LAW AND PRACTICE

RELATING TO

LETTERS PATENT FOR INVENTIONS.

TREATISE

ON THE

LAW AND PRACTICE

RELATING TO

Letters Patent for Inventions.

WITH

AN APPENDIX

OF

STATUTES, INTERNATIONAL CONVENTION, RULES, FORMS AND PRECEDENTS, ORDERS, &c.

BY

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TO

THE RIGHT HONOURABLE LORD ALVERSTONE,

LORD CHIEF JUSTICE OF ENGLAND,

THIS WORK IS BY PERMISSION

Dedicated.

PREFACE.

THIS book is now issued in its Fourth Edition. The Patents and Designs Acts of 1907 and 1908 have occasioned a large amount of re-writing and the addition of much fresh matter dealing with new statutory provisions.

The case law has been brought up to date. The Author ventures to hope that the present Edition may merit a reception as favourable as was accorded to each of its predecessors.

ROBERT FROST.

5, NEW COURT, LINCOLN'S INN,
January, 1912.

PREFACE

TO THE FIRST EDITION.

THIS book is my attempt to bring within a reasonable compass our law, as it at present exists, in reference to Letters Patent for Inventions. Any complete history of our legislation in the past upon the subject would have inconveniently added to the bulk of the volume; and, consequently, it has not been referred to, except where necessary to explain the present practice. For the same reason I have omitted all reference to the laws of foreign countries where legal protection to Inventors is afforded.

To the extent that the book approximates to the end I had in view, so must be the measure of its success or failure. Whatever its shortcomings, I hope it may be found of use.

ROBERT FROST.

8 KING'S BENCH WALK, TEMPLE,
January 1891.

ABBREVIATIONS USED IN THIS WORK.

A. & E. .....Adolphus and Ellis' Reports.

B. & Ad. .....Barnewall and Adolphus' Reports.
B. & Ald. .....Barnewall and Alderson's Reports.
B. & C. .....Barnewall and Cresswell's Reports.
Beav. .....Beavan's Reports.
B. & S. .....Best and Smith's Reports.
Bing. N. C. .....Bingham's New Cases.
B. & P. N. R. .....Bosanquet and Puller's New Reports.
Brod. & Bing. .....Broderip and Bingham's Reports.
Bull. N. P. .....Buller's Nisi Prius.

Camp. .....Campbell's Reports.
C. B. .....Common Bench Reports.
C. B. N. S. .....Common Bench Reports, New Series.
Car. & K. .....Carrington and Kirwan's Reports.
Car. & P. .....Carrington and Payne's Reports.
Carp. P. C. .....Carpmael's Patent Cases.
C. L. R. .....Common Law Reports.
Cl. & F. .....Clark and Finnelly's Reports.
Co. R. .....Coke's Reports.
Coop. Ch. Ca. .....Cooper's Chancery Cases.
Cr. M. & R. .....Crompton, Meeson, and Roscoe's Reports.

D. & L. .....Danson and Lloyd's Reports.
Dav. P. C. .....Davies' Patent Cases.
De G. F. & J. .....De Gex, Fisher, and Jones' Reports.
De G. & J. .....De Gex and Jones' Reports.
De G. M. & G. .....De Gex, Macnaghten, and Gordon's Reports.
De G. J. & S. .....De Gex, Jones, and Smith's Reports.
Dowl. & Ry. .....Dowling and Ryland's Reports.
Dr. & S. .....Drewry and Smale's Reports.

E. & B. .....Ellis and Blackburn's Reports.
E. B. & E. .....Ellis, Blackburn, and Ellis' Reports.
E. & E. .....Ellis and Ellis' Reports.
Eng. .....The Engineer (a weekly publication).
Eq. Rep. .....Equity Reports.
Exch. .....Exchequer Reports.

F. & F. .....Foster and Finlason's Reports.

Giff. .....Giffard's Reports.
Griff. L. O. C. .....Griffin's Patent Cases decided by the Comptroller-General and Law Officers in 1887.
Griff. P. C. .....Griffin's Patent Cases.
G. P. C. .....Goodeve's Patent Cases.
G. P. P. .....Goodeve's Patent Practice.

H. Bl. .....H. Blackstone's Reports.
H. & M. .....Hemming and Miller's Reports.
H. L. C. .....House of Lords Cases.
Holt N. P. .....Holt's Nisi Prius Cases.
H. & N. .....Hurlstone and Norman's Exchequer Reports.

I. O. J. .....The Illustrated Official Journal (Patents).
Ir. Ch. Rep. .....Irish Chancery Reports.
Iron .....Iron (a weekly publication).

Johns. .....Johnson's Reports.
J. & H. .....Johnson and Hemming's Reports.
Jur. N. S. .....Jurist, New Series.
Jur. O. S. .....Jurist, Old Series.
K. & J. .....Kay and Johnson's Reports.
L. J. N. S. Ch. ....Law Journal Reports, New Series, Chancery.
L. J. N. S. C. P.... „ „ „ Common Pleas.
L. J. N. S. Ex. .... „ „ „ Exchequer.
L. J. N. S. Q. B. .. „ „ „ Queen's Bench.
L. J. O. S. .....Law Journal Reports, Old Series.
L. O. C. .....Griffin's Patent Cases decided by the Comptroller-General and Law Officers in 1887.
L. R. App. Cas.....Law Reports, Appeal Cases.
L. R. Ch. ..... „ Chancery Appeals.
L. R. Ch. D. ..... „ Chancery Division.
L. R. C. P. ..... „ Common Pleas Cases.
L. R. E. & I. App... „ English and Irish Appeal Cases.
L. R. Eq. ..... „ Equity Cases.
L. R. Ex. ..... „ Exchequer Cases.
L. R. H. L. ..... „ House of Lords.
L. R. P. C. ..... „ Privy Council Cases.
L. R. Q. B. D. ..... „ Queen's Bench Division.
L. T. .....Law Times, Old Series.
L. T. N. S. .....Law Times, New Series.
M. & G. .....Manning and Granger's Reports.
M. & S. .....Maule and Selwyn's Reports.
M. & W. .....Meeson and Welsby's Reports.
Mac. & G. .....Macnaghten and Gordon's Reports.
Macr. P. C. .....Macrory's Patent Cases.
Marsh. .....Marshall's Reports.
Mer. .....Merivale's Reports.
Moo. P. C. N. S. ...Moore's Reports of Cases in the Privy Council, New Series.
Moo. P. C. O. S. ...Moore's Reports of Cases in the Privy Council, Old Series.
Myl. & Cr. .....Mylne and Craig's Reports.
N. R. .....The New Reports.
Newt. L. J. C. S. ..Newton's London Journal of Arts and Sciences, Conjointed Series.
Newt. L. J. N. S. ..Newton's London Journal of Arts and Sciences, New Series.
Parl. Rep. .....Parliamentary Reports.
Phill. .....Phillips' Reports.
P. O. R. .....Patent Office Reports of Patent Cases.
Q. B. .....Queen's Bench Reports.
R. .....The Reports.
R. P. C. .....Patent Office Reports of Patent Cases.
R. S. C. .....Rules of the Supreme Court.
Russ. .....Russell's Reports.
Russ. & M. .....Russell and Mylne's Reports.
Ry. & M. .....Ryan and Moody's Reports.
Scott N. R. .....Scott's New Reports.
Stark. R. .....Starkie's Reports.
Taunt. .....Taunton's Reports.
T. R. .....Term Reports.
Times R. .....Times Law Reports.
Tyr. .....Tyrwhitt's Reports.
Ves. .....Vesey's Reports.
W. N. .....Weekly Notes.
W. P. C. .....Webster's Patent Cases.
W. R. .....The Weekly Reporter.
Y. & C. .....Younge and Collyer's Reports.

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CHAPTER I.

THE STATUTE LAW OF PATENTS.

Statute Law.

Existing statutes.

THE existing statute law of England relating to Letters Patent for Inventions consists of the unrepealed portions of the Statute of Monopolies (*a*), the Patents and Designs Act, 1907 (*b*), and the Patents and Designs Act, 1908 (*c*).

Early monopolies.

Before the reign of James I., the Sovereigns of England laid claim to, and exercised, the right of granting monopolies of carrying on certain trades, or producing various articles within the realm, or importing them from other countries.

These monopolies were given to the recipients in respect of services rendered by them, or as marks of royal favour.

The system of creating monopolies was made the means on various occasions of raising large sums of money for the expenditure of the government, and the support of the Crown, to the detriment of the public at large.

Statute of Monopolies.

Under the Tudor Sovereigns monopolies were granted to such an extent, and became so monstrously oppressive, that, finally, in the twenty-first year of James I., Parliament passed the celebrated Statute of Monopolies (*d*), which, *as a declaration of the Common Law on the subject*, must be considered as the foundation of our modern patent laws.

The Statute of Monopolies is the earliest statute which relates to grants of the sole use and exercise of inventions, though several Acts had been previously passed for suppressing various illegal monopolies (*e*).

(*a*) 21 Jac. 1, c. 3.
(*b*) 7 Edw. 7, c. 29.
(*c*) 8 Edw. 7, c. 4.
(*d*) 21 Jac. 1, c. 3.
(*e*) See Mag. Ch. c. 30; 9 Edw. 3, st. 1, c. 1; Stat. of Cloths (25 Edw. 3, c. 2); Stat. 27 Edw. 3, st. 2; 28 Edw. 3, c. 13, s. 3; 31 Edw. 3, c. 10; 2 Ric. 2, st. 1, c. 1; 7 Hen. 7, c. 9; and 12 Hen. 7, c. 6.

Statute Law.

There is no doubt, however, that the Crown, before the Statute of Monopolies, did exercise the right, which it claimed at Common Law, of granting to inventors the sole use and exercise of their inventions. There are several reported cases dealing with grants of letters patent from the Crown to inventors before 1623, the date of the statute (*f*), and the practice is referred to by the early text-writers (*g*).

The unrepealed portions of the Statute of Monopolies (*h*) recite and enact, shortly, as follows:—

The preamble recites:

> "Forasmuch as your most excellent Majesty, in your royal judgment, and of your blessed disposition to the weal and quiet of your subjects, did in the year of our Lord God one thousand six hundred and ten, publish in print to the whole realm and to all posterity, that all grants of monopolies, and of the benefit of any penal laws, or of power to dispense with the law or to compound for the forfeiture, are contrary to your Majesty's laws, which your Majesty's declaration is truly consonant and agreeable to the ancient and fundamental laws of this your realm: And whereas your Majesty was further graciously pleased expressly to command that no suitor should presume to move your Majesty for matters of that nature; yet, nevertheless, upon *misinformations* and *untrue pretences of public good*, many such grants have been unduly obtained and unlawfully put in execution to the great grievance and inconvenience of your Majesty's subjects, contrary to the laws of this your realm, and contrary to your Majesty's most royal and blessed intention so published as aforesaid: For avoiding whereof and preventing the like in time to come, may it please your excellent Majesty," &c.

The first section declares and enacts that:—

> "All monopolies and all commissions, grants, licences, charters, and letters patent heretofore made or granted,

(*f*) Darcy *v.* Allin (1602), Noy R. 182; 1 W. P. C. 5; Hastings' Case (1561), Noy R. 182; 1 W. P. C. 6; Clothworkers of Ipswich Case (1615), Godb. 252; S. C. 1 Rol. R. 4; Mitchell *v.* Reynolds (1713), 1 P. Wms. 181; 10 Mod. 130.

(*g*) Sheppard's Abridgment, part iii. tit. Prerog. p. 61; Hawkins, Pleas of the Crown, bk. i. c. 79, s. 20; Coke, 3 Inst. 184.

(*h*) See Vol. II., p. 251.

Statute Law.

or hereafter to be made or granted, to any person or persons, bodies politic or corporate, whatsoever, of or for the sole buying, selling, making, working, or using of anything within this realm or the dominion of Wales, or of any other monopolies, or of power, liberty, or faculty to dispense with any others; or to give licence or toleration to do, use or exercise anything against the tenor or purport of any law or statute; or to give or make any warrants for any such dispensation, licence, or toleration, to be had or made, or to agree or compound with any others for any penalty or forfeitures limited by any statute or of any grant or promise of the benefit, profit, or commodity of any forfeiture, penalty, or sum of money, that is or shall be due by any statute before judgment thereupon had, and all proclamations, inhibitions, restraints, warrants of assistance, and all other matters and things whatsoever, any way tending to the instituting, erecting, strengthening, furthering, or countenancing of the same or any of them, *are altogether contrary to the laws of this realm, and so are and shall be utterly void and of none effect, and in nowise to be put in use or execution.*"

The second section provides that all monopolies, and all such grants, letters patent, &c., ought to be, and shall be, tried by the common laws of the realm, and not otherwise.

The third section provides that all persons shall be disabled and incapable to have or exercise any monopoly, or any such grant, letters patent, &c., as aforesaid.

The fourth section provides that any person aggrieved by any monopoly, or any such commission, grant, letters patent, &c., shall have a remedy by action to recover treble damages and double costs, and imposes the penalties of præmunire upon persons delaying such actions except by authority of the Court.

The fifth and sixth sections refer to letters patent for inventions, and exclude them from the effect of the foregoing clauses, which effectually suppressed all illegal monopolies, and deprived the Crown of all claims to grant such monopolies in the future, and also of all power to prevent persons aggrieved from pursuing their legal remedies.

Statute Law.

The repealed fifth section referred to patents already granted, and declared that none of them should be of any force for a longer period than twenty-one years from the date of the grant.

The terms of the sixth section, which deals with patents to be granted after the date of the statute, are as follows:—

> "Provided also that any declaration before mentioned shall not extend to any letters patent and grants of privilege, for the term of fourteen years or under, hereafter to be made, *of the sole working, or making of any manner of new manufactures within this realm, to the true and first inventor and inventors of such manufactures, which others at the time of making such letters patents and grants shall not use*, so as also they be not contrary to the law, or mischievous to the State, by raising prices of commodities at home, or hurt of trade, or generally inconvenient; the said fourteen years to be accounted from the date of the first letters patents or grants of such privilege hereafter to be made, but that the same shall be of such force as they should be if this Act had never been made and of none other."

Acts between 1623 and 1883.

Between the years 1623 and 1883 many statutes relating to letters patent for inventions were passed and repealed.

Acts between 1883 and 1907.

In 1883 the Statute Law then relating to Patents for Inventions, Registration of Designs, and of Trade Marks, was amended and consolidated by the Patents, Designs, and Trade Marks Act, 1883 (*i*). The Act of 1883 was subsequently amended, or construed, by the Patents, Designs, and Trade Marks (Amendment) Act, 1885 (*k*), the Patents Act, 1886 (*l*), the Patents, Designs, and Trade Marks Act, 1888 (*m*), the Patents Act, 1901 (*n*), the Patents Act, 1902 (*o*), and the Trade Marks Act, 1905 (*p*).

The Trade Marks Act, 1905, repealed all the sections of the Acts of 1883 and 1888 which related exclusively to trade marks, and also, in so far as they related to trade marks,

(*i*) 46 & 47 Vict. c. 57.
(*k*) 48 & 49 Vict. c. 63.
(*l*) 49 & 50 Vict. c. 37.
(*m*) 51 & 52 Vict. c. 50.
(*n*) 1 Edw. 7, c. 18.
(*o*) 2 Edw. 7, c. 34.
(*p*) 5 Edw. 7, c. 15.

most of such other sections as had reference to trade marks as well as to patents and designs.

Statute Law.

Patents and Designs (Amendment) Act, 1907, and Patents and Designs Act, 1907.

During the Parliamentary Session of 1907 a Bill was introduced to amend the Law relating to Patents and Designs. The Bill, on August 28, 1907, received the Royal assent and became the Patents and Designs (Amendment) Act, 1907 (*q*). On the same day the Patents and Designs Act, 1907 (*r*), was added to the Statute Book.

It was provided by sect. 51, sub-sect. 2 of the Patents and Designs (Amendment) Act, 1907, that that Act should, save as otherwise expressly provided, come into operation on January 1, 1908. The Act provided that certain sections should come into operation after January 1, 1908, but it did not provide that any of the sections should come into operation before that date.

The Patents and Designs Act, 1907, by sect. 99 provided that, save as otherwise expressly provided, the Act should come into operation on January 1, 1908. Certain sections were to come into operation at a later date, but it was not provided that any section should come into operation before January 1, 1908.

The Patents and Designs Act, 1907, repealed (*inter alia*) the whole of the Patents and Designs (Amendment) Act, 1907.

It is provided by sect. 36, sub-sect. 2 of the Interpretation Act, 1889, that when an Act passed after the commencement of that Act is expressed to come into operation on a particular day, the same shall be construed as coming into operation immediately on the expiration of the previous day. Since the Patents and Designs (Amendment) Act, 1907, and the Patents and Designs Act, 1907, are both expressed to come into operation on the same day, *i.e.* January 1, 1908, it, therefore, follows that the Patents and Designs (Amendment) Act, 1907, was repealed at the moment it would otherwise have come into operation, and, so, never had operative effect.

The Patents and Designs Act, 1907, repealed, as from the commencement of the Act, or as from the date when certain rules came into operation (see sect. 98), the whole of the following Acts:—The Patents, Designs, and Trade Marks Act,

(*q*) 7 Edw. 7, c. 28. (*r*) 7 Edw. 7, c. 29.

Statute Law.

1883; the Patents, Designs, and Trade Marks (Amendment) Act, 1885; the Patents Act, 1886; the Patents, Designs, and Trade Marks Act, 1888; the Patents Act, 1901; the Patents Act, 1902; and the Patents and Designs (Amendment) Act, 1907; and re-enacted them, with the exception of certain sections mentioned in the Schedule to the Patents and Designs (Amendment) Act, 1907, which would have been repealed by that Act if it had been of operative effect.

The said sections which are not re-enacted are Patents, Designs, and Trade Marks Act, 1883, sects. 17 (in part), 19, 25, 26 (in part), 29, 34 (in part), 50 (in part), 51 (in part), 54, 59, 90, 91, 98, and 106; Patents, Designs, and Trade Marks Act, 1888, sect. 24; and Patents Act, 1902, sect. 3 (in part).

Thus the Patents and Designs Act, 1907, gives operative effect to the provisions of the Patents and Designs (Amendment) Act, 1907, and re-enacts most of the provisions of the other repealed Acts relating to patents and designs. It is a Consolidation Act, and its full title is "An Act to consolidate the Enactments relating to Patents for Inventions and the Registration of Designs and Certain Enactments relating to Trade Marks." The "certain enactments relating to Trade Marks" are those sections of the repealed Acts which related to Trade Marks and were not previously repealed by the Trade Marks Act, 1905.

It has not been thought desirable to discuss here the actual details of the alterations in and additions to the law which are effected by the new Act. Such alterations and additions are dealt with hereafter as the various subject-matters thereof are referred to.

By means of tabular statements it is easy to indicate where the re-enacted provisions of the various sections and sub-sections of the repealed Acts occur, and also the nature of the new provisions and where they are embodied in the new Act.

With this object in view the following tables have been prepared. Table I. shows which sections and sub-sections of the repealed Acts are reproduced and where each appears. Table II. indicates the subject-matter of each new provision, and where it is to be found in the Act, as well as the section of the repealed Patents and Designs (Amendment) Act, 1907, by virtue of which it was added to the Statute Book.

TABLE I.

SHOWING WHERE THE RE-ENACTED PROVISIONS OF THE REPEALED ACTS, 1883—1902, ARE TO BE FOUND IN THE PATENTS AND DESIGNS ACT, 1907 (7 EDW. 7, C. 29).

The Act of 1883 (46 & 47 Vict. c. 57).	The Act of 1907 (7 Edw. 7, c. 29).	The Act of 1883 (46 & 47 Vict. c. 57).	The Act of 1907 (7 Edw. 7, c. 29).
S. 4, ss. 1 }	S. 1, ss. 1	S. 24, ss. 2	S. 25, ss. 1
4 2 }	1 2	26 3	25 2 (*a*)
5 1	1 3	26 4 (*a*) & (*b*)	25 3 (*a*) & s. 94
5 2	2 1	26 4 (*c*)	25 3 (*b* i.)
5 3	2 2	26 4 (*d*)	25 3 (*b* ii.)
5 4	2 4	26 4 (*e*)	25 3 (*b* iii.)
5 5	3 1	26 5, 6 & 7	98 (which see)
6	5 1	27 1 & 2	29
8 1	5 2	28 1, 2 & 3	31
8 2	6 1 & 2	29 1, 2, 3, 4, 5 & 6	98 (which see)
9 1	6 2, 3 (*a*) & 4	30	34
9 2	6 4	31	35
9 3	6 5	32	36
9 4	68	33	14 2
9 5	9	34 1 & 2	43 1 & 2
10	11 1 (*a*)	35	15 1
11 1	11 2 & 3	36	14 1
11 2	11 3	37	44
11 3 & 4	12 1	38	40
12 1	14 1	39	45 1
12 2	12 2	40 1, 2 & 3	46 1, 2 & 3
12 3	13	41	47 1
13	4	42	47 2
14	10	43 1 & 2	48 1 & 2
15	14	44 1—12	30 1—12
16	17 1	45	*cf.* 98 2
17 1	17 2	46	93, 94 8
17 2, 3 & 4 (*a*)	17 3	47 1, 2 & 3	49 1
17 4 (*b*)	21 1	47 4 & 5	49 2
18 1	21 2	47 6 & 7	49 3
18 2	21 3 & 5	48 1 & 2	49 1 (see notes).
18 3	21 5		
18 4	21 4	49 1 & 2	50 1 & 2
18 5	21 5	50 1	53
18 6 & 7	21 6	50 2	54 1 (*a*)
18 8	21 7	51	54 1 (*b*)
18 9	21 8	52 1 & 2	56 1 & 2
18 10	22 (substituted)	53	57
19	23	54	*cf.* 58
20	21 (2) & 22	55 1	52 1
21	28 1	55 2	52 3
23 1	28 3	56	65
23 2	28 4	57	59 1
23 3	65	58 (*a*)	60 1 (*a*)
24	18 *cf.*	58 (*b*)	60 1 (*b*) & 2
25	25 1	59	*cf.* 60
26 1			

Statute Law.

The Act of 1883 (46 & 47 Vict. c. 57).	The Act of 1907 (7 Edw. 7, c. 29).	The Act of 1883 (46 & 47 Vict. c. 57).	The Act of 1907 (7 Edw. 7, c. 29).
S. 60	S. 93	S. 101, ss. 4 & 5	S. 86, ss. 3
61	93	102	76
82, ss. 1	62, ss. 1	103 1	91 1
82 3	62 2	103 2	91 2
82 4	62 3	103 3	91 3 (*b*)
83 1 & 2	63 1 & 2	103 4	91 4
84	64	104 1	91
85	66	104 2	88
86	75	105 1	89 2
87	71 1 & 3	105 2	89 3
88	67	106	90
89	79	107	94 1
90	*cf.* 72	108	94 2
91	*cf.* 70	109 1 & 2	94 3
93	89 1	110	95 1
94	73	111 1	94 4
95	74		95 2
96	78	112 1, 2 & 3	96 1, 2 & 3
97	81	114 1	28 2
98	*cf.* 82	114 2	52 2
99	83	115	93 1
100	80 1 & 2	116	97
101 1 & 2	86 1	117	92 1
101 3	86 2		93

The Act of 1885 (48 & 49 Vict. c. 63).	The Act of 1907 (7 Edw. 7, c. 29).
S. 2	S. 1, ss. 4
	5 1
3	6 5
	12 2 (*a*), (*c*)
4	69
5	1 1
6	91 1

The Act of 1886 (49 & 50 Vict. c. 37).	The Act of 1907 (7 Edw. 7, c. 29).
S. 2	S. 2, ss. 3, and Patent Rules, 1908, r. 26.
3	45, ss. 2
	59 2

The Act of 1888 (51 & 52 Vict. c. 50).	The Act of 1907 (7 Edw. 7, c. 29).	The Act of 1888 (51 & 52 Vict. c. 50).	The Act of 1907 (7 Edw. 7, c. 29).
S. 1, ss. 1	S. 84, ss. 1	S. 6	S. 56, ss. 1
1 2	86 1 (*g*)	7, ss. 1	60 1 (*a*)
1 3	84 2	7 2	60 2
1 4	84 3	21	71 3
1 5	84 5	22	67
2	3	23	*cf.* 72 1
3	68	24	*cf.* 70
4	11 1 (*d*)	25	87
5	21 8		

The Act of 1901 (1 Edw. 7, c. 18).	The Act of 1907 (7 Edw. 7, c. 29).
S. 1, ss. 1	S. 91, ss. 1 (*a*)
1 2	91 3 (*a*)

The Act of 1902 (2 Edw. 7, c. 34).	The Act of 1907 (7 Edw. 7, c. 29).	The Act of 1902 (2 Edw. 7, c. 34).	The Act of 1907 (7 Edw. 7, c. 29).
S. 1, ss. 1	S. 7, ss. 1	S. 1, ss. 10	S. 65
1 2	7 2	2	41, ss. 1
1 4	68	3 1	24 1
1 5	7 3	3 2	24 2
1 6	7 4	3 3	24 3
1 7	7 5	3 7	24 6
1 8	5 1	4	62 3
1 9	7 6		

Statute Law.

TABLE II.

SHOWING WHICH SECTIONS OF THE PATENTS AND DESIGNS ACT, 1907 (7 EDW. 7, c. 29), INCORPORATE THE NEW LAW INTRODUCED BY THE PATENTS AND DESIGNS (AMENDMENT) ACT, 1907 (7 EDW. 7, c. 28).

Subject.	The Act of 1907 (7 Edw. 7, c. 29).	The (Amendment) Act of 1907 (7 Edw. 7, c. 28).
PART I.		
PATENTS.		
Application for and Grant of Patent—		
Specifications	S. 2, ss. 1, 2 & 3	S. 2
	2 5	3
Comparison of specifications	6 3	8
Refusal of grant in lieu of references	7 4	7
Extension of investigations	8	6
New grounds of opposition	11 1 (*b*) & (*c*)	10
Extension of period for sealing	12 2 (*d*)	11, ss. 1 & 2
Date of substituted patent	15 2	18
Single patent for cognate inventions	16 1 & 2	4
Term of Patent—		
Term of patent	17 2	12
Extension of term of patent	18	17
Patents of addition	19	5
Restoration of Lapsed Patents—		
Restoration by comptroller	20	23
Amendment of Specification—		
Amendment by the Court	22	13
Compulsory Licences and Revocation—		
Compulsory licence or revocation	24	16
Revocation on petition	25 2 (*b*)	25
Revocation by comptroller	26	14
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CHAPTER II.

THE PATENTEE.

Who may Apply for Letters Patent.

From the sixth section of the Statute of Monopolies it is clear that, unless otherwise provided by subsequent statutes, the grantee of letters patent for an invention must be the true and first inventor; and, if there are two or more grantees, the true and first inventor must be included in their number, otherwise the Crown has no power to make the grant.

Any person may be an applicant,

Any person, whether a British subject or not, may make an application for letters patent for an invention, and two or more persons may make a joint application (*a*). Moreover, a patent granted to several persons, jointly, is not invalid because some or one of them only are or is the true and first inventors or inventor (*b*); and, consequently, a capitalist may advance money to a needy inventor and obtain an interest in the patent from the beginning.

if he can make the necessary declaration.

The usual application form contains a declaration to the effect that the applicant is in possession of an invention, whereof he, or, in the case of a joint application, one at least of the applicants claims to be the true and first inventor, and for which a patent is desired (*c*).

Legal representative.

The legal representative of a person claiming to be an inventor and dying without making an application for a patent for the invention, may apply for, and obtain, a patent in respect of it, upon a declaration that he believes such person to be the true and first inventor (*d*). The application must be accompanied by the original probate of the will of the deceased, or letters of administration granted of his estate and

(*a*) 7 Edw. 7, c. 29, s. 1.
(*b*) 7 Edw. 7, c. 29, s. 1 (1).
(*c*) 7 Edw. 7, c. 29, s. 1 (3). See Vol. II. p. 377.
(*d*) 7 Edw. 7, c. 29, s. 43.

Who may Apply.

effects, or an official copy of such probate or letters, and such further evidence as may be necessary (*e*).

The legal representative of a person dying possessed of an invention in respect of which he has made an application for a patent within fifteen months prior to his decease, may obtain a grant of a patent in respect of the invention within twelve months of the decease of the person so dying. It is the practice for the legal representative of a person so dying after having made an application for a patent, to produce the probate of the will, or letters of administration granted of the estate and effects of the deceased, for the inspection of the Comptroller, and subsequently to carry out the later stages of the application in his own name.

Married woman.

A married woman may be a patentee, and the property in the invention will be her separate estate (*f*).

Lunatic.

A patent may be granted to a person found lunatic; but, in such case, the declaration, which must accompany the application, must be made by the guardian or committee of the lunatic, or a person appointed by the Court (*g*).

The Comptroller of the Patent Office does not inquire as to the age, coverture, or sanity of an applicant.

True and First Inventor.

Patent invalid unless true and first inventor is a grantee.

Letters patent for an invention can, except under sects. 43 or 91 of the Act of 1907, be validly granted only to the true and first inventor either alone or together with another person or persons (*h*).

Except where, pursuant to sects. 43 or 91 of the Act of 1907, a patent obtained by one person alone who was not the true and first inventor would be void, for the Crown would have been deceived in its grant (*i*).

It therefore becomes a very important question to decide what, in the patent law, is the meaning of the words "true and first inventor."

Except in the case of an invention communicated from

(*e*) See Patents Rules, 1908, r. 11.
(*f*) M. W. P. Act (45 & 46 Vict. c. 75).
(*g*) 7 Edw. 7, c. 29, s. 83.
(*h*) See p. 13, *ante*.
(*i*) Com. Dig. Grant, cc. 8 and 9; Earl of Devon's Case, 11 Co. 90; R. *v.* Mussary, 1 W. P. C. 41; Minter *v.* Wells (1834), 1 W. P. C. 129.

abroad (*k*) a person will not be considered the true and first inventor if he himself did not make the invention, or if the idea of it did not originate in his own mind (*l*), or if it was suggested to him by another (*m*), or taken from a book or other document circulated in the United Kingdom or Isle of Man (*n*), or if the invention was publicly used before the date of the patent by a member of the public other than the person claiming to be the true and first inventor (*o*). **True and First Inventor.**

It is not an objection to a patent that the discovery was the result of accident; and it is immaterial whether it be the outcome of some happy thought, or great study, labour, and expense (*p*).

The true and first inventor must have invented every part of that for which he claims protection (*q*). If he claims a number of things, as being the inventor of them, whether they consist of improvements or original inventions, and it turns out that some of them are not his own ideas, his patent is void (*r*).

The person who himself actually makes an invention and is the first to disclose that invention will be the true and first inventor in the legal sense of the term, and a valid patent may be granted to him notwithstanding the fact that it may possibly be shown that the invention had been previously made by another who did not disclose it (*s*). Thus, *Tindal*, C.J., in *Cornish* v. *Keene* (*t*), stated the law as follows:— **Inventor who first discloses the invention.**

> "Sometimes it is a material question to determine whether the party who got the patent was the real and original inventor or not; because these patents are granted as a reward, not only for the benefit that is conferred upon the public by the discovery, but also to the ingenuity of the first inventor; and although it is proved that it is a new discovery, so far as the world is concerned, yet if anybody is able to show that

Law as to first discloser stated by Tindal, C.J.

(*k*) Pp. 22—26, *post*.

(*l*) Jones *v.* Pearce (1832), 1 W. P. C. 124.

(*m*) Tennant's Case (1798), 1 W. P. C. 125.

(*n*) Arkwright's Case (1785), Dav. P. C. 61; Hill *v.* Thompson (1817), 8 Taunt. 375; 2 B. Mo. 424, S. C.; The Household Co. *v.* Neilson (1843), 1 W. P. C. 673; Lang *v.* Gisborne (1862), 31 Beav. 133; Plimpton *v.* Malcolmson (1876), L. R. 3 Ch. D. 531; Plimpton *v.* Spiller (1877), L. R. 6 Ch. D. 412; chap. iv.

(*o*) Chap. iv.

(*p*) Crane *v.* Price (1842), 1 W. P. C. 411.

(*q*) Tennant's Case (1798), 1 W. P. C. 125; Arkwright's Case (1785), Dav. P. C. 61.

(*r*) Losh *v.* Hague (1837), 1 W. P. C. 203.

(*s*) Chap. iv.

(*t*) (1835), 1 W. P. C. 501, 507.

True and First Inventor.

although that was new—that the party who got the patent was not the man whose ingenuity first discovered it, that he had borrowed it from A. or B., or taken it from a book that was printed in England, and which was open to all the world—then, although the public had the benefit of it, it would become an important question whether he was the first and original inventor. . . . 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 experiment, and, therefore, that he was not the first discoverer of it—because there may be many discoverers starting at the same time, 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 to enjoy its benefits" (*u*).

And again in *Gibson* v. *Brand* (*x*):

"A man may publish to the world that which is perfectly new in all its use, and has not before been enjoyed, and yet he may not be the first and true inventor; he may have borrowed it from some other person, he may have taken it from a book, he may have learnt it from a specification, and then the Legislature never intended that a person who had taken all his knowledge from the art of another—from the labours and assiduity or ingenuity of another—should be the man who was to receive the benefit of another's skill."

Dollond's Case.

In *Dollond's Case*, one of the earliest on the subject of true and first inventor, which is not reported, but is often referred to (*y*) in subsequent decisions, and always with approval, it was objected that *Dollond* was not the inventor of a new method of making object-glasses, but that a Dr. *Hall* had made the same discovery before him. It was, however, held that as

(*u*) But see Vol. II. chap. i.
(*x*) (1841), 1 W. P. C. 627, 628.
(*y*) Boulton *v.* Bull (1795), 2 H. Bl. 463.

Dr. *Hall* had confined it to his closet, and the public were not acquainted with it, *Dollond* was to be considered as the inventor. **True and First Inventor.**

In *Tennant's Case* (*z*) the patent was declared void on the ground that though the utility of the invention and the general ignorance of it of those engaged in the trade to which it referred were proved, yet the plaintiff was not the true and first inventor, as the process had been used by one engaged in the trade for five or six years before the date of the patent. **Tennant's Case.**

From the principles of these two cases it appears that in order to invalidate a patent on the ground that the patentee is not the true and first inventor, it is not enough to show that the alleged invention is only a disclosure of what was known to others before. It must be shown that it was communicated to some extent, or that it was more or less made use of about the date of the patent, so as to constitute discovery as applied to the subject with which the invention deals—*i.e.*, that the alleged prior user was not merely experimental and partial, but was a user of the completed invention (*a*). **Result of above cases.**

If several persons about the same time discover the same thing and keep it secret and make no use of it, the party first making application for a patent becomes the true and first inventor, and is entitled to the benefit of a grant of letters patent (*b*); provided that no application has been made by or on behalf of a person, who has within twelve months applied for protection in respect of the same invention in any State with the Government of which His Majesty has made any arrangement for mutual protection of inventions (*c*). If a man makes a discovery and is enabled to produce an effect from his own experiments, judgment, and skill, it is no objection that some one else has made a similar discovery by his mind unless it has become public (*d*) or been put to practical use (*e*). There is no case in which a patentee has been deprived of the benefit of his invention because another also had invented it, unless he had also brought it into practical use or disclosed it (*f*). **Several independent inventors.**

(*z*) (1798), Dav. P. C. 429; 1 W. P. C. 125.
(*a*) Hill *v.* Thompson (1818), 1 W. P. C. 239.
(*b*) P. 114, *post*.
(*c*) 7 Edw. 7, c. 29, s. 91.
(*d*) As to publication, see chap. iv., *post*.
(*e*) See pp. 117—134, *post*.
(*f*) As to practical use, see chap. v., *post*.

True and First Inventor.

A true and first inventor must have invented every part of that which he claims to have invented (*g*); hence, if different parts of an invention are the outcome of the inventive faculty of different minds, it will be necessary that all the inventors join in applying for a patent to be granted to them jointly.

Joint inventors.

Inventors may employ assistants.

Master and Servant.—There is nothing in law to prevent an inventor from availing himself of the assistance of workmen or servants in the prosecution of his search after a new manufacture. Indeed, many processes cannot be conducted by the unaided exertions of a single individual, and in almost all cases actual experiments are a necessity in order to find out how a desired end may be best obtained. It would, therefore, be absurd to confine the rewards given to inventors to that small class of them only, who have entirely, and without any assistance whatever, brought their discoveries to perfection, and it is grave matter of doubt whether, strictly speaking, any such could be found. The law, therefore, considers workmen and servants merely as tools of the inventor, and instruments in his hands, carrying out the ideas which originate in the master mind; and a person who has invented a main and leading idea remains the true and first inventor, and, as such is entitled to apply for a patent notwithstanding that he avails himself of the assistance and suggestions of workmen and servants in bringing his invention to a state of perfection (*h*).

Cases.

This principle has been frequently acted upon by the Courts in cases of which the following are examples:—

In *Minter* v. *Wells* (*i*), *Alderson*, B., addressing the jury, said: "*Minter* and *Sutton* were together about the time the invention took place: which of the two suggested the invention, and which carried it into effect, is the question for you to decide. If *Sutton* suggested the principle to Mr. *Minter*, then he would be the inventor. If, on the other hand, Mr. *Minter* suggested the principle to *Sutton*, and *Sutton* was assisting him, then Mr. *Minter* would be the first and true inventor, and *Sutton* would be a machine, so to speak, which Mr. *Minter* uses for the purpose of enabling him to carry

(*g*) See p. 15, *ante*.

(*h*) Minter *v.* Wells (1834), 1 W. P. C. 132; Bloxam *v.* Elsee (1832), 1 C. & P. 567; 1 W. P. C. 132; Allen *v.* Rawson (1845), 1 C. B. 551; David *v.* Woodley (1884), Griff. L. O. C. 26; Kurtz *v.* Spence (1888), 5 P. O. R. 181.

(*i*) (1834), 1 W. P. C. 132.

his original conception into effect. You will judge which is the more probable of the two. Mr. *Minter* makes out his *primâ facie* case; he is the person who takes out the patent. If *Sutton* has received a compensation, nothing would have been more simple and easy than that he should have taken out the patent, and still Mr. *Minter* might have the same benefit to-day; and there is no apparent reason why *Sutton* should not have taken out the patent which Mr. *Minter* has taken out, unless they were both desirous to ruin the invention: for suppose two persons are engaged on an invention of this description, they know perfectly well between themselves who is the real inventor of it, and who is the workman to carry into effect the conception, but they would destroy the value of it to both if they did not take it out in the name of the right person" (*j*).

True and First Inventor.

In *Bloxam* v. *Elsee* (*k*), an action in respect of two patents granted to *John Gamble*, it was objected that the improvements on the first invention, which formed the subject of the second patent, were the invention of one *Donkin*, an engineer. It was established that the improvements were the invention of *Donkin*, but it appeared that at the time he invented them he was employed by the patentee and one *Foudrinier*, his partner, as an engineer, for the purpose of bringing the machine to perfection, and was paid by them for so doing; and therefore he was acting as their servant for the purpose of suggesting improvements in the machine. The plaintiff, on the other hand, contended that the improvements were the patentee's inventions, and that *Donkin* was employed by him to carry his ideas into effect, and this view of the case seems to have prevailed with the Court.

Allen v. *Rawson* (*l*), is another case supporting the same principle. In this case it was sought to upset a patent for improvements in the manufacture of felted fabrics on the ground that parts of the invention were discovered by two workmen. *Erle*, J., in directing the jury, stated the law thus: "I take the law to be that, if a person has discovered an improved principle, and employs engineers, agents, or other persons to assist him in carrying out that principle, and they,

(*j*) See also Makepeace *v.* Jackson, 4 Taunt. 770.

(*k*) (1825), 1 C. & P. 558.

(*l*) (1845), 1 C. B. 551.

True and First Inventor.

in the course of experiments arising from that employment, make valuable discoveries accessory to the main principle and tending to carry that out in a better manner, such improvements are the property of the inventor of the original improved principle, and may be embodied in his patent; and if so embodied the patent is not avoided by evidence that the agent or servant made the suggestion of the subordinate improvement of the primary and improved principle." A motion for a new trial on the ground that the judge had misdirected the jury was refused, *Tindal*, C.J. (*m*), saying: "It would be difficult to define how far the suggestions of a workman employed in the construction of a machine are to be considered as distinct inventions by him so as to avoid a patent incorporating those taken out by his employer. Each case must depend upon its own merits. But when we see that the principle and object of an invention are complete without it, I think it is too much that a suggestion of a workman employed in the course of the experiments, of something calculated more easily to carry into effect the conceptions of the inventor should render the whole patent void."

In *The matter of Smith's Patent* (*n*), the above statement of the law by *Tindal*, C.J., in *Allen* v. *Rawson* was applied to the particular facts before the Court, and the patent was revoked on the ground that the patentee was not the true and first inventor.

Master is not entitled to the invention of his servant,

The reward of workmen employed to make inventions or improvements upon existing inventions, whether patented or not, is often made the subject of special contract, which is, of course, enforceable in an action for specific performance (*o*).

The mere relationship of master and servant gives no right to the master in the invention of his servant (*p*). If an employer takes out a patent for an invention discovered and worked out by a workman in his employ, and the patentee has no more connection with the invention than that he is the employer of the workman, the patent will be void, on the ground that the workman and not the patentee is the true and first inventor. Thus, in *Arkwright's Case* (*q*) it ap-

(*m*) 1 C. B. 574.

(*n*) (1904), 22 R. P. C. 57.

(*o*) See Pashley v. Linotype Co. (1903), 20 R. P. C. 633.

(*p*) Saxby v. Gloucester Waggon Co. (1883), Griff. L. O. C. 56.

(*q*) (1785), Rex v. Arkwright, Dav. P. C. 61; 1 W. P. C. 64; Barker v. Shaw, 1 W. P. C. 126, n.

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peared that the patentee *Arkwright* had been told of a particular roller, part of the machinery, by one *Kay*, and, perceiving the value of the invention, he took *Kay* into his service for two years, and employed him in making models, and subsequently applied for and obtained a patent for the invention as his own. In the same way *Arkwright* adopted a crank invented by one *Hargreave*. At the trial *Arkwright* was declared not to be the true and first inventor (*r*).

but only to improvements in details made by him.

When, however, a workman, who is employed by his master to make models, or to carry out experiments, in the course of his employment, makes improvements in details, the improvements so made are the property of the master (*s*), and the workman cannot patent them (*t*). There is in fact a confidential relationship between a master who experiments with a view to taking out a patent for an invention, the leading idea of which originated with him, and the workman he employs in aiding him to perform those experiments, and anything suggested by the workman during such confidential employment will not necessarily vitiate the subsequent patent of the master (*u*). It is always, however, a question of evidence whether such confidential relationship actually existed between the employer and employed (*x*). In general, whether the benefit of suggestions made by a person employed to carry out an invention belong to him or to his employer is a question depending on the merits of each case, but where the main principle and object are complete without the suggestions, which are merely matters calculated more easily to carry into effect the conceptions of the inventor, they are considered as merely accessory (*y*).

In the absence of special contract, the invention of a servant, even though made in the employer's time, and with the use of the employer's materials, and at the expense of the employer, does not become the property of the employer so as to justify him in opposing the grant of a patent for the invention to the servant, who is the proper patentee (*z*), and

(*r*) Rex *v.* Arkwright (1785), Dav. P. C. 61; 1 W. P. C. 64.

(*s*) P. 18, *ante*.

(*t*) David *v.* Woodley (1884), Griff. L. O. C. 26; Kurtz *v.* Spence (1888), 5 R. P. C. 181.

(*u*) Saxby *v.* Gloucester Waggon Co. (1883), Griff. L. O. C. 57; Homan's Patent (1889), 6 P. O. R. 104.

(*x*) Humpherson *v.* Syer (1887), 4 R. P. C. 407, 413.

(*y*) See Allen *v.* Rawson, p. 19, *ante*; Smith's Patent (1904), 22 R. P. C. 58.

(*z*) Heald's Patent (1891), 8 R. P. C. 430; Homan's Case (1889), 6 R. P. C. 184; Siddell *v.* Vickers (1888), 5 R.

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the patent when obtained may be the exclusive property of the servant (*a*). It may very well be that, under the circumstances of a particular case, it is inconsistent with the good faith which ought properly to be inferred or implied as an obligation arising from the contract of service that the servant should hold the patent otherwise than as trustee for his employer, and a declaration of the Court may be obtained to that effect (*b*); or it may be proved to the satisfaction of the Court that the position of trustee can be inferred from the servant's duty, and that he was a trustee for his employer (*c*), and this though the patent was applied for after the employment ceased (*d*).

A patent may be invalidated on the ground of publication of the invention by one workman to another, for there is no necessary presumption of any confidential relationship between fellow-workmen such as will prevent this result ensuing (*e*).

Inventions communicated from abroad.

Communicators of Foreign Inventions.—Before the passing of the Patent Act, 1883, the law had long allowed grants of patents, in their own name, to persons who were in possession of inventions which they had received from others resident in foreign countries, but which inventions had never before been published within this realm.

It was stated in the celebrated *Clothworkers of Ipswich Case* (*f*), which was prior to the Statute of Monopolies, "if a man hath brought in a new invention and a new trade within the kingdom in peril of his life and consumption of his estate, or stock, &c., or if a man hath made now discovery of anything, in such cases the King of his grace and favour in recompense of his costs and travail may grant by charter unto him that he only shall use such trade or trafique 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

P. C. 93; Saxby *v.* Gloucester Waggon Co. (1880), Griff. L. O. C. 56. The above statement was approved by Farwell, J., in Marshall and Naylor's Patent (1900), 17 R. P. C. 555.

(*a*) Saxby *v.* Gloucester Waggon Co., Griff. L. O. C. 56.

(*b*) Worthington Pumping Engine Co. *v.* Moore (1902), 20 R. P. C. 41; Richmond & Co., Ld. *v.* Wrightson (1904), 22 R. P. C. 25; Lamb *v.* Evans, [1893] 1 Ch. 218; Robb *v.* Green, [1895] 2 Q. B. 315.

(*c*) Edisonia, Ld. *v.* Forse (1908), 25 R. P. C. 549.

(*d*) Wollaston and Knowles *v.* Chapman (1908), 25 R. P. C. 733.

(*e*) Saxby *v.* Gloucester Waggon Co. (1883), Griff. L. O. C. 56.

(*f*) (1615), Godb. 252; S. C., 1 Rol. R. 4.

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that patent is expired the King cannot make a new grant thereof." This practice was continued after the Statute of Monopolies of 21 James I., and has frequently been sanctioned by the judges in many cases, from *Edgebury* v. *Stephens* (*g*), which decided that if the invention be new in England, a patent may be granted though the thing was practised beyond sea before; "for the statute speaks of new manufactures within this realm; so that if it be new here it is within the statute; for the Act intended to encourage new devices useful to the kingdom, and whether learned by travel or by study it is the same thing," down to cases such as *Carpenter* v. *Smith* (*h*), *Nickels* v. *Ross* (*i*), and *Plimpton* v. *Malcolmson* (*k*), from which the proposition is established that the first actual importer of an invention into this country is *in law the true and first inventor*.

The Act of 1907 does not contain anything to prevent a person who has become acquainted with an invention abroad, though it was not actually made by him, coming over to this country and applying for a patent for it in his own name, and making the declaration (*l*) as to true and first inventor comprised in Patents Forms 1 (*m*), in the schedule to the Patents Rules 1908, which is sufficiently wide to meet such a case. Before the Act of 1883 it was long the practice for a person applying for a patent in respect of a communication from abroad, in his declaration (*n*), to state that he claimed to be the true and first inventor *within this realm*—though the words "within this realm" might have been omitted, without detraction from the validity of the declaration; and in the form of declaration, given in the schedule to the repealed Act of 1852, as in the forms subsequently in force, they were in fact so omitted. It was objected by some that under the Act of 1883 (which was the same in this respect as the Act of 1907), a person could not obtain a valid patent for an invention communicated from abroad, seeing that the Act required him to declare himself the true and first inventor, which it was said he could not be unless he himself actually made the

(*g*) (1691), Salkeld's Rep. 477; 1 W. P. C. 35; Dav. P. C. 36.
(*h*) (1841), 1 W. P. C. 530, 535.
(*i*) (1849), 8 C. B. 679.
(*k*) (1876), L. R. 3 Ch. D. 531.
(*l*) Vol. II. chap. i.
(*m*) See Appendix; see also Société Anonyme du Générateur du Temple's Patent (1896), 13 R. P. C. 54.
(*n*) Vol. II. chap. i.

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discovery, and the case of *Milligan* v. *Marsh* (*o*), decided in 1856, and *Renard* v. *Levinstein* (*p*), decided in 1865, were relied on as supporting this view. On a reference to these cases it will be found that neither of them amounts to a decision on the point; the [illegible] at most dicta of *Wood*, V.-C., and *Knight Bruce*, L.J.

The Act of 1907, like that of 1883, defines "invention" to be "any manner of new manufacture as defined in 21 Jac. I. c. 3," and it is only reasonable to infer that "inventor" has the same meaning as it has been declared to have in the latter statute—*i.e.*, it includes the actual importer of a communicated invention (*q*).

Many patents have in fact been granted under the Acts of 1883 and 1907 to importers in respect of inventions communicated to them from abroad, and it has never been established that the grantees of such patents are not entitled to hold them for their own benefit in the absence of a fiduciary relationship between the grantee and the actual foreign inventor (*r*).

It must also be noticed that the clauses in the Act of 1907 relating to revocation of the grant of a patent do not exclude the case of a person without the knowledge or against the will of a foreigner endeavouring to forestall him in this country, even though the Comptroller and law officer on appeal have decided to allow the patent (*s*).

Preference to foreign inventor who has made an application abroad.

In virtue of sect. 91 of the Act of 1907, and the International Convention of 1884 (*t*), a foreign inventor who has applied for a patent in any State or States to which the powers of sect. 91 of the Act of 1907 have been applied, has a right of priority to a British patent, if he applies for it during a period of twelve months from the date of his first foreign application, notwithstanding any intermediate publication of the invention in this country (*u*).

Communications made in England.

The communication, made in England, by one British subject to another of an invention does not make the person

(*o*) (1856), 2 Jur. N. S. 1083.

(*p*) (1865), 10 L. T. N. S. 177.

(*q*) Marsden *v.* Saville Street Foundry and Engineering Company (1878), L. R. 3 Ex. D. 203.

(*r*) See Nickels *v.* Ross (1849), 8 C. B. 679; Steadman *v.* Marsh (1856), 2 Jur. N. S. 391; Avery's Patent (1887), L. R. 36 Ch. D. 307, 318, 324: see Vol. II. chap. i., *post*.

(*s*) See Edmunds' Patent (1886), Griff. P. C. 281; Higgins' Patent (1891), 9 R. P. C. 74.

(*t*) See Appendix.

(*u*) See Vol. II. p. 27, *post*.

True and First Inventor.

to whom the communication is made the true and first inventor within the meaning of 21 Jac. I. c. 3, so as to enable him to obtain letters patent for the invention in his own name alone (*x*).

There may well be circumstances under which an oral communication by an agent of a foreigner made in this country to a British subject might entitle such British subject to apply for a patent, and to sustain it on the ground that it was a *bonâ fide* communication from abroad; *e.g.*, where a foreigner resident abroad sends over his clerk to communicate the invention orally to a British subject (*y*). It has been held that where there was a confidential communication in this country to the agent of a foreigner, and by such agent communicated abroad to the foreigner, who in his turn, by letter, instructed a British patent agent to apply in his own name for a patent on a communication from abroad, the innocent patent agent was the true and first inventor (*z*). It would appear that a valid patent could not be granted in respect of a communication by an alien permanently domiciled in this country as being a communication from abroad.

Wirth's Patent (*a*) decided that letters patent may be granted to a foreigner resident abroad for an invention communicated to him by another foreigner resident abroad; but agents resident abroad, and without a place of business in the United Kingdom, are not now recognised (*b*).

Patentee need not be meritorious importer.

In *Beard* v. *Egerton* (*c*), it was held that a person taking out a patent for a communication from abroad need not necessarily be the *meritorious* importer; he may be the mere clerk or agent of the foreign inventor.

The law recognises, however, only the person to whom the patent is granted. Thus it is no objection to the sufficiency of a specification that a foreign inventor was possessed of knowledge, which ought to have been indicated in the specification, when it appears that the actual patentee, who was merely

(*x*) Marsden *v.* Saville Street Foundry and Engineering Company (1878), L. R. 3 Ex. D. 203.

(*y*) See Pilkington *v.* Yeakley Vacuum Hammer Co. (1901), 18 R. P. C. 459. On the facts of this case the communication was held in fact to have been made from abroad: Jameson's Patent (1902), 19 R. P. C. 246.

(*z*) Marks' Patent (1908), 25 R. P. C. 583.

(*a*) (1879), L. R. 13 Ch. D. 303.

(*b*) P. R. 1908, r. 9.

(*c*) (1846), 3 C. B. 97; see also Chappell *v.* Purday (1845), 14 M. & W. 310.

Persons incapable of being Patentees.

the agent of the foreign inventor, was not possessed of that information (*d*). And again, it is not a sufficient answer to an objection that a specification is insufficient to say that it contains all the information which the foreign inventor communicated to his agent, the actual patentee (*e*).

Persons Incapable of being Patentees.

We have seen that any person, whether a British subject or not, may make an application for a patent (*f*), but there are certain persons who, by virtue of their position, could not obtain a valid grant.

The King.

It seems that the King himself could not become a patentee, for he could not grant to himself.

Body corporate.

It is clear that a body corporate could not alone obtain a grant of a patent for an original invention, for it could not make the requisite declaration (*g*), invention being an act of the mind, which could not proceed from such a body in its corporate capacity.

Letters patent may be granted to a body corporate, together with the true and first inventor, since "person," in the Act of 1907, includes a body corporate (*h*). It is the practice of the Patent Office in the case of an invention communicated from abroad to grant the patent to a corporation alone, since such corporation, as the first introducer of the invention into this country, is in law the true and first inventor (*i*). A foreign corporation is entitled to apply for a patent under the provisions of sect. 91 of the Act of 1907 (*k*).

Corporation sole.

A corporation sole, *as such*, cannot become a patentee of an original invention, for he must make the invention by his own mind in his individual capacity, and in that capacity only could he, therefore, become a patentee.

Official persons.

Official persons are in certain cases incapable of obtaining a patent for an invention connected with the subject-matter of their official position.

(*d*) Plimpton *v.* Malcolmson (1876), L. R. 3 Ch. D. 531, 582.

(*e*) Wegmann *v.* Corcoran (1878), L. R. 13 Ch. D. 65; 44 L. T. N. S. 357.

(*f*) P. 13, *ante*.

(*g*) Vol. II. p. 377.

(*h*) 52 & 53 Vict. c. 62, s. 19; Vol. II. p. 305.

(*i*) In the matter of Carez's Application (1889), 6 R. P. C. 552, p. 18.

(*k*) See Carez's Patent (1889), 6 R. P. C. 18; Société Anonyme du Générateur du Temple (1896), 13 R. P. C. 56; see Vol. II. p. 30.

Persons incapable of being Patentees.

Thus, in *Patterson* v. *Gas Light and Coke Co.* (*l*), the House of Lords held that *Patterson*, who had obtained a knowledge of the patented process in the discharge of the duties of his official position of gas referee, appointed by the Board of Trade, under the City of London Gas Act of 1868, was incapable of obtaining a valid patent, as such process was described in an official report of himself and his two colleagues, and thus was public property, notwithstanding that the report was kept back from the authorities to whom it was addressed till after the date of the patent.

Alien enemy.

It is doubtful whether a patent granted to an alien enemy would be valid. It has been doubted whether letters patent taken out on a secret trust, to be held for the benefit of the real inventor, who was an alien enemy, were void or not. To hold that such a trust could not exist would appear contrary to the spirit and policy of the patent law which recognises communications from foreigners as good subject-matters for letters patent; but no action could be maintained by such alien, or by the trustee on his behalf, on any contract, because the resulting moneys might be employed against the country (*m*).

(*l*) (1875), L. R. 2 Ch. D. 812; L. R. 3 App. Cas. 239.

(*m*) Webster on Patents, p. 23; also 1 W. P. C. 418, n.

CHAPTER III.

SUBJECT-MATTER.

General.

Any Manner of Manufacture.—The Statute of Monopolies, in a sense the statutory foundation of our modern patent laws (*a*), defines, by its *sixth* section, the Common Law right of the Crown to grant letters patent for inventions as limited to the granting of patents for "the sole working or making of any manner of new manufactures within this realm to the true and first inventor or inventors of such manufactures, which others at the time of making such letters patent and grants shall not use, so as also they be not contrary to the law, nor mischievous to the State, by raising prices of commodities at home, or hurt of trade, or generally inconvenient."

Subsequent enactments have not in any way altered the provisions of the Statute of Monopolies as regards subject-matter of letters patent for inventions; and the Act of 1907 (*b*) expressly states that the word "invention" shall mean any manner of new manufacture the subject of letters patent and grants of privilege within section "six" of the Statute of James I.—*i.e.*, the above quoted words.

It is well to remember, in considering various questions of patent law, that the word "invention" is frequently used in at least three different senses as indicating (a) an inventive act; (b) a thing which is new and has required an inventive act to produce it; (c) a particular inventive act which the inventor has performed (*c*).

The effect of the sixth section of the celebrated statute is twofold: (i) it exempts all patents and grants of privilege

(*a*) P. 1, *ante*.
(*b*) Sect. 93.
(*c*) See per Moulton, L.J., British United Shoe Machinery Co., Ld. *v.* Fussell (A.) & Sons, Ld. (1908), 25 R. P. C. 651.

which its terms embrace from the abolition of monopolies in general which the preceding sections of the Act effected, and (ii) it expressly declares that such patents and grants of privilege shall have the same effect as they would have had if the Act had never been passed and none other—*i.e.*, they are not rendered valid by virtue of the Act, but obtain their force from the Common Law.

Defined by Statute of Monopolies.

The words "working and making of any manner of new manufactures," coupled with the fact that "manufacture" is capable of more than one meaning, suggest the question, What is it the working and making of which the enactment contemplates as forming the subject-matter of a patent?

"Manufacture" used as a noun may mean either (i) the art or practice of making or constructing any piece of workmanship, or (ii) anything made by art. The words "working or making" used in conjunction with the word "manufactures," seem to imply both these meanings, and the decisions of various Courts warrant the statement that in the contemplation of the patent law the word bears both significations (*d*).

"Manufacture."

It is to be noticed that the word "manufactures," construed with the word "working," signifies the art or processes of making, and the words "working of manufactures" refer to the exercise of arts of making or constructing; whereas the word "manufactures" construed with the word "making" signifies articles or things made, and the words "making of manufactures" therefore mean the art of making articles or things which, when made, may properly be nominated manufactures, and which must be articles of trade or commerce (*e*).

The subject of a valid patent must, consequently, be the working or making of a manner of new manufacture (in one or other of its two meanings) which must be new, useful, and not contrary to the law, nor mischievous to the State by raising the prices of commodities at home, or hurt of trade, or generally inconvenient. It must be new and useful because if it were not so the consideration for which the Crown makes

Subject-matter must be a manufacture which is new, useful, and not contrary to the law, nor mischievous to the State by raising the

(*d*) Crane *v.* Price (1842), 4 M. & G. 580; Household Co. *v.* Neilson (1843), 1 W. P. C. 683; Hornblower *v.* Boulton (1799), 8 T. R. 98; Dav. P. C. 225; R. *v.* Wheeler (1819), 2 B. & Ald. 349; 1 Cary, P. C. 393; Stevens *v.* Keating (1847), 2 W. P. C. 182.

(*e*) Boulton *v.* Bull (1795), 2 H. Bl. 463; Hindmarch on Patents, pp. 80, 81. See also p. 31, *post*.

Defined by Statute of Monopolies.

prices of commodities at home, or hurt of trade, or generally inconvenient.

the grant would fail; and it must be not contrary to the law, nor mischievous to the State by raising the prices of commodities at home, or hurt of trade, or generally inconvenient, for the Crown has not the power to make such a grant.

The commodities above referred to must clearly be commodities open to trade before the patent, and cannot include the commodity which is the subject of the new invention. The patentee in fixing the price at which he will sell the new article does not raise the price of the commodity, for the article was not to be obtained at all before he put it on the market. The idea prevalent at the date of the Statute of Monopolies was that some inventions might be of such a nature that if they were put in practice the manufacture would consume such a quantity of a known article of common use in trade as would, in consequence of a limited supply, raise its price to the hurt of other trades, and this is the evil which the limitation is intended to guard against. Protection of trade was a very prevalent notion when the Statute was passed. Whether or not the objection of general inconvenience would be maintained against any particular invention would depend upon the notions of public convenience and political economy prevalent at the time of decision. Thus in the case of a new invention referred to by Coke (*f*), which related to a fulling mill by means of which more bonnets and caps might be thickened and fulled in a single day than by the labour of four-score men who got their living by the trade, this objection as to hurt of trade was held to prevail. The ground of the decision, as recorded by Coke, was that it was ordained that bonnets and caps should be thickened and fulled by the strength of man and not in a fulling mill, for it was holden inconvenient to turn so many labouring men to idleness. It is safe to predict that this objection to the patent for the fulling mill would not prevail to-day. There is no recorded case within modern times in which a patent has been declared void expressly on the ground of mischief to the State by raising the prices of commodities at home, or hurt of trade, or general inconvenience. The objection now takes the form of a plea that the invention is not new or useful (*g*). The plea of want of utility is, therefore, in effect, a plea that the inven-

(*f*) 3 Inst. c. 85, p. 184.

(*g*) See p. 157, *post*.

Subject-matter must be an Art.

tion is, on the specific ground of lack of utility, tainted with the defect which renders the patent granted in respect of it void by reason of the proviso of sect. 6 of the Statute of Monopolies. It is open to a defendant in an action, or petitioner for revocation, to allege any other specific ground which is covered by the proviso in question. If the plea were raised in the general form, according to modern practice, the person raising it would be required to give particulars as a matter of course.

Subject-matter must be an art,

Subject-Matter must be an Art.—The subject-matter of letters patent for an invention must be an *art*. For, if any person other than the patentee makes any article or articles in accordance with the patentee's specification, he thereby commits an infringement of the patent, and yet the patent does not vest in the grantee the right to use the particular materials of which the articles made in infringement consist, for they may never have been his property. What the infringer does besides using the materials, which he has a right to do, and the physical power, which he is also entitled to avail himself of, is to use the art of applying the physical power to the materials in the manner set forth in the specification (*h*). It is this *art*, therefore, which is the exclusive property of the patentee, and which he, his agents or licensees, and no one else, is entitled to use during the continuance of the privilege. In the case of an article made in infringement of a patent the right of property remains in the infringer (*i*), though he may be ordered to destroy such article, completely or partially, as may be necessary to render further infringement by its use impossible (*k*).

by which vendible articles can be produced,

It has been said that only an art by the exercise of which vendible articles, or articles of trade or commerce, are capable of being produced can form the subject-matter of valid letters patent (*l*), for two reasons:—(i) If the articles made by the exercise of the protected art cannot be sold, the invention will not be used, and therefore will not give any new employment to the people, and the public will receive no benefit from

(*h*) Huddart *v.* Grimshaw (1803), Dav. P. C. 278; 1 W. P. C. 86.

(*i*) Vavasseur *v.* Krupp (1878), L R. 9 Ch. D. 351; p. 525, *post*.

(*k*) See p. 525, *post*.

(*l*) Boulton *v.* Bull (1795), 2 H. Bl. 493; R. *v.* Wheeler, 2 B. & Ald. 349; Cornish *v.* Keene (1837), 3 Bing. N. C. 570; Cooper's Patent (1901), 19 R. P. C. 53; Johnson's Patent (1901), 19 R. P. C. 56.

Subject-matter must be an Art.

the invention. (ii) The intent of the patent is to reward the inventor by means of the profit arising from making and selling the patented articles during the continuance of the privilege (*m*). Since the subject of the patent must be a manufacture, it must result in the production of a material entity. Consequently a patent could not be validly granted for a literary composition, or a mere scheme or plan—*e.g.*, a plan for becoming rich; a plan for the better government of a State; a plan for the efficient conduct of business (*n*).

and which is not to be exercised for illegal purposes.

An art which is to be exercised for the sole object of breaking the law, or for the sole purpose of producing anything designed to be used for an illegal purpose—*e.g.*, implements for housebreaking, picking pockets, locks, &c.—cannot form the subject-matter of valid letters patent. A grant of letters patent for such an object would be void, both on the ground of want of utility (*o*), and as being contrary to public policy. "It would be absurd if by one law patents might be granted to reward persons for providing the means of violating any other law" (*p*). It is, however, no objection to a patent that it was taken out for the purpose of evading a statute—*e.g.*, the Pharmacy Act (*q*).

Difference between discovery and invention.

Discovery and Invention.—The words of the exception clause of the statute of James I. appear so wide and extensive as to embrace almost the whole domain of the inventive faculty of the human mind. But there are, nevertheless, certain discoveries which may be most highly beneficial to mankind, and yet, for meritorious reasons, are not capable of forming the subject-matter of a valid patent. Moreover, if a part of what the patentee claims as being his invention is not proper subject-matter, it will vitiate the whole and render the grant entirely void so long as the specification remains unamended (*r*).

Many instances of discoveries which are incapable of protection by letters patent, and the reasons why, will be found in the following pages.

Discovery and invention are clearly not the same thing. A discovery will not form the basis of a patentable invention

(*m*) See Hindmarch on Patents, pp. 101, 102.
(*n*) See Cooper's Patent (1901), 19 R. P. C. 54.
(*o*) Chap. iv., *post*.
(*p*) See Hindmarch on Patents, p. 142.
(*q*) Vaisey's Patent (1894), 11 R. P. C. 593.
(*r*) Vol. II. p. 103.

unless the discoverer thereby adds something to the stock of public knowledge, and points to an act to be done, which, besides being new and useful is, on the facts of the particular case, the outcome of skilful ingenuity (*s*). **Discovery and Invention.**

In the language of Lord Justice *Buckley*, then *Buckley*, J. (*t*)—

> "Of course the difference between discovery and invention is very familiar. Discovery adds to the amount of human knowledge, but it does so only by lifting the veil and disclosing something which before had been unseen or dimly seen. Invention also adds to human knowledge, but not merely by disclosing something. Invention necessarily involves also the suggestion of an act to be done, and it must be an act which results in a new product, or a new result, or a new process, or a new combination for producing an old product or an old result" (*u*).

The following words of Lord *Lindley*, then *Lindley*, L.J., taken from his judgment in *Lane Fox* v. *Kensington and Knightsbridge Electric Lighting Co.* (*v*) are most instructive upon this point.

> "An invention is not the same thing as a discovery. When *Volta* [*sic. Galvani*] discovered the effect of an electric current from the battery on a frog's leg he made a great discovery, but no patentable invention. Again, a man who discovers that a known machine can produce effects which no one knew could be produced by it before may make a great and useful discovery, but if he does no more his discovery is not a patentable invention (*x*). He has added nothing but knowledge to what previously existed. A patentee must do something more: he must make some addition, not only to knowledge, but to previously known inventions and must use his knowledge and ingenuity so as to produce either a new and useful thing or result, or a new method of producing an old thing or result. On the one hand, the discovery that a known thing—such for

(*s*) See p. 34, *post*.
(*t*) Reynolds *v.* Herbert Smith & Co., Ld. (1902), 20 R. P. C. 126.
(*u*) See also Jandus Arc Lamp and Electric Co., Ld. *v.* Arc Lamp Co. (1905), 22 R. P. C. 277, 296-7.
(*v*) (1892), 9 R. P. C. 416.
(*x*) Britain *v.* Hirsch (1888), 5 R. P. C. 226 (on p. 232); Harwood *v.* Great Northern Ry. Co. (1865), 11 H. L. C. 654; Horton *v.* Nabon (1862), 12 C. B. N. S. 437; Saxby *v.* Gloucester Waggon Co. (1880), L. R. 7 Q. B. D. 305.

Discovery and Invention.

example as a *Planté* battery—can be used for a useful purpose for which it has never been used before is not alone a patentable invention; but, on the other hand, the discovery how to use such a thing for such a purpose will be a patentable invention, if there is novelty in the mode of using it as distinguished from novelty of purpose; or if any new modification of the thing, or any new appliance is necessary for using it for its new purpose, and if such mode of using or modification or appliance involves any appreciable merit. It is often extremely difficult to draw the line between patentable inventions and non-patentable discoveries; but I have endeavoured to state the distinction as I understand it, and so far as is necessary for the purpose of the present case. I have, of course, been guided by the previous decisions on the subject, and especially by *Harwood* v. *Great Northern Railway Co.* (*y*), which is the most instructive of them all. I have been induced to make these observations in order to apply them to the question whether the plaintiff's invention is anything more than a discovery that *Planté* cells can be usefully employed for incandescent lighting" (*z*).

Invention.—At common law the Crown has authority to grant letters patent for inventions to the true and first inventor only, *i.e.*, to the true and first inventor alone, or in conjunction with some other person or persons. This is the effect of the statements contained in the Statute of Monopolies (*a*), and the provisions of sect. 1 of the Patents and Designs Act, 1907. It is evident, therefore, that the grantee of the patent, or one of the grantees as the case may be, must be an inventor. That is to say he must, in arriving at the application of the discovery, which is the subject-matter of the patent, have exercised that faculty of the mind which is called invention.

Mere *scintilla* of invention is sufficient to support a patent.

The question arises as to whether any particular quantum of invention, in this sense, is necessary to the support of a grant of letters patent. The result of the cases on the point

(*y*) (1865), 11 H. L. C. 654.

(*z*) See also Welsbach Incandescent Gas Light Co., Ld. *v.* Daylight Incandescent Mantle Co. (1899), 17 R. P. C. 141, 148; Case *v.* Cressy (1900), 17 R. P. C. 261, 263; Acetylene Illuminating Co., Ld. *v.* United Alkali Co., Ld. (1903), 20 R. P. C. 173; 22 R. P. C. 156; and compare Jandus Arc Lamp and Electric Co., Ld. *v.* Arc Lamp Co. (1905), 22 R. P. C. 296-7.

(*a*) See p. 4, *ante*.

is that, provided the subject-matter of the patent is a manufacture, within the meaning of the Statute of Monopolies, and new and useful, a mere *scintilla* of invention is sufficient (*b*). **Invention.**

(*b*) The following are the leading authorities on the point that a mere *scintilla* of invention is sufficient to support a patent for subject-matter which is in fact a new and useful "manufacture" within the meaning of the Statute of Monopolies, with the most important passages of the quoted judgments printed in *italics*:—

Harwood *v.* Great Northern Ry. Co. (1865), 11 H. L. C. 654; 35 L. J. Q. B. 27. In this case the patent related to "improvement in fishes and fish-joints for connecting the rails of railways," and was declared invalid. When the case reached the House of Lords the judges were summoned and requested to give their opinions as to whether upon the findings of the jury on the facts of the case a verdict should be entered for the plaintiffs or the defendants.

Blackburn, J., in delivering the opinions of himself and Shee, J., stated the law in the following terms, with which all the judges consulted and the House agreed (11 H. L. C. 666): "The Statute of Monopolies (21 Jac. 1, c. 3, s. 6) excepts from the abolition of monopolies patents for 'the sole working or making of any manner of new manufactures within this realm to the true and first inventor and inventors of such manufactures, which others at the time of making such letters patents and grants shall not use.' In order to bring the subject-matter of a patent within this exception, there must be *invention* so applied as to produce a practical result. And we agree with the Court of Exchequer Chamber that a *mere* application of an old contrivance in the old way to an analogous subject, *without any novelty or invention* in the mode of applying such old contrivance to the new purpose, is not a valid subject-matter of a patent. There are many decisions to that effect, which were referred to at your Lordships' bar; and, if the matter were now, for the first time, to be decided on the construction of the statute, without reference to the cases, we should think on principle that such should be the conclusion of the Court. But then in every case arises a question of fact whether the contrivance before in use was so similar to that which the patentee claims that there is no invention in the differences, if any, between the old contrivance and that for which the patentee claims a monopoly; and, if there is none, there arises a further question—viz., whether the purpose to which the contrivance was before applied and the new purpose are so analogous or cognate that there is no discovery or invention in the new application? Whether, in short, it is a *mere* application or not? *For if there is invention or discovery producing a practical benefit, as in the case of* Crane *v.* Price (1840), 1 W. P. C. 377; 4 Man. & Gr. 580, *it is the valid subject of a patent.* And we think it always must be a question of degree—a question of more or less—whether the analogy or cognateness of the purposes is so close as to prevent them being an invention in the application. Mr. Grove, *in his very able arguments, contended, we believe correctly enough, that if there was any real invention, though a slight one, producing a practical beneficial result, the patent was good.* But the question still remains, was there such an amount of cognateness in the purposes that there was no real invention or discovery?"

Lord Westbury, L.C., in moving the House to confirm the decision of the Court of Exchequer Chamber, said (11 H. L. C. 682): "*Then, my Lords, the question is, whether there can be any invention of the plaintiff in having taken 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 had

Invention.

There are dicta of some judges which, at first sight, at any rate, appear to the contrary (*c*), but it is submitted that the 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 which are 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 the purpose in or to which it has been hitherto notoriously used."

In Elias *v.* Gravesend Tinplate Co. (1890), 7 R. P. C. 455, Smith, L.J., pointed out that when Lord Westbury, L.C., stated that you cannot have a patent for a well-known mechanical contrivance *merely* when it is applied in an analogous manner or to an analogous purpose his Lordship meant "*unless there is invention in the adaptation or mode of application.*"

In Penn *v.* Bibby (1866), L. R. 2 Ch. 127; 36 L. J. Ch. 453, the patent related to "an improvement in the bearings and brushes for the shafts of screw and submerged propellers."

It was objected against the patent that it was a case of mere analogous use of bearings known in connection with grindstones and water-wheels. Lord Chelmsford, L.C., to whom there was an appeal for a new trial, in reference to the question of invention, said (L. R. 2 Ch. 135): "It was objected that the finding was erroneous, because the alleged invention was merely a new application of an old and well-known thing. It is very difficult to extract any principle from the various decisions on this subject which can be applied with certainty to every case; nor indeed is it easy to reconcile them with each other. The criterion given by Lord Campbell in Brook *v.* Aston, 8 E. & B. 485, has been frequently cited (as it was in the present argument), that a patent may be valid for the application of an old invention to a new purpose, but to make it valid there must be some novelty in the application. I cannot help thinking that there must be some inaccuracy in his Lordship's words, because according to the proposition, as he stated it, if the invention be applied to a new purpose, there cannot but be some novelty in the application. In every case of this description one main consideration seems to be whether the new application lies so much out of the track of the former use as not naturally to suggest itself to a person turning his mind to the subject, but *to require some application of thought and study.* Now, strictly, applying this test to the present case, it appears to me impossible to say that the patented invention is merely an application of an old thing to a new purpose."

Thomson *v.* American Braided Wire Co. (1889), 6 R. P. C. 518, was a case near the border line, but the patent was upheld by the House of Lords on the ground that there was quite sufficient invention in the mode of application. Lord Herschell's judgment contains the following passage (6 R. P. C. 527): "It cannot be denied that both the prior patents to which I have referred afford some colour to the defendants' contention that the patentee has done nothing more than apply a known substance in a manner and to a purpose analogous to that in and to which it had been already applied, and that the patent therefore cannot be supported. If I thought that the patentee had claimed the mere use of tubular sections of braided wire as a bustle, however fastened or secured, I should arrive at the conclusion that the defendants' contention was well founded, but I do not thus construe the specification. I have already stated that in my opinion it is the combination alone for which protection is sought, and that the method of fastening the ends by clamping plates is an essential part of that which is claimed. Taking this view of the patent, *I think that*, even with the state of knowledge which existed at the time the patent was applied for, *some invention was required to produce the bustle claimed to be protected by it.* All the learned judges in the Court of Appeal, although they arrived at the same conclusion, stated that they had done so with hesitation, and expressed the opinion that but little invention was requisite, and that the case was near the border line. I

(*c*) See p. 37 for note (*c*).

above is a correct statement of the law. In all cases the question to be decided is, does the specification describe and claim *an* invention. If an invention is disclosed, it is quite immaterial, from the point of view of the validity of the patent, whether the invention is a great one or a small one. The essential consideration is the pure question of fact whether, in view of the circumstances peculiar to the case and the state of public knowledge at the date of the application for the patent, there has been an exercise of invention or not. The Courts adopt the view that though it is important to encourage inventions,

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entirely agree, and have not been without doubt as to the proper decision to be arrived at."

In Vickers *v.* Siddell (1890), 7 R. P. C. 292, the subject-matter of the patent related to an improved mechanical appliance for making or operating on large forgings in iron or steel. In the House of Lords, Lord Herschell said (7 R. P. C. 304): "The objections of want of novelty and subject-matter cover to some extent the same ground, but it will be expedient to deal with them as far as possible separately. The invention, so far as we are concerned with it in this part of the case, consists of an apparatus for turning heavy forgings, composed of a wheel and endless chain, the wheel being internally toothed, and having a ratchet working in it, by means of which the wheel is caused to rotate, and the forging which rests in the endless chain is thus turned from time to time to the extent desired. It is admitted by the respondent that the elements which form this combination are all old. On the other hand, the appellants admit that the combination was never in use prior to the date of the patent. But they allege that to combine these well-known elements into the apparatus needed no invention, and that it is therefore not proper subject-matter for a patent. Forgings, they say, had long rested in an endless chain, the idea of turning such forgings by turning the wheel over which the chain passed was not a new one, and a ratchet working in teeth was a well-known device for causing a wheel to rotate to the desired extent. All this, I think, cannot be denied. But the result is an apparatus of extremely simple character, which possesses the advantage of being easily moved from place to place and applied wherever wanted. And the question remains whether this mode of dealing with forgings which require to be gradually turned was so obvious that it would at once occur to anyone acquainted with the subject and desirous of accomplishing the end, or *whether it required some invention to devise it*. There is no doubt about the law applicable to such a question, though it is often difficult to apply it to the circumstances of a particular case, and its application is perhaps most difficult when the alleged invention consists of a new apparatus combining known elements. If the apparatus be valuable by reason of its simplicity, there is a danger of being misled by that very simplicity into the belief that no invention was needed to produce it. But experience has shown that not a few inventions, some of which have revolutionised the industries of this country, have been of so simple a character that when once they were made known it was difficult to understand how the idea had been so long in presenting itself, or not to believe that they must have been obvious to every one." See also Riekmann *v.* Thierry (1896), 14 R. P. C. 105; Longbottom *v.* Shaw (1891), 8 R. P. C. 333; Losh *v.* Hague (1837), 1 W. P. C. 202, 207; R. *v.* Cutler (1847), 4 Q. B. 372, n.; 3 C. & K. 215; Neilson *v.* Harford (1841), 8 M. & W. 806; 11 L. J. Ex. 20; 1 W. P. C. 331; Hayward *v.* Hamilton (1879—81), Griff. P. C. 115; Patent Exploitation, Ld. *v.* Siemens Brothers & Co., Ld. (1904), 21 R. P. C. 549; Gramaphone and Typewriter, Ld. *v.* Ullmann (1906), 23 R. P. C. 260, 752; Dredger *v.* Parnell (1899), 16 R. P. C. 629.

(*c*) *E.g.*, in Carter *v.* Leyson (1902), 19 R. P. C. 478.

Invention. however small, having regard to their possible influence on the development of trade and manufacture, yet it is equally important that traders and manufacturers should not be hampered by the granting of patents where there has been no exercise of the inventive faculty at all (*d*). As is only to be expected, it is frequently found that judges differ *inter se* as to the correct conclusion to be drawn from the circumstances peculiar to a particular case (*e*). A decision of fact in one case is neither an authority, nor a help, to a decision of fact in another case. In the words of Lord *Bowen* (*f*): "Has there been an exercise of the inventive faculties? That depends on a true view of all the circumstances, and it cannot be governed in any one case by a finding of fact, on a totally different invention, by a tribunal like the House of Lords. We must apply our minds to the specific facts in the case before us; and nothing is more pernicious, or likely to lead the Court astray, than, when it has to decide a question of fact in one case, to wander into another case; to look at the decision of fact in that case and then to see what differentiations there can be between the facts in the cited case and the one before the Court. The Court that travels on these lines always goes wrong."

Essential considerations. It is true that every invention capable of supporting a patent must be a new manufacture, but it does not follow that every novelty, though an important and useful one, is good subject-matter. In order to support a patent the novelty must be *de jure* as well as *de facto* (*g*). In other words, it must be the result of invention. It is not, however, necessary that any great amount of thought, design, or skilful ingenuity must have actually been expended in making the invention, for the discovery may have been the outcome of a mere guess or happy accident, suggesting the novel application which is the real meritorious invention. Thus, the discovery of water tabbies was made by mere accident. A man having spat upon the floor, placed a hot iron on the moisture, and observed that it spread out into a kind of flower. He afterwards tried

(*d*) See per Parker, J., West *v.* Keaves (James) & Sons, Ld. (1911), 28 R P. C. 478.

(*e*) See, *e.g.*, Hill *v.* Thomas & Sons (1907), 24 R. P. C. 415; Atkinson *v.* Britton (1910), 27 R. P. C. 469.

(*f*) Lyon *v.* Goddard (1893), 10 R. P. C. 346.

(*g*) See Murray *v.* Clayton (1872), L. R. 7 Ch. 578.

the experiment upon linen, and found it produced the same effect. He then obtained a patent for a process based on the accidental discovery, which proved of great value (*h*). **Invention.**

If the alleged invention is obvious, and it cannot be presumed that the exercise of thought, design, or skilful ingenuity was required in making it, the patent is void, on the ground that there is no invention. It has been authoritatively stated that in point of law the labour of thought or experiment, and the expenditure of money, are not the essential grounds of consideration on which the question whether the invention is, or is not, the subject-matter of a patent ought to depend; for if the invention be new, and useful to the public, it is not material whether it be the result of long experiment and profound search, or of some sudden and lucky thought, or mere accidental discovery (*i*). The conception of the idea is, in many cases, the whole merit of the invention; and its application, when once conceived, becomes the simplest thing in the world, and, consequently, does not evidence the expenditure of much thought, design, or skilful ingenuity (*k*).

Decision may be difficult.

The task of the Court in deciding whether the patentee has made an invention or not is one of varying difficulty. Thus, when the patentee's claim, properly construed, is for a thing substantially as described, and the fact is that no such thing ever existed before and, by means of the thing, a result not previously produced can be attained, it is difficult to say that that thing is not subject-matter for a valid patent, especially where there is no evidence of any prior instrument performing the same function as the thing described and claimed (*l*). And as stated by Lord *Halsbury*, L.C.: "There is nothing, I suppose, more difficult, when you are dealing with a mechanical combination, than to keep one's mind free from the impression created by the fact that all the elements, or most of the elements, in such a case are old . . . it is, of course, extremely difficult to deal with such questions in the abstract, and I am disposed to think myself that the source of error is in dealing with it

(*h*) See Liardet *v.* Johnson (1778), 1 W. P. C. 54; see also 2 H. Bl. 486; Crane *v.* Price (1842), 1 W. P. C. 411.

(*i*) Per Tindal, C.J., Crane *v.* Price (1842), 1 W. P. C. 411.

(*k*) See pp. 42, 43, *post*.

(*l*) See the above-quoted passage from Vickers *v.* Siddell; Annand *v.* Taylor (1900), 18 R. P. C. 53; British United Shoe Machinery Co. *v.* Thompson (1904), 22 R. P. C. 177, 196; Gramaphone and Typewriter, Ld. *v.* Ulman (1906), 23 R. P. C. 260, 752.

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in the abstract; because you have to start with the proposition that everything is old, and until you apply yourself to what is the peculiar mechanism for the purpose required, you do not adequately appreciate—and I may frankly say that I did not adequately appreciate—what the invention is until you come to put it in a concrete form and to see what the thing is, what the thing was intended to do, and then apply your mind to see whether in its combination it has been anticipated or not" (*m*).

An obvious combination is not subject-matter.

A new combination which is obvious and consists merely in putting together two known things, each being applied to do that which it had been used to do before, without making any other experiment, or gaining any further information, is not proper subject-matter (*n*), neither is the mere duplicating of a known thing, though the result is eminently useful (*o*).

For example, in *Williams* v. *Nye* (*p*), the patent was for a sausage-making machine, and it appeared that there was known an old machine, *Nye's*, in which there was a combination of a cutting process and a forcing forward or filling into the skin which was to enclose the meat when cut up. *Nye's* cutting process was defective. There was also known an old cutting process, *Donald's*, which was satisfactory. What the plaintiff did, was to introduce into *Donald's* cutting machine, and on the shaft which worked it, a screw to force the meat when minced into the sausage skin. Such a forcing screw was used in *Nye's* machine. Though the plaintiff did in fact turn *Donald's* machine into a machine which filled as well as cut, and so produced a machine which was new and better than *Nye's* cutting and filling machine, yet the Court of first instance and the Court of Appeal held that there was no sufficient invention, and the patent was bad on the ground of lack of subject-matter.

The mixing of two substances together may result in a useful chemical effect, which is not produced by either of the

(*m*) Taylor *v.* Annand (1900), 18 R. P. C. 62.

(*n*) Williams *v.* Nye (1890), 7 R. P. C. 62; Ormson *v.* Clarke (1862), 13 C. B. 339; 14 C. B. 490; Newsum *v.* Mann (1890), 7 R. P. C. 307; Heys *v.* Hallmark (1891), 9 R. P. C. 25; Bridges' Patent (1901), 18 R. P. C. 257; Wardroper *v.* George Gibbs, Ld. (1903), 20 R. P. C. 355; Northern Press and Engineering Co., Ld. *v.* Hoe (R.) & Co. (1906), 23 R. P. C. 417, 613.

(*o*) Elias *v.* Grovesend Tinplate Co. (1890), 7 R. P. C. 455; Morgan *v.* Windover (1890), 7 R. P. C. 131.

(*p*) (1890), 7 R. P. C. 37, 62, 66.

substances separately, and under such circumstances the mixture may be good subject-matter for a patent (*q*). **Invention.**

The practical success of a new article is in itself cogent evidence from which the conclusion may be drawn that the exercise of invention was necessary to the first production of the article; though in many cases commercial success is by no means proof of invention (*r*). Nevertheless, immediate commercial success has a very important bearing on the question, especially when it appears that the thing never was done in the memory of man down to a particular point, and at the moment it is done it is a great success as regards utility (*s*). **Practical and commercial success.**

When an article suddenly springs into existence and meets a long unsatisfied demand, the length of time during which the demand was unsatisfied is matter from which it may be inferred that it is ingenuity alone which has enabled the inventor to surmount the obstacle, which otherwise would seem, from the mere existence of the long unsatisfied demand, to have existed somewhere, or in some shape (*t*). The merits of an invention are not to be deemed any the less because it subsequently appears what a little alteration was required in, or in the adjustment of, some of the parts of previously known machines, in order to produce the patented machine which will successfully do the work first done by it (*u*). **Unsatisfied demand.**

The fact, however, must not be overlooked that the demand itself may be quite new, and the novelty of the demand may have led immediately to the production, without ingenuity, of an obvious article to satisfy it, which consequently could not be good subject-matter (*x*).

Though the exact thing claimed by the patentee cannot be said to have been anywhere actually published or described **Effect of common knowledge on question of invention.**

(*q*) See Molassine Co., Ld. *v.* Townsend (R.) & Co., Ld. (1906), 23 R. P. C. 27.

(*r*) *E.g.*, Riekmann *v.* Thierry (1896), 14 R. P. C. 103; Fawcett *v.* Horman (1896), 16 R. P. C. 274; Longbottom *v.* Shaw (1891), 3 R. P. C. 333.

(*s*) See per Bowen, L.J., American Braided Wire Co. *v.* Thomson (1888), 5 R. P. C. 125; Ehrlich *v.* Ihlee (1888), 5 R. P. C. 205; Edison-Bell Phonograph Corporation *v.* Smith (1894), 11 R. P. C. 398; Parker *v.* Satchwell (1901), 18 R. P. C. 367-8; British Vacuum Cleaner Co., Ld. *v.* Suction Cleaners, Ld. (1904), 21 R. P. C. 312; Patent Exploitation, Ld. *v.* Siemens Brothers & Co., Ld. (1904), 21 R. P. C. 548.

(*t*) Gosnell *v.* Bishop (1888), 5 R. P. C. 158; American Braided Wire Co. *v.* Thomson (1888), 5 P. O. R. 125; Blakey *v.* Latham (1889), 6 R. P. C. 187; Elias *v.* Grovesend Tinplate Co. (1890), 7 R. P. C. 455; Gammons *v.* Battersby (1904), 21 R. P. C. 331.

(*u*) See *ibid.*; Gammons *v.* Battersby (1904), 21 R. P. C. 332.

(*x*) *Ibid.*

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in its entirety, yet the state of common knowledge may be such that there is, as a fact, no invention in passing from what was known to the thing claimed by the patentee (*y*).

Simplicity no bar to invention.

No apparent smallness or simplicity in what the patentee does will prevent the patent being good, if some invention was requisite to produce the new result; but, on the other hand, more novelty of manufacture, or usefulness in the application of known materials to analogous uses or the arrangement of old parts in combination, will not necessarily establish invention within the meaning of the patent law (*z*).

Sometimes an invention which is an improvement on what has gone before appears extremely simple when discovered and explained, but it does not at all follow that it was obvious before, or did not require invention, or is not of great merit, and the proper subject-matter of a patent. Thus in the case of the discovery of Lanolin the invention consisted in freeing the known commercial wool-fat from fatty acids and other impurities and so leaving only the cholesterine fats, which it was discovered when kneaded and worked take up water and form the highly useful product Lanolin. At the date of the patent the methods used for separating the cholesterine fats were old and known, and a preparation of wool-fat described by *Dioscorides* and called *œsypus*, from which the fatty acids had not been completely removed, was known as an unguent to the ancients. The Courts nevertheless found that the process which yielded the highly useful product Lanolin was the outcome of great invention and the subject-matter of a valid patent (*a*).

Conception of an idea may

Sometimes the merit of an invention consists in clearly

(*y*) See cases note (*z*), *infra*, and pp. 152, 431, *post*.

(*z*) Rickmann *v.* Thierry (1896), 14 R. P. C. 105; Longbottom *v.* Shaw (1891), 8 R. P. C. 336; Hinks *v.* Safety Lighting Co. (1876), L. R. 4 Ch. D. 607; Brook *v.* Aston (1857-9), 8 Ell. & B. 478; Ormson *v.* Clarke (1862), 13 C. B. 339; 14 C. B. 400; Saxby *v.* Gloucester Waggon Co. (1880), L. R. 7 Q. B. D. 305; 50 L. J. Q. B. 577; Williams *v.* Nye (1890), 7 R. P. C. 62; Newsum *v.* Mann (1890), 7 R. P. C. 307; Elias *v.* Grovesend Tinplate Co. (1890), 7 R. P. C. 455; Morgan *v.* Windover (1890), 7 R. P. C. 131; Heys *v.* Hallmark (1891), 9 R. P. C. 25; Duckett *v.* Whitehead (1895), 12 R. P. C. 376; Actien Gesellschaft fur Cartonagen Industrie *v.* Schroeder (1896), 13 R. P. C. 466; Fuller *v.* Handy (1903), 21 R. P. C. 6; McNaught *v.* Dawson (1905), 22 R. P. C. 389; 23 R. P. C. 219; Arnot *v.* Dunlop Pneumatic Tyre Co., Ld. (1904), 22 R. P. C. 105, 472; 25 R. P. C. 309; Northern Press Engineering Co., Ld. *v.* Hoe (R.) & Co. (1906), 23 R. P. C. 417, 613.

(*a*) Benno Jaffé und Darmstaedter Lanolin Fabrik *v.* Richardson (1893), 11 R. P. C. 93, 261; see also *ibid.*

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appreciating some particular useful end to be attained, or, as has been aptly said, in "apprehending a desideratum," the merit of the patent consisting not so much in the way in which the idea was carried out as in conceiving the idea itself (*b*). In fact, invention may lie in an idea, or in the way of carrying out an idea, or in the combination of the two. If the patentee shows a way of carrying out an idea in which invention lies, the patent is valid, though the way of carrying out the idea may involve no invention (*c*). Thus the idea of using the old and well-known operation of "shogging" for the new purpose of obviating waste of thread in lace-making machines has been held to be the basis of a patentable invention, notwithstanding that the realisation of the idea involved no difficulty (*d*).

To be the merit of an invention.

Again, it has been held that the fact a chemist would know *a priori* that by mixing two known substances together an explosive would be the result, did not destroy the patent of a man, who by experimentally mixing them together and treating the result in a certain known way so as to waterproof it found he did get an explosive, Roburite, which satisfied commercial requisites which were not satisfied by explosives known before (*e*). In this case the invention consisted, as it often does in other cases, of putting together items of common knowledge which no one else has ever thought of combining—common knowledge that you may mix, common knowledge that you may waterproof—but the essence of the invention was that the inventor had taken a great many things which were common knowledge and tried which of them would produce a useful and new result, and he thus ascertained that, following the process described by him in his specification, he arrived at a new and useful result, which was undoubtedly invention, and in the particular case invention of a somewhat high order.

But the mere substitution of an obvious chemical equivalent for a chemical substance used in a known process is not

(*b*) See Fawcett *v.* Homan (1896), 13 R. P. C. 405, 410; Hayward *v.* Hamilton (1881), Griff. P. C. 116, 117.

(*c*) See Hickton's Patent Syndicate *v.* Patents and Machine Improvements Co., Ld. (1909), 26 R. P. C. 539.

(*d*) Hickton's Patent Syndicate *v.* Patents and Machine Improvements Co., Ld. (1909), 26 R. P. C. 339.

(*e*) Lancashire Explosives Co. *v.* Roburite Explosives Co. (1895), 12 R. P. C. 470, 482.

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

Where some substantial advance is made in the arts the Courts do not conclude that there is no invention merely because the way in which the advance was effected was very simple, and after its publication it may be matter of surprise that the advance was not made earlier. On the other hand, the Courts in coming to a conclusion whether there has been invention or not, do not forget the prejudicial effects upon trade which may be caused by patents being taken out for unsubstantial alterations in known machines or contrivances in order to effect a small result of trifling or dubious utility (*g*).

Where the idea has been published, the patent of a person who may be the first to put the idea into practice cannot be valid, if, upon the facts of the case, the putting the idea into practice did not involve invention. Thus, *Hennebique's* patent for a manufactured article, viz., a pile constructed of ferro-concrete, was declared invalid by the Court of Appeal and the House of Lords, because, at the date of the patent, the idea of using ferro-concrete for such a purpose had been published by an abstract from a Belgium specification, and, upon the facts of the case, no invention was involved in constructing the pile of ferro-concrete as *Hennebique* constructed it (*h*).

Selection of a member of a class.

Invention, again, may sometimes consist in the selection of particular members of a class of substances, which possess

(*f*) (1905), 22 R. P. C. 199.

(*g*) See Waterhouse's Patent (1906), 23 R. P. C. 476; International Harvester Company of America *v.* Peacock (1908), 25 R. P. C. 765.

(*h*) Hennebique *v.* Cowlin (1909), 26 R. P. C. 280. This case is reported in the court of first instance and Court of Appeal under the name of Moucel *v.* Coignet, 23 R. P. C. 649; 24 R. P. C. 229.

properties by means of which the inventor is able to produce a result which is new and useful, or, if old, is attained in a better or more economical way than hitherto (*i*). **Invention.**

So, though a class of bodies may have been employed before for a particular purpose, there may be such invention in selecting one member of the class which possesses particular advantages not shared by the other members of the class as will support a patent for the use of that particular member (*k*).

So also, though different machines of a certain general class or character be well known, if a person selects and applies one specially adapted for his purpose to effect a new object and produce a new article, or an old article in a substantially more expeditious and economical way than it was produced before, then he may properly claim, as subject-matter of a patent, that machine as applied to the new object, notwithstanding that he could not have claimed the machine *per se*—that is to say, without limitation as to its application (*l*). **New application of known machine.**

Again, invention may consist in the use according to a new method of a known machine whereby no structural alteration is required in the machine, but a new and useful result is produced (*m*); or it may consist in degree—*e.g.*, strengthening a part of a previously proposed combination whereby what is in fact a new and useful process may be effected (*n*); or it may consist in selecting a known thing of a particular size or degree, or constructing a part of a known machine or tool of a particular size and shape (*o*), whereby a result highly desired, but till then incapable of attainment, is achieved. **Use according to new method of old machine.** **Degree.** **Size or shape.**

(*i*) Farbenfabriken vorm. F. Bayer *v.* Bowker (1891), 8 R. P. C. 389; Lancashire Explosives Co. *v.* Roburite Explosives Co. (1895), 12 R. P. C. 470, 478; 13 R. P. C. 429; 14 R. P. C. 303; but see Fabriques de Produits Chimiques de Thann et de Mulhouse *v.* Lafitte (1899), 16 R. P. C. 61.

(*k*) Hills *v.* The London Gas Light Co. (1860), 5 H. & N. 312; 29 L. J. Ex. 409; Wylie and Morton's Patents (1896), 13 R. P. C. 97, in which a patent was refused on the ground that there was in that case no invention in making the selection.

(*l*) Adament Stone and Paving Co. *v.* Corporation of Liverpool (1896), 14 R. P. C. 21; Dowling *v.* Billington (1889), 7 R. P. C. 191.

(*m*) Dowling *v.* Billington (1889), 7 R. P. C. 191.

(*n*) British Vacuum Cleaner Co., Ld. *v.* Suction Cleaners, Ld. (1904), 21 R. P. C. 303; Lyon *v.* Goddard (1893), 10 R. P. C. 121, 334; 11 R. P. C. 113; British Vacuum Cleaner Co., Ld. *v.* London and South Western Ry. Co. (1911), 28 R. P. C. 77.

(*o*) Jandus Arc Lamp and Electric Co., Ld. *v.* Arc Lamp Co. (1905), 22 R. P. C. 277, 297; Fellows *v.* Brookes (1910), 27 R. P. C. 89.

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Mere use of known machine in a more beneficial manner.

The foregoing instances of invention must, however, be contrasted, and not confused with, the case of a claim to a mere use of a known machine in a more beneficial manner (*p*); or the mere use of a known material for the construction of a known class of articles whereby a pleasing result is produced (*q*).

Mere adaptation of old idea.

It is not invention to adapt, without ingenuity, a well-known idea in a well-known manner for a well-known purpose, though the identical adaptation has not been made before and a very useful effect is the result (*r*); or merely with greater skill to apply well-known tools and processes, and so to satisfy a want felt by persons in a particular trade (*s*); or the mere judicious carrying out of a well-known method together with mere adaptive skill in manufacture (*t*).

Mere skilful application of known tool, or judicious carrying out of known method,

or mere alteration of shape or proportions of parts is not invention.

Neither is it invention merely to alter the shape of a known thing, though to do so might possibly be the subject of a new design (*u*); or to alter the proportions of parts used in combination before, when proportion is not of the essence of success (*x*).

Classes of Inventions.—Any invention which possesses all the attributes imposed as conditions by the law—viz., that it is included in the term "new manufactures" as used in the sixth section of the Statute of Monopolies (*y*) and is new and useful—may be the subject of a grant of letters patent.

Exhaustive classification not possible.

It is not possible to give a classification of inventions, including all which may be held to fall within the definition given in 21 Jac. I. c. 3, s. 6. The difficulty which exists in giving an exhaustive classification of all inventions which could possibly support a grant of letters patent arises from the fact that the arts and manufactures of the country are in a continual state of progression, and consequently desirable results, never before contemplated, are continually presenting themselves, and the most minute changes may constitute new and useful inventions when they are the outcome of thought, design, or skilful ingenuity.

(*p*) See pp. 86 and 60, *post*.

(*q*) Hudson, Scott & Sons, Ld. *v.* Barringer, Wallis and Manners, Ld. (1905), 23 R. P. C. 79, 502; March *v.* Wolff (1906), 24 R. P. C. 265.

(*r*) Pp. 88—101, *post*.

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

(*t*) See Beavis *v.* Rylands Glass and Engineering Co., Ld. (1899), 17 R. P. C. 98, 704.

(*u*) Heys *v.* Hallmark (1892), 9 R. P. C. 25; Beavis *v.* Rylands Glass and Engineering Co. (1900), 17 R. P. C. 98, 704.

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

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

Classes of Inventions.

It may, however, be pointed out that all inventions for which letters patent have hitherto been upheld on the ground of subject-matter may be classed under one or more of the following heads:—

I. New or old methods of applying new principles.
II. New methods of applying old principles.
III. New contrivances applied to new objects or purposes.
IV. New contrivances applied to old objects or purposes.
V. New combinations of new or old, or partly new and partly old, parts, which result either in the production of a material object or process.
VI. New methods, involving the exercise of invention, of applying old things or processes.
VII. Improvements on known methods, processes or combinations consisting in the addition to, the omission from, or the rearrangement of, old steps or parts.
VIII. Application, with ingenuity, of materials, processes, or things to some one or more specific useful purpose or purposes.

Principles.

Principles alone are not subject-matter,

A new principle—*i.e.*, an abstract law of Nature, a fundamental law of science—cannot be the subject-matter of a valid patent.

Principles may be of the utmost value to mankind, as, for instance, the principle of gravitation or the doctrine of evolution, which have in the hands of their discoverers and others been productive of the greatest usefulness. The law, however, will not attempt to secure to the discoverer the sole use and enjoyment of such a bare principle, or to prohibit others from making use of it. In the language of Lord *Kenyon*, it would be difficult to frame a specification of a philosophical principle, it would be something like an idea without a substratum (*z*).

Moreover, the very statement of what a principle is proves it not to be a ground for a patent. It is a first ground and rule for arts and sciences, or, in other words, the elements

(*z*) Hornblower *v.* Boulton (1799), 8 T. R. 95; Dav. P. C. 221; see also Boulton *v.* Bull (1795), 2 H. Bl. 463.

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and rudiments of them. A patent must be for some production from those elements, and not for the elements themselves; for some new manufacture, whether with or without principle, produced by art or accident (*a*).

A principle cannot of itself, apart from a practical application, produce any vendible article or manufacture, and therefore, unless the discoverer of a principle points out some practical application of it, it is clear that he cannot give the public the consideration necessary to support a patent—viz., a new and useful manufacture.

but may be together with a method of application.

Principles in a concrete form, together with a method of applying them to a new and useful purpose, may form the subject of a grant of letters patent. In other words, a new principle or a new idea as regards any art or manufacture, together with a mode of carrying it into practice, may be patented, though the idea alone, and very likely the machine alone, because the machine might not be new, is not proper subject-matter (*b*).

The following remarks of *Jessel*, M.R. (*c*), in reference to the patent for the *Otto* gas engine are most instructive in this connection:

> "The first objection is that this is not the subject-matter of a patent, because it is said that what is claimed is a principle . . . or, as it is sometimes termed, the idea of putting a cushion of air between the explosive mixture and the piston of the gas motor engine, so as to regulate, detain, or make gradual what would otherwise be a sudden explosion. Of course that could not be patented. I do not read the patent so. I read the patent as being to the effect that the patentee tells us that there is the idea which he wishes to carry out, but he also describes other kinds of machines which will carry it out, and he claims to carry it out substantially by one or other of these machines. That is the subject of a patent. If you have a new principle, or a new idea, as regards any art or manufacture, and then show a mode of carrying that into practice, you may patent that, though you could not

(*a*) Boulton *v.* Bull (1795), Dav. P. C. 196, 198.

(*b*) Otto *v.* Linford (1881), 46 L. T. N. S. 35; L. R. 18 Ch. D. 394; Crossley *v.* Porter (1853), Moore, P. C. 240; Cassel Gold Extracting Co. *v.* Cyanide Gold Recovery Syndicate (1895), 12 R. P. C. 232, 256.

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

Principles.

patent the idea alone, and very likely could not patent the machine alone, because the machine alone would not be new. One of the strongest illustrations that I know of is the patent for the hot blast in the iron manufacture, where there was nothing new at all except the idea that the application of hot air instead of cold air to the mixture of iron ore and fuel would produce most remarkable results in the shape of economy in the manufacture of iron. The inventor or discoverer could not patent that, but what he did was this. He said: 'I will patent that idea in combination with the mode of carrying it out; that is, I tell you you may heat your air in a closed vessel next your furnace, and then that will effect the object.' It was held that that would do. . . . Now that is a much stronger illustration than this of the validity of a patent as regards the subject-matter. For here is a complicated machine. . . . In the case of the hot blast the man did not pretend to invent anything; he said a machine of any shape in which you can heat air is sufficient. Mr. *Otto* does allege he has invented a machine. It appears that he did, although a machine which, *per se*, was not of sufficient novelty probably to support a patent. It comes therefore to this, that we have a principle and a mode of carrying it out, and, I will assume for this purpose, sufficiently described, and that is good subject-matter for a patent."

Claim to all methods of application amounts to claim to principle itself.

A claim to every mode of carrying a principle or idea into effect amounts to a claim for the principle or idea itself, and therefore renders the patent void (*d*), unless the patentee has described in the specification a method or methods of utilising the principle or idea, *i.e.*, unless he has embodied the principle or idea, in which case such a claim is good provided always that the patentee was the discoverer of the principle or idea (*e*).

Illustrations of allowable claims to principles coupled with methods of application.

Thus the patent, the validity of which was questioned in *Neilson* v. *Harford* (*f*), and also in *Household Co.* v. *Neilson* (*g*), was for an improved method of applying air to produce heat in furnaces, and the specification stated that

(*d*) See Neilson *v.* Harford (1841), 1 W. P. C. 295; Booth *v.* Kennard (1856), 2 H. & N. 84; 26 L. T. Ex. 23, 305; Wyeth *v.* Stone, 1 Story, 273; Arnold *v.* Bradbury (1871), L. R. 6 Ch. App. 711; Patterson *v.* Gas Light & Coke Co. (1875), L. R. 2 Ch. D. 812; 3 App. Cas. 239.

(*e*) See p. 57, *post*.

(*f*) (1841), 1 W. P. C. 295, 328, 331.

(*g*) (1843), 1 W. P. C. 673.

Principles. "a blast or current of air must be produced by blowing apparatus in the ordinary way. The blast so produced is to be passed from the blowing apparatus into an air-vessel, and from that vessel by means of a pipe into the furnace. The air-vessel must be kept artificially heated at a considerable temperature. It is better to be kept to red heat, or nearly so, but so high a temperature is not absolutely necessary to produce a beneficial effect. The size of the air-vessel must depend upon the blast and on the heat necessary to be produced. *The form or shape of the vessel*, or receptacle, *is immaterial to the effect*, and may be adapted to the local circumstances or situation." There was no separate claim. The defendants in *Neilson* v. *Harford* contended that the patent was bad, as being for a principle only, but the Court of Exchequer, after much debate, came to the conclusion that it claimed not only a principle, but also a practical means of carrying the principle into effect—viz., heating the air in a separate vessel, and was therefore good. As reported in *Household Co.* v. *Neilson* (*h*), Lord Justice Clerk *Hope*, addressing the jury and referring generally to the validity of patents for methods of carrying principles into effect, used the following words, which were not objected to by the House of Lords in that case, and have often been quoted with approval by Judges in subsequent cases:

> "It is quite true that a patent cannot be taken out solely for an abstract philosophical principle—for instance, for any law of Nature, or any property of matter, apart from any mode of turning it to account in the practical operations of manufacture, or the business, and arts, and utilities of life. The mere discovery of such a principle is not an invention in the patent law sense of the term. Stating such a principle in a patent may be a promulgation of the principle, but it is no application of the principle to any practical purpose. And without that application of the principle to a practical object and end, and without the application of it to human industry, or to the purposes of human enjoyment, a person cannot in the abstract appropriate a principle to himself. But a patent will be good, though the subject of the patent consists in the discovery of a just, general, and most com-

(*h*) (1843), 1 W. P. C. 673, 683.

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prehensive principle in science or law of Nature, if that principle is by the specification applied to any special purpose, so as thereby to effectuate a practical result and benefit not previously attained. The main merit, the most important part of the invention, may consist in the conception of the original idea—in the discovery of the principle in science, or of the law of Nature, stated in the patent—and little or no pains may have been taken in working out the best manner and mode of the application of the principle to the purposes set forth in the patent. But still if the principle is stated to be applicable to any special purpose, so as to produce any result previously unknown, in the way and for the objects described, the patent is good. It is no longer an abstract principle. It comes to be a principle turned to account to a practical object, and applied to a special result. It becomes, then, not an abstract principle, which means a principle considered apart from any special purpose or practical operation, but the discovery and statement of a principle for a special purpose, that is, a practical invention, a mode of carrying a principle into effect. That such is the law, if a well-known principle is applied for the first time to produce a practical result for a special purpose, has never been disputed. It would be very strange and unjust to refuse the same legal effect, when the inventor has the additional merit of discovering the principle as well as its application to a practical object. The instant that the principle, although discovered for the first time, is stated, in actual application to, and as the agent of, producing a certain specified effect, it is no longer an abstract principle, it is then clothed with the language of practical application, and receives the impress of tangible direction to the actual business of human life."

In *Patterson* v. *Gas Light and Coke Co.* (*i*), a patent, which claimed the employment of sulphide of calcium in separate purifiers as a means of purifying coal-gas from sulphur existing in other forms than that of sulphuretted hydrogen, was declared void, on the ground that the claim amounted to a claim to the known principle however effected as distinct from a particular invented means of carrying it out. The judgment of *James*, L.J., which was affirmed in the House of

(*i*) (1875), L. R. 2 Ch. D. 812; 3 App. Cas. 239; 45 L. J. Ch. 843; 47 L. J. Ch. 402.

Principles. Lords, contains the following passage in reference to the claim for "the employment of sulphide of calcium in separate purifiers as a means of purifying coal-gas from sulphur existing in other forms than that of sulphuretted hydrogen":

> "There is nothing in this but the enunciation of a chemical truth that pure sulphide of calcium will absorb the sulphur compounds. The plaintiff believed that he had discovered that chemical truth, although it had been taught for many years in many books, and was well known to chemists. There is no invention of any particular process or means of employing the pure sulphide of calcium. If pure sulphide of calcium is to be used, it must be used in some separate purifier, and there is nothing therefore in any previous part of the specification to limit the universality of the claim to the employment of sulphide of calcium for the removal of sulphur in other forms than sulphuretted hydrogen. It is obviously impossible to support such a claim as that, which was plainly based on the plaintiff's mistaken idea that he had discovered that peculiar property in sulphide of calcium."

In *Dangerfield* v. *Jones* (*k*), a patent for a mode of bending wood for the handles of walking-sticks, &c., in which the claim was "the application of a flame of gas or other combustible fluid or liquid as described for softening the fibres of the wood while being bent in combination with a clamping apparatus for securing the wood in its bent form until the fibres are set, so that the work may remain permanent as herein set forth," was declared to be perfectly valid, Vice-Chancellor *Wood*, before whom the case was tried, saying: "If, having a particular purpose in view, you take the general principles of mechanics, and apply one or other of them to a manufacture to which it has never been before applied, that is sufficient ground for taking out a patent, provided that the Court sees that that which has been invented is new, desirable, and for the public benefit" (*l*).

In *Minter* v. *Wells* (*m*), on motion to nonsuit the plaintiff, who had succeeded in an action against the defendant for infringement of a patent, in the specification of which *Minter*

(*k*) (1865), 13 L. T. N. S. 142. (*l*) *Ibid.*

(*m*) (1834), 1 W. P. C. 134.

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claimed "the application of a self-adjusting leverage to the back and seat of a chair, whereby the weight on the seat acts as a counterbalance to the pressure against the back of such chair, as above described," the defendant contended that *Minter* had claimed the principle of the lever, but the Court held that it was the application of a self-adjusting leverage to the back and seat of a chair, the patentee having described what that self-adjusting leverage was. And it was further held that any application of a self-adjusting leverage to the back and seat of a chair producing this effect, that the one acts as a counterbalance to the pressure against the other, would be an infringement of the patent, and it was not a leverage only, but the application of a self-adjusting leverage; and it was not a self-adjusting leverage only, but a self-adjusting leverage producing a particular effect, by means of which the weight on the seat counterbalanced the pressure against the back. *Parke*, B., in reply to the statement that this was nothing more than one of the first principles of mechanics, observed: "But that not being in combination before cannot that be patented? It is only for the application of a self-adjusting leverage to a chair—cannot he patent that? He claims the combination of the two, no matter in what shape you may combine them, but if you combine the self-adjusting leverage, which he thus applies to the subject of a chair, that is an infringement of his patent."

In the *Electric Telegraph Co.* v. *Brett* (*n*) the patentees claimed, substantially: (1) "We wish it to be understood that we make no claim to the application of the multiplying coils of conducting wires herein described (meaning thereby the galvanometer coils and magnetic needles), but the improvement and the adaptation of magnetic needles for giving signals consists in disposing the needles in vertical planes with fixed horizontal axes, making them heavier at one end than the other, so that they hang perpendicularly, and limiting the angular motion by stops, against which the needles may rest in suitable inclining directions for pointing out on a vertical dial the signification of the signals. (2) The combining several needles, so as to give signals by determinate angular motions. (3) The improvement whereby the com-

(*n*) (1851), 10 C. B. 838; 20 L. J. C. P. 123.

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plete apparatus for giving signals and sounding alarms, as described, may have duplicates of such apparatus at intermediate places between the two ends, all such duplicates operating simultaneously with each other." In the judgment, *Cresswell, J.*, said: "It was insisted that the giving of duplicate signals at intermediate stations was not the proper subject of a patent, being an idea or principle only, and not a new manufacture. But we think that the patentees not only communicated the idea or principle that duplicate signals might be given, but showed how it might be done—*i.e.*, by duplicate apparatus at each station—and that this is a fit subject of a patent."

Claim to a general arrangement distinguished from claim to a principle.

A claim to a particular general arrangement may be distinguished from a claim to a principle itself. Phonographs were at one time made with a single diaphragm, with a single tool or point for recording and reproducing. Later, two diaphragms were used with separate recording and reproducing points, together with a floating weight applied to give the proper pressure to the reproducing point. Edison then discovered that the floating weight might also be applied to the recording point, and so a single diaphragm with both the points on it might be used. For this discovery a patent was obtained, and the specification claimed (*inter alia*) "In a phonograph, attaching both the recording point and the reproducing point to the same diaphragm, means being provided whereby either of the points may be brought into operative position on the surface of the phonogram." In an action brought for the infringement of this patent, it was sought on the defendant's behalf to establish that the claim was a claim to monopolise the principle of having both points on a single diaphragm. It was however held, both by the Judge of first instance and the Court of Appeal, that on the evidence the claim was not for a principle, but for a novel and useful arrangement (*o*). Lord *Esher*, M.R., in the Court of Appeal, adopted the decision of *Wright*, J., *ipsissimis verbis*, and said (*p*):

"Now, I have said I have confined this mode of dealing with this patent to the case of a machine, and I therefore adopt

(*o*) Edison-Bell Phonograph Corporation *v.* Smith (1894), 11 R. P. C. 148, 389.

(*p*) 11 R. P. C. 397.

precisely the way in which Mr. Justice *Wright* has stated the matter: 'There remains the question whether the patent is invalidated by the first claim. That claim appears to me to be, on the face of it, a claim of monopoly for every form of phonograph in which two styles are attached to one diaphragm, so that each style can be brought to bear on the cylinder. It is stated that such a claim is a claim to monopolise a principle. I think not.' Now that is the part with which I say I agree. 'It is a claim for a particular arrangement of essential parts of a machine, which arrangement has obvious advantages, but has never before been made practicable in a way disclosed by the specification. Such a claim ought properly to be construed as a claim of monopoly for that arrangement carried out by any means substantially similar to those disclosed in the specification, and that appears to be sufficient.' I agree with that, and therefore I think that so far as this objection is concerned, applying it to each and every one of the claims, it shows that these claims are none of them wanting in that respect."

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Ambit of patent for carrying a new principle into effect.

It has been demonstrated in the foregoing pages that a patent for carrying a principle which is new into effect protects the grantee against all other modes of carrying the same principle into effect (*q*).

In order that a patent may secure to the patentee the application of a principle by means different to those described in the specification, it is only necessary that the principle itself be new, and the patentee sufficiently describes a means of applying it. It is not necessary that the means, as well as the principle, should be new, for the novelty of the invention consists in applying the new principle by the means specified. If, however, not only the principle but the means is also new, then the means may form the subject of a distinct claim or a separate patent.

(*q*) Jupe *v.* Pratt (1837), 1 W. P. C. 146; Chamberlain and Hookham *v.* Mayor, &c. of Bradford (1903), 20 R. P. C. 684; Ashworth *v.* English Card Clothing Co., Ld. (1903), 20 R. P. C. 797; Consolidated Car Heating Co. *v.* Carne (1903), 20 R. P. C. 767; Sandow *v.* Brooks (1903), 21 R. P. C. 33, 333; 23 R. P. C. 6; Haskell Golf Ball Co. *v.* Hutchison (1905), 22 R. P. C. 492; Minter *v.* Wells (1834), 1 W. P. C. 127; Household Co. *v.* Neilson (1843), 1 W. P. C. 685; Otto *v.* Linford (1881), 46 L. T. N. S. 35; Crossley *v.* Beverley (1829), 1 W. P. C. 106; Badische Anilin und Soda Fabrik *v.* Levinstein (1883), L. R. 24 Ch. D. 156, 171; Easterbrook *v.* The Great Western Ry. Co. (1885), 2 R. P. C. 201.

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In *Jupe* v. *Pratt* (*r*), *Alderson*, B., in the course of the argument, laid down the law thus:

> "You cannot take out a patent for a principle; you may take out a patent for a principle coupled with the mode of carrying the principle into effect, provided you have not only discovered the principle, but invented some mode of carrying it into effect. But then you must start with having invented some mode of carrying the principle into effect; if you have done that, then you are entitled to protect yourself from all other modes of carrying the same principle into effect, that being treated by the jury as piracy of your original invention."

The above expressions of *Alderson*, B., would at first sight appear to establish the proposition, that if a man has invented a new principle, and shows one method of carrying it into effect, he thereupon becomes entitled to protection against every other possible method of carrying out the new principle. That it does do so must now be conceded, since it has been accepted by the House of Lords as a correct statement of the settled state of the law on the subject (*s*). Before this decision of the House of Lords, there was some doubt as to whether the dictum must be considered a correct statement of the law. For instance, *Cotton*, L.J., pointed out that the above language of *Alderson*, B., was used during the discussion of the case, probably to meet something that was said by counsel, and did not express his full opinion. The Lord Justice stated that in his opinion a patentee could prevent any one from using the same method of carrying a new principle into effect, or from using the same thing with only a colourable difference. Where there is a principle first applied in a machine, capable of carrying it into effect, the Court looks more narrowly at those who carry out the same principle, and say they do it by a different mode, and looks to see whether, in effect, although the mode is not exactly the same, it is only a colourable difference—a mechanical equivalent for a substantial part of the patentee's invention being looked upon as a more colourable difference, and there-

(*r*) 1 W. P. C. 145, 146.
(*s*) Chamberlain and Hookham *v.* Mayor, &c. of Bradford (1903), 20 R. P. C. 684.

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fore he is entitled to an injunction against that mode of carrying out his principle, which is only the same in substance as that which he patented, though there are colourable differences (*t*). There is no longer any necessity for this qualification of Baron *Alderson's* dictum, since, as stated by Lord *Davey*, the question in every case is in what consists the originality and merit, or to use the well-known phrase of Lord *Cairns*, the "pith and marrow," of the patented invention. If that includes the discovery or suggestion of a new principle, as well as the means of carrying it into effect, an infringer is not entitled to take the principle although he uses somewhat different machinery for the application of it to a particular purpose (*u*). If a patentee desires to claim a general principle he should in his own interest make it clear that he does so (*x*), and he should be careful not to frame his claim so that it will be construed as one for a particular combination only (*y*).

Ambit of patent for carrying old principle into effect.

If a principle is not new, whether or not it has been successfully applied before (*z*), a patent for a method of applying it only secures to the patentee protection in respect of the particular method specified, and he cannot restrain the use of different methods of carrying the same principle into effect, which may be fit subject-matter for other valid patents (*a*).

Thus finishing hosiery and other goods by pressing between steam-heated rollers was no infringement of a patent for

(*t*) See judgment of Cotton, L.J., Automatic Weighing Machine Co. *v.* Knight (1889), 6 P. O. R. 304, 305; see also Automatic Weighing Machine Co. *v.* Combined Weighing Machine Co. (1889), 6 P. O. R. 367; Automatic Weighing Machine Co. *v.* National Exhibitions Association (1891), 8 R. P. C. 345; 9 R. P. C. 41, 44; Nobel's Explosives Co. *v.* Anderson (1894), 11 R. P. C. 527, 530.

(*u*) Chamberlain and Hookham *v.* Mayor, &c. of Bradford (1903), 20 R. P. C. 684; Consolidated Car Heating Co. *v.* Carne (1903), 20 R. P. C. 767; Ashworth *v.* English Card Clothing Co., Ld. (1903), 20 R. P. C. 797, 798; Sandow *v.* Brooks (1903), 21 R. P. C. 33, 333; 23 R. P. C. 6; Haskell Golf Ball Co. *v.* Hutchison (1905), 22 R. P. C. 492.

(*x*) See p. 200, *post*.

(*y*) See Ackroyd and Best, Ld. *v.* Thomas (1904), 21 R. P. C. 737.

(*z*) Chamberlain and Hookham *v.* Mayor, &c. of Bradford (1903), 20 R. P. C. 673.

(*a*) Proctor *v.* Bennis (1887), 4 R. P. C. 333; L. R. 36 Ch. D. 740; Automatic Weighing Machine Co. *v.* Knight (1889), 6 R. P. C. 113; Siddell *v.* Vickers (1888), 5 R. P. C. 416; Needham *v.* Johnson (1888), 5 R. P. C. 49; Bovill *v.* Pimm (1856), 1 Ex. R. 718, 739; Barber *v.* Grace (1847), 1 Ex. R 339; 17 L. J. Ex. 122; Jupe *v.* Pratt (1837), 1 W. P. C. 145; Curtis *v.* Platt (1863), L. R. 3 Ch. D. 135, n.; Lister *v.* Leather (1857), 8 E. & B. 1004, 1033; Saxby *v.* Clunes (1877), 43 L. J. Ex. 228; Dudgeon *v.* Thomson (1877), L. R. 3 App. Cas. 34; Nordenfelt *v.* Gardner (1884), 1 R. P. C. 61; Hocking *v.* Hocking (1889), 6 R. P. C. 76.

Processes. finishing such goods by pressing between steam-heated flat-sided boxes, the principle of steam-heating being old for the purpose (*b*).

PROCESSES.

Processes are subject-matter. The proposition that a method or process of itself and apart from the thing produced, or result, can be the subject-matter of a valid patent was finally established by the decision in *Crane* v. *Price* (*c*), in 1842.

History of the cases. For some time prior to that decision there were many cases and dicta of the Judges indicating the general opinion that grants made in respect of such subject-matter were not invalid. *Abbot*, C.J., in *R.* v. *Wheeler* (*d*), pointed out that the word "manufacture" "may perhaps extend to a new process to be carried on by known implements, or elements, acting upon known substances, and ultimately producing some other known substance, but producing it in a cheaper or more expeditious manner, or of a better or more useful kind." In *Boulton* v. *Bull* (*e*), the Court was divided in opinion, but *Eyre*, C.J., made the following remarks:

"It was admitted in the argument at the Bar that the word '*manufacture*' in the statute (*f*) was of extensive signification, that it applied not only to things made but to the *practice of making*, to principles carried into practice in a new manner, to new results of principles carried into practice. Let us presume this admission. Under *things made* we may class, in the first place, new compositions of things, such as manufactures in the most ordinary sense of the word; secondly, all mechanical inventions, whether to produce old or new effects, for a new piece of mechanism is certainly a thing made. Under the *practice of making* we may class all new artificial manners of operating with the hand, or with instruments in common use, new processes in any art producing effects useful to the public. When the effect produced is some new substance or composition of things, it would seem that the privilege of the sole working or making ought to be

(*b*) Barber *v.* Grace, 1 Ex. R. 339; 17 L. J. 122.
(*c*) 4 M. & G. 580; 1 W. P. C. 393; 12 L. J. C. P. 81; see p. 60, *post*.
(*d*) (1850), 2 B. & Ald. 493.
(*e*) (1795), 2 H. Bl. 463; 3 Revised Reports, 439.
(*f*) 21 Jac. 1, c. 3.

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for such new substance, or composition, without regard to the mechanism or process by which it has been produced, which, though perhaps also new, will be only useful as producing the new substance. . . . When the effect produced is no substance or composition of things, the patent can only be for the mechanism, if new mechanism is used, *for the process, if it be a new method of operating*, with or without old mechanism, by which the effect is produced. . . . In the list of patents with which I have been furnished there are several for *new methods* of manufacturing articles in common use, where the sole merit and the whole effect produced are the saving of time and expense, and thereby lowering the price of the article and introducing it into more general use. Now I think these *methods* may be said to be new manufactures. . . . The patent cannot be for the effect produced, for it is either no substance at all, or, what is exactly the same thing as to the question upon a patent, no new substance, but an old one produced advantageously for the public. It cannot be for the mechanism, for there is no new mechanism employed; it must then be for the method; and I would say, in the very significant words of Lord *Mansfield*, in the great case of the copyright (*g*), it must be for the method detached from all physical existence whatever."

Hall v. *Jarvis* (*h*) decided that though the application of the flame of oil to remove the superfluous fibres from lace and other goods was a mere process, yet a patent for this invention could be upheld on the ground of subject-matter. In *Hill* v. *Thompson* (*i*), Lord *Eldon*, L.C., stated that "there may be a valid patent for a new combination of materials previously in use for the same purpose, *or for a new method of applying such materials*." So also in *Morgan* v. *Seaward* (*k*), *Parke*, B., said that the word "manufacture" in the statute (*l*) must be construed in one of two ways; it may mean the machine when completed, *or the mode of constructing the machine*; but in *Gibson* v. *Brand* (*m*), *Tindal*, C.J., pointed out that it was not necessary in that case to go into the question whether or not a patent can be supported

(*g*) 4 Bun. 2397.
(*h*) (1822), 1 W. P. C. 100, approved in Losh *v.* Hague (1836), 1 W. P. C. 207, and Crane *v.* Price (1842), 5 M. & G. 580; 1 W. P. C. 393; 12 L. J. C. P. 81.
(*i*) (1817), 1 W. P. C. 237.
(*k*) (1837), 1 W. P. C. 193.
(*l*) 21 Jac. 1, c. 3, s. 6.
(*m*) (1841), 4 M. & G. 179; 1 W. P. C. 627.

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for a *process* only. If the specification were properly prepared it probably might be considered a fit subject for a patent.

Law settled by Crane *v.* Price.

Crane v. *Price* (*n*), tried in 1842, finally settled the question. In this case the patent related to the use of anthracite or stone coal, in conjunction with a hot-air blast, for the smelting of iron, and the claim was in the following terms: "The application of anthracite or stone coal combined with the using of a hot-air blast in the smelting and manufacture of iron." In delivering the judgment of the Court of Common Pleas, *Tindal,* C.J., said:

> "The question becomes this, whether admitting the using of the hot-air blast to have been known before in the manufacture of iron with bituminous coal, and the use of anthracite or stone coal to have been known before in the manufacture of iron with the cold blast, but that the combination of the two together (the hot-air blast and the anthracite) was not known before in the manufacture of iron—such combination can be the subject of a patent. We are of opinion that, if the result produced by such a combination is either a new article, or a better article, or a cheaper article to the public than that produced before by the old method, such combination may well become the subject of a patent."

Since *Crane* v. *Price* it has been held that a new and alternative method of arriving at a known result, irrespective of whether that result is attained in a better or cheaper form, may be patentable if the new method was the outcome of invention. But a process, to be patentable, must be a process which leads to some result, and the result arrived at must be useful, though it need not be an article at all; for example, a new process for chemically cleaning dirty linen would be good subject-matter, but a process of treating materials of which no result at all could be predicted would not be patentable (*o*).

Decision in Crane *v.* Price doubtful upon the facts.

Though the above statement of the law by *Tindal,* C.J., in *Crane* v. *Price* has never been questioned, Judges have expressed doubts as to whether, upon the facts, the case was correctly decided (*p*). Novelty of the result is, no doubt, evi-

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

(*o*) See Alsop's Patent (1907), 24 R. P. C. 752, per Parker, J.

(*p*) See Bamlett *v.* Picksley (1875), Griff. 40; Rushton *v.* Crawley (1870), L. R. 10 Eq. 522; Murray *v.* Clayton (1872), L. R. 7 Ch. 570.

dence of invention in the process which produces it, but it is not necessarily conclusive evidence (*q*). If the case were open to review on the facts, another Court would probably come to the conclusion that since the hot-air blast was known with bituminous coal, and the cold blast was in use with anthracite, and both processes were used for the manufacture of iron, the patent could not be supported; for all that the patentee did was to apply the hot blast in conjunction with anthracite to the manufacture of iron in a manner analogous to the former application of the hot blast to bituminous coal for the same purpose, and though the discovery was commercially very important, it was not one involving the exercise of invention. Further, the grant of the patent was an undue curtailment of the right of the public to use the hot blast in the manufacture of iron with bituminous coal, anthracite, or any other known fuel. Processes.

Sometimes in a patent case a conclusion may be arrived at in favour of the defendant by considering the infringement apart from the patent. If it can be shown that the alleged infringement is an act which, having regard to the state of public knowledge prior to the date of the patent, the public actually did or had the right to do (*i.e.*, passing from what was actually known or done to the act complained of involved no inventive step), the patentee cannot complain. He is in this dilemma, either the patent includes that which was actually done before or that which the public had the right to do—that is, something which involved no invention—in which case the patent is bad for want of novelty; or it does not include it, in which case the defendant is not an infringer. Thus in *Waterhouse's* patent (*r*), the Court of Appeal decided against the validity of the patent upon the ground (*inter alia*) that taking into consideration all the circumstances of the case, it appeared that to support the patent would be unfairly to take away from the public the full use to which they were entitled of the public knowledge at the date of the patent.

In *Partington* v. *Hartlepools Pulp and Paper Co.* (*s*), which is somewhat analogous to *Crane* v. *Price*, it appeared that paraffin had been used to make wood-pulp pass more easily The analogous case of Partington *v.* Hartlepools Pulp and Paper Co.

(*q*) Steiner *v.* Heald, 6 Exch. 607; Booth *v.* Kennard (1856), 1 H. & N. 527, 531; Higgs *v.* Goodwin (1858), E. B. & E. 585.
(*r*) (1906), 23 R. P. C. 470.
(*s*) (1895), 12 R. P. C. 295.

Processes.

through the meshes of machines in which it was manufactured, and had also been used for the purpose of cleaning the machine from resin deposited from the pulp. The patentee discovered that if the machine were perfectly clean to start with, the addition of paraffin to the contents of the machine thus prevented the formation of objectionable specks of a pitchy or resinous nature in the pulp, and also the partial coating or fouling of the machine. *Romer*, J., held that this commercially important discovery was not the subject-matter for a patent, since all the patentee claimed was to use the old process of adding paraffin, but in a clean machine where the process effected the additional advantages discovered by him. Had the patent been upheld the public would have been prevented from using the old process *with clean machines*, whether for the purpose of making the wood-pulp pass through the meshes as previously, or for the sake of the additional advantage discovered by the patentee. A patent which so curtailed the public right could not be supported (*t*).

New method of using old machine.

On the other hand, a new method of using an old machine in a manner not analogous to any use to which it has hitherto been put may, as the outcome of invention, be good subject-matter—*e.g.*, a new method of using an existing weaving machine requiring no structural alteration in the machine, but producing a novel and useful result (*u*).

Strengthening of a part.

The strengthening, in a manner obvious when the desirability of strengthening is appreciated, of a part of a known or suggested combination of parts may be good subject-matter, if the performance of what is in fact a new and useful process is thereby rendered possible. For instance, the patent for the vacuum carpet cleaner, the subject-matter of which was not the mere generally known but ineffective suggestion of a combination of extractor, dust collector, and pump at large, but the new and useful process comprising the use of an implement which sits tightly on the carpet so that there is practically similarity of vacuum both at the instrument end and at the filter end, which vacuum must be at least five pounds per square inch (*x*); or *Lyon's* patent for the process

(*t*) See also Patterson *v.* Gas Light and Coke Co. (1875), L. R. 2 Ch. D. 812; 3 App. Cas. 239; p. 85, *post*.

(*u*) Dowling *v.* Billington (1889), 7 R. P. C. 191; see also p. 99, *ante*.

(*x*) British Vacuum Cleaner Co., Ld. *v.* Suction Cleaners, Ld. (1904), 21 R. P. C. 303; British Vacuum Cleaner