

of disinfecting articles by subjecting them to contact with dry Processes.  
superheated steam in a container jacketed with superheated steam, when all that had to be done to effect the new process was to strengthen various parts of an existing apparatus (*y*).

A man cannot have a patent merely because he discovers the theory and reason of that which has before been done empirically. On the other hand, 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 have a patent to prevent others from using what they had used before, though empirically (*z*).

Discovery of theory of what was done before only empirically.

A patentee, further, in his specification is under no obligation to give any theory of the action of a combination or process which he directs to be constructed or carried out, and he is not to be injuriously affected by the fact that he has given a wrong theory in the absence of a statement which, if acted upon, would lead to failure (*a*).

Theory of action not part of consideration for patent.

A process which results in a larger yield of a known article, when the new process is not an obvious one, may well form the subject-matter of a valid patent (*b*); but it is not a patentable invention merely to adopt and use on a commercial scale a process which has been previously known and used to produce the same result on a small scale (*c*).

Use on commercial scale of process used on small scale.

The discoverer of a hidden and concealed virtue in something known before, which enables him to apply the known thing to some useful purpose of life to which it has not been applied before, is entitled to patent the novel application. Thus, in *Muntz v. Foster* (*d*), it appeared that *Muntz*, by experiment, ascertained that a certain mixture of the alloy of zinc with copper in certain proportions, when made into plates and used for the purpose of sheathing the bottoms of ships, possessed great advantages over the ordinary copper plates

Discovery of a hidden property or virtue.

Co., Ltd. *v.* London & South Western Ry. Co. (1911), 28 R. P. C. 77.

(*y*) *Lyon v. Goddard* (1893), 10 R. P. C. 121, 334.

(*z*) *Patterson v. Gas Light and Coke Co.* (1877), L. R. 3 App. Cas. 246; judgment of Lord Blackburn.

(*a*) See per Finlay, S.-G., *Dellwik's Patent* (1898), 15 R. P. C. 687; p. 196, *post*; *Atkins and Applegarth v. Castner-Kelner Alkali Co.* (1901), 18 R. P. C. 294; *Badische Anilin, &c. v.*

*Levinstein* (1887), 4 R. P. C. 449; *Monnet v. Beck* (1897), 14 R. P. C. 847; *Badische Anilin, &c. v. La Société Chimique des Usines du Rhone* (1898), 15 R. P. C. 368.

(*b*) *Saccharin Corporation v. Chemical and Drug Co.* (1899), 17 R. P. C. 28.

(*c*) *Acetylene Illuminating Co. v. United Alkali Co.* (1902), 19 R. P. C. 213; 20 R. P. C. 161; 22 R. P. C. 145.

(*d*) (1844), 2 W. P. C. 96; see also *Newton v. Vaucher*, p. 97, *post*.

Processes. previously in use for the same purpose, by reason of the plates of the alloy possessing the property of oxydating just in sufficient quantities—*i.e.*, 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 attached to it. *Muntz* obtained a patent for his invention, the title of which was “An improved manufacture of metal plates for sheathing the bottoms of ships or other vessels.” The action was brought for the infringement of the patent, and the defendant objected to the validity on the ground (*inter alia*) that the invention above described was not subject-matter; but the objection was not sustained. *Tindal*, C.J., in his charge to the jury, directed them thus (*e*):—

“I cannot think, as at present advised, that if it was shown—as possibly it might be—that sheets had been made of metal before, in the same proportions which he has pointed out, that 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—that is the opinion which I form upon it. 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, such application has been considered as the ground, and a 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.”

Again, a valuable and validly claimed process for the extraction of gold from its ore, was founded on the discovery of the selective action possessed by a dilute solution of cyanide of potassium, and its application to the extraction of gold from ores in which other baser metals occur (*f*).

(*e*) 2 W. P. C. 103.

(*f*). Cassel Gold Extracting Co. v.

Cyanide Gold Recovery Syndicate  
(1895), 12 R. P. C. 232.

In the case of the valuable patent for Lanolin, the patentee discovered that if wool-fat (which was known in the days of *Dioscorides*, and a preparation of which was then used as an unguent) be thoroughly freed from the constituent fatty acids and other impurities, the remaining cholesterine fats when kneaded with water possess a great capacity for taking up water, and yield the highly useful unguent Lanolin. The process formed the subject-matter of a patent, which was declared valid both by the Judge of first instance and the Court of Appeal (*g*).

Processes.

It is sometimes objected that to speak of a patentable process is in reality a misuse of terms, for the subject of the patent is *a manufacture according to a new process*, and therefore a new manufacture. To take the above case of *Crane v. Price* (*h*), the subject there was the manufacture of iron by a new process—*i.e.*, the combination of a hot-air blast and anthracite in the furnace.

Objection to the term "patentable process."

This idea seems to have been in the mind of *Pollock*, C.B., when he gave judgment in *Stevens v. Keating* (*i*), and made use of the words, "the real invention may be, not so much the thing when produced, as the mode in which it is produced; and its novelty may consist, not so much in its existence as a new substance as in its being an old substance, but produced by a different process. In one sense, an old substance produced by a new process is a new manufacture; of that there cannot be a doubt, and therefore, although the language of the Act has been said to apply only to manufactures and not to processes, when you come to examine it, either literally or even strictly, it appears to me the expression 'manufacture' is free from objection, because, though an old thing, if made in a new way, the very making of it in a new way makes it a new manufacture; therefore, although I think this is a patent for the process rather than the product, I think it may be a patent for the product."

Bearing in mind, however, the very wide interpretation given to the word "manufacture" as used in the Act of James I., the exposition of which term, "as far as usage will expound

(*g*) *Benno Jaffé und Darmstaedter Lanolin Fabrik v. Richardson* (1893), 11 R. P. C. 93, 261.

(*h*) (1842), 2 M. & G. 580; p. 60, *ante*.

(*i*) (1847), 2 W. P. C. 182.

Processes. it, has gone very much beyond the letter " (k), the above excuse by way of explanation becomes unnecessary. For instance, the word "manufacture" has a very wide and extended meaning, and may be interpreted "invention" (l), and it includes both process and result (m). Lord *Westbury*, in discussing the meaning of the word, said, "By the large interpretation given to the word 'manufacture,' it not only comprehends productions, but it also comprehends the means of producing them. Therefore, in addition to the thing produced it will comprehend a new machine, or a new combination of machinery; it will comprehend a new process or an improvement of an old process" (n).

"Manufacture" is a wider term than "process," and for this reason a patentee, who desired to do so, was not allowed to amend his specification by altering the words *a process of preparing, &c.*, in a claiming clause to *the manufacture of, &c.*, since such an amendment would be contrary to the provisions of sub-sect. 8 of sect. 18 of the Patents Act, 1883 (o).

A reference to the cases will show that patents have again and again been granted and held valid for processes pure and simple. For example, the application of a known detonating powder to the discharge of known kinds of fire-arms was held (p) to be a patentable invention. And (q) a patent was granted and upheld for the application of metal plates, made in a known way, to ships and buildings, for the purpose of protecting them against fire by preventing the access of air. In the case of the *Electric Telegraph Co. v. Brett* (r), a patent was upheld for a method of giving duplicate signals at intermediate stations; and in *Newall v. Elliott* (s), where the patent was for improvements in apparatus employed in laying down submarine telegraph wires, and the claim was, "First, coiling the wire or cable round a cone; secondly, the supports placed cylindrically outside the coil round the cone; thirdly, the use of the rings in continuation with the

(k) *Eyre, C.J.*, in *Boulton v. Bull* (1795), 2 H. Bl. 463.

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

(m) *Bush v. Fox* (1852), Macr. P. C. 176.

(n) *Ralston v. Smith* (1865), 11 H. L. C. 223.

(o) *Vidal's Patent* (1898), 15 R. P. C. 721.

(p) *Forsyth v. Riviere* (1819), 1 Carp. Rep. 401.

(q) *Hartley's Patent* (1777), 1 W. P. C. 54.

(r) (1851), 1 C. B. 838.

(s) *Newall v. Elliott* (1858), 13 W. R. 11.

cone as described," the Court declared the patent valid, and overruled the objection that the invention claimed was merely a mode of coiling and paying out cables, and not a new manufacture, and therefore incapable of being the subject-matter of a patent.

A new process which consists merely in the omission of a step hitherto thought to be important from an old process may support a patent.

Thus a process for the manufacture of gelatine by cutting hides into thin slices and then submitting them in that state to the action of caustic alkali, whereby the use of blood, as in the method previously used, was rendered unnecessary, was declared to be subject-matter (*t*).

And vegetable gas having been obtained from oils which were separated from seeds and other oleaginous substances by pressure, the discovery that the same gas might be distilled at once from the seeds, &c., without separating the oils, was held to be fit subject-matter (*u*), though the patent was upset on other grounds.

Questions sometimes arise as to the ambit of patents for processes. As a result of the cases (*x*), the wide dicta in the earlier of which were questioned in some of the later ones, it may be stated that when a patentee has discovered a process for arriving at a new result or product not known before—*i.e.*, the patent is a pioneer patent or master patent (*y*)—and in the specification there is described one process which is effectual for the purpose of arriving at that result, new at the time when the patent is taken out, the patentee will be protected against all other *analogous equivalent* processes for arriving at the same result, and no one can without infringing his patent adopt simply an equivalent

Processes.

Ambit of patent for a process.

(*t*) Wallington v. Dale (1852), 7 Exch. 888.

(*u*) Booth v. Kennard (1856), 1 H. & N. 527.

(*x*) Jupe v. Pratt (1837), 1 W. P. C. 145; The Househill Co. v. Neilson (1843), 1 W. P. C. 673; Curtis v. Platt (1863), L. R. 3 Ch. 135, n.; L. R. 1 H. L. 337; Badische Anilin und Soda Fabrik v. Levinstein (1885), 2 R. P. C. 89; L. R. 24 Ch. D. 156; Proctor v. Bennis (1887), 4 R. P. C. 333; L. R. 36 Ch. D. 740; 57 L. J.

Ch. 11; Gosnell v. Bishop (1888), 5 R. P. C. 158; Bovill v. Pimm (1856), 11 Exch. 718, 739; Barber v. Grace (1847), 1 Exch. 339; 17 L. J. Exch. 122; Automatic Weighing Machine Co. v. Knight (1889), 6 R. P. C. 304; Nobel's Explosives Co. v. Anderson (1894), 11 R. P. C. 519, 527; Incandescent Gas Light Co. v. De Mare Incandescent Gas Light System, Ltd. (1896), 13 R. P. C. 331.

(*y*) See chap. ix., *post*.

Processes. process to achieve the same result. Where, on the other hand, the invention is a process which achieves what at the date of the patent is a known result, any other person may obtain another patent for any new though analogous process for arriving at the same result; or he may use any other process without infringing the patent first taken out (x).

Lord *Westbury*, L.C., in *Curtis v. Platt* (z), referring to a patent for a new means of attaining an old object, laid down the law thus:—

“If the invention be, as I have already described, nothing more than a particular means to attain a given result which is perfectly well known, then you can no more say that the invention of one distinct set of means interferes with the invention of another than you could say originally that there ought not to be patents for the inventions of distinct means to an end. I would illustrate it familiarly by this example. If we suppose a patent may be for a ladder to go down a pit, that patent may be made to comprehend all ladders, whether constructed of wood or of iron, or of hemp or of wire; but if another man invented a mode of letting men down the pit by a rope and pulley, it would be impossible to say that the one means of attaining that particular end was to be regarded as identical with or comprehended in the other. . . . It is extremely desirable that when a beneficial idea has been started by one man he should have the benefit of his invention, and that it should not be curtailed or destroyed by another man simply improving upon the idea; but if the idea be nothing in the world more than the discovery of a road to attain a particular end, it does not at all interfere with another man discovering another road to attain that end, any more than it would be reasonable to say that if one man has a good road to go to Brighton by Croydon, another man shall not have a road to go to Brighton by Dorking.”

Lord *Halsbury*, L.C., in *Moore v. Thomson* (a), referring to the ambit of Lord *Kelvin's* invention of a card for the mariner's compass—which was in fact the first card in which the principle or system of employing a very light card with the greater part of its weight thrown on to the periphery was

(x) See note (x), previous page.

(z) (1863), L. R. 3 Ch. D. 139, n.

(a) (1890), 7 R. P. C. 332.

successfully applied in practice with all the attendant advantages of reduction of frictional and other sources of error—Processes. and overruling the judgment of the Irish *Master of the Rolls*, who had construed the patent as being merely for a new means of attaining an old object, stated the law applicable to the case in like manner thus:—

“Now what appears to me with all submission to be the fallacy, to be found in the very lucid and learned judgment of the *Master of the Rolls*, is that he has used the phrase ‘a new instrument, and a new end, and a new means of attaining an old end,’ as if those words in themselves were sufficient to explain the subject-matter to which he applied them. In certain relations those words may be sufficiently clear; but I will take the illustration which I think is that of Lord *Westbury* in one of the cases relied on (*b*), in which he points out that the end and object (that is to say, the end in the Greek sense) of a ladder is to get down to the bottom of a pit, and that a man might have taken out a patent for a ladder which would include all sorts of instruments of that kind, but that, if somebody invented a mode of lowering a man to the bottom of a pit with a rope, that could not be said to be an infringement of a patent for any sort of ladder, and yet the end and object of the invention would be the same, to get to the bottom of the pit. When the *Master of the Rolls*, using the word ‘end’ in that sense, says that the end and object of both instruments here is to obtain a mariner’s compass which shall, under all circumstances, as nearly as possible point to the true north, he seems to me to omit to consider the machinery by which that is effected. I do not mean merely the construction of the particular machine, but he omits to consider that there may be new principles of construction by which that end is to be attained, as distinct as the lowering by a rope is from the lowering by a ladder. . . . The moment you come to apply yourself to see how this compass differs from all other compasses which have been hitherto in use, you perceive (at least it appears to me to be so, as a matter of fact, upon the evidence) that it is absolutely different from any compass which anybody has ever seen before. Upon principles, the ascertainment of which was the result undoubtedly of great study and wonderful powers of invention, Sir

(*b*) See Lord Westbury’s judgment in *Curtis v. Platt*, p. 68, *ante*.

Products.

*William Thomson* found out that he could obtain those great things which had been pointed out as most material for the purpose of securing the steadiness of the needle, that which should keep the needle in its position, notwithstanding the rolling of the ship, in whatever direction it should take place, and he invented an instrument accomplishing that object. I think it is a fallacy to say that this is an old instrument; it is not an old instrument; it is a new instrument. It is an instrument in which the end is attained by certain expedients, by the weight being thrown on to the circumference, and being in the position in which it is and the weight of the whole compass card, as it is called, being reduced."

Upon the motion of his Lordship the House held that a compass card, which differed in its details from the card specified and claimed by the patentee, but resembled it in that it possessed the characteristics above described, which were the real substance of the invention, was an infringement of the patent.

## PRODUCTS.

Is a patent  
for a product  
valid?

The question arises whether a grant of a patent for a product is valid. There is no reported case in which the point has been fully discussed and definitely decided, though there are dicta of various Judges which appear, at first sight at any rate, to be conflicting (c).

The word "product" is defined in "Webster's Dictionary" as "anything that is produced, whether as the result of 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."

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

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 (d), which is the real invention of the patentee; but a patent for a product would be bad

(c) See *Boulton v. Bull* (1795), Dav. P. C. 208; *Ralston v. Smith* (1865), 35 L. J. C. P. 49; 11 H. L. C. 223; *Vorwerk v. Evans* (1890), 7 R. P. C. 265; *Automatic Weighing Machine Co. v. Knight* (1889), 6 R. P. C. 297; *Nobel's Explosives Co. v. Anderson* (1894-95), 11 R. P. C. 519; 12 R. P.

C. 164; *Riekmann v. Thierry* (1896), 14 R. P. C. 106; *Lancashire Explosives Co. v. Roburite Co.* (1896), 13 R. P. C. 429, 476; 14 R. P. C. 303; *Kopp v. Rosenwald* (1902), 19 R. P. C. 211.

(d) See p. 31, *ante*; see also *Kopp v. Rosenwald* (1902), 19 R. P. C. 211.



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.

Products.

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

First, suppose a man find 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, by means of a patent, prevent other people from obtaining the new metal in the same way from similar ore, should they find it on their land, or from using the new metal if discovered in a pure state? 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 (*e*), 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 profiting by the mere discovery of the new metal, or 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 utilize the mere discovery of the new metal or 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 (*f*). 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. (g)*, "a thing is not to be called new, in the sense of *Crane v. Price*, simply because that particular thing has never been 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

(*e*) See p. 88, *post*.

(*f*) P. 4, *ante*.

(*g*) *Blakey v. Latham* (1889), 6 R. P. C. 187; see also *Thierry v. Riek-*

*mann* (1895), 12 R. P. C. 547, 548; judgment of *Kay, L.J.*, *Rockliffe v. Priestman* (1898), 15 R. P. C. 155.

**Products.** *Moser v. Marsden (h)*. 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 (*i*), 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 (*k*).

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

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

(*i*) P. 274, *post*.

(*k*) 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 of any process for producing it, in itself, invalidated the patent does not appear to have been taken at the bar.

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 (*l*).

Combinations.

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 (*m*).

The point of a combination patent must always be that the elements of which the combination is composed are combined together so as to produce one result (*n*). In other words, not every collocation of parts is a combination which is capable of protection by patent, but to be patentable the combination must be a collocation of inter-communicating parts, which in virtue of their inter-communication produce a definite specific result (*o*). Thus, where it appears that each collocated member

(*l*) Cf. p. 68, *ante*.

(*m*) *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. 538; *Allen v. Rayson* (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. Middleton*, 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.

(*n*) See per Lord Davey, *Klaber's Patent* (1906), 23 R. P. C. 469.

(*o*) See *British United Shoe Machinery Co., Ltd. v. Fussell (A.) & Sons, Ltd.* (1908), 25 R. P. C. 257, per Buckley, L.J.

Combinations.

merely gives its own known result, and there is no result which follows from the collocation of parts, there is no patentable combination (*p*).

Merit depends largely on result produced.

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 (*q*). Thus, the mere placing of two flat wicks parallel to each other in an oil lamp, two concentric round wicks having been previously combined, and flat wicks being perfectly well known, has been held sufficient to merit a patent (*r*); so also has the substitution of a filament, carbonised before formation, for a thin rod in an incandescent electric lamp (*s*); the alteration in the shape of the handle of a tennis racket (*t*); 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 (*u*).

In the words of *Tindal*, C.J. (*x*), 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 (*y*).

Objection to the use of the

In *Crane v. Price* (*z*) a patent for a new combination of the

(*p*) *Donnersmarckhütte Oberschlesische Eisen und Kohlenwerke Actien Gesellschaft v. Electric Construction Co., Ltd.* (1910), 27 R. P. C. 321.

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

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

(*s*) *Edison v. Woodhouse* (1887), 4

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

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

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

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

(*y*) *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.

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

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. (a). *James*, L.J., in the case of *Murray v. Clayton* (b), 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 Judge has ever questioned the principle upon which that case was decided."

**Combinations.**  
word "combination" in *Crane v. Price*.

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" (c). And arguments to the effect that a new combination bringing with it new and important consequences in the shape of a practical machine is not an invention, because it is easy to show how it might have been arrived at by starting from something known and taking a series of apparently easy steps, do not find much favour with the Courts. As stated by *Moulton*, L.J., such *ex post facto* analysis of invention is unfair to the inventor (d).

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

For example, in *Hayward v. Hamilton* (e), 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 rhom-

(a) But see p. 60, *ante*.

(b) (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. 346.

(c) 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. 77, *post*.

(d) See *British Westinghouse Electric and Manufacturing Co., Ltd. v. Baulick* (1910), 27 R. P. C. 230; see also *British Westinghouse Electric and Manufacturing Co., Ltd. v. Electrical Co., Ltd.* (1911), 28 R. P. C. 517.

(e) (1879-81), *Griff. P. C.* 115; see also *Steel Railway Journal Box Co., Ltd. v. Hurst, Nelson & Co., Ltd.* (1909), 26 R. P. C. 493.

Combinations.

boidal 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 the 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* (f), the House of Lords held a 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.

(f) (1888), 7 R. P. C. 131.

In *Fawcett v. Homan* (*g*), 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.

Combinations.

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 (*h*).

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

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, and the combination must also be the outcome of invention (*i*). 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 (*k*).

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

In the *Haskell* golf ball case it was established that, at the date of the patent sued upon, balls composed of rubber thread wound by hand under tension round a kernel of cotton waste, or rubber waste, were well known, and that the use of gutta percha for covering balls was also well known. The House of Lords, and a majority of the Court of Appeal, held that under such circumstances there was no subject-matter in the alleged invention of a golf ball, which consisted merely in applying a covering of gutta percha to a ball composed of rubber thread wound under tension round a central core, no particular adjustment of the cover to the ball inside it being

(*g*) (1896), 13 R. P. C. 268, 398.

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

(*i*) *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.

(*k*) *Wood v. Raphael* (1896), 13 R. P. C. 730; *Haskell Golf Ball Co., Ltd. v. Hutchison* (No. 2) (1907), 25 R. P. C. 194.

Combinations.

an essential feature of the claim (*l*). Upon the facts of the case there was, probably, a patentable invention in a nice adjustment of the cover to the ball inside so as to combine two conflicting qualities and constitute a ball specially suited to the requirements of the game of golf, *i.e.*, so that the cover should act as a muffle, as it were, in an inverse ratio to the force of the stroke, checking but little, if at all, the great resilience of the ball when struck with great force from the tee, but counteracting that resilience so effectually on the green that the ball is relatively inelastic when struck a gentle blow in putting (*m*).

## 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 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 (*n*).

## Novelty of parts not necessary.

Each of the parts of which the combination consists may, in itself, be old (*o*), or some of the parts may be old and some new (*p*), or the whole of the parts may be new (*q*).

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

(*l*) *Haskell Golf Ball Co., Ltd. v. Hutchison* (No. 2) (1907), 25 R. P. C. 194.

(*m*) See *ibid.*, judgment of Lord Atkinson.

(*n*) *Morris v. Young* (1895), 12 R. P. C. 455, 462.

(*o*) *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.

(*p*) *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.

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



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 (*r*). Combinations.

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 (*s*); or similarly it may consist in the addition to an old combination of a part (*t*) even though previously used for a similar purpose (*u*), if making the addition was an act of invention (*x*)—*e.g.*, if the addition of a device to an old combination enables results to be attained different in kind to any that could be attained before by the old combination (*y*). In what a new combination may consist.

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 (*z*).

Thus in *Cannington v. Nuttall* (*a*), *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,

(*r*) P. 250, *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.

(*s*) *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.

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

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

(*x*) *Ibid.*; p. 75, *ante*; *Wood v. Raphael* (1896), 13 R. P. C. 730.

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

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

(*a*) (1871), L. R. 5 E. & I. App. 205.

Combinations.

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 (*b*), 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 (*c*). 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 (*d*).

Definite relative arrangement of parts.

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 (*e*). But in one case (*f*) 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 (*g*) 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 (*h*).

(*b*) *Birch v. Harrop* (1896), 13 R. P. C. 615.

(*c*) *Evans and Taunton, Ltd. v. Hoskins and Sewell, Ltd.* (1904), 21 R. P. C. 675; 24 R. P. C. 517.

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

(*e*) *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.

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

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

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

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 (*i*); 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 (*k*).

**Combina-  
tions.**

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 mohair (*l*). *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 (*m*). *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 (*n*). *Parkes'* patent for "improvements in lamps," which consisted in the substitution of a hinge for a slide in a known glass lamp (*o*). *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 (*p*). *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 sub-

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

(*i*) *Unwin v. Heath* (1855), 5 H. L. Cas. 505, 522, 543; *Badische Anilin und Soda Fabrik v. Levinstein* (1885), 2 R. P. C. 90; see p. 355, *post*.

(*k*) See p. 355, *post*.

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

(*m*) *Thompson v. James* (1883), 32 Beav. 570.

(*n*) *Horton v. Mabon* (1862-64), 16 C. B. N. S. 141; 31 L. J. C. P. 255.

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

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

Combina-  
tions.

stituting in the place of the piston a screw filling the whole of the box (*q*). *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 (*r*). *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 (*s*). *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 (*t*). *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 (*u*). *Nuttall's* patent for a beer barrel tap, which substituted a gauze strainer for a metal strainer to keep impurities floating in the beer out of the tap (*x*).

## IMPROVEMENTS.

Improvement  
may be sub-  
ject-matter.

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 (*y*), the omission from (*z*), or only the rearrangement of (*a*) old parts, the alteration so made is a fresh arrangement. It is established beyond doubt that such an improvement, provided that it be new and useful, may be the subject-matter of a patent (*b*).

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

(*r*) *Brunton v. Hawkes* (1820), 4 B. & Ald. 541.

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

(*t*) *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* (1890), 7 R. P. C. 251.

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

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

(*y*) *Ralston v. Smith* (1865), 11 H. L. C. 223; *Moser v. Marsden* (1895), 13 R. P. C. 30.

(*z*) *Russell v. Cowley* (1843), 1 W. P. C. 463, 465; *Wallington v. Dale* (1852), 7 Exch. 888; *Booth v. Kennard* (1856), 1 H. & N. 527.

(*a*) P. 80, *ante*.

(*b*) *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*

As was pointed out by Lord *Mansfield* (c), 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.

Improvements.

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 (d).

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

Argument against legality of patents for improvements.

“ 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” (e).

v. Bull (1795), 2 H. Bl. 489; *Harmar v. Playne* (1809), 11 East, 101; *Crane v. Price* (1842), 1 W. P. C. 410.

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

(d) *Ex parte Fox* (1812), 1 V. & B. 67; 1 W. P. C. 431, n.; *Fox v. Del-*

*lestable* (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.

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

**Improvements.**

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 (*f*).

Patentee must claim only the improvement.

The patentee of an improvement must be 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 (*g*).

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 (*h*); 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 (*i*).

Invention necessary to support a patent for an improvement.

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 (*k*). 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" (*l*).

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

(*g*) P. 246, *post*.

(*h*) *Leggott v. McGeoch* (1893), 10 R. P. C. 429, 435; p. 246, *post*; *Kynoch v. Webb* (1899), 17 R. P. C. 100; *Beston v. Watts* (1907), 24 R. P. C. at p. 227; 25 R. P. C. 19.

(*i*) See judgment of Lord Watson,

*Brown v. Jackson* (1895), 12 R. P. C. 324; *Kynoch v. Webb* (1899), 17 R. P. C. 100.

(*k*) *Blakey v. Latham* (1889), 6 R. P. C. 188; *Thierry v. Riekmann* (1895), 12 R. P. C. 548; 14 R. P. C. 105.

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

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 (*m*). Thus, in *Patterson v. The Gas Light and Coke Co.* (*n*), 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:—

Improve-  
ments.

Mere working  
direction  
though valu-  
able is not  
subject-  
matter.

"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, 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."

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

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

(*n*) (1875), L. R. 2 Ch. D. 834.

Improvements.

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" (o).

Mere use of known machine 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 of an existing machine in a more beneficial manner than previously (p).

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

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 (q). 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 (r).

Meaning of "improvement" as used in titles of letters patent.

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 "improve-

(o) L. R. 3 App. Cas. 246; p. 63, *ante*.

(p) *Ralston v. Smith* (1860), 9 C. B. N. S. 117; 11 H. L. Cas. 223.

(q) *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.

(r) *Dredge v. Parnell* (1899), 16 R. P. C. 625.



ments 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 (s).

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ments.

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 (t).

Amount of  
improvement  
does not affect  
validity.

In *Sykes v. Howarth* (u), 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 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.

Examples of  
patentable im-  
provements.

In *Heath v. Unwin* (x), 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 pro-

(s) See p. 173, *post*.

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

(u) (1879), L. R. 12 Ch. D. 826;

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

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

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cess, 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 (*y*), 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, no doubt, of itself have formed the subject for a patent.

#### NEW USES OF OLD APPLIANCES.

New use of  
old appliance  
may be sub-  
ject-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 idea or the mode of the new application (*z*). It does not follow that because an idea is commercially good it involves the exercise of the inventive faculty. In most cases it does, but it certainly does not do so in all cases.

If the new use requires no exercise of invention, *i.e.*, if as regards purpose and manner it is merely analogous to a use of the known thing made before, then a patent cannot be validly granted in respect of it; 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, or if the adaptation of the old thing to the new occasion necessitates the exercise of invention, it will be perfectly good subject-matter.

(*y*) (1854), 5 H. L. C. 505.

(*z*) See pp. 91, 96, *ante*.

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

“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 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* (22). 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” (a).

Lord *Davey*, in reference to the facts of a particular case, 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,

(22) 6 R. P. C. 518.

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

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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 *Siemens* 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 1894, 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 that was pointed out in the Patent of 1892, and nothing more" (b).

*Moulton*, L.J., in reference to *Linde's* invention which solved the problem of mechanically separating pure oxygen from the air, and consisted of a new use of a rectifying column, a well-known device, said:

"It is, of course, well settled law that the application of a known device to its ordinary purpose under analogous circumstances is not good subject-matter for letters patent, because it does not involve invention. But the principle does not apply when the circumstances are not analogous, or where invention is required to adopt the device to the new circumstances" (c).

No rule  
possible.

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.

There may be an element of novelty in an alleged invention, and yet that novelty may consist only in the new occasion or

(b) *Acetylene Illuminating Co., Ltd. v. United Alkali Co., Ltd.* (1904), 22 R. P. C. 156.

(c) *British Liquid Air Co., Ltd. v. British Oxygen Co., Ltd.* (1908), 25 R. P. C. 601.

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.

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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 fresh 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 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 (*d*).

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

(*d*) *Tatham v. Dania* (1869), Griff. P. C. 213, judgment of Willes, J. The following are selected from many cases in which patents relating 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:—

In *Kay v. Marshall* (1836), 2 W. P. C. 71, 77, 79; 8 L. J. C. P. 261, 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 question in the case was whether, with public knowledge in the state above

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Apprehension  
of a new use  
may be in-  
vention.

In some cases, however, the apprehension of the new use of the old thing is invention sufficient to support a patent for

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: "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 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 *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

the new use—*e.g.*, the application of an old thing to remove a defect in an old machine, as in *Edison-Bell Phonograph* New Uses of Old Appliances.

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 anyone 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. 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 con-

sidered as claiming the machine itself, which the evidence showed was old.

In *Harwood v. The Great Northern Ry. 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

**New Uses of Old Appliances.** *Corporation v. Smith (e)*; or the use of retorts inclined at a particular angle for the purpose of saving labour and expense

in or to which it has been hitherto notoriously used."

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.

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 adapting it in the proper way to the carriage. The House of Lords, however, held the 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 *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 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 *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 banū 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.

In *Thermos, Ltd. v. Isola, Ltd.* (1910), 27 R. P. C. 388, a patent which merely involved the idea of putting a case upon a Dewar vessel for the purpose of storing liquids, though a great success, was held bad because the invention, so far as there was invention, was commercial and not mechanical, and the practice of covering glass flasks was well known.

In *Doulton & Co., Ltd. v. Albion Clay Co., Ltd.* (1911), 28 R. P. C. 121, 638, a patent for improvements in pipe joints was declared bad as being merely

(e) (1894), 11 R. P. C. 398, 399.



in gas-making, though inclined retorts had been used before for purposes other than gas-making, as in *Automatic Coal Gas Retort Co. v. Mayor, &c. of Salford* (f). 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 (g). 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 (h).

When 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 (i).

for the application to a well-known pipe of the well-known method of making a joint by using canvas for keeping in the grout.

(f) (1897), 14 R. P. C. 450.

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

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

(i) See *Bamlett v. Picklesley* (1875), Griff. P. C. 40, 42; *British Liquid Air Co. v. British Oxygen Co., Ltd.* (1908), 25 R. P. C. 577.

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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 (*k*).

(*k*) Von Heyden v. Neustadt (1880), L. R. 14 Ch. D. 230; 50 L. J. Ch. 126. 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.

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 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

When unknown qualities possessed by a natural or artificial product are discovered, and, from the result of experiments, **New Uses of Old Appliances.**

Applications of newly discovered qualities of natural or artificial products.

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. Exch. 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 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.

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

New Uses of Old Appliances. applied to useful purposes, such application is the proper subject-matter of letters patent (*l*).

had ever proposed to deal with fodder in the way he did, and his process enabled him to sell for 7*s.* what the defendant had to charge 3*l.* 10*s.* 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.

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.

In *Pirrie v. York Street Flax Spin-*

*ning 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 tube during the process of winding, which would otherwise lose its shape and become useless from the moisture of the yarn, and, so, 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.

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.

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.

In *Geipel v. Lord Mayor, &c. of Manchester* (1903), 21 R. P. C. 41 (see also *Geipel's Patent* (1904), 21 R. P. C. 379), the defendants urged that the alleged invention 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

(*l*) See pp. 44, 63, *ante*.

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 evidence

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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.

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., Ltd. 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 anti-vibrator, 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.

In *Brown's Patent* (1907), 24 R. P. C. 313; 25 R. P. C. 86, it was proved that long before the patent the cleverest men in the electrical world had been endeavouring to solve the problem of automatic retransmission of messages by relay apparatus in long submarine cables. Relay apparatus had been satisfactorily used in the case of land lines, but Brown's apparatus was the first satisfactory solution of the difficulty of using relays for retransmission in the case of submarine cables. Before Brown solved the problem, retransmission had to be performed by hand. Before Brown it had been attempted to use Kelvin syphon recorders to operate relay tongues, but unsuccessfully, owing to the fact that the necessary firmness of contact for local circuit working was not attained, and also by reason of the difficulties in overcoming, without great loss of speed, the inertia of the extra mechanism which the arrangement entailed, and in maintaining the zero (a straight line on either side of which wave or indication of the signal is given) of the combination. Varley had patented an instrument which was not satisfactory. Brown's solution was the addition of a condenser to the known Varley contact. This improved the contact, and gave greater sensitiveness to the moving tongues to the signals that they ought to regard, and also gave a sharper signal at the beginning, a more clear determination of the signal at the end, and produced an instrument which is enabled to reproduce the impression of the signalling current and to disregard the weak current through the cable itself, due to earth currents and other inexplicable mysterious things. Under the above circumstances the application of a condenser to a Varley contact to improve the contact for the purpose of receiving and sending forward the proper signals was held to be not mere discovery, but a patentable invention of very high utility, notwithstanding that condensers had previously been used in different apparatus (Delany's)

Mere advantage in a new use is not sufficient to support a patent.

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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.

In this connection, Lord *Watson*, in *Morgan v. Windover (m)*, supporting a motion before the House of Lords that the judgment of the Court of Appeal should be reversed, referred to the decision of the House in *American Braided Wire Co. v. Thompson (n)* 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. (n)*. 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 improve a similar contact and prevent sparking, and the addition of Delany's condenser to Varley's apparatus constituted an apparatus identical with Brown's.

In *British Liquid Air Co., Ltd. v. British Oxygen Co., Ltd. (1908)*, 25 R. P. C. 577; 26 R. P. C. 509, the Court of Appeal and the House of Lords held that the employment of a known rectifying column, in addition to a previously published process comprising the employment of counter current interchangers, for the purpose of separating commercially pure oxygen from the air, was good subject-matter. The use of the rectifying column resulted in an increase of the richness of the oxygen obtained from about 60 per cent. to commercial purity; and, upon the facts of the case, it required invention to enable rectification to be utilised for the purpose.

In *Hickton's Patent Syndicate v. Patents and Machine Improvements Co., Ltd. (1909)*, 26 R. P. C. 339, the new use, in a lace-making machine, of the old and perfectly well-known operation of "shogging" for the purpose of obviating waste of thread, being an application of "shogging" never before applied to a machine of the class or for any analogous purpose, was held by the Court of Appeal to be a patentable invention, which consisted in the new idea.

In *Fox v. Astrachans, Ltd. (1910)*, 27 R. P. C. 377, a patent was upheld for a new use of an old principle, which had been applied to gaiters but not to puttees, and which application formed the subject-matter of the plaintiff's invention.

(*m*) (1890), 7 R. P. C. 131.

(*n*) (1899), 6 R. P. C. 518.

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" (o).

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(o) 7 R. P. C. 136.

## CHAPTER IV.

## NOVELTY.

## NOVELTY AT COMMON LAW.

Novelty an essential at Common Law.

It is 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 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.

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*).

*Prima facie* right of public.

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.

Consideration fails if invention is not new.

The 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 evident the

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

(*b*) *Ibiâ*. 132.

(*c*) Bac. Abr. tit. Prerog.; Year Book, 40 Edw. 3, fol. 18.

(*d*) Finch, 84.

(*e*) 1 Co. R. 44<sup>b</sup>, 45<sup>b</sup>; Noy, R. 182; 3 Shep. Abr. 48.

(*f*) Godb. 254.



patentee would not have given to the public 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. In the language of Lord *Loughborough*, L.C., "A bargain without consideration is a contradiction in terms and cannot exist" (*h*).

Novelty at  
Common  
Law.

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The Common Law, as expressed in cases decided before the passing of the Statute of Monopolies, requires that an invention must possess the element of novelty to be capable of being the subject of a valid patent (*i*).

Common Law  
authorities.

(*g*) *Harmar v. Playne* (1807), 14 Ves. 132; *Tubes, Ld. v. Perfecta Seamless Steel Tube Co., Ld.* (1902), 20 R. P. C. 95, 96.

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

(*i*) 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 merely 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.*"

**Novelty at  
Common  
Law.**

Limit of  
Crown's  
authority to  
grant patents  
for inven-  
tions.

Novelty re-  
quisite by  
statute as  
well as Com-  
mon Law.

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*" (*k*). 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."

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.

The words "true and first inventor" do not imply that the grantee must necessarily be the man who actually first made the discovery; and, if he be the inventor 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 (*l*).

Prior use by  
others renders  
patent bad.

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 (*m*). Moreover, in an action for the infringement of the patent, each ought to be pleaded separately if either party desires to rely on both (*n*).

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 (*o*).

(*k*) 21 Jac. 1, c. 3, s. 6.

(*l*) Pp. 14—26, *ante*.

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

*Keene* (1835), 1 W. P. C. 507; but see p. 134, *post*.

(*n*) *Ibid.*; see chap. ix., *post*.

(*o*) *Hoe v. Foster* (1898), 16 R. P. C. 33, 38; but see p. 134, *post*.

The grantee may, in fact, have made the discovery himself 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 (*p*).

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* (*q*). 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 (*r*).

## PUBLIC KNOWLEDGE.

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 (*s*).

Meaning of  
public know-  
ledge.

If some of the public, therefore, not under terms of secrecy or confidence to the inventor, become acquainted with the invention at any time before the date of the patent, this will be quite sufficient to render the grant void; and the question in

(*p*) *Young v. Rosenthal* (1884), 1 R. P. C. 32.

(*q*) See p. 38, *ante*; *Ralston v. Smith*, (1866), 11 H. L. C. 223; *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; *Hudson, Scott & Sons, Ltd. v. Barringer, Wallis Manners, Ltd.* (1905), 23 R. P. C. 79, 502.

(*r*) See p. 31, *ante*; *Thierry v. Riekman* (1895), 12 R. P. C. 548.

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

**Public  
Know-  
ledge.**

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an action upon a patent, the validity of which is put in issue on the ground of previous publication, is: "Is it the fair conclusion from the evidence that some English people, under no obligation of secrecy (*t*) arising from confidence or good faith towards the patentee, knew of the invention at the date when the plaintiff took out his patent?" (*u*).

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

"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

(*t*) P. 134, *post*.

(*u*) 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.

(*x*) (1876), L. R. 3 Ch. D. 556.

*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."

Public  
Know-  
ledge.

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

Test of  
novelty.

Lord *Hatherley*, L.C., in *Cannington v. Nuttall* (*a*), 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?"

Lord *Westbury*, L.C., in *Hill v. Evans* (*b*), 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

(*y*) P. 78, *ante*.

(*z*) *Newton v. The Grand Junction Railway Co.* (1846), 5 Exch. 331; 20 L. J. Ex. 427, n.; *Cannington v. Nutt-*

*all* (1871), L. R. 5 H. L. 205; 40 L. J. Ch. 739.

(*a*) (1871), L. R. 5 H. L. 216.

(*b*) (1862), 13 L. J. Ch. 457.

**Public  
Know-  
ledge.**

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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.”

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

“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” (*d*).

(c) (1862), H. & C. 154.

(d) See also per Lord Chelmsford,

L.C., *Betts v. Neilson* (1868), L. R. 3 Ch. App. 435.

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

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 *æsyphus* described by *Dioscorides* was no publication of *Lanolin*, which formed the subject-matter of a valid and valuable patent (f).

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 and utilises it (g). 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 (h). 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 (i).

A patent for an apparatus, which is suitable for a particular and novel purpose—e.g., disinfecting by steam at high pressure

**Public Knowledge.**

Statement that a result is desirable is no anticipation.

Mere scientific curiosity is no anticipation.

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

(e) *Thomson v. Batty* (1889), 6 R. P. C. 84.

(f) *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.

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

(h) *Ibid.*

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

Public  
Know-  
ledge.

—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 (*k*).

## 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 (*l*). And that, if, in the case of a single invention, the subject-matter of an individual claiming clause turns out to be old the patent will be rendered entirely void (*m*).

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 (*n*). 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 (*o*). Although the Statute of Monopolies invalidates a patent in the event of there being no novelty in the invention,

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

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

(*m*) *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. Brand* (1842), 1 W. P. C. 636; *Hill v. Tombs* (1881), *Engineer*, 51, p. 274. Under the Act of 1907 patents do not usually comprise more than one invention. See pp. 110–113, *post*.

(*n*) Vol. II. p. 6.

(*o*) See form of letters patent in Appendix.



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" (*p*).

For example, in *Brunton v. Hawkes* (*q*) 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:—

"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*

(*p*) Per Parke, B., in *Morgan v. Seaward* (1837), 2 M. & W. 544; Mur. & H. 55; 1 Jur. 527; 1 W. P. C. 196.  
(*q*) (1820), 4 E. & Ald. 541.

Want of  
Novelty  
in Part.

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 (*r*) 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 (*s*).

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

Thus, in *Plimpton v. Spiller* (*t*), 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 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.

(*r*) P. 110, *ante*.

(*s*) P. 254, *post*.

(*t*) (1877), L. R. 6 Ch. D. 412.

Analogous  
Uses.

## 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 (*u*). 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 (*x*).

## 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 (*y*).

This will appear from a contrast of *Dollond's Case* (*z*) with *Tennant's Case* (*a*), and *R. v. Arkwright* (*b*). 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 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

(*u*) Pp. 88—101, *ante*.

(*x*) *Ibid.*; *Westley v. Tolley* (1894), 11 R. P. C. 602; *Mathews v. Patentee* (1896), 13 R. P. C. 511.

(*y*) *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. 130, *post*.

(*z*) (1776), 1 W. P. C. 43.

(*a*) (1795), 1 W. P. C. 125, n.

(*b*) (1785), 1 W. P. C. 71.

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.

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 to the public. In the case of *Dollond's* patent (*c*), *Hall's* discovery was an anticipation of *Dollond's*, but not a publication of it, whereas in *Tennant's Case*, and *R. v. Arkwright(d)*, the subject of the patent, in each, had not only been anticipated, but had also been published before.

Distinction  
between anti-  
cipation and  
publication.

#### EQUIVALENTS.

If an invention differs only from a previous invention in that for one part in the former invention there is substituted an

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

(c) P. 114, ante.

(d) P. 114, ante.

Equivalents.

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 (*e*); but any person may obtain a patent, valid as regards novelty, for the use of equivalents, which, judged in the light of public knowledge at the time the patent for the former discovery was granted, would not be deemed to be equivalents (*f*).

## REDISCOVERY OF A LOST ART.

Is the rediscovery 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* (*g*). 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 (*h*). A state of facts might, however, be supposed in which the case would be different. For instance (*i*), 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 of glass, might be a long-lost art. In such a case, if an inventor newly discovers the art of producing the encaustic

(*e*) *Heath v. Unwin* (1854), 5 H. L. Cas. 505; 2 W. P. C. 279; see p. 355, *post*.

(*f*) *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. 355, *post*.

(*g*) (1843), 1 W. P. C. 717.

(*h*) See p. 142, *post*.

(*i*) 1 W. P. C. 718, n.

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 (*k*), each one of those ways, provided they are all different, may be the subject of a patent (*l*). 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 (*m*).

**Rediscovery of a Lost Art.**

#### 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 invention. 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 (*n*).

Prior unsuccessful experiment or useless machine is no publication.

(*k*) P. 69, *ante*.

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

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

(*n*) *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.

Thus, a machine designed by the patentee to be used for 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 (*o*).

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 (*p*); 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 (*q*).

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

*Tindal*, C.J., in *Cornish v. Keene* (*r*), 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

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

(*p*) *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* (1843), 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.

(*q*) Pp. 67—70, *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.

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



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

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 (t).

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 (u).

(s) *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.

(t) *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. 125.

(u) 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 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.

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),

### Prior User.

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

An invention abandoned is presumed to have been a failure.

**Prior User.**

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

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."

In *Walton v. Bateman*, 1 W. P. C. 619, 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."

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."

In *Hills v. London Gas Light Co.*

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 (x). 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 *Re Adamson's Patent* (referred to in the footnote below), or *Hoe v. Foster* (y), 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

(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 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." See also *Lewis v. Marling*

(1829), 10 B. & C. 22; 4 Car. & P. 57; 1 W. P. C. 493.

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. See also *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; *Dewrance 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.

(x) *Newall v. Elliott* (1858), 4 C. B. N. S. 269; see also *Morgan v. Seaward* (1837), 1 W. P. C. 194.

(y) (1898), 16 R. P. C. 33.

Prior User. 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.

Prior user of the invention by the patentee himself.

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, *e.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 (*z*). 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—*e.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 (*a*), that such a user would not prevent the manufacturer, though it might prevent another person who should discover the secret, from obtaining a patent for the invention valid on the ground of novelty (*b*). 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 sect. 6 of the Statute of Monopolies, be void (*c*); whereas if the user

(*z*) See *Carpenter v. Smith* (1841), 1 W. P. C. 530, 531; 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.

(*a*) Pp. 130—131, *post*.

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

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

has only been secret, the grant *may* be sustained (*d*), and this whether the user has been by the inventor himself (*e*), or by a manufacturer for the inventor under terms of secrecy to him (*f*), or his workmen (*g*). 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 (*h*).

The public use of only one specimen of a patented article (*i*), even if by only one person (*k*), 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

Prior User.

Prior public use of one specimen sufficient to invalidate the patent.

Meaning of "public use and exercise," per Lord *Abinger*.

(*d*) *Dollond's Case* (1776), 1 W. P. C. 43; but see p. 130, *post*.

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

(*f*) *Morgan v. Seaward* (1837), 1 W. P. C. 187; *Useful Patents Co. v. Rylands* (1865), 2 R. P. C. 235; *Humpherson v. Syer* (1887), 4 R. P. C. 407; *Kurtz v. Spence* (1888), 5 R. P. C. 161.

(*g*) *Betts v. Menzies* (1867), 1 E. &

E. 1008.

(*h*) See pp. 128—131, *post*.

(*i*) *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; *Bereton v. Richardson* (1884), 1 R. P. C. 177; *Sinnett's Patent* (1898), 15 R. P. C. 761.

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

Prior User.

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 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" (*l*). 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*, and upheld the finding of the jury (*m*).

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

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 (*n*)—*e.g.*, to show that an article has been openly manufactured (*o*) or exhibited

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

(*m*) 1 W. P. C. 542; see *Croysdale v. Fisher* (1884), 1 R. P. C. 21.

(*n*) *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.

(*o*) *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.

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

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. 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 (*s*). 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 (*t*). Applicant for a patent provisionally protected against public use of the invention.

In *Lister v. Norton* (*u*), 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 of sealskin and other similar materials." On the 21st July,

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

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

(*r*) *Taylor's Patent* (1896), 13 R. P. C. 482; *Stead v. Williams* (1843), 2 W. P. C. 136.

(*s*) 7 Edw. 7, c. 29, ss. 4, 10; *R. v. Townsend* (1876), 13 R. P. C. 265; In the Queen 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.

(*t*) See 7 Edw. 7, c. 29, s. 15.

(*u*) (1886), 3 R. P. C. 199.

**Prior User.** 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 the 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 (*x*).

Foreign applicant protected against publication.

The combined effect of Art. 4 of the International Convention of 1883 (*y*), and sect. 91 of the Patents and Designs Act, 1907, is to protect any person who has duly registered 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 sect. 45 of the Patents and Designs Act, 1907, and Rule 101 of the Patent Rules, 1908. 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 publi-

(*x*) 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.

(*y*) See Appendix, Vol. II.



cation 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 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:

- (a) The exhibitor, before exhibiting the invention, give the Comptroller the prescribed notice of his intention to do so; and
- (b) The application for a patent is made before or within six months from the date of the opening of the exhibition.

Rule 101 of the Patents Rules, 1908 (*z*), provides that the inventor shall give to the Comptroller notice on Patents Form No. 33 of his intention to exhibit, publish, or use the invention, as the 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.

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*).

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

Prior User.

Delay in applying for a patent is undesirable.

Offering for sale is publication;

(*z*) See Appendix, Vol. II.

(*a*) See p. 123, *post*.

(*b*) Bentley v. Flemming (1844), 1 C.

& R. 587; Bowman v. Taylor (1834), 1 W. P. C. 293.

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

Prior User. from an inspection of the article, publish his invention and deprive himself of any right to become a patentee in respect of it (*d*).

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 not if the article sold or offered for sale does not show the manner of its manufacture.

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*).

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*).

Prior user in colony no legal bar.

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 (*m*).

Prior secret profitable user by the inventor.

We have now to consider the question whether the fact of an inventor having made pecuniary profit by a secret user of

(*d*) *Oxley v. Holden* (1860), 8 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*) *Honiball 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. 130, *post*; *Hancock v. Somervell* (1851), 39 Newton, L. J. 158.

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

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

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

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

his invention before the date of a subsequent grant of letters patent will render the grant invalid. Prior User.

The question has never been judicially decided, though Lord *Campbell*, C.J., is reported, in *Heath v. Smith* (*n*), 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* (*o*), the plaintiff elected to be non-suited, 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 (*p*) 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 (*q*) 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 of performing them, for the public good, and it does not go into the past history of the inventor and insist on his having

(*n*) (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.

(*o*) (1886), 3 R. P. C. 254, 259.

(*p*) P. 103, *ante*.

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

Prior User. 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 (*r*). 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 (*s*), 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 special 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 about 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 (*t*), as being one "which others at the time of making such letters patent and grants shall not use" (*u*). Thus in *Tennant's Case* (*x*) a secret trade user by persons other than the patentee was held to vitiate the grant. And in the more recent case of *Cheetham v. Oldham* (*y*) the prior sale, about the date of the patent, 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

(*r*) 21 Jac. 1, c. 3, s. 6.

(*s*) *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.

(*t*) *P.* 4, *ante*.

(*u*) See *Heath v. Unwin* (1854), 2

*W. P. C.* 276, 278; *Cornish v. Keene* (1835), 1 *W. P. C.* 511; see note, 1 *W. P. C.* 719, 720; *Robertson v. Purdy* (1907), 24 *R. P. C.* 290, 291.

(*x*) (1798), 1 *W. P. C.* 125.

(*y*) (1890), 7 *R. P. C.* 124.

statements of the defendant's witnesses to the effect that such process had been used in their manufacture, was held to invalidate the patent (*z*). But in *Mark's* patent (*a*), where a petitioner for revocation failed to prove that a prior user relied upon was public, or by way of trade, the petition failed. In every reported case in which a patent has been defeated by user without publication the user has been continued to the time of the patent; and it may be that a case where the facts show that the secret use was abandoned some time before the patent is excluded by the words, "which others at the time of making such letters patent and grants shall not use," which occur in the sixth section of the Statute of Monopolies. The point has not been definitely decided (*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*).

Prior User.

Importation  
of an article  
made abroad.

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

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

(*a*) (1908), 25 R. P. C. 253.

(*b*) See *Haskell Golf Ball Co., Ltd. v. Hutchison* (No. 3) (1907), 25 R. P. C. 200, 201, 202, 204; 1 W. P. C. 719, 720, n.

(*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. 103, *ante*.

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

Prior User. 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 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

(*g*) See p. 336, *post*.

(*h*) See *infra*, and pp. 378—380, *post*.

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

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, handing about the country for the purpose of attracting customers): if you should think, also, 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 *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

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

Prior User. 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 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 communications 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

(*l*) Vol. II. p. 5.

(*m*) P. 31, *ante*.

(*n*) See Von Heyden *v.* Neustadt

(1880), L. R. 14 Ch. D. 230; p. 380, *post*.

(*o*) P. 172, *post*.

(*p*) See p. 149, *post*.



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 (*r*) 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*).

Personal  
Communications.

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Since the decision in the latter case, the Patents and Designs Act, 1907, has given the following protection to inventors, viz., a patent shall not be held invalid by reason only of the invention in respect of which the patent was granted, or any part thereof, having been published prior to the date of the patent, if the patentee proves to the satisfaction of the Court that the publication was made without his knowledge and consent, and that the matter published was derived or obtained from him, and if he learnt of the publication before the date of his application for the patent, that he applied for and obtained protection for his invention with all reasonable diligence after learning of the publication (*s*). This protection will be a real benefit to many an inventor who desires to entrust his invention to others in confidence before applying for a patent in respect of it, *e.g.*, to a workman, as in the pince-nez case, to construct the thing in order to see whether it will really have the effect the inventor anticipates. It does not protect the inventor against the consequences of his own voluntary publication of the invention before the application, in the presence of persons not bound to him by terms of confidence and secrecy. Apparently the publication referred to is a publication in this country without the knowledge and

(*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; [1892] A. C. 263; see also *Blank v. Footman* (1888), 5 R. P. C. 653, 656.

(*s*) 7 Edw. 7, c. 29, s. 41 (2).

Personal  
Communi-  
cations.

consent of the patentee; and, so, a voluntary publication made abroad, which, contrary to the desire and intention of the inventor, resulted in publication in this country before application for a British patent, would not invalidate the grant.

When, apart from the above protection, an article has been openly manufactured and 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 (*t*).

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

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

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

(*t*) See per Lord Abinger, C.B., in *Carpenter v. Smith* (1841), 1 W. P. C. 536.

(*u*) *Rex v. Arkwright* (1875), 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; *Hurteloup'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. 673; *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.

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 (*x*).

Publication  
by  
Documents.

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 (*y*).

It has been held that an invention is published if a description of it is contained in a foreign book which has been circulated in England (*z*), in such a manner that some English people may be fairly supposed to know of it (*a*), whether the foreign book be in a foreign language or English (*b*); but it would appear that if the foreign book is in a remote language with which very few English people would be acquainted, proof

Foreign  
books.

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

(*y*) *Hills v. Evans* (1862), 31 L. J. Ch. 457; 4 Do 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 und Gibbs' Patent* (1888), 5 R. P. C. 535; *Flour Oxidizing Co., Ltd. v. Carr & Co., Ltd.* (1908), 25 R. P. C. 428.

(*z*) *Reg. v. Seine*, 40 Newton, L. J.

71; *The United Telephone Co. v. Harrison* (1882), L. R. 21 Ch. D. 720.

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

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

**Publication by Documents.** of such publication of its contents as would vitiate a subsequent patent would be difficult (*c*).

Publication in a foreign book, only four copies of which were proved to have been sold in this country, has been held sufficient to vitiate a patent (*d*).

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 contents of the prior book or document was part of the stock of public knowledge before the date of the patent.

Publication by prior document is always a question of fact.

The question whether the contents of a particular document have really become part of the stock of public knowledge, or, at any rate, part of the knowledge of that portion of the public interested in the invention, is in every case a matter of evidence (*e*). In the words of *Tindal*, C.J.:—

“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” (*f*).

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

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

(*d*) *Lang v. Gisborne* (1862), 31 Beav. 133.

(*e*) *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.

(*f*) *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), 60 L. J. N. S. Ch. 126; *United Telephone Co. v. Harrison* (1882), L. R. 21 Ch. D. 720.

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 (*g*).

Publication  
by  
Documents.

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 (*h*), it was held that there was not sufficient publication to upset an English patent (*i*). Again, the fact that a French book containing a description of an invention was mentioned in catalogues distributed in this country, in the absence of any proof that a single copy of the French book had ever been sold in this country through the instrumentality of such catalogues, or that the only copy known to exist in this country (in an inner room of the British Museum) had ever been consulted, was held to be no publication of the invention (*l*). If, however, the foreign book or document is catalogued and in a library to which the public have access, it may amount to a publication of the invention, though only one person has seen it (*l*), or it is the only copy accessible to the public (*m*).

In *Plimpton v. Malcolmson* (*n*), 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 the book did not come to light till ten years or more after the date of the patent. Under these circumstances, *Jessel, M.R.*,

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

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

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

(*k*) *Otto v. Steel* (1885), L. R. 31 Ch. D. 241.

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

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

(*n*) (1876), L. R. 3 Ch. D. 531.

**Publication by Documents.** 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 (o) upheld by the Court of Appeal. c

**Effect of sect. 9 of Act of 1907.**

A question arises as to whether the contents of a specification which has been open to public inspection under sect. 9 of the Patents and Designs Act, 1907, but has not been actually printed or inspected by a member of the public, are to be deemed published so as to affect the validity of a patent applied for before the actual printing of such specification and its lodgment on the shelves of the Patent Office Library.

In *Fox v. Astrachans, Limited* (p), the Court decided that, under the above circumstances, a specification was so published. The Judge appears to have adopted the view that the public is to be deemed to have seisin of the contents of the document, and not the view taken by Sir *George Jessel*, in *Plimpton v. Spiller* (q), that the circumstances must be such as to show a reasonable probability of the public having acquired knowledge of the existence and contents of the document. It is to be noticed that sect. 9 of the Act only says the specification and drawings (if any) shall be open to public inspection, not that the public shall be deemed to have knowledge of its contents. On this ground, and on the ground that the contents of a specification are not public property till they become part of the stock of public knowledge by becoming known to a member of the public not under terms of secrecy, since the Act does not make the document public property from the time it is written, or at all until the public must be presumed to have taken possession of it; and on the authority of *Plimpton v. Spiller*, and the other cases referred to above, it is submitted that the specification is not published so as to affect the validity of the second patent, though it is published within the meaning of sect. 8 of the Act (r). If the subject-matter of the second patent were claimed in the specification of earlier date there would, no doubt, be a prior grant.

(o) *Plimpton v. Spiller* (1877), L. R. 6 Ch. D. 412.  
(p) (1910), 27 R. P. C. 377.

(q) (1877), L. R. 6 Ch. D. 412.  
(r) See *Parsons and Stoney's Patent* (1910), 27 R. P. C. 491.

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 (s).

Publication  
by  
Documents.

Document is  
sometimes  
public pro-  
perty the  
moment it is  
written.

It is not always possible to predict of two documents which make use of terms of art *ipsisimis 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" (t).

Terms of art  
used in differ-  
ent docu-  
ments may  
not have the  
same mean-  
ing.

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 (u).

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

(s) *Patterson v. Gas Light and Coke Co.* (1856), L. R. 3 App. Cas. 239. L. Cas. 152.

(t) *Betts v. Menzies* (1862), 10 H.

(u) See *Nobel's Explosives Co. v. Anderson* (1895), 12 R. P. C. 164;

**Publication by Documents.** 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 (*x*).

**Power of Court to order production of abandoned provisional specifications.** 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 (*y*).

**Sect. 41 (1) of Patents and Designs Act, 1907.** An invention covered by any patent applied for on or after the 1st January, 1905, is not deemed to have been anticipated by reason only of its publication in a specification left pursuant to a prior application made in the United Kingdom not less than fifty years before the date of the application for the patent, or of its publication in a provisional specification of any date not followed by a complete specification (*z*).

**Not necessary to prove that a prior published invention 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 (*a*).

As has been shown, the subject of a patent is really the art of producing the new and useful result (*b*), 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

*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; *Flour Oxidizing Co., Ltd. v. Carr & Co., Ltd.* (1908), 25 R. P. C. 428.

(*x*) 7 Edw. 7, c. 29, s. 69 (1); *Oxley v. Holden* (1860), 8 C. B. N. S. 686;

*Lister v. Norton* (1886), 3 R. P. C. 199.

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

(*z*) 7 Edw. 7, c. 29, s. 41 (1).

(*a*) *Frearson v. Loe* (1878), L. R. 9 Ch. D. 92.

(*b*) P. 31, *ante*.



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 (c). 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 (d).

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

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 (h).

Mere sugges-  
tion is not  
publication.

The law requires the inventor in the specification which he is compelled to lodge at the Patent Office (i) 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

(c) P. 105, *ante*.

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

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

(f) *Stead v. Williams* (1844), 7 M. & G. 818, 842; 2 W. P. C. 141.

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

(h) *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.

(i) 7 Edw. 7, c. 29, ss. 1 (3), 2; chap. vi.

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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* (*k*) 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* 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* (*l*), 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 (*m*).

Sufficiency of  
description

The real point to be considered in determining whether

(*k*) 10 H. L. Cas. 152.  
(*l*) *Carpenter v. Smith* (1841), 1 W.  
P. C. 534.  
(*m*) See also *Incandescent Gas Light*

*Co., Ltd. v. De Mare Incandescent Gas  
Light System, Ltd.* (1896), 13 R. P. C.  
322, 323.

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 (*n*).

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necessary in  
an antici-  
pating docu-  
ment.

Lord *Westbury*, L.C., in *Hills v. Evans* (*o*), 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 subsequent cases. The following extract from the judgment of Lord *Lindley*, then *Lindley*, L.J., in *Savage v. Harris* (*p*), contains a clear statement of what the law upon the subject now is:—

Rule in *Hills*  
*v. Evans*.

“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

(*n*) *King, Brown & Co. v. Anglo-American Brush Corporation* (1891), 9 R. P. C. 313; *Wilfley Ore Concentra-*

*tor Syndicate, Ltd. v. Guthridge* (N.), Ld. (1906), 23 R. P. C. 538.

(*o*) 4 De G. F. & J. 289.

(*p*) (1896), 13 R. P. C. 368.

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 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" (q).

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In *Otto v. Linford* (r), 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 as would accomplish what the machine of the later inventor effected?

In *Stoner v. Todd* (s), 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 taken out for

(q) 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; *Flour Oxidizing Co., Ltd. v. Carr & Co., Ltd.* (1908), 25 R. P. C. 428.

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

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

Publication by Documents. such piece of mechanism 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 (*t*); 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'" (*u*). Thus, the House of Lords held that *Frichot's* true statement that flour could be bleached by nascent oxygen coupled with his untrue statement that nascent oxygen could be liberated by subjecting the flour to the action of ozone was no publication of *Andrews'* invention, whereby flour was successfully bleached and conditioned through the instrumentality of nascent oxygen when passed with full exposure through an atmosphere containing a gaseous oxide of nitrogen or chlorine or bromine oxidising agents in the gaseous state (*x*).

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

(*t*) *Betts v. Menzies* (1881), 10 H. L. Cas. 154; see also *Woodcroft's Patent* (1846), 2 W. P. C. 23.

(*u*) *Betts v. Menzies* (1862), 10 H. L. Cas. 157; see also *Muntz v. Foster* (1844), 2 W. P. C. 105; *Galloway v. Bleaden* (1839), 1 W. P. C. 501; *Thom-*

*son v. Batty* (1889), 6 R. P. C. 84.

(*x*) *Alsop's Flour Process, Ltd. v. Flour Oxidizing Co., Ltd.*, In the matter of *Andrews' Patent* (1908), 25 R. P. C. 477; *Flour Oxidizing Co., Ltd. v. Carr & Co., Ltd.* (1908), 25 R. P. C. 428.

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 (*y*).

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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 (*z*).

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 (*a*).

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 (*b*). Thus, in the

Though an anticipation might be an infringement, it is not necessarily a publication.

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

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

(*a*) In judgment of C. A., Cassel *Gold Extracting Co. v. Cyanide Gold Recovery Syndicate* (1895), 12 R. P. C. 256.

(*b*) *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; *Brown's Patent* (1907), 25 R. P. C. 108.

**Publication by Documents.** case of *Welch's* patent for holding on bicycle tyres by in-extensible wire rings, it was objected that this was anticipated by a prior specification of *Latta*. Two figures in *Welch's* 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 (c).

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

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 (d).

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

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 (e). 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

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

(d) *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.

(e) *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. 44, *ante*.



inventor has, by the particular use of the limited suitable members of the class, been enabled to produce a new result (*f*). Publication  
by  
Documents.

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 and enables them by its aid alone to make the machine indicated (*g*); 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 such description sufficiently indicates how it may be used (*h*).

Drawings.

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 (*i*). 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 (*k*).

Description  
of a useless  
machine.

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

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

(*g*) *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.

(*h*) *United Telephone Co. v. Harrison* (1882), L. R. 21 Ch. D. 720; 51 L. J. Ch. 705, judgment of Fry, J.; see p. 143, *ante*.

(*i*) See pp. 148, 117, *ante*.

(*k*) *Tubeless Pneumatic Tyre and Capon Heaton, Ld. v. Trench Tubeless Tyre Co.* (1899), 16 R. P. C. 313; *Gaulard and Gibbs' Patent* (1890), 7 R. P. C. 367; see p. 214, *post*.

**Publication by Documents.** 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 (*l*).

**Invention may be partly published 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 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 (*m*).

**Mosaic of extracts from prior documents not a publication.** 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 (*n*).

*James, L.J.*, delivering the judgment of the Court of Appeal in *Von Heyden v. Neustadt* (*o*), 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

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

(*m*) *Von Heyden v. Neustadt* (1880),

50 L. J. N. S. Ch. 126.

(*n*) See *Otto v. Linford* (1881), 46 L. T. N. S. 35.

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

an inventor as the diligent study of the works of Nature would do.”

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Documents.

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 (*p*). It is no detraction from the merit of an inventor to point out that one detail is to be found in one obscure 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 (*q*).

(*p*) *Otto v. Linford*, 46 L. T. N. S. 35; *Pneumatic Tyre Co. v. Casswell* (1896), 13 R. P. C. 375.      (*q*) *Fawcett v. Homan* (1896), 13 R. P. C. 410.

## CHAPTER V.

## UTILITY.

## UTILITY AT COMMON LAW.

Utility is a  
requisite 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.

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 his 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

(*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. 183.

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

(*f*) P. 31, *ante*.

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 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. 164, *post*.

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

(*k*) It was argued in *Darey 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

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and is pre-  
served by the  
Statute of  
Monopolies.

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 (*l*) 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.

Sir *Edward Coke*, commenting on the words "mischievous to the State by raising the prices of commodities at home,"

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 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*) S. 6.

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

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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 (*m*), 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.

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

Thus *Parke, B. (n)*, 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 (*o*) 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

(*m*) Vol. II. p. 421.

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

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

p. 131.

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

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 sect. 24 of the Patents and Designs Act of 1907, 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 who, in the exercise of his common law rights (which are, of course, curtailed by sect. 24 of the Patents and Designs Act, 1907), declines to allow another to use his invention, does, in a sense, actually prejudice such other person is not sufficient. Such prejudice to the 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

(*p*) (1853), *Macr. P. C.* 240.



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 (*q*). 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.

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It is to be remembered that not every useful novelty is patentable. To be patentable the novelty, besides being useful, must be the outcome of inventive ingenuity (*r*).

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 (*s*).

#### MEANING OF UTILITY IN LAW.

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.

Utility does  
not mean  
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" (*t*).

This definition given by *Grove, J.*, requires some modification, for it may well be that a person might produce a new

or necessarily  
an improve-  
ment from

(*q*) P. 155, *ante*.

(*r*) *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; pp. 38, 105, *ante*.

(*s*) *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.

(*t*) *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.

Meaning of  
Utility  
in Law.

all points of  
view.

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 (*u*). 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 nothing to do with it so long as the thing is useful for the purpose intended (*x*). 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 (*y*), 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 (*z*); 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 (*a*), *i.e.*, useful in some cases though not in all cases, unless the patentee has represented it as useful in all cases (*b*).

Commercial  
utility.

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 (*c*). There is in fact in

(*u*) 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.

(*x*) *Fawcett v. Homan* (1896), 13 R. P. C. 405; *Stone & Co., Ltd. v. Broadfoot & Sons, Ltd.* (1907), 25 R. P. C. 313.

(*y*) *Wilson Brothers Bobbin Co. v. Wilson & Co., Ltd.* (1902), 20 R. P. C. 1.

(*z*) See p. 159, *ante*.

(*a*) *Welsbach Incandescent Gas Light Co. v. New Incandescent (Sun-*

*light Patent) Gas Light Co.* (1900), 17 R. P. C. 252; *Ward v. Hill* (1901), 18 R. P. C. 481; 20 R. P. C. 189; *Kelvin v. White, Thomson & Co.* (1907), 25 R. P. C. 177.

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

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

many cases no necessary relationship between the commercial pecuniary success of an invention and its utility in patent law (*d*); 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 (*e*).

Meaning of  
Utility  
in Law.

The circumstance that an invention has not come into general use merely raises a strong presumption against its utility (*f*), and commercial success is not necessarily evidence that the subject-matter of the patent, though useful, is the outcome of *invention* and so fit to support the patent (*g*).

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 (*h*).

AMOUNT OF UTILITY.

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 (*i*) provided that the Crown has not been deceived as to the extent of the utility of the invention (*k*). 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

Slight amount  
of utility is  
sufficient to  
support a  
patent.

(*d*) *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 Appl-garth v. Castner-Kellner Alkali Co.* (1901), 18 R. P. C. 295.

(*e*) See *Badische Anilin und Soda Fabrik v. Levinstein* (1887), 12 App. Cas. 712; see also 1 W. P. C. 71, n.; see p. 162, *post*.

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

*Macr. P. C.* 56.

(*g*) P. 34, *ante*; *Fawcett v. Homan* (1896), 13 R. P. C. 274.

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

(*i*) *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.

(*k*) *Pirrie v. York Street Flax Spinning Co.* (1893), 10 R. P. C. 39; 11 R. P. C. 429.

Invention must be useful as Specified.

other steam-engine, and of any use to the public, that was sufficient (*l*).

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 (*m*), or in conjunction with some subsequently discovered material or device (*n*). 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—i.e., the invention is useful for the purpose for which the inventor intended it—the patent is void (*o*).

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 (*p*). Neither is a patent invalid merely because it turns out that the most sanguine expectation of the patentee is not realised in full (*q*). 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

(*l*) *Morgan v. Seaward* (1836), 1 W. P. C. 172, 186.

(*m*) *Tolson v. Speight* (1896), 13 R. P. C. 718; *Wilson Brothers Bobbin Co., Ltd. v. Wilson & Co., Ltd.* (1902), 20 R. P. C. 1.

(*n*) *Tubeless Pneumatic Tyre and Capon Heaton, Ltd. v. Trench Tubeless Tyre Co., Ltd.* (1899), 16 R. P. C. 291, 312.

(*o*) *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), 9 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. Cartner-Kelner Alkali Co.* (1901), 18 R. P. C. 295; *Von der Linde v. Brummerstaedt & Co.* (1909), 26 R. P. C. 289.

(*p*) *Miller v. Searle* (1893), 10 R. P. C. 106.

(*q*) *Saccharin Corporation v. Chemical and Drugs Co.* (1899), 17 R. P. C. 38.

utility can be had (*r*), and the fact that a defendant has attempted to infringe a patent is most cogent evidence as to its utility (*s*).

**Invention  
must be  
useful as  
Specified.**

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.* (*t*), 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 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’ (*u*). 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

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

(*s*) *Lucas v. Miller* (1885), 2 R. P. C. 155; *Miller v. Barker* (1893), 10 R. P. C. 111.

(*t*) (1892), 9 R. P. C. 417.

(*u*) 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.

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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 discovery in its entirety forming one entire consideration) the patent is altogether void” (*z*). So if a patentee claims several inventions, 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*).

In *Manton v. Parker* (*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

(*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; 5 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.

(*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. 316; *Templeton v. Macfarlane* (1848), 1 H. L. C. 595; *United Horse-nail Co. v. Stewart* (1885), 2 R. P. C. 122, 132.

(*b*) (1815), Dav. P. C. 327; 1 W. P. C. 192, n., 481, n.

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.

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must be  
useful as  
Specified.**

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: "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" (e).

*Bloxam v. Elsee* (f) 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

(c) (1885), 2 R. P. C. 201.

(1907), 24 R. P. C. pp. 752-3.

(d) (1787), 1 T. R. 602; 1 W. P. C.

(f) (1825), 1 Car. & P. 558; 9 Dowl.

77.

& Ry. 215; 6 B. & C. 169; 3 L. J.

(e) See per Parker J., *Alsop's Patent*

(O. S.) Q. B. 93.

Invention  
must be  
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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.

In *Morgan v. Seaward* (*g*), 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 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.

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* (*h*) the patent was for "certain machinery, or apparatus adapted to facilitate the operation of drying calicoes, linens, or other similar fabrics,"

(*g*) (1837), 2 M. & W. 544; Mur. & P. C. 68, 78.  
H. 55; 1 Tur. 527; 1 W. P. C. 187; (*h*) (1834), 4 M. & Sc. 790; 1 Bing.  
see also Owen's Patent (1899), 17 R. N. S. 182; 1 W. P. C. 480.

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.



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 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.

Invention must be useful as Specified.

It is necessary to distinguish between the results which the patentee claims from his invention and the purposes to which, in his opinion, it may be applied. If he says that the invention producing certain definite results may be applied for certain purposes, and it turns out that it cannot be applied for those purposes, that does not affect the validity of the patent (i).

Distinction between results claimed and purposes to which invention may be applied.

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 (k), 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 (l).

Lack of utility in non-essential part is no bar.

If an invention as a whole is useful, it is not necessary that each part of it should possess the same amount of utility (m).

A patent is void if an essential part of his invention is impracticable and useless (n), 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* (o).

In *Lewis v. Marling* (p), the patent was for improvements in shearing machines, for shearing or cropping woollen and

(i) See per Warrington, J., *Flour Oxidizing Co., Ltd. v. Hutchinson* (I. & R.) (1909), 26 R. P. C. 629.

(k) *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.

(l) *United Horse-shoe Co. v. Swedish Horse-nail Co.* (1888), 6 R. P. C. 8; *Ehrlich v. Ihlee* (1888), 5 R. P. C. 450.

(m) *Ehrlich v. Ihlee* (1888), 5 R. P. C. 103.

(n) *United Horse-nail Co. v. Stewart* (1885), 2 R. P. C. 122, 132.

(o) *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.

(p) (1829), 10 B. & C. 22; 4 Car. & P. 57; 1 W. P. C. 493.

Invention must be useful as Specified.

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 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.

Lack of utility in a prior invention is no bar to a patent for an improvement upon it.

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 (*q*).

(*q*) *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.*

*Bloxam v. Elsee* (*r*) 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.

Utility of  
Improvements.

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.

Clayton (1877), L. R. 7 Ch. 581; O. R. 336.  
 Morgan v. Windover (1888), 5 R. P. C. (*r*) (1825), 1 Car. & P. 558; 9 Dowl.  
 303; Jones v. Pearce (1832), 1 W. P. C. & Ry. 215; 6 B. & C. 169; L. J.  
 121, 122; Shaw v. Jones (1889), 6 P. (O. S.) Q. B. 93.

## CHAPTER VI.

## 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 the public are prohibited from doing during the existence of the monopoly without the sanction of the patentee. 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

(a) P. 103, *ante*.

devised to obviate this objection. This plan consisted in making it a condition that the patentee should, within six 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*).

The Patent Act of 1852 introduced a further improvement by providing that a would-be patentee 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."

(*b*) *Bailey v. Robertson* (1878), 3 App. Cas. 1074, per Lord Blackburn.

**Origin and  
Develop-  
ment.**

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 thereby deprive himself of the right to make further legitimate improvements before obtaining the great seal.

The practice in this matter under the Patents and Designs Act, 1907, like that under the repealed Acts, 1883—1902, 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 the Comptroller deems it desirable, 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 adopted 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

(c) 7 Edw. 7, c. 29, s. 2.

(d) *E.g.*, *Badische Anilin und Soda*

*Fabrik v. Thomson* (1904), 21 R. P. C. 473.

view supported by existing decisions (e) appears to be that a patentee is not *primâ facie* bound to work the invention within the realm, or to license others to do so.

Origin and  
Develop-  
ment.

Sections 24 and 27 of the Patents and Designs Act, 1907, as were sects. 3 and 22 of the repealed Acts of 1902 and 1883 respectively, are framed to deal with the public inconvenience which arises if the patentee, during the currency of the patent, does not supply the patented article or gives to foreigners preferential terms in the matter of licenses, or otherwise uses his monopoly in any way which does not secure fair play between the industries of this and foreign countries.

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 (f), which is virtually a short and concise statement of the invention (g). 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.

Title a neces-  
sary part  
of the  
specification.

Since the passing of the Act of 1883, defective titles have not been, nor are they likely to be, so frequent as they were

(e) *Ibid.*; see also *Bremer's Patent* (1908), 24 R. P. C. 457.

(g) *Househill Co. v. Neilson* (1843), 1 W. P. C. 678.

(f) 7 Edw. 7, c. 7, s. 2 (4).

The Title. formerly, for it was by that Act, as it is by the present Act, provided 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 (*h*) in which the question has been raised. Still, after the title has passed the examiner, or after amendment, it may remain defective; and it must not be forgotten that under the practice before the Act 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 (*i*). 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 to which the authorities at the Patent Office require titles to conform substantially.

Before the Act of 1852 the patent was granted upon the title, whereas now it is granted upon the specification, the filing of which is a condition precedent to the grant.

I. The title must not be too extensive so as to embrace more than the patentee has really discovered, for this may tend to make it difficult to avoid the conclusion that on the specification as a whole the patent was granted for more than the patentee is entitled to (*m*).

(*h*) *Pirie v. York Street Spinning Co.* (1892), 10 R. P. C. 34.

(*i*) P. 260, *post*.

(*k*) *Brown's Patent* (1887), Griff. L. O. C. 1.

(*l*) Vol. II. p. 7.

(*m*) In the following cases decided before 1852 objections were taken to validity on the ground of too extensive title: *Cochrane v. Smethurst* (1816), 2 Coop. Ch. Cas. 57; 1 Stark. R. 205; *Felton v. Greaves* (1829), 3 Car. & P.



The Title.

II. The title should not be too narrow, so as to exclude something which the patentee has invented, for this may make it difficult to avoid the conclusion that on the specification as a whole the patent was granted for less than the patentee was justly entitled to (*n*).

III. The title should not be vague or ambiguous (*o*).

IV. The title should not contain a misdescription of the invention, for this may raise difficulties on the construction of the specification (*p*).

V. A false suggestion should be avoided in the title, for it may tend to the conclusion that the Crown has been deceived in its grant (*q*).

VI. The title should sufficiently and accurately describe what is really the invention, and should be comprehensive enough to include the actual invention claimed (*r*).

611; *Campion v. Benyon* (1821), 6 B. Moo. 71; 3 Brod. & Bing. 5; *Nickels v. Haslam* (1844), 7 M. & G. 378; 8 Scott, N. R. 97; 13 L. J. C. P. 146; *Derosne v. Fairie* (1835), 5 Tyr. 393; 2 Cr. M. & R. 476; 1 W. P. C. 154.

(*n*) In the following cases decided before 1852, the point was taken that the title did not include what the patentee claimed: *Croll v. Edge* (1847), 9 C. B. 479; 19 L. J. C. P. 261; *Oxley v. Holden* (1860), 8 C. B. N. S. 666; 30 L. J. C. P. 68.

(*o*) There is the authority of *Cook v. Pearce* (1844), 8 Q. B. 1044; 13 L. J. Q. B. 189, 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, 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. Thus, in *Sturz v. De la Rue* (1828), 5 Russ. 322; 7 L. J. (O. S.) Ch. 47, 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* (1841), 1 W. P. C. 295; 8 M. & W. 806; 2

Coop. Ch. Cas. 61; 11 L. J. Ex. 20, a patent for the application of the *hot blast* in the smelting of iron, under the title “an improved application of air,” was upheld.

(*p*) In the following cases decided before 1852, the point was taken that the title misdescribed the invention: *Rex v. Metcalf* (1817), 2 Stark. R. 249; *Bainbridge v. Wrigley* (1810), Par. Rep. 197; *Fisher v. Dewick* (1838), 2 M. & W. 544; 1 W. P. C. 167; 6 L. J. Ex. 153.

(*q*) In the following cases decided before 1852, the point of deceptive title was taken: *Morgan v. Seaward* (1835), 2 M. & W. 544; 1 W. P. C. 167; 6 L. J. Ex. 153; *Bloxam v. Elsee* (1825), 1 Car. & P. 558; 9 Dowl. & Ry. 215; 6 B. & C. 169; 2 L. J. O. S. 93; *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; *Gibson v. Brand* (1842), 1 W. P. C. 634.

(*r*) The point of insufficient and inaccurate title was taken in the following old cases: *Electric Telegraph Co. v. Brett* (1851), 10 C. B. 838; 20 L. J. C. P. 123; *Hills v. The London Gas Light Co.* (1860), 29 L. J. Ex. 409; 5 H. & N. 312; *Regina v. Mill* (1851), 10 C. B. 389; 14 Beav. 312; 20 L. J. C. P. 16.

Provisional  
Specifica-  
tion.

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 (s). 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  
provisional  
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* (t). It thus appears that, as regards the description of the invention, there is a difference in the completeness 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 (u); nor is it necessary that it should describe any mode of carrying it out at all (x); 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 (y). The provisional specification was never intended to be more than a mode of

(s) 7 Edw. 7, c. 29, s. 1 (3); for forms of provisional and complete specification, see Vol. II. pp. 387, 388.

(t) 7 Edw. 7, c. 29, s. 2, sub-ss. 1, 2.

(u) *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.

(x) See *United Telephone Co. v. Harrison* (1882), L. R. 21 Ch. D. 747; p. 234. *post*.

(y) P. 188, *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.

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 (*z*). 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 should 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 (*a*).

Provisional  
Specifica-  
tion.

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The object of this is to show that, subject to the provisions of sect. 42 of the Act of 1907, the invention subsequently fully specified is the same as that which is presented to the Comptroller in the first instance (*b*).

In cases of subsequent dispute the question is not whether the provisional specification is defective, but whether the complete specification is excessive (*c*). The provisional may go 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, and the conditions of sect. 42 of the Act of 1907 are satisfied (*d*).

There is the authority of Lord *Chelmsford*, L.C. (*e*), 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."

(*z*) *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.

(*a*) *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.

(*b*) *Newall v. Elliott* (1863), 1 H. &

C. 797; 32 L. J. Ex. 120; 10 Jur. N. S. 954; 4 C. B. N. S. 269.

(*c*) *Siddell v. Vickers* (1888), L. R. 39 Ch. D. 92, 97; *Curtis v. Platt* (1888), Griff. L. O. C. 53; 5 R. P. C. 87, n.

(*d*) *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. 182, *post*.

(*e*) *Penn v. Bibby* (1866), L. R. 2 Ch. 127.

Provisional  
Specifica-  
tion.

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Further, as pointed out by *Lopes, L.J. (f)*, 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 meantime 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. (g)*, "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. Before the enactment of sect. 42 of the Patents and Designs Act, 1907, the patent was altogether void if the final comprised an invention not comprehended by the provisional specification (*h*).

Details stated  
in the com-  
plete may  
differ from  
those stated  
in the pro-  
visional,

It is not necessary that all the details of the 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 (*i*).

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

(*f*) *Woodward v. Sansum* (1887), 4 R. P. C. 166.

(*g*) *The Cassel Gold Extracting Co. v. The Cyanide Gold Recovery Syndicate* (1895), 12 R. P. C. 257.

(*h*) *Bailey v. Robertson* (1878), L. R. 3 App. Cas. 1055; *Crossley v. Potter* (1853), Macr. P. C. 240.

(*i*) Per Chelmsford, L.C., *Penn v. Bibby* (1875), L. R. 2 Ch. 827.

the detailed method referred to in the provisional is not within the claim of the complete (*k*).

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 (*l*). In future cases the effect of an abandonment in the complete of details set forth in the provisional specification must be considered in the light of sect. 42 of the Patents and Designs Act, 1907 (*m*).

In *Thomas v. Welch* (*n*) 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 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

Provisional  
Specifica-  
tion.

or subordinate  
matters may  
be abandoned;

(*k*) *Sandow v. Szalay* (1905), 22 R. P. C. 15; 23 R. P. C. 6.

(*l*) *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, Ltd. v. Szalay* (1905), 23 R. P. C. 6.

(*m*) See p. 184, *post*.

(*n*) (1866). L. R. 1 C. P. 192; 35 L. J. C. P. 200.

**Provisional  
Specifica-  
tion.**

but the pro-  
visional can-  
not be read  
to supply an  
omission in  
the complete  
specification.

parts, is what was referred to in the expression, '*and another acting therewith.*'"

If, however, the patentee, in the complete specification, omits 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* (o), 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 (p); 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 discovery, may possibly wish to include and claim in the final and complete specification.

(o) (1862), 13 C. B. N. S. 52.

(p) 7 Edw. 7, c. 29, s. 2.

**Provisional Protection.**—The Act of 1907, like the repealed Act of 1883, 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 (*q*).

**Provisional Protection.**

Provisional protection is limited to consequences of publication.

This provisional protection only protects the patentee against the consequences of 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. 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 (*r*).

The effect of filing the provisional specification is, therefore, to secure six months provisional protection, subject to a possible extension not exceeding one month (*s*); 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 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 otherwise than as provided by sect. 42 of the Act of 1907, 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 (*t*).

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 (*u*).

(*q*) 7 Edw. 7, c. 29, s. 4.

(*r*) 7 Edw. 7, c. 29, s. 29.

(*s*) 7 Edw. 7, c. 29, s. 5 (1).

(*t*) P. 171, *ante*.

(*u*) Vol. II. p. 73.

Variations  
between  
the Speci-  
fications.

VARIATIONS BETWEEN THE SPECIFICATIONS.

It is, for the first time, provided by sect. 42 of the Patents and Designs Act, 1907, that a patent shall not be held to be invalid on the ground that the complete specification claims a further or different invention to that contained in the provisional, if the invention therein claimed, so far as it is not contained in the provisional, was novel at the date when the complete specification was put in, and the applicant was the first and true inventor.

What are  
legitimate  
developments.

**Legitimate Developments of the Invention.**—Considered apart from the above provision, 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 (*x*).

Lord *Blackburn* (*y*), commenting on the effect of experiments and developments made during the period of provisional protection, at a time when the Statute Book did not contain the above-mentioned provision, or any provision analogous to it, pointed out that it is proper 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

(*x*) *Watling v. Stevens* (1886), 3 R. P. C. 151; *Newall v. Elliott* (1863), 10 Jur. N. S. 955; 4 C. B. N. S. 269; *Foxwell v. Bostock* (1863), 4 De G. J. & S. 298; *Siddell v. Vickers* (1888),

L. R. 39 Ch. D. 92; 5 P. O. R. 81, 416.

(*y*) *Bailey v. Robertson* (1878), L. R. 3 App. Cas. 1074.



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, 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, 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 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” (z).

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fications.

It will be seen hereafter (a) that, in such a case, unless the provisions of sect. 42 of the Patents and Designs Act, 1907, apply, 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 relied on for the purpose of invalidating a patent on the ground of disconformity (b).

Improve-  
ments 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 tainted with disconformity, if the two methods are

Better and  
different  
methods.

(z) 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.

(a) Vol. II. chap. iii.  
(b) Per Lopes, L.J., *Woodward v. Sansum* (1877), 4 R. P. C. 178; *Geipels' Patent* (1904), 21 R. P. C. 379.

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fications.**

within the invention described in the two specifications (*c*). 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 (*d*). 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" (*e*).

Legitimate  
development  
always a pure  
question of  
fact.

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 the invention foreshadowed by the provisional. Therefore, one case, though it may be a guide, is no authority for the decision of another case. In the note (*f*) 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.

Discon-  
formity may  
be fatal 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, except for the protection afforded by sect. 42 of the Patents and Designs Act,

(*c*) *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.

(*d*) P. 226, *post*.

(*e*) Per Lord Field, then Field, J., *Crampton v. The Patents Investments Co.* (1888), 5 R. P. C. 382; see 6 R. P. C. 287.

(*f*) *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 Patents 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.

1907, 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.

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fications.

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This is expressed in the phraseology of modern practitioners by saying that there must not be a disconformity between the specifications.

Sect. 42 of the Patents and Designs Act, 1907, as before stated, enacts for the first time that a patent shall not be held invalid on the ground that the complete specification claims a further or different invention to that contained in the provisional, if the invention therein claimed, so far as it is not contained in the provisional, was novel at the date when the complete specification was put in, and the applicant was the first and true inventor thereof.

It is submitted, that if the alleged further or additional invention claimed in the complete specification is not an invention, or, if an invention, it is the invention of some one other than the applicant; or if the alleged further or additional invention was, subject to sect. 41 (2) of the Patents and Designs Act, 1907, published before the date when the complete specification was put in, the disconformity is a fatal objection.

Ever since the Patent Act of 1852, which first introduced provisional specifications, up to the passing of the Patents and Designs Act, 1907, disconformity was held to be a fatal objection to the validity of a patent. It was at one time urged by some that the operation of sect. 9 of the Act of 1883 (*g*), the provisions of which are re-enacted in sect. 6 of the Act of 1907, and which cast 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, is to render disconformity no objection to the validity of the patent. This, however, is not so, for the repealed sect. 26 of the Act of 1883, which abolished the proceeding by *scire facias* to repeal a patent, and which is re-enacted as sect. 25 of the Patents and Designs Act, 1907, provided that "every ground on which a patent might, at the

(*g*) 46 & 47 Vict. c. 57, s. 9.

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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 (*h*), and therefore it is still fatal to the validity of a patent when the provisions of sect. 42 of the Patents and Designs Act, 1907, do not apply, and, as such, a defence to an action for infringement, and a ground on which a patent may be revoked on petition for revocation (*i*).

The point was before 1907 decided substantially as above stated by the Court of Appeal, but was not the subject of a direct decision of the House of Lords, though a dictum of Lord *Halsbury*, L.C., supports the conclusion of the Court of Appeal (*k*), and the House of Lords has adjudicated upon the fact of disconformity after 1883 without, however, discussing the effect of sect. 9 of the Act of that year (*l*).

Discon-  
formity  
between an  
amended  
complete and  
a provisional  
specification.

If a specification is amended (*m*) and there is a disconformity between the complete and provisional specifications as they stand after amendment, the objection is open (*n*), subject of course to sect. 42 of the Act of 1907. 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 (*o*).

Method of  
deciding  
questions  
of fact as to  
disconformity.

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

(*h*) *Bailey v. Robertson* (1878), L. R. 3 App. Cas. 1055.

(*i*) See *Nuttall v. Hargreaves* (1891), 8 R. P. C. 450; *Vickers v. Siddell* (1890), 7 R. P. C. 292.

(*k*) See *Vickers v. Siddell* (1890), 7 R. P. C. 292.

(*l*) *Pneumatic Tyre Co. v. Leicester Pneumatic Tyre and Automatic Valve Co.* (1899), 16 R. P. C. 531; *Castner-Mellner Alkali Co. v. Commercial De-*

*velopment Corporation* (1900), 17 R. P. C. 593.

(*m*) See Vol. II. chap. iii.

(*n*) *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.

(*o*) See *Moser v. Marsden* (1895), 13 R. P. C. 24; Vol. II. p. 107.

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 complete specification an invention of a different nature from that described in the provisional (*p*)? 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 (*q*).

The Patents and Designs Act, 1907 (sect. 4 and sect. 11 (1)), like the repealed Acts of 1883 and 1888 (*r*), 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" (*s*).

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fications.

(*p*) 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.

(*q*) *Cassel Gold Extracting Co. v. Cyanide Gold Recovery Syndicate* (1895), 12 R. P. C. 232, 257.

(*r*) 46 & 47 Vict. c. 57, s. 9; and 51 & 52 Vict. c. 50, s. 4.

(*s*) 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.

There are many instances in which, before the Act of 1907 came into operation, patents were declared void because the patentee had in his final specification described and claimed inventions which the Courts held were not included in the description given in the provisional specification. The following may be taken as illustrative cases:—

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 ( $\text{CaO}_2\text{SO}_2$ ) 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 specifica-

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fications.**

Effect of  
detailing  
advantages  
of the inven-  
tion in the  
provisional  
specification.

The patentee is not bound in the provisional specification to detail the advantages of his invention. If he does detail

tion, 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.

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 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.

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 think the provisional specification was an honest statement of the nature of

advantages, all of which are present when the invention is used for one purpose which is principally referred to in the

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fications.

the discovery. On that ground I come to the conclusion that Mr. Edison's patent cannot be upheld." See also *Horrocks v. Stubbs* (1885), 3 R. P. C. 233, 226; *Hutchison v. Pattullo* (1888), 5 R. P. C. 351; *King, Brown & Co. v. Anglo-American Brush Corporation* (1889), 6 R. P. C. 414; *Nuttall v. Hargreaves* (1891), 8 R. P. C. 450; *Lane Fox v. Kensington 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, Ld. v. Balmoral Cycle Co.* (1898), 15 R. P. C. 505; *Tubeless Pneumatic Tyre and Capon Heaton, Ld. v. Trench Tubeless Tyre Co., Ld.* (1899), 16 R. P. C. 291; *Savage Brothers, Ld. v. Brindle* (1900), 17 R. P. C. 228.

The following cases may be taken as instances among many reported cases in which the objection of disconformity was not sustained.

*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 mouthpiece, 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 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 (15 & 16 Vict. c. 83; cf. 46 & 47 Vict. c. 57, s. 5) 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 (sect. 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 (sect. 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 describes 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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fications.**

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 creates a disconformity (*t*). In fact, if a patented invention, owing to subsequent discoveries of others, proves more valuable and has a wider field of usefulness than what was contemplated by the patentee at the time of his application, he is entitled to the full

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.

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 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. 681), 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. See also *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 Patents Investments 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. 232, 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. Leicester Pneumatic Tyre and Automatic Valve Co.* (1899), 16 R. P. C. 531.

(*t*) *Pneumatic Tyre Co. v. East London Rubber Co.* (1896), 14 R. P. C. 77, 99.



benefit of the use of his 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 (u).

Variations  
between  
the Speci-  
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 (x). 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 (y).

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" (z).

In a case to which the protection of sect. 42 of the Act of 1907 is not applicable, 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

Applicant's  
course in case  
of doubt as  
to discon-  
formity.

(u) *Pneumatic Tyre Co. v. East London Rubber Co.* (1896), 14 R. P. C. 101; *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; *Pneumatic Tyre Co. v. Leicester Pneumatic Tyre and Automatic Valve Co.* (1899), 16 R. P. C. 541.

(x) 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.

(y) *Ibid.*; *Adamant Stone and Paving Co. v. Corporation of Liverpool* (1896), 14 R. P. C. 19.

(z) *Pneumatic Tyre Co. v. Ixion Patent Pneumatic Tyre Co.* (1897), 14 R. P. C. 869.

Variations  
between  
the Speci-  
fications.

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 on the ground of prior grant; 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 sect. 32 of the Patents Act, 1883, which is now sect. 36 of the Act of 1907. 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*(a). A petition for the revocation of the second patent, on the ground of prior grant by the first, would not avail; 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 the 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? 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 by the patentee, or with his concurrence, before the date of the second patent.

(a) See p. 309, *post*.

## THE COMPLETE SPECIFICATION.

Complete  
Specifica-  
tion.Object of  
complete  
specifications.

The Patents and Designs Act, 1907, like its predecessors of 1852 and 1883, enacts (sect. 2 (2), (3)) 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.

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, be able to put the invention into practice, and thus enjoy the benefit of the discovery (*b*).

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 (*c*).

The title and provisional specification (*d*) 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

(*b*) *Young v. Rosenthal* (1884), 1 R. F. C. 31; *Macfarlane v. Price* (1816), 1 Stark. N. P. 201; *Allen v. Duckett* (1893), 10 R. P. C. 397.

(*c*) *Gibson v. Braud* (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.

(*d*) P. 173, *ante*.

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Specifica-  
tion.**

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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 document 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 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.

Requisites of complete specification.

The conditions which the law requires the complete specification to satisfy may be conveniently considered under the following heads:—

- 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.

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Specifica-  
tion.

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- 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 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.*

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 (e). 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

Patent a  
bargain with  
the public.

(e) Per Lord Eldon, *Cartwright v. De la Rue* (1828), 5 Russ. 322; 7 Eamer (1890), 14 Ves. 131, 136; *Sturz L. J.* (O. S.) Ch. 47.

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Specifica-  
tion.**

Must not  
mislead by  
commission,  
or omission.

the invention and in what manner the same is to be performed.

As stated by *Buller, J.*, in *R. v. Arkwright (f)*, 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 (*g*). 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 (*h*), 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 (*i*), for the theory of action 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 (*k*).

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 (*l*). 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 (*m*).

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

(*f*) (1785), *Dav. P. C.* 61; 1 *W. P. C.* 64.

(*g*) 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.

(*h*) *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. Levinstein* (1887), 2 *R. P. C.*

449; *Badische Anilin und Soda Fabrik v. La Société Chimique des Usines du Rhône* (1898), 15 *R. P. C.* 368.

(*i*) See per *Finlay, S.-G.*, *Delwick's Patent* (1898), 15 *R. P. C.* 687; *ibid.*

(*k*) *Saccharin Corporation v. Chemical and Drugs Co.* (1899), 17 *R. P. C.* 38.

(*l*) *Turner v. Winter* (1787), 1 *T. R.* 602; 1 *W. P. C.* 77; *Palmer v. Wagstaff* (1853), *Newtons' L. J.* vol. xliii. p. 131.

(*m*) *Ibid.*; see *Bickford v. Skewes* (1838), 1 *W. P. C.* 211.

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Specifica-  
tion.

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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 (*n*).

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 (*o*), or that one of the alternatives is not new (*p*), 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 (*q*).

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 (*r*); but in the former case the patent cannot be sustained.

Distinction  
between a  
false descrip-  
tion and a  
claim to  
something  
useless.

Thus, in *Neilson v. Harford* (*s*), *Parke*, B., at the trial, said that his strong opinion, as then advised, was that a certain 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 (*t*):—

“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

(*n*) *Lewis v. Marling* (1829), 1 W. P. C. 493; see also p. 226, *post*.

(*o*) *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.

(*p*) *Pether v. Shaw* (1893), 10 R. P. C. 293; p. 110, *ante*.

(*q*) *Monnet v. Beck* (1897), 14 R. P. C. 777.

(*r*) *R. v. Cutler* (1816), Macr. P. C. 137; *Lewis v. Marling* (1829), 10 B. & C. 22; 1 W. P. C. 493.

(*s*) (1841), 1 W. P. C. 313; 8 M. & W. 806.

(*t*) (1841), 1 W. P. C. 371.

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Specifica-  
tion.

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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" (*u*).

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 (*x*)? If the specification contain what amounts to a false suggestion on the part of the patentee; 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 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 (*y*); and in the latter it will be bad, because the statutory requirements have not been complied with (*z*). 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 (*a*). A statement in a specifi-

(*u*) *Plimpton v. Malcolmson* (1875), L. R. 3 Ch. D. 576; see also *Lewis and Stirckler's Patent* (1897), 14 R. P. C. 24, 36.

(*x*) *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 Ry. Co.* (1885), 2 R. P. C. 210; 3 R. P. C. 94; *Fawcett v. Homan* (1896), 13 R. P. C. 268, and cases referred to in the following note (*a*).

(*y*) *Travell v. Carteret*, 3 Lev. 135; *Alcock v. Cooke*, 5 Bing. 340; *Morgan v. Seaward* (1837), 2 M. & W. 544; *Owen's Patent* (1890), 17 R. P. C. 78.

(*z*) See 1 W. P. C., and cases there referred to.

(*a*) *Cole v. Saqui* (1888), 5 R. P. C. 494, cf. p. 260, *post*. The following cases illustrate the application of the principles stated in this paragraph.

*Bloxam v. Elsee* (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.*



cation to the effect that a certain thing is important which is in fact not so, as in *Huddart v. Grimshaw* (b), or that something is immaterial which is in reality material, as in *Neilson v. Harford* (c), will, it is submitted, amount to an attempt to deceive, and so render the patent void.

*Potter* (1825), *Maor. 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."

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 "a tapered hair or head brush," and the method of manufacture to consist in cutting hair in lengths of about one inch and a quarter, and then mixing it by hand and shaking it together as unevenly as possible, and finally attaching the hairs so cut and mixed to the stock by means of wires. At the trial it appeared that the patented brushes had bristles of unequal length mixed indiscriminately together. Lord *Ellenborough, C.J.*, held that the invention was improperly described, and said: "Tapering means gradually converging to a point. According to the specification the bristles would be of an unequal length, but there would be no tapering to a point which the description assumes. If the word 'tapering' be used in its general sense, the description is defective—there is no converging to a point. If the term has had a different meaning annexed to it by the usage of trade, it may be received in its perverted sense. At present, however, I cannot hold out any prospect that the difficulty arising

from the grammatical consideration can be removed." After further evidence his Lordship advised the jury to find that it was not a tapering, but only an unequal brush, which they accordingly did. A rule for a new trial was refused.

In *Felton v. Greaves* (1829), 2 *Stark. N. P.* 249, the plaintiff had obtained his patent for "a machine for an expeditious and correct mode of giving a fine edge to knives, razors, scissors, and other cutting instruments," and it appeared that the invention, which was stated in the specification to consist in a machine for sharpening various cutting instruments by passing their cutting edges backward and forward in the angle formed by the intersection of two or more circular files in the manner explained, was suitable for sharpening knives, but it would not do for sharpening scissors. The files were stated to be in the form of cylinders, and at the trial it appeared in evidence that in order to adapt the instrument to the sharpening of scissors it was necessary to have one of them smooth, which the specification did not describe, and Lord *Tenterden, C.J.*, on this ground directed a nonsuit.

In *Bainbridge v. Wigley* (1810), *Parl. Rep.* 192; 1 *Carp. P. C.* 270, the specification stated that the invention consisted in certain improvements in the English flute, whereby the fingering was rendered more easy and certain notes produced that were never before produced, whilst it appeared in evidence that, as a matter of fact, only one new note was produced. Lord *Ellenborough* held that this was fatal to the patent, the consideration on which it was granted not being truly set forth. The patentee had stated that, by his improvement, he gave new notes, when in fact he had given but one new note.

(b) (1803), 1 *W. P. C.* 85.

(c) (1841), 1 *W. P. C.* 363.

**Complete  
Specifica-  
tion.**

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.*

The principle about to be discussed is closely allied to that which has been considered in the preceding pages. It is now proposed to demonstrate that ambiguous or misleading statements in essential particulars as to the nature of the invention, or the manner of carrying it out, even though *bonâ fide* on the part of the patentee render the grant invalid.

Must be clear  
and unequivocal.

It is incumbent on the patentee to give a specification of the invention in the clearest and most unequivocal terms of which the subject is capable, and if it appears that there is any unnecessary ambiguity affectingly introduced into the specification, or anything which tends to mislead the public, in that case the patent is void. . . . It is certainly of consequence that the terms of a specification should express the invention in the clearest and most specific manner; so that the persons to whom it is addressed may be able to produce the thing intended, without the necessity of trying experiments (*d*), and, as was pointed out by *Dallas*, L.C.J. (*e*), if the instrument contains an ambiguity in a material point that is a ground on which it may be avoided altogether.

In the case of a written contract or similar document, the Court is bound to find a meaning, but in the case of a specification the Court has no such duty, and, if the fact be that it is not possible to say that the language of the specification is unambiguous, and the point is pressed, the Court ought to declare the patent void, on the ground that the patentee has not complied with the condition of the grant (*f*). Thus it is fatal for the patentee to state so many alternatives in different parts of the processes he describes, and generally to so frame his specification that it cannot be properly gathered what are

(*d*) *Per* Ashurst, J., *Turner v. Winter* (1787), 1 T. R. 602; 1 W. P. C. 77; but see p. 183, *ante*.

(*e*) *Campion v. Benyon* (1821), 6 B. Moo. 71; 3 Brod. & B. 5.

(*f*) See *Tubes, Ld. v. Perfecta Seamless Tube Co., Ld.* (1902), 20 R. P. C. 101, judgment of Lord Davey;

*Ackroyd and Best, Ld. v. Thomas* (1904), 21 R. P. C. 737; *Linotype Machinery Co. v. Hopkins* (1910), 27 R. P. C. 112; *British Ore Concentration Syndicate, Ld. v. Minerals Separation, Ld.* (1910), 27 R. P. C. 47, *per* Lord Halsbury.

the essential parts of his invention or what is the extent of his claim (*g*).

Complete  
Specifica-  
tion.

Absolute or perfect precision in the language of the specification is impossible, and cannot therefore be required. It will be quite sufficient if the document is comprehensible to the ordinary workman in the trade to which the invention relates.

Perfect  
precision in  
language is  
not possible.

The following remarks of *Grove, J.*, are instructive upon this point:—

“Every word I give will be open to exception, and no human being probably could criticise my language more than I could myself, if I were to sit upon it, because I am one of those who believe that there is no form of words which can be used with such accuracy as to exclude every other conclusion but the one which the speaker or the writer intends to express. I have never yet seen any form of words, even of moderate length, upon which a person reading it in an adverse spirit might not put a different conclusion from that which the author intends, and those who have written books, or have had to deal with drawing legal documents, or other matters of that sort, know how impossible it is to give any definition, or use any form of words, which may not be excepted to” (*h*).

If there is a want of clearness in the specification, so that the public cannot afterwards avail themselves of the invention, and if there is any studied ambiguity in it, so as to conceal from the public that of which the patentee is, for a term, enjoying the exclusive benefit, the patent itself will be completely void (*i*).

A statement, or claiming clause, which is so indefinite as to include what will not answer the purpose in view as well as what will; in accordance with the principles above stated, fatal to the validity of the grant. That is to say, if the specification, in describing any materials or ingredients which are necessary for the purpose of carrying out the invention, uses

Must not  
include what  
will not as  
well as what  
will answer.

(*g*) *Klüber's Patent* (1904), 22 R. P. C. 414; 23 R. P. C. 461.

(*h*) *Philpot v. Hanbury* (1885), 2 R. P. C. 38; see also *Boulton v. Bull* (1795), Dav. P. C. 216; *Arkwright v.*

*Nightingale* (1785), Dav. P. C. 37; *Tubes, Ld. v. Perfecta Seamless Tube Co., Ld.* (1902) 20 R. P. C. 96.

(*i*) *Per Tindal, C.J., Galloway v. Bleadon* (1839), 1 W. P. C. 521.

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language wide enough to include what is unsuitable as well as what is suitable for the purpose, the ambiguity will be fatal (*k*).

For example, in *Stevens v. Keating* (*l*), the Court of Exchequer upheld a verdict, given in the Court below for the defendant, on the question of the sufficiency of the plaintiff's specification. One of the patents in question in the action related to a method of making cement, by mixing gypsum, limestone, or chalk, each in a state of powder, with a strong solution of pearlsh in water, and then adding sulphuric acid in sufficient quantity to neutralise the alkali. A stated quantity of water and of the powdered material was next added, and the product was dried and heated to a red heat. The specification stated: "Other alkalis and acids, besides those hereinbefore mentioned, will answer the purpose of my invention, though none that I have tried answer as well as the alkali and acid hereinbefore set forth;" and concluded with a claim for the process of mixing the powdered materials, alkalis, and acids, as described, and subsequently burning, heating, or calcining the same, for the purposes set forth. *Pollock*, C.B., in the Court of Exchequer, upholding the verdict below, pointed out in his judgment that only one alkali (potash) and one acid (sulphuric) were mentioned in the specification, but manifestly the inventor did not confine himself to them; if he did, the defendant would be entitled to a verdict, on the plea of no infringement, for he used neither. The learned Chief Baron continued thus:—

"To what extent, then, does the claim go beyond the alkali and acid named? If it be a claim of all acids and alkalis, it is clearly bad, as there are some that will not answer the purpose. If it be a claim of those only which will answer the purpose, it is clearly bad, in consequence of not stating those

(*k*) *Ralston v. Smith* (1865), 9 C. B. N. S. 117; 11 C. B. N. S. 471; 11 H. L. Cas. 223; *Booth v. Kennard* (1857), 2 H. & N. 84; *Haworth v. Hardcastle* (1834), 1 W. P. C. 484; *Saunders v. Aston* (1832), 3 B. & Ad. 881, 886; 1 W. P. C. 76, n.; *Kurtz v. Spence* (1888), 5 R. P. C. 161; *Stevens v. Keating* (1848), 2 W. P. C. 194; *Muntz v. Foster* (1844), 2 W. P. C. 109; *Hills v. London Gas Light Co.*

(1857), 5 H. & N. 312; 27 L. J. Ex. 60; 29 L. J. Ex. 409; *Bailey v. Robertson* (1878), L. R. 3 App. Cas. 1070; *Badische Anilin und Soda Fabrik v. La Société des Usines du Rhône* (1897), 14 R. P. C. 875; 15 R. P. C. 359; *Hattersley v. Hodgson* (1903), 20 R. P. C. 591; but see 21 R. P. C. 517.

(*l*) 2 W. P. C. 175; 19 L. J. Ex. 57.

which will answer the purpose and distinguishing them from those which will not, and so preventing the public from being under the necessity of making experiments to ascertain which of them will succeed and which will not; and this was expressly so determined by the Court of Queen's Bench in *R. v. Wheeler* (1819), 2 B. & Ald. 345; where they say that a specification which casts on the public the expense and labour of experiment and trial is bad. In my view, therefore, this specification is defective."

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In *Wegmann v. Corcoran* (*m*), the Court of Appeal upheld a decision of the Court below, which declared a patent for an improved machine or apparatus for treating or preparing meal void on the ground of the ambiguity of the language used by the specification. The patentee stated that the squeezing rollers of the improved machine were to have "a surface consisting of a material containing so much silica as not to colour the meal or flour," and went on to say that he preferred to make them of "iron coated with china, and finely turned with diamond tools." It was proved in evidence that there are two kinds of china—Oriental or Chinese china, containing 73 per cent. of silica, and very hard, and the china usually made in this country, containing only about 40 per cent. of silica, and much softer. The evidence also established that the first kind of china would answer the purpose, but the second would not, and that the invention was useful in milling operations. The Courts held that the specification was bad, as being ambiguous and inadequate, in so far as it did not state what kind of china was to be employed.

So also in *Badische Anilin und Soda Fabrik v. La Société Chimique des Usines du Rhône* (*n*), where the patentee directed that a certain process was to be carried out in "an autoclave," and it appeared that it was essential that the vessel in question should be of iron unenamelled, and it also appeared that at the date of the specification both unenamelled and enamelled autoclaves were in general use, and that it was first discovered during the trial of the action that the process could only be effected in an unenamelled autoclave, the specification was held to be fatally insufficient on the ground that it did not point out that

(*m*) (1879), L. R. 13 Ch. D. 66.

(*n*) (1897), 14 R. P. C. 875.

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the use of an unenamelled iron autoclave was an essential element of success.

It must not, however, be forgotten that the meaning of words is liable to change with the progress of science and discovery, and a term which, for the purpose of the specification, is sufficiently accurate, may, in future years, include that which will not answer the purpose the patentee has in view. In such a case the specification will be read with reference to the state of knowledge at the time it was prepared, and if the term used include nothing *then* known that would not answer, it will not be held to be ambiguous, though the use of the same term subsequently might be (*o*). This is only equitable, for a patentee is not entitled to a monopoly of ingredients and materials which were unknown at the date of the specification, and which, viewed in the light of the knowledge at the date of the specification, would not be perceived to be the equivalents of materials mentioned, even though the language used be sufficiently wide to include them (*p*). It would be manifestly unfair to hold that language which, by the advance of knowledge, has come to include more than the patentee contemplated should vitiate the grant.

Thus, for instance, when the directions given in a specification for the preparation of the article, which is the subject-matter of the patent, necessitate the use of a practically chemically pure substance, and, at the date of the patent, the person to whom the specification is addressed would, by using the knowledge of the period, obtain the substance sufficiently pure and would succeed, it is no valid objection to the utility of the invention and the sufficiency of the specification that, at a subsequent date, the same person using the *then* commercial article (*which has only come into existence as a commercial product after the date of the patent*) would fail (*q*).

It is always a question for the jury, or the Court acting as a jury, to say whether or not the specification describes with

(*o*) *Badische Anilin und Soda Fabrik v. Levinstein* (1883), L. R. 24 Ch. D. 156; 12 App. Cas. 410; 4 R. P. C. 449; *Crossley v. Beverley* (1829), 3 Car. & P. 513; 1 W. P. C. 112.

(*p*) *Tetley v. Easton* (1852), Maor.

P. C. 77; 18 C. B. 643; 25 L. J. C. & P. 293; p. 355, *post*.

(*q*) *Incandescent Gas Light Co. v. De Mare Incandescent Gas Light System* (1896), 13 R. P. C. 324, 326.

sufficient accuracy the ingredients or materials which the patentee directs to be used (*r*), but a patentee is not obliged, in referring to materials and ingredients, to enter into minute details as to them if they are known in commerce and can be readily procured under the names which he gives them (*s*). The names of articles mentioned must be taken to be used in their ordinary commercial sense (*t*).

The specification of *Medlock's* patent for improvements in the preparation of red and purple dyes directed the use of *dry* arsenic acid in a part of the process, and this was held by Lord *Westbury*, L.C., to refer to the ordinary arsenic acid of commerce (which is dry to the touch, although it contains water of hydration), which would answer, and not to the anhydrous form, which would not answer (*u*); but in a case where the specification directed the use of "the finest and purest chemical white lead," and it appeared in evidence that there was no substance known in the trade by that name, but that white lead only was known, the specification was held to be defective on the ground of ambiguity (*x*).

In the case of an invention of a new use of known substances in new proportions (*y*), the patentee in his complete specification is bound to state the most suitable proportions within his knowledge (*z*), but he is not obliged to limit his claim to the precise proportions mentioned (*a*). Though proportions of substances used may be of importance, yet if the proportions specified as an instance yield good and satisfactory results, the fact that different proportions yield results differing in utility is not a fatal objection to the sufficiency of the specification (*b*). If on the true construction proportions are claimed which will

*E.g.*, pro-  
portion.

(*r*) *Bickford v. Skewes* (1837), 1 W. P. C. 214; *Derosne v. Fairie* (1835), 1 W. P. C. 154; *Elliott v. Turner* (1845), 2 C. B. 446; *Wallington v. Dale* (1852), 7 Exch. 888.

(*s*) *MacIntosh v. Everington*, 2 Carp. R. 180, 191.

(*t*) *Simpson v. Holliday* (1864), 2 Newton, L.J., 118; 5 N. R. 340; L. R. 1 H. L. 315; 35 L. J. Ch. 811; *Stevens v. Keating* (1847), 2 W. P. C. 183, 187; 19 L. J. Ex. 57; *Muntz v. Foster* (1844), 2 W. P. C. 104; *Sturz v. De la Rue* (1828), 1 W. P. C. 83; 5 Russ. 327; *Badische Anilin und Soda Fabrik v. Levinstein* (1883), L. R. 24 Ch. D.

156; 12 App. Cas. 710; (1887), 4 R. P. C. 449.

(*u*) *Simpson v. Holliday* (1866), 5 N. R. 340.

(*x*) *Sturz v. De la Rue* (1828), 1 W. P. C. 83; 5 Russ. 327.

(*y*) P. 88, *ante*.

(*z*) See p. 226, *post*.

(*a*) *The Patent Type Foundry Co. v. Richards* (1860), 6 Jur. N. S. 39; *Welsbach Incandescent Gas Light Co. v. Daylight Incandescent Gas Mantle Co.* (1899), 17 R. P. C. 147; *Neilson v. Betts* (1871), L. R. 5 H. L. 21.

(*b*) *Incandescent Gas Light Co. v. De Mare Incandescent Gas Light System* (1896), 13 R. P. C. 326.

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not yield without further experiment and discovery the result aimed at by the patentee, the patent is bad for insufficiency of the specification (*c*). On the other hand, if the specification on its true construction is limited to certain definite proportions of the ingredients used, then, no doubt, it is no infringement to use proportions outside the limits stated (*d*).

In *The Patent Type Founding Co. v. Richards* (*e*), the patent was for "improvements in the manufacture of type," and the specification stated "the object of the invention is to make type harder, tougher, and more enduring, by employing tin in large proportions with antimony, and to greatly reduce or omit the use of lead. The best proportions I am acquainted with are seventy-five of tin and twenty-five of antimony, but this may be to some extent varied; and when lead is also used I find that it must not exceed fifty parts in one hundred of the combined metals employed."

*Wood, V.-C.*, overruled a demurrer on the ground that this specification was bad for uncertainty, and said:—

"What I have to determine is whether this specification is so clearly and manifestly bad that no explanation by workmen or other experts . . . could induce the Court to hold that this is a new invention set forth with sufficient clearness and precision. . . . A person who takes out a patent for an invention which consists in the use of certain proportions is not, in my opinion, bound to say 'I limit my claim to these precise proportions.' Even if the patentee had in terms absolutely tied himself down to 25 per cent. as a minimum in the place of 1 or 2 per cent., supposing that to be the proportion previously used, a stranger would not be allowed to evade the patent by throwing in 23 or 24 per cent. It will be for experts in the trade to say whether the production of a tough metal by using a large proportion of tin is a useful practice, whether anything of the kind was ever done before, and whether a variation from the given proportion to others slightly different would not be a colourable evasion. These are all questions for a jury. The only opinion I express is that the specification is not void on the face of it."

(*c*) *Maxim-Nordenfelt Guns and Ammunition Co. v. Anderson* (1897), 14 R. P. C. 371, 671; *Welsbach Incandescent Gas Light Co. v. Daylight*

*Incandescent Gas Mantle Co.* (1899), 17 R. P. C. 147.

(*d*) *Ibid.*

(*e*) (1860), 6 Jur. N. S. 39; 1 Johns. 381; 2 L. T. N. S. 359.



In *British Dynamite Co. v. Krebs* (*f*), the patent the validity of which was in question was for "improvements in explosive compounds and in the means of igniting the same." The specification stated: "This invention relates to the use of nitro-glycerine in an altered condition, which renders it far more practical and safe to use. The altered condition of the nitro-glycerine is effected by causing it to be absorbed in porous unexplosive substances, such as charcoal, silica, paper, or similar materials, whereby it is converted into powder, which I call dynamite or *Nobel's* safety powder." Objection was taken at the trial to the specification, on the ground that the above was not a sufficient statement of the quantity of the nitro-glycerine to be used. The Judge of first instance overruled the objection, but the Court of Appeal held it fatal to the validity of the patent. The House of Lords, however, held that, under the circumstances, the specification was sufficient upon the ground stated by Lord *Cairns*, L.C., thus (*g*):—

"Where you speak of a porous substance absorbing a fluid, if the porous substance is in one piece you naturally expect that the absorption will continue up to the point where the porous substance can hold no more; and when the absorbing substance is, and is to continue, a powder, the act of absorption itself will show the point at which the absorption must stop, lest the absorbing substance should become, not a powder but a paste."

It is settled law that a person, to be entitled to the benefit of a patent, must disclose his secret and specify his invention in such a way that others of the same trade may be taught to do that for which the patent is granted, by following the directions in the specification, without any new invention or addition of their own (*h*). And the specification ought to be framed so as not to call on a person to have recourse to more than those ordinary means of knowledge (not invention) which a workman of competent skill in his art and trade may be presumed to have.

(*f*) (1875-79), S. P. C. 88; 13 R. P. C. 190; cf. *Otto v. Linford* (1881-82), per *Jessel*, M.R., 46 L. T. 40.

(*g*) 13 R. P. C. 192.  
(*h*) Per *Buller*, J., R. v. *Arkwright* (1785), Dav. P. C. 106; 1 W. P. C. 66, and note.

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Specifica-  
tion.Test of  
sufficiency.

In judging of the sufficiency of the specification, the proper criterion is whether a person to whom the specification is addressed, by using only the existing knowledge common to the trade at the date of the patent, would be able to exercise the invention without using information derived from any other source (*i*). *Tindal*, C.J., directing the jury in *Muntz v. Foster* (*k*), as to the sufficiency of the specification, used the following words: "People are not to go on and make experiments, at a great expense to themselves, which shall turn out to be bootless and fruitless; but they rely on an honest and open and candid exposition by the patentee of everything that is necessary for the easy and certain procurement of the commodity for which the patent was granted; that is a question upon the evidence." And, in the language of *Jessel*, M.R., "you are not to tell a man to make an experiment, but to tell him how to do the thing" (*l*).

When neces-  
sity for  
experiments  
renders a  
specification  
bad, and  
when not.

If the specification be such that the persons to whom it is addressed are not able, by following its directions, to produce *any* beneficial result without the further necessity of performing experiments and trials involving invention, it is bad. It may not, however, be bad if a beneficial result can be obtained by strictly carrying out the directions given, though further experiments may be necessary to obtain the result in a higher degree (*m*), provided that the patentee has given the best means known to him of carrying out the invention (*n*).

If the specification contain language which is calculated to mislead the public into performing experiments which the patentee knows must fail, such language will be a fatal defect in the specification. Thus, in *Crompton v. Ibbotson* (*o*), a patent for "improvements in dyeing and finishing paper," was held bad on this ground. The specification stated: "My invention consists in conducting paper by means of a cloth against a heated cylinder, which cloth may be of *any suitable*

(*i*) *Per* Alderson, B., *Morgan v. Seaward* (1836), 1 W. P. C. 173, 174; *Badische Anilin und Soda Fabrik v. Levinstein* (1887), L. R. 12 App. Cas. 710; 4 R. P. C. 463; *British Dynamite Co. v. Krebs* (1875), G. P. C. 88; 13 R. P. C. 190; *Neilson v. Harford* (1841), 1 W. P. C. 371; *Rex v. Arkwright* (1785), 1 W. P. C. 66.

(*k*) (1844), 2 W. P. C. 109.

(*l*) *British Dynamite Co. v. Krebs* (1875-79), G. P. C. 90.

(*m*) *Neilson v. Harford* (1841), 1 W. P. C. 295, 318; *Macnamara v. Hulse* (1842), Car. & M. 471; 2 W. P. C. 128, n; *Otto v. Linford* (1881), 46 L. T. N. S. 39; *Edison v. Holland* (1889), 6 R. P. C. 243.

(*n*) P. 226, *post*.

(*o*) (1828), 6 L. J. (O. S.) K. B. 214.

material, but I *prefer* it to be made of linen warp and woollen weft." One of the witnesses for the plaintiff admitted that as to the conducting medium he had tried several things, but he was not aware that anything would answer the purpose except the material which the patentee said he preferred, and the plaintiff was nonsuited. The Court of King's Bench refused to set the nonsuit aside, Lord *Tenterden*, C.J., pointing out that the patent was obtained for the discovery of a proper conducting medium and that the plaintiff found, after repeated trials, that nothing would serve the purpose except the cloth described in the specification, whilst he said that the cloth might be of any suitable material, and merely that he preferred the particular kind in the specification mentioned. Other persons, misled by this statement, might be induced to make experiments, which the patentee knew would fail. The public, therefore, had not the full and entire benefit of the invention. In *Winter v. Turner* (*p*) a patent was held void (*inter alia*) on the ground of a similar ambiguity in the specification.

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tion.

*Leonhardt v. Kallé* (*q*) indicates that the above two old cases would be differently decided by the Courts now. The invention consisted in the production of various colouring matters fast to alkali by the action of suitable oxidisable substances and free alkalies upon a certain substance under heat. It was objected that the specification was ambiguous and misleading on four points, viz.: (a) it showed no means of ascertaining which oxidisable substances were not suitable; (b) the proportions in which the various alternative oxidisable substances were to be used were not stated; (c) there was no statement as to how the process could be varied to produce the several shades of colour mentioned; (d) the specification entirely failed to state the chemical nature of the compound, the product of the process. Lord Justice *Romer*, then *Romer*, J., who tried the case, held that upon the facts all these objections failed, and as to some of them remarked that if they were held valid they would render it practically impossible to draw a specification for an invention like that of the patentee that could be free from objection. The reasons for holding the objections invalid were, shortly:—

As to (a), It was unreasonable to suppose that the patentee

(*p*) (1787), 1 T. R. 602; 1 W. P. C. 77.

(*q*) 1895, 12 R. P. C. 103.