given for the plaintiff on the finding of a jury that the invention was new and useful on the whole, but that the machine was not useful in some cases for taking off goods, the Court, consisting of Tindal, C.J., Parke, Gaselee, and Bosanquet, JJ., held that they would not be justified in setting aside a verdict given on such a finding, and in holding that the patent was void on the ground that the machine was altogether useless for one of the purposes described in the specification.

If an entire machine or subject is, as a whole, useful, a want of utility in a part or parts, provided that the useless part or parts form no part of the consideration in respect of which the patent was granted, will not vitiate a patent in respect of such machine or subject, (h) and a minor claim the subject of which is found not to be useful will not be fatal, provided there is no concealment, and the subject of the claim does not form part of the consideration for the grant. (i)

(f) *Morgan v. Seaward*, (1837) 2 M. & W. 544; Mur. & H. 55; 1 Jur. 527; 1 W. P. C. 187; see also *Owen's Patent*, (1899) 17 R. P. C. 68, 78.

(g) (1834) 4 M. & Sc. 790; 1 Bing. N. S. 182; 1 W. C. P. 480.

(h) *Morgan v. Seaward*, (1837) 2 M. & W. 544; Mur. & H. 55; 1 Jur. 527;

1 W. P. C. 187; *Lewis v. Marling*, (1829) 1 W. P. C. 490; *United Horse-nail Co. v. Stewart*, (1885) 2 R. P. C. 122, 131.

(i) *United Horse-shoe Co. v. Swedish Horse-nail Co.*, (1888) 6 R. P. C. 8; *Ehrlich v. Ihlee*, (1888) 5 R. P. C. 450.

Invention must be Useful as Specified.

Illustrations.

If invention is useful for most purposes within a general statement, the fact that it fails for one purpose within such statement is not necessarily fatal.

Lack of utility in non-essential part is no bar.

Invention
must be
Useful as
Specified.

If an invention as a whole is useful, it is not necessary that each part of it should possess the same amount of utility. (*k*)

A patent is void if an essential part of the invention is impracticable and useless, (*l*) but if part of an invention, as described in a specification, turn out to be not necessary, the inutility of that part will not vitiate the patent unless it is claimed as *essential*. (*m*)

In *Lewis v. Marling*, (*n*) the patent was for improvements in shearing machines, for shearing or cropping woollen and other cloths. And it appeared in evidence that a brush, described in the specification, and intended to raise the wool, was unnecessary and useless. The Court of King's Bench held that the inutility of this brush, which was not claimed as *essential*, did not render the patent bad. *Tenterden*, C.J., saying: "As to the objection on the ground that the application of a brush was claimed as part of the invention, adverting to the specification, it does not appear that the patentee says the brush is an essential part of the machine, although he claims it as an invention. When the plaintiffs applied for the patent they had made a machine to which the brush was affixed, but before any machine was made for sale they discovered it to be unnecessary. I agree, that if the patentee mentions that as an essential ingredient in the patent article, which is not so, nor even useful, and thereby misleads the public, his patent may be void; but it would be very hard to say that this patent should be void because the plaintiffs claim to be the inventors of a certain part of the machine not described as essential, and which turns out not to be useful." *Bayley*, J., saying: "Now, at the period when this specification was made, the brush was in use, and there is no reason to believe that this patentee did not think it was a useful part of the machine. His patent is for an instrument where something of that kind was always thought material; and I am of opinion that the subsequent discovery that the brush was unnecessary is no objection to the validity of the patent. If the party knew that it was unnecessary, the patent would be bad, on the ground that this was deception, but if he

(*k*) *Ehrlich v. Iblee*, (1888) 5 R. P. C. 103.

(*l*) *United Horse-nail Co. v. Stewart*, (1885) 2 R. P. C. 122, 132.

(*m*) *Lewis v. Marling*, (1829) 10 B. & C. 22; 1 W. P. C. 493; *Morgan v.*

Seaward, (1837) 2 M. & W. 544; 1 W. P. C. 167; 6 L. J. Ex. 153; *United Horse-nail Co. v. Stewart*, (1885) 2 R. P. C. 132.

(*n*) (1829) 10 B. & C. 22; 4 Car. & P. 57; 1 W. P. C. 493.

thought it was proper, and only by a subsequent discovery finds out that it is not necessary, I think that it forms no ground of objection."

Utility of
Improvements.

UTILITY OF IMPROVEMENTS.

In the case of a patent for an invention which is an improvement on a former invention, the want of utility in the former invention will not vitiate the patent for the improvement, which will be perfectly valid as regards utility, if the machine manufactured according to it is useful. (o)

Lack of utility in a prior invention is no bar to a patent for an improvement upon it.

Bloxam v. Elsee (p) at first sight appears to be a decision contrary to the above proposition, but it must be observed that *Bloxam v. Elsee* was decided on the ground that the subsequent patent was granted on the strength of the suggestion contained in the prior patent, which turned out to be false.

In the case of a patent for an invention which is an improvement on a former patented invention, the question always is, What is the representation on the strength of which the second patent was granted? If the second patent was granted on the same representation as rendered the first void it is bad also; but if the second patent was granted on a true representation the fact that the first patent was bad will not vitiate the second.

(o) *Lewis v. Davies*, (1829) 3 Car. & P. 502; 1 W. P. C. 488; per Lord Tenterden, C.J.; *Tetley v. Easton*, (1852) Macr. P. C. 56; *Murray v. Clayton*, (1877) L. R. 7 Ch. 581; *Morgan v. Windover*, (1888) 5 R. P. C.

303; *Jones v. Pearce*, (1832) 1 W. P. C. 121, 122; *Shaw v. Jones*, (1889) 6 P. O. R. 336.

(p) (1825) 1 Car. & P. 558; 9 Dowl. & Ry. 215; 6 B. & C. 169; L. J. (O. S.) Q. B. 93; see p. 169 *ante*.

CHAPTER V.

THE SPECIFICATIONS.

ORIGIN AND DEVELOPMENT.

Historical.

WHEN a person becomes the recipient of the exclusive privilege of exercising any particular art under a grant of letters patent from the Crown, it is of the utmost importance, in the interests of the rest of the community, that definite information should be given as to what it is they are, without the sanction of the patentee, prohibited from doing during the existence of the monopoly. It is also very essential, in the interests both of the patentee himself and the public, that the exact invention which forms the subject of the grant of letters patent and the best means of performing it should be clearly defined. An invention without the knowledge of the means of putting it into practical operation is of no use to its possessor; and the patent may be considered substantially as amounting to a bargain between the patentee and the Crown, according to which the former shall disclose the means of putting the invention into practice for the benefit of the public, so that, after the expiration of the time for which the monopoly is granted, all may alike enjoy the benefits of the discovery, if minded to do so. (a)

It was formerly the practice to insert in the letters patent a recital, amounting to a description of the invention, which was the subject of the grant, and this recital, which was usually very meagre, was, except in so far as the patentee verbally instructed particular members of the public, the only source of information as to what the invention really was and how it was to be performed.

Great inconvenience was found to arise from this practice, and certainly as early as the reign of Queen Anne a plan was devised to obviate this objection. This plan consisted in making it a condition that the patentee should, within six

(a) p. 106 *ante*.

months, "particularly describe and ascertain the invention, and the manner in which it is to be performed," and in inserting in the letters patent a declaration that an omission to do this would render the grant null and void. This was the origin of the modern instruments known as specifications. Before this period of six months had elapsed, there being no provisional specification, it must have been a question of evidence as to what was the invention for which the patentee went to the Crown, and for which the Crown granted a monopoly. (b)

Origin and
Develop-
ment.
—

The Patent Act of 1852 introduced a further improvement by providing that would-be patentees should, at the time of application for letters patent, deposit a provisional specification, which is a very different instrument to that required after the grant under the earlier practice. Instead of requiring that the patentee should, in the provisional specification, "particularly describe and ascertain the nature of the invention, and in what manner the same shall be performed," the Act of 1852 only insisted that in the provisional specification, which the applicant was to leave with the law officer of the Crown when he applied for a patent, he should state the nature of the invention; and the Act further provided that when the law officer of the Crown had looked at the specification, if he were of opinion that it did not state the nature of the invention, he should be competent to require the document to be amended in that particular, but if he thought it properly stated the nature of the invention he could grant a certificate authorising the applicant to use the invention publicly without thereby making a publication which would render the patent, if granted afterwards, invalid.

The provisional specification was introduced for the benefit of the patentee, who, during the period of protection from the effects of publication which the certificate of the law officer of the Crown secured, was enabled to make further experiments and improve the means of carrying out his invention before filing his second and complete specification, in which he was required not only to "describe the nature of the invention," but to "state in what manner the same shall be performed." It was, moreover, under the Act of 1852, competent for the applicant, if he thought fit, to file his complete and final specification on making application for the grant of letters patent, instead of putting in a provisional specification; but it would clearly not be his interest as a rule to do so, for he would

(b) *Bailey v. Robertson*, (1878) 3 App. Cas. 1074, per Lord Blackburn.

Origin and Development. thereby deprive himself of the right to make further legitimate improvements before obtaining the great seal.

The practice in this matter under the Patents, Designs, and Trade Marks Act 1883, is practically the same as that under the Act of 1852, excepting that the leaving of a complete specification is now always a condition precedent to the grant of a patent; and it is enacted that an application for a patent must be accompanied by either a provisional or a complete specification, and that a provisional specification must *describe the nature of the invention*, whilst a complete specification, whether left on application or subsequently, must *particularly describe and ascertain the nature of the invention, and in what manner it is to be performed*; and a provisional or complete specification must, if required, be accompanied by drawings. (c)

Consideration for letters patent.

There are some who maintain that the consideration for the grant of the patent is the introduction and setting up within the realm of a manufacture according to the new and useful invention: whereas there are others who contend (and it is submitted rightly contend) that the consideration is the disclosure of the invention and the manner of performing it, whereby the public is instructed how they may, after the expiration of the monopoly, enjoy the invention for themselves, if minded so to do. The point is one of considerable academic interest, but a minute discussion of it would be foreign to the scope of this work and occupy too much space to permit of it being entered upon here. The practical conclusion of the matter is that the legislature, as voiced in the present Patents Acts, and various Courts by their decisions, (d) have acted upon the view that disclosure of the new and useful invention and the means of performing it, as distinguished from the actual setting up of a manufacture according to the invention within the realm, is the essence of the consideration. The correct view supported by existing decisions (e) appears to be that a patentee is not *prima facie* bound to himself work the invention within the realm, or to licence others to do so. Sec. 3 of the Patents Act 1902, as was the repealed sec. 22 of the Act 1883, is specially framed to deal with the public inconvenience likely to arise if the patentee, during the currency of the patent, does not either himself work the invention

(c) 46 & 47 Vict. c. 57, s. 5, sub-s. 2, 3, 4.

(d) *E.g.* Badische Anilin und Soda

Fabrik v. Thomson, (1904) 21 R. P. C. 473.

(e) *Ibid.*

within the realm, or, upon just terms, permit others to do so. (*f*) The Title.

It may well be that the necessity for the filing of a full and sufficient specification has displaced the older necessity at common law, if it ever existed, of inculcating a knowledge of the invention by its actual working and introduction as a trade within the realm. It must be remembered that the specification on its introduction was a condition subsequent to the grant, whereas now it is a condition precedent. This fact is indicative of the evolution from an earlier common law view that the introduction of the invention itself within the realm, as a trade, was the price paid for the patent to the more modern doctrine, which fixes the price paid as merely the introduction or communication within the realm of a knowledge of the invention and the best means known to the patentee of performing it.

THE TITLE.

A specification, whether provisional or complete, must commence with the title, (*g*) which is virtually a short and concise statement of the invention. (*h*) Before the days of provisional specifications the title was of far greater importance than it is now. In those days its functions were largely those of the provisional specifications now, and a discrepancy between the title and the specification subsequently enrolled was a matter of vital importance, as it rendered the patent utterly void.

Titles should be drafted in conformity with certain rules.

Since the passing of the Act of 1883, defective titles have not been, nor are they likely to be, so frequent as they were formerly, for it is expressly provided by the sixth section of that Act that the Comptroller shall refer every application to an examiner, who is required to examine the specification and to ascertain that the title sufficiently indicates the subject-matter of the invention. There is, in fact, no reported case since the Act of 1883 in which a patent has been declared void on the ground of a defective title, and there appears to be only one (*i*) in which the question has been raised. Still, if the title after it has passed the examiner, or after amendment, remains defective, it may be an objection to the validity of the patent; and it must not be forgotten that under the practice before the Act

(*f*) See Vol. II. p. 259 *post*.

(*g*) 46 & 47 Vict. c. 57, s. 5, sub-s. 5.

(*h*) *Househill Co. v. Neilson*, (1843)

1 W. P. C. 678.

(*i*) *Pirrie v. York Street Spinning Co.*, (1892) 10 R. P. C. 31.

The Title.

of 1883 an examination of the title was supposed to be made by the patent clerks of the law officers of the Crown before the great seal was obtained, and that, notwithstanding this precaution, it was not uncommon for patents to be vitiated through defects in their titles.

The specification is to be construed as a whole, and a defect in the title may consequently be remedied in the body of the specification. (j) Further, a patentee is entitled to frame the title in his own way, provided he does not infringe the rules of the statute. (k)

It is not uncommon for the Comptroller-General, or, on appeal from him, the law officer, to make the amendment of titles as originally drafted a condition of the grant of letters patent. (l)

Rules in conformity with which titles should be drafted.

Titles should be drafted in conformity with the following rules. As inferred above, the cases quoted in support of the rules were all decided before the Act of 1883, but under the present practice, assuming that the provision in the Act of 1883 for reference to an examiner has not removed the objection of defective title against a patent which has been accepted by the examiner, (m) in the event of a title being defective, the principles of these cases would still apply; and the authorities at the Patent Office require titles to substantially conform to the rules hereafter stated. Of course it is a question of fact in each instance whether the title is at variance with any one or more of the rules under consideration.

I. *The title must not be too extensive so as to embrace more than the patentee has really discovered, for this may make the patent void on the ground that it has been granted for more than the patentee is entitled to.*

Thus, in *Cochrane v. Smethurst*, (n) where a man had invented a glazed street lamp, and obtained a patent for it under the title "an invented method of more completely lighting cities, towns, and villages," he was nonsuited in an action for infringement of his patent, on the ground that he had obtained it, not for an improved street lamp, but for an improved method of lighting streets, towns, and villages. (o) And in *Felton v. Greaves*, (p)

(j) Vol. II. p. 277 *post*.

(k) *Brown's Patent*, (1887) Griff. L. O. C. 1.

(l) Vol. II. p. 6 *post*.

(m) See p. 175 *ante*; cf. Vol. II. p. 66.

(n) (1816) 2 Coop. Ch. Cas. 57; 1 Stark. R. 205.

(o) See remarks of Tindal, C.J., *Cook v. Pearce*, (1844) S. Q. B. 1051, 1062; 13 L. J. Q. B. 189.

(p) (1829) 3 Car. & P. 611.

where a man took out a patent under the title "a machine for an expeditious and correct mode of giving a fine edge to knives, razors, scissors, and other cutting instruments," and the machine, as described in the specification, was not capable of giving an edge to scissors, the patent was held to be bad for want of sufficiency. The Title. Rules in conformity with which titles should be drafted.

In *Campion v. Benyon* (q) a rule nisi to set aside the verdict for the plaintiff, and to enter a nonsuit, was made absolute by the Court of Common Pleas. The title of the patent in question was "an improved method of making and manufacturing double canvas and sailcloth with hemp and flax, or either of them, without any starch whatever." It was sought, on the part of the plaintiff to show from the specification that the omission of the use of starch (which was old) was no part of what the plaintiff claimed. *Dallas, C.J.*, delivering his judgment, said:—

"With respect to patents, every patent being a monopoly, that is, an infringement of public right, and having for its object to give public warning of the precise extent of the privilege conferred on the patentee, the Court (without going into the controversy whether it is politic that such privileges should be conferred or not) is bound to require that such warning should be clear, and accurately describe what the inventor claims as his own. If the instrument contain an ambiguity on a material point that is a ground on which it may be avoided altogether. From the first time I read this patent down to the present day, I thought that the object of the patent was to make cloth without starch. Then, as to the specification, if that be different from the patent, the whole is void; if it coincides it is open to the same objection as the patent. Whether we look to the patent or the specification, I have no doubt that the claim of the plaintiff is too extensive; it is not confined to an improved method of weaving the cloth, or twisting the threads, but also comprehends another mode of proceeding, which is not a new discovery."

It has been held, on the other hand, that where the title was "improvements in the manufacture of plaited fabrics," the objection that only one improvement was disclosed by the specification was not sufficient to upset the patent, *Tindal, C.J.*, remarking:—

"This is, certainly, a most subtle objection; if the term 'improvement' had been used, it would have been *nomen collectivum*,

(q) (1821) 6 B. Moo. 71; 3 Brod. & Bing. 5.

The Title.

Rules in conformity with which titles should be drafted.

and would have covered any number of improvements. I cannot see why the variance, if it be one, should vitiate the patent, the objection being merely to the title of the patent, without fraud upon the Crown or detriment to the public." (r)

And, again, where the word "improvements," being in the plural number, was relied on as an objection to the patent in question, Lord *Abinger*, C.B., thought that it was of no consequence, because the plaintiff might mean every part of his process to be treated as an improvement, forming, together, a series. (s)

II. *The title should not be too narrow, so as to exclude something which the patentee has invented, for, if it be so, he may not obtain protection in respect of that to which he may be justly entitled.*

Thus, in *Croll v. Edge*, (t) a patent was granted under the title "improvements in the manufacture of gas for the purpose of illumination, and in apparatus used when transmitting and measuring gas." From the specification it appeared that the patentee had invented an improved method of making retorts. In that instrument it was stated that the invention consisted in "improvements in the manufacture of gas for the purpose of illumination, and apparatus used therein, and when transmitting and measuring gas," but the Court held that the patentee was not entitled to protection in respect of the retorts, as the title did not profess to comprehend improvements in any apparatus used in making gas, and that the insertion of the words "therein and" amounted to a substantial extension of the grant of the Crown.

In *Oxley v. Holden*, (u) in which the title of the patent was "improvements in the doors and sashes of carriages," the specification stated that the patentee had shown the invention, as applied to railway carriage doors and window fittings, although it was equally applicable to the doors and windows of any other description of carriage, or in any case where windows and doors are subject to jar and vibration. The Court held that the invention claimed was not larger than the title, and the judgment of *Erle*, C.J., contained the following passage:—

(r) *Nickels v. Haslam*, (1844) 7 M. & G. 378; 8 Scott, N. R. 97; 13 L. J. C. P. 146.

(s) *Derosne v. Fairie*, (1835) 5 Tyr. 393; 2 Cr. M. & R. 476; 1 W. P. C. 154.

(t) (1847) 9 C. B. 479; 19 L. J. C. P. 261.

(u) (1860) 8 C. B. N. S. 666; 30 L. J. C. P. 68.

“The invention specified and claimed is truly an improvement in the doors and windows of carriages, not the less because it is also applicable to other doors and windows. It seems to us reasonable that the claim should be construed with reference to the title, and confined, accordingly, to the doors and windows of carriages. The present case has no analogy to the decision of this Court in *Croll v. Edge*, (1847) 9 C. B. 479; 19 L. J. C. P. 261, where the patent was, in effect, for improvements in the apparatus for the manufacture, and also in that of the transmission, of gas. The specification, therefore, related to an apparatus additional to and beyond that referred to in the title. Here the title and the specification relate to one and the same apparatus.”

The Title.
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Rules in conformity with which titles should be drafted.

III. *The title should not be vague or ambiguous.*

There is authority for saying that the mere vagueness or ambiguity of the title is an objection which may well be taken on the part of the Crown—that is to say, by the Comptroller-General, (v) before a patent is granted, but it affords no ground for avoiding the patent after it has been granted, provided that the ambiguity is explained by the specification, and the title is not at variance with it. (w)

Thus, in *Sturz v. De la Rue* (x) a patent for a method of fixing folding shutters in carriages in which German shutters were used was upheld, notwithstanding the objection that the title “improvements in carriages” was too vague.

And in *Neilson v. Harford* (y) a patent for the application of the hot blast in the smelting of iron, under the title “an improved application of air,” was upheld.

IV. *The title should not contain a misdescription of the invention, for this may be a fatal objection if not corrected in the body of the specification.*

In *Rex v. Metcalf*, (z) a patent under the title “a tapered hair or head brush” was upset, on the ground that from the description in the specification it appeared that the brush invented by the patentee did not taper, but was only unequal. (a)

(v) Vol. II. chap. i.

(w) *Cook v. Pearce*, (1844) 8 Q. B. 1044; 13 L. J. Q. B. 189.

(x) (1828) 5 Russ. 322; 7 L. J. (O. S.) Ch. 47.

(y) (1841) 1 W. P. C. 295; 8 M. &

W. 806; 2 Coop. Ch. Cas. 61; 11 L. J. Ex. 20.

(z) (1817) 2 Stark. R. 219.

(a) See also *Neilson v. Harford*, (1841) 1 W. P. C. 333.

The Title.
 ———
 Rules in conformity with which titles should be drafted.

In *Bainbridge v. Wrigley*, (b) Lord *Ellenborough* held a patent void which was for "certain improvements in the flageolet or English flute, whereby the fingering will be rendered more easy, and notes produced that were never before produced," on the ground that the instrument described, as a matter of fact, produced only one new note.

In *Fisher v. Dewick* (c) the title of the patent in question was "improvements in machinery for the manufacture of bobbin net lace," and the defendant objected that the title misdescribed the subject-matter, the invention being only for making a spot during a particular part of the process, and being useless when that addition was not wanted, and that the title should have been "for a mode of making spots in bobbin net lace." *Coltman*, J., ruled that the invention was inapplicable to anything but the making of bobbin net lace, and that it was an improvement. The Court of Common Pleas supported the ruling of the Court below, *Tindal*, C.J., observing that it could not, without great refinement, be said that the invention was not an improvement in the manufacture of bobbin net lace.

V. *A false suggestion in the title may be fatal to the validity of the patent, for the Crown may have been deceived in its grant.*

Thus, in *Morgan v. Seaward*, (d) the case of *Galloway's* patent for "improvements in steam-engines and in machinery for propelling vessels," the defendants in an action for infringement obtained a verdict on the issue that the invention was not an improvement in steam-engines.

In *Bloxam v. Elsee* (e) the patent was held void on the ground of false suggestion, it appearing that the patentee had by the title represented that he was in possession of "an invention of making paper in single sheets, without seam or joining, from one to twelve feet and upwards wide, and from one to forty-five feet and upwards in length," whereas from the evidence it appeared that the machine he claimed to have invented would only make paper of one particular degree of width and length.

It is not uncommon to find the titles of patents commencing

(b) (1810) Parl. Rep. 197. (e) (1825) 1 Car. & P. 558; 9 Dowl. & Ry. 215; 6 B. & C. 169; 3 L. J. (O. S.) Q. B. 93.
 (c) (1838) 4 Bing. N. C. 706.
 (d) (1835) 2 M. & W. 544; 1 W. P. C. 167; 6 L. J. Ex. 153.

with the words "a new or improved method or process," and it would appear that if the method or process be partly new, so as to produce a result which as a whole is new, or if the method or process be entirely new, it may properly be called a new or improved method or process; (*f*) whereas, if the method or process be not new, but improved, the patent with such a title may be bad. (*g*)

The Title.

Rules in conformity with which titles should be drafted.

VI. *If the title insufficiently or inaccurately describe what is really the invention, it will not render the patent void, if it is comprehensive enough to include the actual invention.*

In *Hills v. The London Gas Light Co.*, (*h*) the title as amended was "an improved method of purifying coal-gas," and it appeared from the specification that the invention really consisted in a method of removing the sulphuretted hydrogen which occurs as an impurity in coal-gas. The Court of Exchequer overruled the objection that the invention specified was different from that for which the patent was granted, *Watson, B.*, saying:—

"The patentee made a mistake in stating for what he wanted his patent, but in reality he wanted a patent for his invention; it has been granted to him for that and the title comprehends it. If, indeed, the jury had found either that when he applied for the patent he had not invented the thing specified, or that, in truth, he did not apply for it, a different question might have arisen; but the jury must be taken to have found that, although he has inaccurately or insufficiently described what he was asking for, in reality he was asking for a patent for this invention." (*i*)

In *The Electric Telegraph Co. v. Brett*, (*k*) the defendants objected that the plaintiffs' patent being described in the title as an "Invention of improvements in giving signals and sounding alarms in distant places, by means of electric currents transmitted through metallic circuits," it was impossible for them, the defendants, to infringe as long as the circuit they used was not metallic throughout, but to a substantial extent

(*f*) *Beard v. Egerton*, (1846) 2 Car. & N. 312.

& K. 667; 3 C. B. 97; 8 C. B. 165; 15 L. J. C. P. 270; 19 L. J. C. P. 36. (*i*) See also *Regina v. Mill*, (1851)

10 C. B. 389; 14 Beav. 312; 20 L. J. C. P. 16.

(*g*) *Gibson v. Brand*, (1842) 1 W. P. C. 634. (*h*) (1851) 10 C. B. 838; 20 L. J.

(*h*) (1860) 29 L. J. Ex. 409; 5 H. C. P. 123.

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non-metallic. The jury, however, found a verdict for the plaintiffs, which was upheld by the Court of Common Pleas, *Creswell, J.*, saying:—

“Now, the patentees, by their specification, do not make any claim to metallic circuits. What they claim is improvements in giving signals by means of electric currents transmitted through metallic circuits, and the improvements, as appears by the specification, consist entirely in the methods and instruments for using the electric current. The circuit used by the defendant is metallic in all that part which operates in giving signals, and it is no condition necessary to the existence of the improvements that the circuit should be metallic in any other part than that which contains the coils and operates on the needles. It appears to us reasonable to hold that a claim for a patent for improvement in the mode of doing something by a known process is sufficient to entitle the claimant to a patent for his improvements when applied either to the process as known at the time of the claim or to the same process altered and improved by discoveries not known at the time of the claim, so long as it remains identical with regard to improvements claimed and their application.”

THE PROVISIONAL SPECIFICATION.

Provisional
specification
is optional.

An applicant for a patent is required to accompany his application by a specification, but it is optional whether this shall be provisional or complete.^(l) It is, however, in virtue of the difference between the requisites of the provisional and complete specifications, very rarely to the interests and advantage of a would-be patentee to depart from the general practice of accompanying his application by a provisional specification, and availing himself of the time allowed him under the Act wherein to consider and fulfil the obligations which the necessity of ultimately filing a complete specification imposes upon him.

Differences
between pro-
visional and
complete
specifications.

Functions of Provisional Specifications.—The provisional differs from the complete specification in that the former must describe the nature of the invention, and the latter must *particularly* describe and ascertain the nature of the invention and *in what manner it is to be performed.*^(m) It thus appears

^(l) 46 & 47 Vict. c. 57, s. 5, sub-s. 2; for forms of provisional and complete specification, see Vol. II. pp. 350, 351.

^(m) 46 & 47 Vict. c. 57, s. 5, sub-s. 3, 4.

that, as regards the description of the invention, there is a difference in the accuracy with which this is required to be given by the two specifications. The provisional specification need not enter in detail into all the means by which the invention is to be carried out; (n) nor is it necessary that it should describe any mode of carrying it out at all; (o) nor is it necessary that it should state all the objects to which the invention may be applied. On the contrary, the invention may in the complete specification be described and claimed as applied to objects not mentioned in, or contemplated by the patentee at the date of, the provisional. (p) The provisional specification was never intended to be more than a mode of protecting an inventor until the time for filing the complete specification; nor was it intended to contain a complete description of the discovery such as would enable a skilled person, and, therefore, much less a workman of mere ordinary skill, to carry it out. (q) It is quite sufficient if the provisional specification inform the Comptroller-General roughly what the invention is for which protection is sought; but it must do this fairly and honestly, and must indicate the whole invention of which the would-be patentee is in possession at the date of his application, and for which he desires to obtain protection. (r)

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Object of pro-
visional speci-
fication is to
avoid disputes
thereafter as
to what the
invention is
for which the
monopoly was
granted.

The object of this is to show that the invention subsequently fully specified is the same as that which is presented to the Comptroller in the first instance. (s)

In cases of subsequent dispute the question is not whether the provisional specification is defective, but whether the complete specification is excessive. (t) The provisional may go

(n) *Re Newall v. Elliott*, (1858) 4 C. B. N. S. 269; 1 H. & C. 797; 32 L. J. Ex. 120; 10 Jur. N. S. 954; *Penn v. Bibby*, (1875) L. R. 2 Ch. 127, 132; *Lucas v. Miller*, (1885) 2 R. P. C. 155; *Moseley v. Victoria Rubber Co.*, (1887) 4 R. P. C. 241; *Morgan v. Windover*, (1887) 4 R. P. C. 422; 5 R. P. C. 295; *Pneumatic Tyre Co. v. Leicester Pneumatic Tyre and Automatic Valve Co.*, (1899) 16 R. P. C. 541.

(o) See *United Telephone Co. v. Harrison*, (1882) L. R. 21 Ch. D. 747; p. 239 *post*.

(p) p. 192 *post*; *Pneumatic Tyre Co. v. East London Rubber Co.*, (1896) 14 R. P. C. 101, 573; *Pneumatic Tyre Co. v. Leicester Pneumatic Tyre and Automatic Valve Co.*, (1899) 16 R. P. C. 531; *Adamant Stone and Paving*

Co. v. Corporation of Liverpool, (1896) 14 R. P. C. 19; *Pneumatic Tyre Co. v. New Ixion Tyre and Cycle Co.*, (1898) 16 R. P. C. 16.

(q) *Stoner v. Todd*, (1874) L. R. 4 Ch. D. 58; *United Telephone Co. v. Harrison*, (1882) L. R. 21 Ch. D. 720; 51 L. J. Ch. 705; *Nuttall v. Hargreaves*, (1892) 8 R. P. C. 450; L. R. 1 Ch. 94; 61 L. J. Ch. 94.

(r) *Stoner v. Todd*, (1874) L. R. 4 Ch. D. 58; *United Telephone Co. v. Harrison*, (1882) L. R. 21 Ch. D. 743, 747; *Woodward v. Sansum*, (1887) 4 R. P. C. 166, 174; *Siddell v. Vickers*, (1888) L. R. 39 Ch. D. 92.

(s) *Newall v. Elliott*, (1863) 1 H. & C. 797; 32 L. J. Ex. 120; 10 Jur. N. S. 954; 4 C. B. N. S. 269.

(t) *Siddell v. Vickers*, (1888) L. R.

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beyond the complete, and anything contained in the provisional may be dropped in the complete, provided the omission does not alter the nature of the invention. (*u*)

There is the authority of Lord *Chelmsford*, L.C., (*x*) for the statement that "it is clear that the office of the provisional specification is to describe the nature of the invention, not with minute particularity, but with sufficient precision and accuracy to inform the law officers" (now the Comptroller-General) "what is to be the subject-matter of the patent. It is not at all necessary that the provisional specification should describe the mode or modes carried out. That is left to the complete specification."

Further, as pointed out by *Lopes*, L.J., (*y*) a provisional specification was never intended to contain a complete and exhaustive description of the invention; it was intended to be sufficiently specific to disclose the nature of the invention, so as to protect the inventor till the time for filing the final or complete specification, but permitting him in the mean time to perfect any details, to modify, supplement, and develop his invention, always keeping within what may be called the ambit of his invention as disclosed in his provisional specification.

And as observed by *Smith*, L.J., (*z*) "In a provisional specification no claim is ever made by the patentee, he has not to state therein what he claims, or how he carries out the invention; but he must state its nature in such a way that the law officers may see what it is, and so that the identity of its subject-matter with that of the complete specification which is to come thereafter may be ascertained."

Thus, one of the objects of the provisional specification is to determine that the invention described and claimed by the final is really one and the same as that described by the provisional specification. The patent is altogether void if the final comprise an invention which is not comprehended by the provisional specification. (*a*)

Details stated
in the com-

It is not, however, necessary that all the details of the

39 Ch. D. 92, 97; *Curtis v. Platt*, (1888) Griff. L. O. C. 53; 5 R. P. C. 87 *n*.

(*u*) *Penn v. Bibby*, (1866) L. R. 2 Ch. 127; 36 L. J. Ch. 455; *Ward v. Hill*, (1903) 20 R. P. C. 198, 200, 203; p. 188 *post*.

(*x*) *Penn v. Bibby*, (1875) L. R. 2 Ch. 127.

(*y*) *Woodward v. Sansum*, (1887) 4 R. P. C. 166.

(*z*) *The Cassel Gold Extracting Co. v. The Cyanide Gold Recovery Syndicate*, (1895) 12 R. P. C. 257.

(*a*) *Bailey v. Robertson*, (1878) L. R. 3 App. Cas. 1055; *Crossley v. Petter*, (1853) Macr. P. C. 240.

invention described in the final should be identical with those indicated in the provisional specification, provided that the invention remain substantially the same. The complete specification is, in a sense, supplemental to the provisional, not going beyond, nor varying from it as to the nature of the invention, but conveying additional information, which may have been acquired during the period of provisional protection, as to the manner in which the invention is to be performed. (b)

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differ from
those stated
in the pro-
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It is not legitimate to draw the inference that, because a detailed way of performing the invention which is referred to in the provisional is not mentioned in the complete, therefore the detailed method referred to in the provisional is not within the claim of the complete. (c)

Any subordinate matter, or point, or detail, may be abandoned in the final specification without affecting the validity of the patent, provided always that such abandonment does not change the nature of the invention, and make it really a different one to that described in the provisional; and such an abandonment may be a notification to the public that the inventor could not work it, or thought it useless, and consequently omitted it altogether. (d)

or subordinate
matters may be
abandoned ;

In *Thomas v. Welch* (e) the defendant contested the validity of the plaintiff's patent for a sewing machine on the ground that the complete specification omitted some of the inventions put forward in the provisional specification. It appeared that the provisional specification described a certain instrument, and then went on to say that "this, or another acting therewith, acts to hold the work during the insertion of the needle." It was contended that the complete specification contained nothing corresponding to this second alternative. The Court of Common Pleas overruled this objection, and *Erle*, C.J., in his judgment said :—

"Assuming that this is so, I do not think the objection ought to prevail. The difference is a slight one, and injured nobody; and it may be that the patentee had something in his mind

(b) Per Chelmsford, L.C., *Penn v. Bibby*, (1875) L. R. 2 Ch. 127.

(c) *Sandow v. Szalay*, (1905) 22 R. P. C. 15; 23 R. P. C. 6.

(d) *Stoner v. Todd*, (1876) L. R. 4 Ch. D. 58; 46 L. J. Ch. 32; *Hutchinson v. Pattullo*, (1888) 5 R. P. C. 351; *Thomas v. Welch*, (1866) L. R. 1 C. P.

192; *Penn v. Bibby*, (1875) L. R. 2 Ch. 127, 134; *Everitt's Patent*, (1888) Griff. L. O. C. 27; *Pneumatic Tyre Co. v. East London Rubber Co.*, (1896) 14 R. P. C. 77, 573; but see *Sandow, Ld. v. Szalay*, (1905) 23 R. P. C. 6.

(e) (1866) L. R. 1. C. P. 192; 35 L. J. C. P. 200.

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when he filed his provisional specification, which he found afterwards would be useless. As he could not disclaim, formally, part of the provisional specification, he might, I think, in such a case as the present, have omitted it from his complete specification. It may be, however, that one form, if mentioned in the complete specification, which is in two parts, is what was referred to in the expression, 'and another acting therewith.'

but the pro-
visional cannot
be read to
supply an
omission in
the complete
specification.

If, however, the patentee omits in the complete specification anything which is described in the provisional specification, he cannot afterwards read the provisional to supply a defect in the final specification.

Thus, in *Mackelcan v. Rennie*, (*f*) the patent related to "improvements in floating docks;" and the provisional specification stated: "I construct a pontoon or vessel of iron-framing, sheeted over entirely with *plate-iron*, so as to form an air-tight chamber subdivided into compartments." And the complete specification stated: "Having in a provisional specification described the nature of my invention, I will now proceed particularly to describe the same," and went on to explain the arrangement of parts, and the method of employing the dock, but said nothing about its being constructed of iron. The claim was "the arrangement and combination of all the parts of any floating dock as represented and described." It appeared at the trial that floating docks, constructed of timber, were well known before the patent, and that the plaintiff's invention consisted in constructing such docks of iron. There being, however, no mention of iron in the complete specification, *Erle*, C.J., held that the provisional specification could not be produced in aid for the purpose of supplying a defect in the complete specification, and the plaintiff was nonsuited. The Court of Common Pleas refused a motion for a new trial, and approved the course the learned Chief Justice had taken in the Court below; and indicated an opinion that, even if the defect had been supplied, the alleged invention could not properly be the subject of a patent.

Drawings may
be necessary.

It must not be forgotten that a provisional, like a complete, specification, must be accompanied by drawings, if required; (*g*) and from a consideration of the foregoing pages it will be apparent that great skill and care must be expended in the preparation of the instrument, so as to make it comprehensive enough to cover all that the patentee, after developing the

(*f*) (1862) 13 C. B. N. S. 52.

(*g*) 46 & 47 Vict. c. 57, s. 5, sub-s. 3.

discovery, may possibly wish to include and claim in the final and complete specification.

Provisional Protection.—The Act of 1888 especially provides that where an application for a patent in respect of an invention has been accepted the invention may, during the period between the date of the application and the date of sealing such patent, be used and published without prejudice to the patent to be granted for the same; and such protection from the consequences of use and publication is in the Act referred to as provisional protection. (*h*)

**Pro-
visional
Protection.**

Provisional protection is limited to consequences of publication.

This provisional protection only protects the patentee against the consequences of his own publication of the invention, and thus enables him to employ workmen and assistants in helping him to perform experiments and exercise the invention with a view to bringing it to a state of perfection before filing the complete specification. (*i*) It does not confer on the patentee any rights against the public, and it is expressly provided that he shall not institute any legal proceedings for infringements committed before the acceptance of the complete specification. (*k*)

The effect of filing the provisional specification is therefore to secure six months provisional protection, (*l*) and the object of this protection evidently is to enable the patentee to perfect his invention by experiments which, although open and known, will not be a use and publication to the prejudice of letters patent to be afterwards granted, so that he may be in a condition to describe in the complete specification, as the result of experience, the best manner of performing the invention. It clearly appears, therefore, that the complete is in a sense supplemental to the provisional specification, not going beyond nor varying from it as to the nature of the invention, but conveying additional information, which may have been acquired during the currency of the provisional protection, as to the manner in which the invention is to be performed. (*m*)

The letters patent when granted bear date as of the day of application—*i.e.*, the date of the provisional specification in cases where the applicant avails himself of the advantages of filing a provisional specification. (*n*)

(*h*) 46 & 47 Vict. c. 57, s. 14.

(*i*) *Ex parte* Bates and Redgate, (1876) L. R. 4 Ch. 577.

(*k*) 46 & 47 Vict. c. 57, s. 13.

(*l*) *Ibid.* s. 8; 2 Edw. VII. c. 34,

s. 1 (8).

(*m*) 46 & 47 Vict. c. 57, s. 8; p. 173 *ante*.

(*n*) Vol. II. p. 53.

Variations
between
the Speci-
fications.

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What are
legitimate
developments.

VARIATIONS BETWEEN THE SPECIFICATIONS.

Legitimate Developments of the Invention.—If the complete specification, filed as it must be after the provisional, describe and claim any invention different from that described in the provisional specification, it is evident that the patentee has never applied for a patent or received provisional protection in respect of that different invention, and the whole grant is void, because the specification claims that which has never been granted, and consequently that to which the patentee has no right—viz., the monopoly of the invention which differs from that described in the provisional specification. (*o*)

Lord *Blackburn*, (*p*) commenting on the effect of experiments and developments made during the period of provisional protection, pointed out that the proper process is to say: "Look at the nature of the invention described in the provisional specification, and say whether this which you have been doing, and which you say was a part of the patent, is fairly within the nature of the invention you have described, in that case you are protected; but if it is a new and separate invention and a different one, then you are not protected." The learned Lord also pointed out that "it becomes pretty clear, when the nature of an invention has been described in the provisional specification, if something were found out during the period of provisional protection to make the invention work better, or with respect to the mode in which the operation may be performed—a thing which is very likely to happen when, in carrying out his invention, the inventor finds that some particular will not work as smoothly as he expected, and it is necessary to supplement it—still the nature of his invention remaining the same, and it is no objection that in the complete specification, which comes afterwards, the invention or application is described more particularly and in more detail, or even if it be shown that there has been more discovery made, and so as to make the invention which he has described in the provisional specification really workable. If nothing more is done than that, I think it is good; but as soon as it comes to be more than that, and the patentee says in the provisional specification 'I describe my invention as A.,' and in the complete specification he says 'I hereby describe A. and also

(*o*) *Watling v. Stevens*, (1886) 3 R. & S. 298; *Siddell v. Vickers*, (1889) P. C. 151; *Newall v. Elliott*, (1863) L. R. 39 Ch. D. 92; 5 P. O. R. 81, 416.
10 Jur. N. S. 955; 4 C. B. N. S. 269; (*p*) *Bailey v. Robertson*, (1878) L. R.
Foxwell v. Bostock, (1863) 4 De G. J. 3 App. Cas. 1074.

B.,' then as far as regards B. it is void, because the patent was granted for the invention that was described in the provisional specification and does not cover the [sic, further] invention that is described in the other." (q)

Variations
between
the Speci-
fications.

It will be seen hereafter (r) that, in such a case, so long as B. remains in the complete specification it renders the whole grant bad, but the defect is one which may be amended by excision, so as to secure to the patentee protection in respect of A.

Improvements in the arrangement of the machinery, of the relative position and adaptation of the different parts with a view of producing the same results, the substitution of mechanical equivalents and modifications and developments within the scope of the invention set out in the provisional specification, are allowable, and cannot be successfully relied on for the purpose of invalidating a patent on the ground of disconformity. (s)

Improvements
in details.

If the provisional specification describe a method of carrying the invention into effect, and a totally different method is described in the complete specification, the latter document will not be void for disconformity, if the two methods are within the invention described in the two specifications. (t) The reason of this is that the patentee is bound to describe the best and latest method known to him of carrying out the invention. (u) It is not only his privilege, but his duty to do this, for the object of the complete specification, whether filed with the application or subsequently, is to tell the public how the invention is to be best carried out. "That is the price which the man who wants to be a patentee has to pay to the public for it." (v)

Better and
different
methods.

It is always a question of fact, to be determined with reference to the peculiar circumstances of each case, whether, when the complete specification differs from the provisional, the difference is merely a legitimate development and improvement made during the period of provisional protection, upon

Legitimate
development
always a pure
question of
fact.

(q) See also *Crampton v. Patents Investments Co.*, (1888) 5 R. P. C. 382, 397; *Siddell v. Vickers*, (1888) 5 R. P. C. 81, 426; *Woodward v. Sansum*, (1887) 4 R. P. C. 178.

(r) Vol. II. chap. ii.

(s) Per Lopes, L.J., *Woodward v. Sansum*, (1877) 4 R. P. C. 178; *Geipels' Patent*, (1904) 21 R. P. C. 379.

(t) *Woodward v. Sansum*, (1887) 4 R. P. C. 175; *Lucas v. Miller*, (1885)

2 R. P. C. 155; *Moseley v. Victoria Rubber Co.*, (1887) 4 R. P. C. 241; *Morgan v. Windover*, (1887) 4 R. P. C. 422; 5 R. P. C. 295; *Ward v. Hill*, (1903) 20 R. P. C. 189; *Geipels' Patent*, (1904) 21 R. P. C. 379.

(u) p. 235 *post*.

(v) Per Lord Field, then Field, J., *Crampton v. The Patents Investment Co.*, (1888) 5 R. P. C. 382; see 6 R. P. C. 287.

Variations
between
the Speci-
fications.

the invention foreshadowed by the provisional. (x) Therefore, one case, though it may be a guide, is no authority for the decision of another case. In the note (y) at the foot of the page reference will be found to some important cases in which variations between the complete and provisional specifications have been held, upon the facts, to be merely legitimate developments and improvements.

Disconformity
is a fatal ob-
jection to
validity.

Disconformity.—The provisional specification, as appears from the foregoing pages, must contain a description of the invention for which the patentee desires protection, and though his description may be a mere rough outline, it is absolutely essential that it shall be honest, fair, explicit, and wide enough to comprise all that is described and claimed in the final specification when that instrument is filed, and, speaking generally, the two specifications ought not so to differ that the nature of the invention described in the one is materially different from that described in the other. (z)

This is expressed in the phraseology of modern practitioners by saying that there must not be a disconformity between the specifications.

Ever since the Patent Act of 1852, which first introduced provisional specifications, disconformity has been held to be a fatal objection to the validity of a patent. It was at one time urged by some that the operation of sec. 9 of the Act of 1883, (a) which casts upon the Comptroller-General the duty of ascertaining whether the invention particularly described in the complete specification is substantially the same as that described in the provisional, was to render disconformity no longer an objection to the validity of the patent. This, however, is not so, for sec. 26 of the Act of 1883, which abolishes

(x) See Geipels' Patent, (1904) 21 R. P. C. 389.

(y) *Newall v. Elliott*, (1858) 4 C. B. N. S. 269; 27 L. J. Ch. 337; *Wright v. Hitchcock*, (1870) L. R. 5 Ex. 37; 39 L. J. Ex. 97; *Penn v. Bibby*, (1866) L. R. 2 Ch. 127, 135; 36 L. J. Ch. 455; *Lucas v. Miller*, (1885) 2 R. P. C. 155; *Watling v. Stevens*, (1886) 3 R. P. C. 37; *Horrocks v. Stubbs*, (1886) 3 R. P. C. 221; *Moseley v. Victoria Rubber Co.*, (1887) 4 R. P. C. 241; *Gaulard and Gibbs' Patent*, (1888) 5 R. P. C. 533; *Crampton v. The Patent Investments Co.*, (1889) 6 R. P. C. 294; *King, Brown & Co. v. Anglo-American Brush Corporation*, (1889) 6 R. P. C. 414; 9 R. P. C. 313;

Gadd v. Mayor of Manchester, (1892) 9 R. P. C. 516; *Miller v. Searle*, (1893) 10 R. P. C. 106; *Cassel Gold Extracting Co. v. Cyanide Gold Recovery Syndicate*, (1895) 12 R. P. C. 232, 257; *Pneumatic Tyre Co. v. East London Rubber Co.*, (1896) 14 R. P. C. 77; *Automatic Coal Gas Retort Co. v. The Mayor, &c., of Salford*, (1897) 14 R. P. C. 450; *Pneumatic Tyre Co. v. Ixion Patent Pneumatic Tyre Co.*, (1897) 14 R. P. C. 853; *Ward v. Hill*, (1903) 20 R. P. C. 189; *Geipels' Patent*, (1904) 21 R. P. C. 379.

(z) *Foxwell v. Bostock*, (1863) 4 De G. J. & S. 298.

(a) 46 & 47 Vict. c. 57, s. 9.

the proceeding by *scire facias* to repeal a patent, provides that "every ground on which a patent might, at the commencement of this Act, be repealed by *scire facias*, shall be available by way of defence to an action of infringement, and shall also be a ground of revocation." Disconformity was one of the grounds on which a patent could be repealed by *scire facias* before the Act of 1883, (b) and therefore it is still fatal to the validity of a patent, and, as such, a defence to an action for infringement, and a ground on which a patent may be revoked on petition for revocation. (c)

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between
the Speci-
fications.

The point has been decided substantially as above stated by the Court of Appeal, but it has not yet been directly decided by the House of Lords, though a dictum of Lord Halsbury, L.C., supports the conclusion of the Court of Appeal, (d) and the House of Lords has adjudicated upon the fact of disconformity since the Act of 1883 came into force, without, however, discussing the effect of sec. 9. (e)

If a specification is amended (f) and there is a disconformity between the complete and provisional specifications as they stand after amendment, the objection is still fatal. (g) An amended claim, however, when once allowed, even if it is for an invention substantially larger than or different to the invention originally claimed by the complete specification, will not vitiate the patent, provided that the invention comprised by the amended claim is to be found fairly foreshadowed and described within the provisional specification. (h)

Disconformity
between an
amended
complete and
a provisional
specification.

In arriving at a conclusion as to the question of fact, whether in any particular instance there is a disconformity between two specifications, or the alleged excess in the complete is merely a legitimate development of the invention described in the provisional, it is well to consider separately the two questions: (1) What is the nature of the invention for which the patentee has obtained provisional protection—i.e., what is the nature of the invention described in the provisional specification? (2) Is what is described in the

Method of
deciding ques-
tions of fact as
to discon-
formity.

(b) *Bailey v. Robertson*, (1878) L. R. 3 App. Cas. 1055.

(c) See *Nuttall v. Hargreaves*, (1891) 8 R. P. C. 450; *Vickers v. Siddell*, (1890) 7 R. P. C. 292.

(d) See *Vickers v. Siddell*, (1890) 7 R. P. C. 292.

(e) *Pneumatic Tyre Co. v. Leicester Pneumatic Tyre and Automatic Valve Co.*, (1899) 16 R. P. C. 531; *Castner-Kellner Alkali Co. v. Commercial De-*

velopment Corporation, (1900) 17 R. P. C. 593.

(f) See Vol. II. chap. ii.

(g) *Gaulard and Gibbs' Patent*, (1890) 7 R. P. C. 367; *Lane Fox v. Kensington and Knightsbridge Electric Lighting Co.* (1892) 9 R. P. C. 221, 413.

(h) See *Moser v. Marsden*, (1895) 13 R. P. C. 24; Vol. II. p. 66.

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between
the Speci-
fications.
—

complete specification an invention of a different nature from that described in the provisional? (i)

Thus, in a case where the proportions of the ingredients used in a process were not of the essence of the invention, and the complete specification stated and made a separate claim to definite suitable proportions, but the provisional did not refer to any specific proportions of the ingredients, the Court of Appeal held that there was no disconformity, since the proportions used in the process were not of the essence of the invention, and the real invention described in each specification was the same. (k)

The Acts of 1883 and 1888 (l) provide for the comparison of the complete specification with the provisional by an examiner at the Patent Office, and having regard to this fact the Courts do not decide against the validity of a patent on the ground of disconformity, unless the invention claimed by the complete specification is unmistakably different from that described in the provisional specification. "If a case is on the border line, the patent ought to be held good rather than bad." (m)

Effect of de-
tailing advan-
tages of the
invention in
the provisional
specification.

The patentee is not bound in the provisional specification to detail the advantages of his invention. If he does detail advantages, all of which are present when the invention is used for one purpose which is principally referred to in the provisional specification, the fact that only some of those advantages are present when the invention is applied to another purpose mentioned in the complete specification, is not a sound argument to support the proposition that the second purpose is an illegitimate extension, and so renders the patent bad on the ground of disconformity. (n) In the words of *Romer, J.*, "A patented invention may, owing to subsequent discoveries of others, prove more valuable and have a wider field of usefulness than what was contemplated by the patentee at the time of his invention; and yet the patentee is entitled to the full benefit of the use of his

(i) See *Gadd v. Mayor of Manchester*, (1892) 9 R. P. C. 526, 529; *Cassel Gold Extracting Co. v. Cyanide Gold Recovery Syndicate*, (1895) 12 R. P. C. 257; *Castner-Kellner Alkali Co. v. Commercial Development Corporation*, (1900), 17 R. P. C. 603-4.

(k) *Cassel Gold Extracting Co. v. Cyanide Gold Recovery Syndicate*, (1895) 12 R. P. C. 232, 257.

(l) 46 & 47 Vict. c. 57, s. 9; and 51 & 52 Vict. c. 50, s. 4.

(m) Per *Lindley, L.J.*, *Gadd v. Mayor of Manchester*, (1892) 9 R. P. C. 527; in *Chadburn v. Mehan*, (1895) 12 R. P. C. 121. *Romer, J.*, applied this principle to the facts of that case.

(n) *Pneumatic Tyre Co. v. East London Rubber Co.*, (1896) 14 R. P. C. 77, 99.

invention if taken and applied for the purpose of those subsequent discoveries, and if the subsequent discoveries have taken place after the provisional and before the final specification, there would be nothing improper in the patentee referring to them in the final, and there showing the manner in which his invention could be best applied to them." (o)

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between
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fications.

To put it in another way, when the invention described in the provisional specification is, during the period of provisional protection, found by the patentee or some one else to be applicable to a purpose not thought of at the date of the provisional and there are special advantages in that application the patentee may claim those advantages legitimately in the complete specification. (p) Further, the use of the invention for such additional purpose, even though there is no distinct claim to such use, would be an infringement, provided it is not disclaimed. (q).

And as pointed out by *Wills, J.*, it is settled law that "so far as the objection of want of conformity is concerned, the patentee, merely by condescending to particulars in respect of the things which he has thought out, never loses the benefit of general expressions in the provisional specification as to matters which he has not thought out. Of course he may use words which may tie his hands afterwards to detail. But that is merely saying that his language may be such as to exclude an area which might otherwise be within more general phraseology." (r)

There are many instances in which patents have been rendered void because the patentee has in his final specification described and claimed inventions which the Courts have held were not included in the description given in the provisional specification. (s) The following may be taken as illustrative cases:—

Illustrative
cases.

(o) *Pneumatic Tyre Co. v. East London Rubber Co.*, (1896) 14 R. P. C. 101; *Adamant Stone and Paying Co. v. Corporation of Liverpool*, (1896) 14 R. P. C. 19; *Pneumatic Tyre Co. v. New Ixion Tyre and Cycle Co.*, (1898) 16 R. P. C. 16; *Pneumatic Tyre Co. v. Leicester Pneumatic Tyre and Automatic Valve Co.* (1899) 16 R. P. C. 541.

(p) See *Pneumatic Tyre Co. v. East London Rubber Co.*, (1896) 14 R. P. C. 77, 100, 101, 573; with special reference to claim 18 of Welch's specification.

(q) *Ibid.*; *Adamant Stone and Pay-*

ing Co. v. Corporation of Liverpool, (1896) 14 R. P. C. 19; p. 379 *post.*

(r) *Pneumatic Tyre Co. v. Ixion Patent Pneumatic Tyre Co.*, (1897) 14 R. P. C. 869.

(s) See *Bailey v. Robertson*, (1878) L. R. 3 App. Cas. 1055; *United Telephone Co. v. Harrison*, (1882) L. R. 21 Ch. D. 743; *Horrocks v. Stubbs*, (1885) 3 R. P. C. 233, 226; *Hutchison v. Patullo*, (1888) 5 R. P. C. 351; *King, Brown & Co. v. Anglo-American Brush Corporation*, (1889) 6 R. P. C. 414; *Nuttall v. Harleaves*, (1891) 8 R. P. C. 450; *Lat. Fox v. Kensington*

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fications.

Bailey v.
Robertson.

In *Bailey v. Robertson*, (1878) L. R. 3 App. Cas. 1055, the patent related to a method of preserving meat. The patentees in the provisional specification stated: "We dissolve the ordinary commercial gelatine in boiling water, using about 2 lbs. of gelatine to 10 lbs. of water. We then add, while hot, a volume equal to the volume of solution of gelatine of a solution of bisulphite of lime (CaO_2SO_2) in water of about the specific gravity 1070. While the solution of gelatine and bisulphite of lime is still warm and liquid, we coat the substance to be preserved with it, either by dipping the substance in it, or by brushing it over with two or three coats of the solution." The complete specification described a solution consisting of bisulphite of lime alone, and it was contended that it laid claim to the use of this solution by itself for preserving animal substances. The House of Lords held that a claim to the use of bisulphite of lime alone, which was not foreshadowed by the provisional specification, would invalidate the patent, but that the claim did not, in fact, include the use of bisulphite of lime alone. Lord Cairns, L.C., pointed out that it could not be doubted that the invention, which those who wrote out the provisional specification conceived, was not an invention merely of the chemical application of bisulphite of lime to animal substances, such as meat and fish, but was a mode of applying a coating or film to the outside of animal substances, which coating or film was to consist of gelatine, or some substance of the same kind mixed with a solution of bisulphite of lime. The patentees could only claim the use of the solution of bisulphite of lime separately by claiming an invention through the medium of the complete specification which was not mentioned in the provisional specification, and as to the mode of exercising or applying which they could not, in that specification, point out any claim, or any information given to the public.

Castner-
Kellner Alkali
Co. v. Com-
mercial De-
velopment
Corporation.

In *Castner-Kellner Alkali Co. v. Commercial Development Corporation*, (1900) 17 R. P. C. 593, the action was founded upon *Kellner's* patent for an invention relating to a machine intended to carry out an old and well-known process of producing caustic soda by electrolysis. Other machines differing in mechanical arrangement but carrying out the same process were well known at the date of *Kellner's* patent. The essential feature of the patented invention was the use of a stationary mercury cathode. In the complete specification the patentee claimed the use of a

Electric Lighting Co., (1892) 9 R. P. C. 221, 413; Cera Light Co. v. Dobbie, (1892) 11 R. P. C. 10; Magee v. Tangyes, (1897) 14 R. P. C. 255; Brooks v. Lamplugh, (1897) 15 R. P. C. 33; Osmond's, Ltd. v. Balmoral Cycle Co., (1898) 15 R. P. C. 505;

Tubeless Pneumatic Tyre and Capon Heaton, Ltd. v. Trench Tubeless Tyre Co., Ltd., (1899) 16 R. P. C. 291; Savage Brothers, Ltd. v. Brindle, (1900) 17 R. P. C. 228; Castner-Kellner Alkali Co. v. Commercial Development Corporation, (1900) 17 R. P. C. 593.

rotating vessel containing the mercury cathode. The dispute arose as to the proper construction of the word "stationary" as used in the provisional specification. It was contended for the patentee that "stationary" was to be construed as meaning "stationary in relation to the vessel containing the mercury," and not as "stationary in relation to space generally." The House of Lords held that upon the true construction of the provisional specification the patentee, when he filed that document, never contemplated the movement in any sense of the mercurial cathode, and that "stationary" was to be read in its primary meaning, which implies the absence of movement of any kind. Consequently, the House further held that the claim in the complete specification to a machine which comprised a rotating vessel containing the mercury cathode was a claim to an invention different from that described in the provisional specification, and that the patent was, therefore, void on the ground of disconformity.

Variations
between
the Speci-
fications.

In *United Telephone Co. v. Harrison*, (1882) L. R. 21 Ch. D. 743, *Edison's* patent for the telephone under the title "improvements in instruments for controlling by sound the transmission of electric currents, and the reproduction of corresponding sounds at a distance," was held invalid by *Fry, J.*, and afterwards by the Court of Appeal. One of the grounds for so holding was the fact that the final specification described and claimed the phonograph whilst it was not disclosed in the provisional specification, although it was admitted that portions of the provisional specification explained, or might be held to refer to, an instrument like the phonograph. *Fry, J.*, after stating the fact that *Edison* had discovered an instrument of the highest ingenuity, the phonograph, which is purely mechanical, and has nothing to do with electric or magnetic science, and nothing necessarily to do with the transmission of sound to a distance, observed: "Has that remarkable invention so made by *Edison* been in any manner described in the provisional specification? . . . Now, no doubt some of these words do explain or might be held to refer to an instrument like the phonograph, but when I ask myself whether they in any manner describe the nature of the invention, I am bound to say that they do not. . . . I agree that the provisional specification need not describe the manner in which an invention is to be carried into effect—I agree that it need not describe the nature of the invention otherwise than roughly; but it ought to do so fairly and honestly; and if *Mr. Edison* was at the time at which these letters patent were granted in possession of that very remarkable mechanical invention by which speech could be reproduced, not necessarily at a distance, but in the same room as that in which it was uttered, I do not

United Tele-
phone Co. v.
Harrison.

Variations
between
the Speci-
fications.

think the provisional specification was an honest statement of the nature of the discovery. On that ground I come to the conclusion that Mr. *Edison's* patent cannot be upheld."

Illustrative
cases in which
the objection of
disconformity
failed.

The following cases may be taken as instances among many reported cases (*t*) in which the objection of disconformity was not sustained.

Newall v.
Elliott.

Newall v. Elliott, (1858) 4 C. B. N. S. 269; 27 L. J. C. P. 337, was a case in which the validity of *Newall's* patent for "improvements in apparatus for laying down submarine telegraph wires" was questioned on the ground of disconformity. The provisional specification described the nature of the invention in the following words: "The cable or rope containing this insulated wire or wires is passed round a cone, so that the cable, in being drawn off the coil, is prevented from kinking by means of the cone, and there is a cylinder on the outside which prevents the coil from shifting in its place." The complete specification, besides containing words to the above effect, continued the description in the following terms: "When the cable is to be laid down I place over the cone an *apex* or top which is conoidal, as shown (the drawing showed a short conoidal head placed on the flat top of the truncated cone) and around this I suspend *several rings* of iron by means of cords, so as to admit of adjustment at various heights over the cone. The use of these rings is to prevent the bight of the rope from flying out when going at a rapid speed. The two rings nearest the coil are lowered to about six and twelve inches respectively from the coil (the drawing showed four rings arranged in gradations of size, the smallest being at the top, and acting as a mouth-piece, for the exit of the cable which was thus carried close over the conoidal top of the cone)." The claims included one for the use of rings in combination with a cone as described. The matters in dispute were referred to an arbitrator, who made an award, and stated a special case for the opinion of the Court, in which one of the questions for decision was: "Whether there

(*t*) See *Newall v. Elliott*, (1858) 4 C. B. N. S. 269; 27 L. J. C. 337; *Wright v. Hitchcock*, (1870) L. R. 5 Ex. 37; 39 L. J. Ex. 97; *Penn v. Bibby*, (1875) L. R. 2 Ch. 127, 135; *Lucas v. Millar*, (1885) 2 R. P. C. 155; *Watling v. Stevens*, (1886) 3 R. P. C. 42; *Moseley v. Victoria Rubber Co.*, (1887) 4 R. P. C. 241; *Gaulard and Gibbs' Patent*, (1888) 5 R. P. C. 533; *Horrocks v. Stubbs*, (1886) 3 R. P. C. 221; *King, Brown & Co. v. Anglo-American Brush Corporation*, (1889) 6 R. P. C. 414; *Crampton v. The Patent Investment*

Co., (1889) 6 R. P. C. 294; *Gadd v. Mayor of Manchester*, (1892) 9 R. P. C. 249, 516; *Miller v. Searle*, (1893) 10 R. P. C. 106; *Cassel Gold Extracting Recovery Co.*, (1895) 12 R. P. C. 222, 257; *Pneumatic Tyre Co. v. East London Rubber Co.*, (1896) 14 R. P. C. 77; *Pneumatic Tyre Co. v. Ixion Patent Pneumatic Tyre Co.*, (1897) 14 R. P. C. 853; *Pneumatic Tyre Co. v. New Ixion Tyre and Cycle Co. v. Leicester Pneumatic Tyre and Automatic Valve Co.*, (1899) 16 R. P. C. 531.

was a fatal variance between the provisional and complete specification, in that the former omitted all mention of the rings claimed by the latter document." The Court gave judgment for the plaintiff, and the judgment of *Byles, J.*, contained the following passage: "The second objection was that the provisional specification contained no mention of the rings claimed in the final specification. But the office of the provisional specification is only to describe generally and fairly the nature of the invention, and not to enter into all the minute details as to the manner in which the invention is to be carried out; otherwise the provisional specification must be as full as the complete specification, and drawn with as much care and deliberation. Indeed, the statute itself (u) indicates this distinction between the provisional and the final specification; for it calls the latter the complete specification, implying that the former is, or legally may be, in some respects executory and incomplete. Moreover, it enacts (sec. 6) that the provisional specification is to describe the nature of the invention and no more; but when the statute comes to speak of the complete specification its language is altogether different; it enacts (sec. 9) that the complete specification shall describe not only the nature of the invention, but also the manner in which it shall be performed, and not describe but particularly ascertain it. We, therefore, think that this provisional specification in the case under consideration sufficiently describe the nature of the invention, though it does not enter into a detail of all the means by which it is to be accomplished."

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between
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fications.

In *Wright v. Hitchcock*, (1870) L. R. 5 Ex. 37; 39 L. J. Ex. 97, the patent was for "improvements in the manufacture of frills or ruffles, and in the machinery or apparatus employed therein." The provisional specification stated: "The invention relates to a peculiar manufacture of frills and ruffles, and to a peculiar combination of mechanism," &c., whilst the complete specification stated: "The invention relates to a peculiar manufacture of frills, ruffles, or trimmings, and to a peculiar combination of mechanism to be applied to a sewing machine for producing the same." It was objected on behalf of the defendants that there was an inconsistency between the provisional and final specification, the word *trimmings* being added in the latter. *Kelly, C.B.*, overruled this objection, and held that by whatever name it was described the thing was in substance identical.

*Wright v.
Hitchcock.*

In *Pneumatic Tyre Co. v. East London Rubber Co.*, (1896) 14 R. P. C. 77, 573, and also in *Pneumatic Tyre Co. v. Leicester Pneumatic Tyre and Automatic Valve Co.*, (1898) 15 R. P. C. 159; 16 R. P. C. 50, 531, which related to an infringement

*Pneumatic
Tyre Co. v.
East London
Rubber Co.*

(u) 15 & 16 Vict. c. 83; cf. 46 & 47 Vict. c. 57, s. 5.

Variations
between
the Speci-
fications.

of *Welch's* invention of the method of securing a tyre to a bicycle rim by means of inextensible rings or rims, it was objected that the provisional specification did not describe that the invention was intended to relate to a pneumatic tyre, or a cover for a pneumatic tube or tyre, or for affixing a pneumatic tube or its cover to a wheel rim. It was also alleged that the inventions set out and claimed in certain claiming clauses, which related to pneumatic tyres, were inventions none of which were disclosed or hinted at in the provisional and were not legitimate developments of anything disclosed in the provisional.

These objections were overruled by the Court of first instance, the Court of Appeal, and the House of Lords, on the ground that the real nature of the invention was sufficiently described in the provisional, and the use of it with pneumatic tyres as claimed in the complete specification was a legitimate development sufficiently hinted at in the provisional. As was pointed out by Lord *Lindley*, then *Lindley*, L.J., (14 R. P. C. 581) it is easier to ascertain the nature of an invention from a complete specification, which shows how it is to be applied, than from a provisional specification which describes the nature of an invention in general language, but which seldom shows how it is to be performed.

Applicant's
course in case
of doubt as to
disconformity.

There may be a real doubt as to whether a specific thing is a legitimate development, or is of such a nature that a claim embracing it would make the patent bad on the ground of disconformity, and the applicant may feel that his conduct, during the period of provisional protection, might amount to such a publication of the specific thing as would invalidate a later patent for it. In such circumstances his best course is to include it in the complete specification, and, before such specification is open to public inspection, to apply for the grant of a second patent limited to the specific thing in question. The second patent will be of the nature of a confirmatory deed of conveyance. Assuming no publication is proved against the patentee, the monopoly of the specific thing is secured to him under either the first or the second patent, but, of course, not under both. It cannot be said that there is any monopoly created for a period greater than fourteen years; because the monopoly in the specific thing originates at the date of either the first or the second patent, but it is not created by both patents. If, in fact, it is created by the first, then, true, the second patent is invalid, and its effect is to enable the grantee

to assert a monopoly after the expiration of fourteen years from the date on which it was created. The assertion of an invalid patent right, even if it be known to be invalid, is not *per se* a ground for revocation, but it does give rise to the statutory right of action created by sec. 32 of the Patents Act, 1883. Before the Act of 1883 the only remedy for a threat of proceedings on an invalid patent was an action for damages, which, moreover, only lay when the threat was made *malâ fide*. (x) A petition for the revocation of the second patent, on the ground of prior grant by the first, would fail, because the grant of a monopoly of the specific thing to the grantee, who *ex hypothesi* is the true and first inventor, is lawful, and it is immaterial to the public which patent was the effective document. Moreover, the presentation of a petition would be an abuse of the process of the Court, because it would be asking the Court to investigate the validity of the first patent at large, the question being, not, assuming validity, is the specific thing within the ambit of the claim of the first patent, but the very different question is the first a valid grant.

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Specifica-
tion.
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The above suggested plan will obviously not protect the applicant, if it turn out that the specific thing in question was not a legitimate development of what was described in the provisional specification of the first patent, and that, in fact, it was published before the date of the second patent.

THE COMPLETE SPECIFICATION.

The Patents, &c., Act, 1883, like the previous Act of 1852, enacts that the patentee shall in the complete specification *particularly* describe and ascertain the nature of the invention, and in what manner it is to be performed, and further requires that this instrument shall be accompanied by drawings if necessary. (y)

Object of com-
plete specifica-
tions.

The patentee is required to *particularly* describe and ascertain the nature of his invention, so that the public may know what they are prohibited from doing without his leave or licence, during the continuance of the patent; and he is required to state in what manner the invention is to be performed, in order that the rest of the public may, when the patent expires,

(x) See p. 310 *post*.

(y) s. 5, sub-s. 41; see P. R. 1903.

Complete
Specification.
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be able to put the invention into practice, and thus enjoy the benefit of the discovery. (z)

In fact, upon the view that letters patent are virtually a bargain between the Crown and the public, the price which the patentee pays for his monopoly is the fulfilment of the obligation he is under of lodging such an account of his discovery as will enable the public at the expiration of the time for which the grant is made to have as free and unreserved use of the invention as he himself. (a)

The title and provisional specification (b) are sufficient if they give a mere rough and incomplete description of the invention; from them the public, except in the case of very simple inventions, obtain but little information of the real nature of the manufacture they are prohibited from using, and unless some specific and detailed information were given respecting what they are commanded by the terms of the grant to refrain from doing, during the continuance of the monopoly, it would be unfair to punish them for any violation of the patent right committed without the means of ascertaining its nature and extent.

It is apparent that, in every case in which an action for infringement is brought against a member of the public in respect of a particular patent, it is necessary to ascertain whether the act complained of is described in the complete specification, and claimed by implication, or otherwise, and whether the exclusive privilege of carrying out that particular operation is conferred upon the patentee.

If the specification does not sufficiently describe some art of manufacture which is substantially the same as that used by the alleged infringer, no action lies against him.

Complete
specification
is generally a
difficult docu-
ment to draft.

The complete specification requires the exercise of the greatest skill and care in drafting it, and is by no means easy to draw. The reason of this is that the conditions and tests which the law requires the document to satisfy are very numerous, and a failure in any one of them will not only make the specification bad, but will render the whole grant void.

It must be borne in mind that the object for which the complete specification exists is to give sufficient and complete

(z) *Young v. Rosenthal*, (1884) 1 R. P. C. 31; *Macfarlane v. Price*, (1816) 1 Stark. N. P. 201; *Allen v. Duckett*, (1893) 10 R. P. C. 397.

(a) *Gibson v. Brand*, (1842) 1 W. P.

C. 627; 4 M. & G. 179; 4 Scott, N. R. 844; 11 L. J. C. P. 177; *Wood v. Zimmer*, (1815) Holt, N. P. 58; 1 W. P. C. 82 n.

(b) p. 182 ante.

information to the public of what they are prohibited from doing, without the sanction of the patentee, during the continuance of the patent, and what they will be able to do after it has expired.

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Specifica-
tion.

The conditions which the law requires the complete specification to satisfy may be conveniently considered under the following heads :—

Requisites of
complete speci-
fication.

- I. The complete specification must be framed with the utmost good faith, and must not contain any false representation or misdescription of the invention or any material part of it, or otherwise mislead the public.
- II. The complete specification must not be framed in ambiguous language, but must be as clear and concise as the nature of the subject will admit.
- III. The complete specification must be intelligible to an ordinary workman, possessing the ordinary skill and knowledge of that branch of the useful arts to which the invention relates. It is not required to describe the invention and the manner in which it is to be performed so fully as to instruct persons wholly ignorant of the subject-matter.
- IV. The complete specification must particularly describe and ascertain the nature of the invention and how the same is to be performed.
- V. The complete specification need not describe any step or process which is necessarily implied.
- VI. The complete specification need not describe minutely any known thing to which it refers.
- VII. The complete specification need not describe the particular shape of any article or part, if the form thereof is not of the essence of the invention.
- VIII. The complete specification must describe the best method known to the patentee of performing the invention and all his knowledge relating thereto, including that which he may have acquired during the period of provisional protection prior to the date of filing the complete specification.
- IX. The complete specification need not mention everything which will produce the desired result, or every mode of performing or applying the invention.
- X. If the complete specification describe anything which

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Specifica-
tion.

is not new, it must clearly distinguish that which is old from that which is new, and claim only the latter.

- I. *The complete specification must be framed with the utmost good faith, and must not contain any false representation or misdescription of the invention, or any material part of it, or otherwise mislead the public.*

Patent a bar-
gain with the
public.

A patent may be considered as a bargain with the public, and the specification ought to be construed on the same principle of good faith as that which regulates all other contracts. (c) If any statement in the specification turn out to be untrue, or of a nature calculated to mislead or puzzle the public, the grant of the letters patent will thereby be rendered void, either on the ground that the untruth is part of the representation on the strength of which the grant was made, or that the patentee has not properly described and ascertained the nature of the invention and in what manner the same is to be performed.

Must not mis-
lead by com-
mission,

As stated by *Buller, J.*, in *R. v. Arkwright*, (d) and acted upon by many Judges since, if the specification, in any part of it, be materially false and defective, the patent is against law and cannot be supported. Further, if certain things mentioned in the specification are of no use, and merely thrown in *malâ fide* to puzzle, the patent is equally void; though invalidity is not the necessary result of a misleading statement which does not, in fact, lead to absolute failure, and which the patentee *bonâ fide* believed to be true when the specification was filed. (e) Thus a patentee is under no obligation to explain any theory of action of a combination or process which he directs to be constructed or carried out, (f) and, if he do give a theory, he is not to be injuriously affected by the fact that it turns out to be a wrong theory, (g) for the theory of action

(c) Per Lord Eldon, *Cartwright v. Eamer*, (1890) 14 Ves. 131, 136; *Sturz v. De la Rue*, (1828) 5 Russ. 322; 7 L. J. (O. S.) Ch. 47.

(d) (1785) Dav. P. C. 61; 1 W. P. C. 64.

(e) See *Lewis v. Marling*, 1 W. P. C. 496; *Monnet v. Beck*, (1897) 14 R. P. C. 847; pp. 207, 215, 233, cf. *Owen's Patent*, (1899) 17 R. P. C. 68, 78, in which the decision appears to ignore this principle.

(f) *Atkins and Applegarth v. Castner-Kellner Alkali Co.*, (1900) 18 R. P. C. 294; *Delwick's Patent*, (1898) 15 R. P. C. 687; *Badische Anilin und Soda Fabrik v. Levi..stein*, (1887) 4 R. P. C. 449; *Badische Anilin und Soda Fabrik v. La Société Chimique des Usines du Rhône*, (1898) 15 R. P. C. 368.

(g) See per *Finlay, S.-G.*, *Delwick's Patent*, (1898) 15 R. P. C. 687; *ibid.*

is no part of the consideration for the grant. Neither is a patent to be held bad merely because the patentee is too sanguine in his statement as to the quantity of a useful result which will be obtained by the use of his invention. (*h*)

Complete
Specifica-
tion.

If there is anything introduced into the specification which tends to mislead the public into failure, or if the process as directed by the specification does not produce that which the patent professes to do, the patent itself is void. (*i*) Also if the patentee can make the article, which is the subject of the patent, with two or three of the ingredients specified, and he insert others which will not produce the effects stated, the patent will be void. (*k*)

Further, if the patentee suppress anything, or mislead, his specification is bad—*e.g.*, if he say there are many modes of doing a thing, when in fact there is only one, this will avoid the patent. If he maintain, as an essential ingredient in the patented article, that which is not so, or even useful, and thereby misleads the public, his patent may be void. (*l*)

Again, if the specification describes and claims two ways of doing a thing, and it turns out that by one of the ways specified it cannot be done, (*m*) or that one of the alternatives is not new, (*n*) the specification is bad and the patent void. So also if the patentee, misled by theory, describes and claims as an essential step in a process—*e.g.*, a chemical process—the production of something which is in fact an impossibility, the patent is void. (*o*)

Must not de-
scribe methods
which will
not answer.

A false description of a method of performing the invention, or a part of it, must not be confused with a claim to something which turns out to be useless. In the latter case, if the useless part is a non-essential, the patent may be perfectly good, notwithstanding the claim; (*p*) but in the former case the patent cannot be sustained.

Distinction
between a false
description
and a claim to
something
useless.

Thus in *Neilson v. Harford*, (*q*) *Parke*, B., at the trial, said that his strong opinion, as then advised, was that a certain

(*h*) *Saccharin Corporation v. Chemical and Drugs Co.*, (1899) 17 R. P. C. 38.

(*i*) *Turner v. Winter*, (1787) 1 T. R. 602; 1 W. P. C. 77; *Palmer v. Wagstaff*, (1853) *Newtons' L. J.* vol. xliii. p. 131.

(*k*) *Ibid.*; see *Bickford v. Skewes*, (1838) 1 W. P. C. 211.

(*l*) *Lewis v. Marling*, (1829) 1 W. P. C. 493; see also p. 231 *post*.

(*m*) *Beard v. Egerton*, (1846) 2 Car. & K. 667; 3 C. B. 97; 8 C. B. 165; 15 L. J. C. P. 270; 19 L. J. C. P. 36;

R. v. Cutler, *Macr. P. C.* 137; *Savory v. Price*, (1823) *Ry. & M.* 1; 1 W. P. C. 83; *Kurtz v. Spence*, (1888) 5 R. P. C. 161, 184.

(*n*) *Pether v. Shaw*, (1893) 10 R. P. C. 293; p. 112 *ante*.

(*o*) *Monnet v. Beck*, (1897) 14 R. P. C. 777.

(*p*) *R. v. Cutler*, (1816) *Macr. P. C.* 137; *Lewis v. Marling*, (1829) 10 B. & C. 22; 1 W. P. C. 493.

(*q*) (1841) 1 W. P. C. 313; 8 M. & W. 806.

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Specification.
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statement in the specification was incorrect and untrue, and that it being clearly untrue, it vitiated the specification, and prevented the patent from being a good patent. The jury, by their verdict, agreed with the view the learned Baron took of the statement in question; but the Court of Exchequer, of which he was also a member, construed it differently, and *Parke. B.*, is reported to have said (*r*):—

“At the trial, I construed this passage as meaning that the shape was immaterial to the degree of effect in making the blast; and, if this were so, the jury having by their finding negatived the truth and accuracy of this statement, the specification would be bad, as containing a false statement in a material circumstance of a nature that, if literally acted upon by a competent workman, would mislead him, and cause the experiment to fail. . . . But my Lords and my brothers, after considerable hesitation, are of opinion that a construction may be reasonably put upon this clause which will support the patent; and though I myself still entertain great doubt whether such is the true construction, I am not prepared to say that it is not.”

Must not give
problems.

As has been said by *Jessel, M.R.*: “You must not mislead people by telling them to do something wrong, and leaving them to find out the mistake. . . . You must not give people mechanical problems and call them specifications.” (*s*)

The invention
described must
be useful for
the object
stated.

It is also a fatal defect if the invention is not useful for the purpose for which the patentee says it is useful. The question always is, Does the invention really do when put in practice by a competent man what the patentee states it will do? (*t*)

If the specification contain what amounts to a false suggestion on the part of the patentee—*e.g.*, the machine claimed is represented as capable of sharpening knives, scissors, and razors, whereas, in fact, it will only sharpen knives; (*u*) or if the specification give only an insufficient description of the invention and the manner of performing it, the patent will in each case be equally bad. In the former it

(*r*) (1841) 1 W. P. C. 371.

(*s*) *Plimpton v. Malcolmson*, (1875) 1. R. 3 Ch. D. 576; see also *Lewis and Stirekler's Patent*, (1897) 14 R. P. C. 24, 36.

(*t*) *Morgan v. Seaward*, (1836) 1 W. P. C. 185; *Badische Anilin und Soda Fabrik v. Levinstein*, (1887) 4 R. P. C.

462; *Easterbrook v. Great Western Railway Co.*, (1885) 2 R. P. C. 210; 3 R. P. C. 94; *Fawcett v. Homan*, (1896) 13 R. P. C. 268, and cases following in the text, pp. 205–206 *post*.

(*u*) See *Felton v. Greaves*, (1829) 3 C. & P. 611.

will be void on the same principle that an ordinary grant of lands or tenements from the Crown is by a false suggestion of the grantee rendered inoperative, not merely against the Crown, but in a suit against a third person; (x) and in the latter it will be bad, because the statutory requirements have not been complied with. (y) But a statement in a specification to the effect that an invention is applicable to other purposes than that specified will not vitiate the patent, as there is no objection to a patentee stating that what he has invented with reference to one particular machine may be applicable to other machines. (z) A statement in a specification to the effect that a certain thing is important which is in fact not so, (a) or that something is immaterial which is in reality material, (b) will, it is submitted, amount to an attempt to deceive, and so render the patent void.

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Specifica-
tion.

The following cases illustrate the application of the principles stated in the last paragraph.

Illustrative
cases.

Bloxam v. Elsec, (1825) B. & C. 169; 1 C. & P. 558, is an instance of a specification which was rendered void, because the patentee thereby represented that the machine described was capable of doing more than it really could do—viz., making paper of different widths, whereas it was in reality only suited to paper of one definite width. And in *Crossley v. Potter*, (1825) Macr. P. C. 240, a patent was declared bad on the ground that the specification represented that the machine as described was applicable to the weaving of carpets as well as of coach lace, whereas such was not in reality the case. The direction of *Pollock, C.B.*, to the jury contained the following instructive passage: "In my mind, the safest course for patentees to adopt in framing their specifications is, instead of including everything, to confine themselves specifically to one good thing; and a jury will always take care that, if it be a real invention, no man, under colour of improvement, shall be allowed to interfere with that which is the offspring of their genius."

Bloxam v.
Elsec.

Crossley v.
Potter.

In *R. v. Metcalf*, (1817) 3 Car. & P. 611, the patentee, both in the title and body of the specification, described the object for which the patent was obtained to be the manufacture of

R. v. Metcalf.

(x) *Travell v. Carteret*, 3 Lev. 135; *Alcock v. Cooke*, 5 Bing. 340; *Morgan v. Seaward*, (1837) 2 M. & W. 544; *Owen's Patent*, (1899) 17 R. P. C. 78.

(y) See 1 W. P. C., and cases there referred to.

(z) *Cole v. Saqui*, (1888) 5 R. P. C. 494, cf. p. 261 *post*.

(a) *Huddart v. Grimshaw*, (1803) 1 W. P. C. 85.

(b) *Neilson v. Harford*, (1841) 1 W. P. C. 313.