A

# PRACTICAL TREATISE

ON

# The Law

OF

# PATENTS FOR INVENTIONS

AND OF

# COPYRIGHT:

ILLUSTRATED BY

## NOTES OF THE PRINCIPAL CASES;

WITH AN ABSTRACT OF THE

## LAWS IN FORCE IN FOREIGN COUNTRIES.

Second Edition,

TO WHICH IS ADDED,

## A SUPPLEMENT,

CONTAINING THE LAW TO THE PRESENT TIME.

BY

RICHARD GODSON M.A.-Q.C.-M.P.

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TO

THE RIGHT HONORABLE

# LORD BROUGHAM AND VAUX,

LATELY

## LORD HIGH CHANCELLOR

OF

## GREAT BRITAIN,

A SUCCESSFUL CULTIVATOR

OF THE SCIENCES, LITERATURE, AND THE ARTS,

AND

A POWERFUL PROTECTOR

OF SCIENTIFIC MEN, SCHOLARS, AND ARTISTS,

## THIS TREATISE,

EXPLANATORY OF THE LAWS UNDER WHICH

## INVENTORS, SCHOLARS, AND ARTISTS,

ENJOY THE FRUITS OF THEIR GENIUS,

IS, WITH THE GREATEST RESPECT,

DEDICATED BY

THE AUTHOR.

# PREFACE

TO THE

## SECOND EDITION.

THIS Book has been long out of print, and *Supplements* were at two several times published, with the view of saving expense to the purchasers of the original Work.

For this edition—the Text has been carefully examined, and the Notes enlarged,—the cases lately decided have been collected and analysed, the new Acts of Parliament set forth and explained, and the Index much extended.

The improvements effected in the Law, by which *Patents for Inventions* are better secured to scientific men, call for thanks from all men to LORD BROUGHAM for the Acts of Parliament which he introduced, and to the LEARNED JUDGES for the wise decisions favourable to Inventors to which they have arrived.

Of the alterations attempted in the Laws giving a *Copyright* to Scholars, it may be said, that whilst books in general are amply protected, yet instances arise for which sufficient time is not allowed to Authors to secure an adequate reward. For such cases, an act, similar to the one under which the terms of Letters Patent are prolonged, appears to be the most just.

A Bill has also been introduced into Parliament, to extend the time of the Copyright in *Patterns* printed on Linens, &c. It is to be lamented, that when alterations are made in the *Statute Law*, that the whole subject is not always re-embodied in the new Act. Thus to protect *Patterns*, there will be, besides the new Statute, four acts,—the 27 Geo. III. c. 38; the 34 Geo. III. c. 23; the 2 Vict. c. 13, and the 2 Vict. c. 17. The time of protection varies in three different ways: for patterns *printed on* articles as calicoes, three months: for patterns *worked in* articles as carpets, twelve months: and for patterns or ornaments *placed on* articles as vases, three years. Less complication would, undoubtedly, be more convenient.

R. G.

*Inner Temple,*
*25th March*, 1840.

# PREFACE

TO THE

## FIRST EDITION.

To collect and explain the Laws protecting that species of property which arises more particularly from the exertions of *ingenious and learned Men*—to furnish the library of the Artist with a book wherein he might readily find the rules of law, subject to which he must give publicity to his inventions, if he intend to secure exclusively to himself the benefits accruing from them—and to inform the Scholar of the extent and duration of his power over the productions of his mind—was the task imposed on himself by the Author of the following Treatise. How far he has succeeded in the execution of his undertaking, he now leaves to the judgment and candour of the Reader.

The rights conferred by a *Patent for an Invention*, and the *Copy of a Book*, differ in their *Origin*; the one species arising from grants made by the Crown regulated by an Act of Parliament, and the other being at the present day conferred by enactments in several statutes. But they are similar in their *Nature*; and the protection afforded to the labours of the ingenious Artist, and the literary productions of Genius, are therefore subjects which must necessarily interest the same class of readers. It is that circumstance which has induced the Author of this Treatise to include them in the same work.

The laws which prevent persons making machines or printing books, from those in which by purchase they have acquired a property, are in their nature *restrictive*; and give to inventors and authors different kinds of Monopolies: hence it has been necessary to introduce a brief account of Monopolies in general, as they were formerly made by Royal Grants, or created by individuals.

To render the matter as clear as possible, the work therefore begins with Monopolies as they stood at Common Law, or can be made at this day; it

then proceeds to the development of the Law of Patents for Inventions. And, because many of the principles of Copyright can be illustrated by the reasoning on Patents, that branch of law is last explained.

Other Monopolies, such as have been granted to *Public Companies* to enjoy an exclusive trade to different parts of the world, belong to the law of Commerce, and come not therefore within the design of the present Work; and perhaps the third chapter of the first book ought on that account to have been omitted.

In the TEXT of this Treatise it has been the anxious wish of the Author to state the Principles of the Law, with examples to explain them, in as concise, yet comprehensive, a manner as the subject would admit. Aiming at a middle course, he has endeavoured to treat the matter with a perspicuous brevity, that the work might not be tedious to the professional reader; and yet he hopes that it will be found sufficiently full, as not to be obscure to the Artists and Scholars who may be led to peruse it. The NOTES are subjoined with the intention of affording full information to those persons who may

wish to see the cases more at length; and to serve as a Commentary on the text for the use of scientific men who may not have an easy access to a Law Library. In the APPENDIX are collected together the necessary forms and the principal acts of Parliament that have been referred to in the Work. A copious INDEX has been added, by which it is hoped that every point of law in the whole Treatise may readily be found.

On the *Necessity* or *Utility* of a Book, similar to the one now presented to the Public, it is not for the Author to expatiate; though it may be allowed to him to observe, that the Law of Patents for Inventions has never yet been fully and scientifically investigated; that it is so little known among Artists, that it is supposed that not one-half of the Patents which have been obtained could bear the test of a legal inquiry; and that the cases of Copyright have never before been formed into a distinct and independent Treatise.

In this attempt to extract the principles upon which the numerous cases on the Law of Patents for Inventions, and of Copyright, have been decided, and to reduce them into a System—in this

endeavour to reconcile apparent inconsistencies, and to arrange the whole in a logical manner—the Author has spent some time, and employed much labour. If the positions of law should be found in general to be correctly and clearly stated, he hopes to meet with that indulgence which it is usual for the Profession to extend to every one, who attempts to explain any part of our Laws, for any inaccuracies which possibly may be found in his Work.

R. G.

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A

# PRACTICAL TREATISE

ON THE

# LAW

OF

# PATENTS FOR INVENTIONS;

AND OF

# COPYRIGHT.

## BOOK I.

## ON MONOPOLIES.

### CHAP. I.

### INTRODUCTION.—OF MONOPOLIES IN GENERAL.

EACH individual, by the *natural rights* of mankind, is entitled to exercise an uncontrolled power over every kind of property of which he is once legally in possession; whether obtained by purchase, or produced by labour. The buyer of any *merchandize*, or a *machine*, or a *book*, would, on that principle, be at liberty to dispose of his goods in any way that would be most conducive to his own advantage, or he might increase the number of the machines or books to any magnitude that profit or pleasure might dictate.

A monopoly.

This natural right to unlimited freedom in trade has, at different times, been invaded, both by the Sovereigns of States, and by the individuals who compose them.—By the former it is effected when they assume the prerogative of granting an exclusive privilege to particular persons of the sole trade in any article of commerce mentioned in their grants.—By the latter, when by nefarious and unfair means, or in excessive quantities, they obtain possession of the necessaries of life, and vend them at exorbitant prices. These innovations and restrictions on trade, which would otherwise be *free*, are called *Monopolies*. (*a*)

Monopolies among the ancients.

The monopolists among the ancients, both in Greece and at Rome, as Thales, Pythocles, &c., and the Roman merchants speculating in olives, were of that description, which, at the present day, would be called *engrossers*, persons benefiting themselves to the injury or ruin of their countrymen, but doing it without the authority or connivance of their governments.

Modern monopolies.

In modern times kings and their subjects have respectively enriched themselves by monopolies, differing in their nature and extent, but attended with the same baneful consequences to the community.

Commercial combinations.

After the introduction of the Feudal system into Europe, and during the time it was strictly

(*a*) *Monopolium, απο του μονου, και πωλεομαι*, quod est cum unus solus aliquod genus mercaturæ universum emit, ut solus vendat pretium ad suum libitum statuens. 11 Co. Rep. 86. 3 Inst. 181.

followed, commerce was spurned and rejected as an ignoble employment, far beneath the dignity of a freeman and warrior: but when the fury of the martial spirit had somewhat abated, and the countries became a little settled, the want of the comforts and even necessaries of life, incident to every country where the art of war has been preferred to the occupations of peace, soon urged some of the people, particularly the inhabitants of the different towns, to form themselves into societies for the purposes of carrying on their pursuits in trade with facility and in safety. To them immunities were granted by the Sovereigns in whose states the places were situated. And afterwards the corporate bodies of many cities associated together for the protection of their common interests.

Hanseatic league.

The first combination was the Hanseatic league, formed about the end of the twelfth century, to which many extensive privileges were granted. This confederation, promoting commerce and the interests of each other, soon astonished Europe by the accumulation of the wealth which it rapidly gathered, and the immense power, its inseparable concomitant, which it quickly obtained. At length its augmenting influence created an alarm, that it would become dangerous to the independence of the sovereign power in Europe. The members of it were commanded by the governments of the several countries forming parts of the league to reside within their native towns, that they might, by

their commercial pursuits, enrich the dominions of their respective princes. The association thus weakened was gradually reduced to insignificance.

Progress of commerce.

Commerce, having once revived, was not to be destroyed by the dissolution of this league—She continued to spread her beneficial influence over several countries. The monopolies, restrictions, immunities and privileges, which protected her in the earlier stages of her progress were transferred by each prince from the members of the league to the inhabitants of the places within their own states.

Progress of monopolies.

The towns, with the facilities and assistance which exclusive privileges afford, increased in population, and became rich and powerful. At first, the joint efforts of large bodies of citizens were alone capable of supplying to their princes the large sums of money which were necessary to relieve their wants, or to gratify their inclinations. Hence the advantages to be derived from monopolies were first bestowed on corporate bodies.

In this manner commerce arose, and spread her influence. When the opulence of individuals enabled them to advance money for the use of their sovereigns, they too were rewarded with charters and privileges.

Monopolies may thus be traced. They were formerly granted to many towns confederated together—afterwards they were given to separate towns—and ultimately were conferred on

individuals. It is the last species of them which is the immediate subject of the *first book* of this Treatise.

Monopolies in England.

To the Hanseatic league, England is in some measure indebted for her wealth. London, however, was the only town which was admitted to form a part of that celebrated confederacy.

The Metropolis, and most of our cities and corporate towns, are indebted to King John for their commercial pre-eminence arising from endowments by him, and his gift of their greatest franchises. The privileges of the *cinque ports*, the nursery of the English navy, were first granted by King John upon the condition of supplying him with ships in his wars.

From his death to the reign of Elizabeth there is very little variation in the commercial history of this country. Its power kept continually, though slowly, increasing beneath a heavy burthen of Monopolies.

The public purse being under the immediate control of the Parliament, the Kings of England often exercised the prerogative of conferring exclusive grants; either to supply the deficiency of their revenues, or to reward their necessitous adherents. It was the policy of Queen Elizabeth never to recur to Parliament for a supply of money, if she could possibly avoid it. To such an alarming height had monopolies accumulated during her reign, that towards the end of it they threatened the destruction of commerce, and the annihilation of the best interests of the country.

The people could no longer bear the oppressive and pernicious effects of them, and they loudly called for some redress. To prevent an abrogation of her power by an act of Parliament, she cancelled the patents that were considered to be the most oppressive.

It should, however, be mentioned, that all the grants and exclusive privileges made in her reign were not detrimental to the interests of the nation. It was under the auspices of Queen Elizabeth that the Huguenots settled in Norwich, Sandwich, Colchester, and other places, where they carried on woollen and linen manufactories to the great benefit of the country. It was by her charter that the East India Company was established; which grant, though a great monopoly, has contributed very largely to the splendour and influence of England in the scale of nations.

Stat. of James. At length the Legislature interfered, and, with cautious policy, taking a middle course, between the right of all persons to a free trade, and the assumed power of the Crown, declared by stat. 21 Jac. c. 3, that the Sovereign might make grants of the exclusive privilege of sale to individuals who produced *new inventions*, and to those only; still allowing the common right to take effect, if the grants, even for new inventions, were not properly made.

Upon that statute is founded all the law on PATENTS FOR INVENTIONS. It was in vain that King Charles attempted to renew the grievance of monopolies. That statute afforded an insur-

mountable barrier against every attempt to introduce them, and he did not possess sufficient power to have it repealed.

Monopolies by individuals.

Whilst the Parliament was strenuously exerting itself to confine the prerogatives of the Crown within the limits of the common law, they had also to contend with the malpractices of the subjects, to the monopolist among the people—the *forestaller*, (*a*) the *engrosser*, (*b*) and *regrater*. (*c*) Many statutes were passed to correct the abuses they introduced, which were afterwards repealed, and the matter left to the rules of the common law.

Monopolies by act of parliament.

The Statute of James just referred to is merely *declaratory* of the common law. Hence it appears that the monopoly, which can be created by the Crown, arises merely, from the grant, conferring on an individual the privilege of the sole making and selling *some article or thing*.

(*a*) Forestel, faristel, foristellum, foristellarius, is derived from two Saxon words, viz. *far* or *fare* (via or iter) and *stall*, interceptionem, 3 Inst. 195. It may also be derived from the circumstance of thus preventing the articles from coming to the stalls in the market, from *fore*, before, and *stalle*, a standing place.

(*b*) Ingrosser is derived from *in* and *gross*, great. "Is in genere dicitur qui integram rei alicujus copiam emendo satagit comparare, ut distrahendo, postea carius vendat, a Gall. *le gros*, pro integro vel plenitudine." Spelman.

(*c*) Regrating is derived from *re*, again, and the French *grater*, to grate or scrape; and signifieth the scraping or dressing of cloth or other goods, to sell them again; or from *regratement*, Huckstery. 3 Inst. 195.

It can be made, when thereby, no other person is restrained in what he had before, or prevented from following his lawful trade; (*d*) which grant, at the present day, can only be for a *new Invention.* When, therefore, it is in contemplation to constitute a *new* monopoly, recourse must be had to Parliament. This transcendent power of the Legislature has, in several instances, particularly in confining the trade to the East Indies and other parts of the world to different companies, been often and wisely exerted. Under peculiar circumstances, statutes have also been passed to increase the benefits and advantages derived by the inventor from the patent for his invention, either by extending its duration, or by enlargiug the number of persons that may at one time be interested in it.

Account of copyright.

By the Legislature other exclusive privileges, as COPYRIGHT in books, engravings, &c. have been conferred. Copyright being the subject of the *Third Book* of this Treatise, it will be unnecessary to make any other observation at present, than merely to remark that it was formerly considered to be fcunded on common law, but that it can now only be viewed as part of our Statute Law.

The manner in which the laws on monopolies may be systematically arranged, may be collected from an examination of the preceding historical sketch, and the following analysis. The inves-

(*d*) Hawk. I. 470.

tigation, it is conceived, necessarily leads to the inquiry into monopolies, when made

BY THE KING; and therein

1. *How they stood at common law.*
2. *Under the Statute of James; whence arise*

PATENTS FOR INVENTIONS.

BY INDIVIDUALS: as to

1. *Forestalling.*
2. *Engrossing.*
3. *Regrating.*

BY THE LEGISLATURE:

1. *The Statutes respecting the trade, with foreign countries.*
2. *The Statute of* 8 *Ann. whence arises* COPYRIGHT.
3. *The Statutes as to the* FINE ARTS.

The whole matter of this work is, therefore, divided into three parts:—First, *Monopolies in general*, as they are governed by the rules of the common law, are cursorily described:—Secondly, the limited monopoly in *Inventions*, created by patents, is investigated:—and, Thirdly, the statutes giving a *Copyright* in books, and in the productions of the Fine Arts are explained.

## CHAP. II.

### OF MONOPOLIES MADE BY GRANTS.

LETTERS Patent, or grants of the Crown, by which the exercise of the natural right of a person to use in any way he pleases, every thing by him once legally possessed, is restrained, and monopolies in general created, may be classed for consideration under the following heads:—

I. *Grants that were valid at common law.*
II. *Those that were bad at common law.*
III. *Those that by statute law are permitted to be made.*

### I. GRANTS VALID AT COMMON LAW.

IT is clear, that at common law the Queen could make a patent, to continue for a *reasonable time*, to any person who, at his own charge, or by his own industry, wit, or invention, had introduced any *new and profitable trade* into the realm, or any engine that had never before been used, tending to the furtherance of a trade; by virtue of which the patentee might confine the whole use of it to himself, and enjoy all the benefit accruing from it. (*a*)

(*a*) Noy. 182.; Hawk. P. C. 231.

For in the 9th year of Elizabeth a patent was granted to Mr. Hastinges of the sole trade for several years, of making frisadoes, in consideration that he had brought the method of making them from Amsterdam. (*b*) This patent was considered as valid, until it was shewn that some clothiers had before its date made baize of similar workmanship.

A patent was also granted to Mr. Matthews, a cutler, (*c*) because, as was suggested, he had brought the invention from beyond the seas. The grant was supported, until it appeared that other cutlers had, with *a slight difference* only, made similar knives; and then it was declared to be void.

There is another case which illustrates the law as it anciently stood. A patent had been granted for the sole and only use of a sieve, or instrument for melting lead. In the Court of Exchequer Chamber, (*d*) it was said that the question was, whether it was *newly invented* by the grantee, whereby he might have the privilege of exclusive power over it; or else used before, in which case they were of opinion that he should not have the sole use of it.

It is said to be the better opinion, (*e*) that the Queen may also grant to particular persons the *sole use of some particular employments* (as of

(*b*) Noy, Rep. 182. 10 Mod. 131. Godb. 125.
(*c*) Noy, Rep. 183.
(*d*) Ibid.
(*e*) 3 Bac. Ab. 627.

printing the Holy Scriptures, and law books, &c.) in the exercise of which an unrestrained liberty might be of dangerous consequence. How far this rule is correct, to what extent it is modified, and how limited, will hereafter be shewn. (*f*)

## II. GRANTS THAT WERE BAD AT COMMON LAW.

It evidently appears that at Common Law *Novelty* was a necessary incident to the thing over which an exclusive power was to be given by the patent. On the other hand any institution or allowance by the Queen by her grant, commission, or otherwise, to any person or persons, politic or corporate, of or for the sole buying, selling, making, working, or using of any thing, whereby any person or persons, bodies politic or corporate, were sought to be restrained of any freedom or liberty *that they had before*, or hindered in *their own* lawful trade, was a monopoly, and void at common law. (*g*)

Such an Act of the Sovereign was always considered by the Judges to be against the ancient and fundamental laws of the realm; because it destroyed the freedom of trade, and discouraged labour and industry. John Peachie, (*h*) so early as in the reign of Edward III., was severely punished for procuring a license under the great seal, whereby it was directed that he alone, in

(*f*) Post, Book III. Copyright; and see Mod. 256. 3 Keb. 792. 3 Mod. 75. 2 Chan. Ca. 67. Skin 234. 1 Burn Ec. Law, 347, title College.

(*g*) 3 Inst. 181. 2 Inst. 47, 61. (*h*) 3 Inst. 181.

London, should enjoy the privilege of selling sweet wines.

And the grant of the sole ingrossing of wills (*i*) and inventories in a spiritual court, also of the sole making of bills, pleas, and writs, in a court of law, to a particular person, were held to be void; because it entrenched on the acknowledged privileges of every member of society.

A grant of the King, of the sole making, importing, and selling of *playing cards*, was also adjudged to be invalid. (*k*) It was urged on the consideration of the court, that the playing with them was matter merely of pleasure and recreation, and often abused, and that, therefore, it was proper that the making of them should be restrained. The principal argument which produced the judgment, was the circumstance, that card-making was a *known trade*, and that there was no reason why any subject should be hindered from getting his livelihood by it. (*l*)

(*i*) 2 Roll. Ab. 212. Jon. 231. 3 Mod. 75. Vern. 120, 130. 10 Mod. 107, 131, 133.

(*k*) 11 Co. 84. Noy, 173. Moor, 671. 2 Inst. 47.

(*l*) Darcy's Case, Noy, Rep. 179. The observations of the counsel are very strong against monopolies. Now by this patent, be they good, be they bad, be they false, be they true, be they dear, or good cheap, you must buy all of him and his assigns, in what manner pleaseth him. When before, if any person by his industry had obtained excellent skill in his trade, he might have reaped the fruits thereof, and that hath been thought the surest thing, a man could obtain skill and knowledge, because thieves could not steal it. Now, Mr. Darcy hath devised a means to take away a man's skill

And the King's charter to any particular corporation of the *sole importation* of any merchandize was also held to be of no effect, whether the merchandize was prohibited by statute or not. (*m*)

A similar charter, empowering individuals or companies to trade to and from a particular place, and in particular articles, is void, so far as it gives such persons an exclusive right of trading, and debarring all others. (*n*)

### III. GRANTS AS RESTRAINED BY STATUTE LAW.

The doubt which formerly existed as to the legality of the prerogative of confining the exclusive trade in certain articles to particular persons was removed by the stat. 21 Jac. I., by which it was declared (*o*) that all monopolies, and all commissions, grants, licenses, charters, and letters patent, &c., granted to any person or persons, bodies politic or corporate whatsoever, of or for the sole buying, selling, making, working, or using of any thing within this realm, or Wales, or any other monopolies, &c., and all licenses, &c., and all proclamations, &c., and all

from him which was never heard of before, which if others should do the like in other trades, it would discourage men to labour to be skilful in any art, and bring in barbarism and confusion.

(*m*) 2 Roll. Ab. 214. 3 Inst. 182. 2 Inst. 61. Style, 214.

(*n*) Sandys *v.* East India Company, Raym. 489. 2 Chan. Cas. 165. Skin. 165, pl. 2, 226, 234; and see the Company of Merchant Adventurers *v.* Rebow, 3 Mod. 126.

(*o*) 21 Jac. I. c. 3, s. 1.

other matters whatsoever, any way tending to the instituting, strengthening, furthering, or countenancing of the same, or any of them, were altogether contrary to the laws of this realm, and so were and should be utterly void and of none effect, and in no wise to be put in use or execution.

All monopolies being, by the prior part of that statute, thus indiscriminately condemned, a clause, (*p*) upon which alone the *second Book* of this Treatise is a commentary, was afterwards inserted declaratory of the common law. By it the Sovereign is still permitted to grant *patents for new inventions*, provided they are not made to endure for a longer time than fourteen years.

For a knowledge of the remaining clauses of the stat, 21 Jac. I. which except certain monopolies out of its first general enactments against them, reference must be made to the Act itself: for they are not immediately connected with the present inquiry. (*q*)

(*p*) 21 Jac. I. c. 3, s. 6. (*q*) Post, Appendix.

## CHAP. III.

### OF MONOPOLIES IN DOMESTIC TRADE.

THERE are monopolies created by individuals. (*a*) They take place in *domestic trade*, and consist in obtaining possession of provisions or the necessaries of life, with the *intention* of enhancing the current prices of them in the market.

The principles of law, which govern these Monopolies, were elucidated in the first edition of this work, but it is thought better not to reprint them, as the subject belongs rather to a Commercial Treatise.

(*a*) The difference between monopoly in general, and engrossing, consists in this, that the one is made by patent from the King, the other arises from the acts of the subjects between party and party. Skin. 169.

# BOOK II.

## ON PATENTS FOR INVENTIONS.

## CHAP. I.

### INTRODUCTION.—OF A PATENT GENERALLY.

THE manner in which our Sovereigns, mistaking the extent of their prerogative, created monopolies, and the pernicious consequences which flowed from those grants, have been alluded to in the first Book of this Treatise. It was there stated, how the limitation of the power of making grants of exclusive privileges was defined by the common law, and how the exercise of it was moderated by the prudent determinations of the judges.

One species of monopolies, it has been shewn, are those, which, although founded on grants, are allowed by the statute law. From that source the LAW OF PATENTS FOR INVENTIONS springs. It is a branch of the jurisprudence, in its nature and consequences as pleasing to consider, as that of the first book was irksome. For although they are monopolies, yet they are very limited ones; and are as beneficial in their effects, both to the inventors and to the community, as the old kind were detrimental to the best interests of the state.

Patents at common law.

The common law, however, is not altogether silent on the question of Patents for Inventions. All monopolies were declared generally to be void. The grants of the crown were, at common law, construed with the greatest strictness. Yet, even by that law the King had the power of conferring on the *inventor* of any useful manufacture or art the exclusive power of using or vending it for a *reasonable* time. (*a*)

Patents by stat. of 21 Jas.

But the law of patents for inventions, as it lately stood, rested entirely for support on the statute of 21 James. (*b*)

After a declaration that all monopolies are void, it is, by the *sixth* and principal section of that act, enacted, "That any declaration before mentioned shall not extend to any letters patents and grants of privilege for the *term of fourteen years* or under, thereafter to be made, of the sole working or making of any manner of *new manufactures* (*c*) within this realm, to the *true and first inventor* (*d*) 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*, nor 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,

(*a*) 3 Inst. 181. 2 Hawk. P. C. 293, B. I. c. 79, s. 20. Noy, 182, ante, 10.

(*b*) 21 Jac. 1, c. 3, ante 14.

(*c*) Post, chap. 3.

(*d*) Post, chap. 2.

or grant of such privilege thereafter to be made, but that the same shall be of such force as they should be, if that act had never been made, and of none other."

Encouragement of artists.

This statute has always been considered as merely *declaratory* of the common law prerogative of granting patents: but the acknowledged power of the Crown was so seldom exerted in favour of the inventor of a useful manufacture, that the legislature was compelled with one blow to put an end to the licentious and grievous monopolies, and to hold out encouragement to the ingenious artist.

The necessity of some legal provision, to secure a reward to those who would exert their abilities, employ their time, and spend their money in the production of something new and useful to the community, was apparent to every one. But the question—what kind of protection is the most proper to be afforded to the inventor,—has since given rise to much discussion. It seems but just, that he, who informs the public of a new method of increasing their wealth, should gather for himself the first fruits of his ingenuity and labour. Hence the great and almost certain remuneration given by the statute of James,—that an inventor shall have a limited monopoly in his own manufacture,—seems to be the most appropriate recompence that can be awarded to him; for, in proportion as the invention is valuable to society, will the amount of his own profits increase.

Policy of stat. 21 Jac.

Upon this statute numerous observations, as to its *policy* and the construction it ought to receive, have been made by learned men, many of them differing in opinion. Whilst some have thought it a very wise and useful measure, others have described it as oppressive to inferior tradesmen. Of its policy nothing can be said in a legal treatise. The opinions, as to the kind of *construction* which it ought to receive, will be noticed when those parts of the subject to which they apply are mentioned; and the whole of them will be collected together, when the *rules for the construction* of the statute of monopolies, as it relates to patents for inventions, are expounded. (*e*)

Condition for the specification.

This important statute, marking out the boundary to which the royal grants should in future extend, left *the terms* on which they might be obtained, to be settled at the pleasure of the Sovereign. In the reign of Queen Anne a conuition was introduced into the patent: that if the inventor did not by an instrument under his hand and seal *particularly describe* (*f*) and ascertain the nature of his invention, and in what manner the same was to be performed, and also cause the same to be inrolled in Chancery within a certain time (generally one month) therein mentioned, then the letters patent, and all liberties and advantages whatsoever thereby granted, were utterly to cease and become void.

(*e*) Post, chap. 6.

(*f*) Post, chap. 4.

By thus obtaining an exact statement (*g*) of the nature and use of the invention, the public are benefited, and have an equivalent for this limited monopoly. The instrument containing this required description is called THE SPECIFICATION.

No right to demand patent.

Though the power of the King to create monopolies was accurately defined by the statute of James, and it is clearly stated that grants of them in future were to be made only to the authors of new inventions; yet there is not any clause or enactment, by which the subject can *demand* them as a *right*. This great encouragement to industry, this fruitful source of wealth, is still the free gift of the Sovereign. It emanates from Her Majesty as *the Patron of Arts and Sciences* at the humble request of her subject; and it is as a gracious favour that she extends this royal protection to the inventor.

Only one parliamentary attempt to improve upon the statute of King James has been successful. Lord Brougham, with great skill, managed to carry through the legislature "An Act to amend the law touching Letters Patent for Inventions,"

(*g*) The description must be very correct. Even an inadvertent omission would, it appears, (post, ch. 4,) invalidate the grant. A man, whose thoughts have long dwelt on the same subject, overlooks many things forming part of the manufacture which lead him to the invention. It is, therefore, often very prudent to call for the skill, experience, and unprejudiced judgment of others, to enable him to make a good specification.

the 5 & 6 Wm. 4, c. 83, which being a great boon to inventors, will be afterwards fully explained.

The grants of Queen by letters patent.

All grants from the crown are matters of public record (*h*) *as being the deeds of the first magistrate*; and are next in dignity to the acts of the state. They are either in the form of charters, or letters. (*i*) These letters are either open, and thence called *Literæ Patentes*, being addressed to all Her Majesty's subjects; or else close, *Literæ clausæ*, addressed to particular persons. It is by the *Literæ Patentes*, or letters patent, that grants of the sole privilege and exclusive property in inventions are made.

Offices for patents.

To prevent grants of this description from being surreptitiously obtained, numerous offices are established, communicating in regular subordination. In them the proceedings are narrowly inspected by the Queen's law officers, before they are sanctioned by the royal authority; and that the great seal may not be affixed without the utmost caution being used, and due consideration given to the subject of the grant, the letters patent must first pass by the dilatory and expensive method of *bill*. (*k*)

The parts of a patent.

The clause in the patent by which the specification is required has been given. (*l*) It is thought that a short description of the several parts of the patent will make the different bear-

(*h*) Dr. and Stud. B. I. d. 8.
(*i*) 2 Bla. Com. 346.
(*k*) Post, chap. 5.
(*l*) Ante, 20.

ings of patent law more readily seen, and the numerous rules respecting it more easily comprehended.

In the patent, (*m*) after a recital of the petition and its prayer, it is stated that Her Majesty, of her special grace, certain knowledge, and mere motion, (*n*) has given and granted the matter requested by the petitioner. That he, his executors, administrators, or such others as they shall agree with, shall lawfully make, use, and vend the invention, during the time therein expressed, (generally fourteen years,) within that part of the dominions in which the inventor has petitioned to use it. It then goes on to command that all persons, bodies politic and corporate, shall not dare to imitate the same, or make any addition to or subtraction from it, without the *licence* (*o*) of the petitioner, his executors, administrators, or assigns, in writing, under his or their hands and seals; disobedience subjecting them to the punishment for a contempt, or to be proceeded against in an action at law. (*p*) It also directs that mayors, sheriffs, &c., and all other the Queen's officers and ministers, shall not molest the patentee in the exercise of his invention.

Matters which make it void.

There are several regulations connected with the grant that are mentioned in the patent, the

(*m*) For a patent at length with all its clauses see Appendix.

(*n*) In the old grants speciali gratia, certa scientia, et mero motu.

(*o*) See post, chap. 7.

(*p*) See post, chap. 8.

non-observance of which will render it void. (*q*) If it should appear to the Queen, or any of the privy council, that the grant is contrary to the provisions (particularly the sixth section) of the statute of monopolies, or that it leads to the use of any invention protected by a prior patent, or that the patentee or his representative has transferred or divided it into shares, or declared any trust of it, to or for any number of persons exceeding the number of twelve (formerly five) or those twelve have presumed to act as a corporate body, or in any wise contrary to an act of Parliament therein recited, respecting assurances of ships and merchandize, then the patent is to be declared to be void.

In the construction of this proviso, executors or administrators; and assigns, created by operation of law; however numerous they may be, are collectively to stand in the place, and to be considered as and for the single person whom they represent. (*r*)

Then comes the proviso for the particular description or specification of the invention to be made in a given time.

And lastly, it is granted that the letters patent shall be *construed* (*s*) and adjudged in the most *favourable* and beneficial sense for the best advantage of the grantee, notwithstanding any defective and uncertain description of the nature and quality of the invention, and of its materials.

(*q*) See post, chap. 9.
(*r*) See post, chap. 7.
(*s*) See post, chap. 6.

Which instrument—the PATENT—is the *formal*, as the SPECIFICATION is the *substantial*, part of this limited monopoly.

Division of matter respecting patents.

Whence it appears that the most logical order in which the matter of this book on patents can be arranged, will be, to begin with investigating the law respecting the *true and first inventor*, the *subject* of his invention, and the nature of the *description* which he must give to the public to secure his limited monopoly. Having examined the contents of the grant, it will then be the best time to set forth the *mode of obtaining it*. Being once in possession of the patent, the questions as to its *construction* and the *property* in it will arise. And then will follow the *remedies* which may be resorted to by an inventor, if he suffer any injury from an infringement of his right. And lastly, the method by which the public *may deprive him* of the grant, if it be not a good one in law, will be examined.

## CHAP. II.

### OF THE INVENTOR.

THE most important business of an inquiry into the laws respecting patents for inventions, is to obtain an accurate knowledge of the following questions:—Who is he that has found out something new, or who is the *inventor* of the subject? What is an invention, or a proper *subject* for a patent? How is the thing to be described, or the *specification* to be made? These topics claim particular attention, and therefore a Chapter will be devoted to the examination of each of them.

In prosecuting the investigation of the first question—who is the person that the law will adjudge to be *the true and just inventor* of a manufacture, within the meaning of the statute,—the decisions will lead to the consideration of,—

I. A *discoverer* of a new thing. (*a*)
II. A *publisher* of an invention.
III. An *introducer* of a foreign invention.

### I. A DISCOVERER OF A NEW THING.

That a *discoverer*, or he who *first finds out*

(*a*) Since the word "*inventor*" has in patent law several distinct meanings, it is thought that this Treatise will be rendered more intelligible if that word is made a *generic term*, and if to each of its meanings a separate name be given.

a thing, of which a limited monopoly may lawfully be granted, should have the advantages accruing from it secured to him by patent, if he apply for it, is one of the fundamental maxims of this branch of the law.

But, to prevent abuse, the protection which the laws afford to this species of monopoly is strictly watched. No person, who has not without assistance *formed the original idea* of the subject in his own mind, will be enabled to keep any patent which he may have obtained.

In the case of *Hill* v. *Thompson* (*b*) it was laid down, that if a servant make an improvement, his master is not entitled to take out a patent for it; but it appears from the case of *Bloxam* v. *Elsee*, (*c*) that an important qualification has been made, which establishes, that if the inventor employ a skilful person for the express purpose of assisting him in completing mechanical contrivances, the additions made by that person will belong to his employer, who may include them in the specification to his patent as a part of his own invention.

It was objected in that case, that *parts* of the improvements in Foudriniers' paper machine were the inventions of Mr. Donkin, who proved, that when he made those improvements, he was employed as an engineer, for the purpose of

(*b*) 8 Taunt. 395. S. C. 2 B. Moore, 456.
(*c*) 1 Car. & P. 558.

bringing the machine to perfection, and was paid for so doing, and that he was acting as the servant of the inventor of the machine, for the purpose of suggesting those improvements. He did not discover the principle of the machine, nor invent the important movements of it. The patent was not disturbed on that ground.

The rule of law respecting the assistance from servants may thus be stated. If the servant make a new discovery by himself, such invention becomes his property; but if the master plans, and the servant only executes with alterations of his own, then the master is the true inventor of the machine.

Letters patent are often taken out in the joint names of two or three persons. If the secret should be discovered that one or two of those persons bore no part in the invention of the machines, the patents would be void.

In those cases (*d*) in which the patentees have had to contend against the charge that their machines were not new, because similar machines had been invented by others, although not brought into public use, it was held that the patentees should be clear from all suspicion of having seen the machines in an imperfect state, or whilst they were partially concealed. It is not sufficient that they bring the machines first

(*d*) *Lewis* v. *Marling*, 10 B. & C. 22. And S. C. 4 Car. & P. 52. *Jones* v. *Pearce*, MS. and see post.

into public use. They must also be original inventors of them, without any assistance from inspection or knowledge of the other machines.

If the principle of the invention be taken from a *scientific work*, (*e*) the patentee is not an *inventor*.

Nor will he be entitled to hold the grant, if he has in any manner been *informed of the secret* by another person in England. Mr. Tennant (*f*) had a part of the process, indispensable in rendering the subject of his patent of any utility, suggested to him by another person. It was therefore determined that he was not the inventor.

In vain it will be urged that the patentee has embodied the principle, that the method of reducing it to practice is his own discovery, and that great genius has been exerted to form the subject.

In the great case of the *King* v. *Arkwright*, (*g*)

(*e*) Post, *King* v. *Arkwright*, printed cas. 182. Dav. Pat. Cas. 129. And see *Hill* v. *Thompson*, 2 B. Moore, 456.

(*f*) Dav. Pat. Cas. 429. Evans St. 607.

(*g*) Mr. Arkwright's machine consisted of ten distinct parts. It may be useful to know the opinion of Mr. Justice Buller on each of them, with references to the printed case. No. 1. The beater, taken from Emerson's book, p. 182. No. 2. The iron frame, not new, if used, p. 182. No. 3. The feeder, invented by John Lees, p. 183. No. 4. The crank, not new, p. 183. No. 5. The filleted cylinder, not new, p. 185. No. 6. The rollers, not new, p. 185. No. 7. The can, if new, not material and useful, p. 186. No. 8. A machine for twisting, and No. 9. A spindle and flyer, never used, p. 186. No. 10. A regulating wheel, not used, p. 187. And see *King* v. *Murray*, Rep. of

the point was agitated,—whether the machine for which the patent had been granted, was invented by Mr. Arkwright—it was satisfactorily proved, that every part which was not *old*, or had not been *used* for the same purpose to which it was then applied, was either not *material* or not *useful*. It was therefore determined that he was not the inventor of a new manufacture.

## II. A PUBLISHER OF AN INVENTION.

If two persons severally discover the same thing, the one who obtains a patent for it, before the other has made the matter public, will be adjudged to be "*the true and first inventor*," and be entitled to hold the grant. This rule is necessary to insure an early production of the efforts of genius.

An objection was raised to the patent of Dolland, (*h*) that he was not the inventor of the

Arts, Vol. III. N. S. p. 235. The patent was for improvements in the construction of air-pumps. Messrs. Boulton and Watt proved that they had used every one of the parts which it was pretended were new, and the verdict was given for the crown to repeal the patent.

(*h*) In *Boulton* v. *Bull*, 2 Hen. Bla. 487. The patent granted to Mr. Dolland, was for an invention of a new method of making the object-glasses of refracting telescopes, by compounding mediums of different refractive qualities; whereby the errors arising from the different refrangibility of light, as well as those which are produced by the spherical surfaces of the glasses, were perfectly corrected. *Buller, J.* The point contested in Dolland's case was, whether he, or Dr. Hall, was the first and true inventor within the meaning of the statute:

new method of making object-glasses, for that Dr. Hall had made the same discovery a long time before. It was held, however, that, inasmuch as the public were not acquainted with it, Mr. Dolland must be looked upon as the inventor. He was not only a *discoverer* of it, as well as Dr. Hall, but he was the *first publisher*.

This doctrine was confirmed in the late case of *Forsyth* v. *Reviere*, (*i*) in which it was held that, if several persons *simultaneously discover* the same thing, the party who first communicates it to the public, protected by a patent, *the publisher*, becomes the legal inventor, and is entitled to the benefits to be derived from the invention.

It is therefore necessary that a *discoverer*, who does not wish that a grant should be obtained, either by himself, or by any other person finding out the same thing, should immediately make his discovery known. But if he has a desire to enjoy the advantages which may arise from the sole use of the invention by himself, he will act with prudence, if he procure a patent *immediately* before the matter can be divulged by another person.

### III. AN INTRODUCER OF A FOREIGN INVENTION.

The sixth clause, and indeed the whole of the Hall having first made the discovery in his own closet, but never made it public, and on that ground Dolland's patent was confirmed.

(*i*) Chitty, Jun. Prœr. of Crown, 182, n.

statute of monopolies, being made for the benefit of the subject, has been construed in his favour.

If the objects of patents are new in England, they certainly come within the equity of a statute, by which it was intended to encourage new devices that might probably prove useful and beneficial to the kingdom. Whether the invention was learnt by travel, or produced by study, the intention of the legislature is equally fulfilled; and therefore, soon after the passing of the act, (*k*) a patent, granted for something which had been practised beyond the sea, was held to be good and valid.

This construction has continued to be put upon that clause, and subsequent practice has confirmed it.

Upon the whole, then, the character of an inventor may be obtained by a person in three ways, by bringing with him and publishing to his countrymen the productions of the genius of foreigners; by publishing what others as well as himself, may have found out at home; or by publishing what he alone has discovered.

It is now the common practice when the invention has been obtained from a foreigner, to state in the title of the patent, that the patentee has received the communication from a person residing abroad, but that fact need not be set forth. It has been doubted whether the patent

(*k*) *Edgeberry* v. *Stephens*, 2 Salk. 477.

can be supported if the inventor, the foreigner, retaining any interest in the patent, be an alien enemy. (*m*)

*Observations.*—The law respecting the person to be considered the *first inventor* (*n*) does not

(*m*) *Bloxam* v. *Elsee*, 1 Car. & P. 558.

(*n*) Inventors have been thus described by a writer in the London Journal of Arts and Sciences for 1831. "Useful inventors are of three classes; the first are men of genius, capable of producing important inventions that involve the entire projecting of new machines, or remodelling of existing ones, and the organization of new or complicated processes and systems of working. These are very few.

"The second are men who have not so extensive a scope of imagination and intellect as to project new systems or great changes, and to organize the means of effecting them, but who are capable of making marked improvements upon existing systems and machinery, or partial changes in them. This class is considerable.

"The third class is made up of men of small imagination, who are not capable of any great originality of thought, but who have a certain ingenuity which they can apply to the things that come within the range of their observation, and possess a tact for correctly and accurately executing that which they conceive.

"Their province is to improve in detail, to give a finish to the detached parts of the extensive combinations formed by superior minds, and to fill up the chasms that occur frequently in the plans of the greatest inventors. Happily this class is immense, being spread thickly over the whole body of mechanics, from the manufacturer and engineer down to the lowest workman. Such men constitute expert mechanicians, who are never at a loss for expedients for overcoming the practical

require much alteration. If a communication be made from a foreigner residing abroad to a person in this country, that person can have a patent as being the original inventor. Why not permit a foreigner in this country to give the information? And if a foreigner, why not an Englishman?

It might be advantageously enacted, that the inventor might assign his right to a patent, so that the assignee should have the patent in his own name.

difficulties of detail that occur in their business, and are perpetually making trifling inventions which they require for immediate application."

## CHAP. III.

### OF A NEW MANUFACTURE; OR, THE SUBJECT OF A PATENT.

THE statute of monopolies having been made for the encouragement of commerce, the word "manufacture" has received a very extended signification. (*a*) It has not indeed, as yet, been accurately defined; for the objects which may possibly come within the spirit and meaning of that act, are almost infinite.

That the principles, upon which the great variety of things which have been declared to come within the design and to claim the protection of that statute, may be clearly understood, it will be proper to divide "Manufactures" into their several kinds.

An arrangement, at once simple and correct, could not easily be suggested; it is therefore hoped that the following classification of them will assist in the present enquiry, and that it will also be found useful in elucidating the rules for making out the *specification* of patents. There is not any thing which conduces so much towards

(*a*) A summary of what things come within the words "new manufacture," will be found given by Eyre, C. J., in 2 H. Bla. 492; by Dallas, C. J., in 2 B. Moore, 448; by Eldon, C., in 3 Meriv. 629; by Abbott, C. J., in 2 Barn. & Ald. 349.

rendering the description of a manufacture concise yet clear, as a knowledge of the several objects of patents, in their kinds distinct from each other. (*b*)

A new manufacture may be,

I. A *substance*, or thing made.
II. A *machine*, or instrument.
III. An *improvement*, or addition.
IV. A *combination* or arrangement of things already known.
V. A principle, *method*, or process, carried into practice by tangible means.
VI. A *chemical* discovery.
VII. A *foreign invention*.

### I. A SUBSTANCE, OR THING MADE.

Definition of a new manufacture.

*A substance* appears peculiarly to have been contemplated by the legislature, as the most proper object for a patent. "A manufacture," says Lord Kenyon, "is something made by the hands of man." (*c*)

The requisite qualities of a manufacture.

But it is not for every substance, nor for every thing which is discovered, that a patent can be obtained and supported. It must be *new*, or it will come within the purview of the former part of the statute of James against monopolies. It

(*b*) It will be noticed that this arrangement is not *strictly logical* as to the several kinds of manufactures; but that it has been formed with a view to illustrate the reported cases, and for the sake of simplicity in the observations on them.

(*c*) 8 T. R. 99.

must, by the words of the act, not have been *used.* It must be *vendible;* or, not being required in trade, it cannot be a proper object for protection. It must be *perfect in itself*, and the means must be adapted to the end, or the public will not receive any benefit from it; at least, the barter between them and the monopolist will be greatly in favour of the latter. In its effects it must be *useful* and beneficial, or it will be unworthy of notice.

These are the *primary qualities*, and are not peculiar to any one species of manufacture, but must be found in every discovery for which a patent is sought. These properties may be considered as the TEST by which the fitness of an invention to support a patent may be ascertained.

Before the several kinds of manufactures are particularly described, it will therefore be proper to investigate the exact nature and extent of those qualities which are common to all of them.

Every manufacture within the meaning of the statute must, at least, be

1. *New.*
2. *Not used before,*—neither
    1. By others,—nor
    2. By the inventor.
3. *Vendible.*
4. *Useful.*

Some incidental properties, as that the means

must be adapted to the end intended to be produced, will be best understood, if examined when treating of the *specification*.

1. Must be new.

Not only must the subject be *new*, in the common acceptation of that word, as to the world in general, but it must not be copied from a *scientific work*. The beater in Mr. Arkwright's machine was taken from *Emerson's* book. (*d*)

Though it may be learned abroad, (*e*) yet it must not be suggested by a friend at home. (*f*)

And where the patentee claimed the exclusive liberty of making lace, composed of silk and cotton thread mixed, and not of any *particular mode* of mixing them; upon its being clearly proved and admitted that silk and cotton thread had before that time been mixed on the same frame for lace in some mode or other, the patent was declared to be void. (*g*) There was not any thing particularized which was a novelty.

A patentee *summed up the principle* (*h*) in

(*d*) Ante, 29. *Rex* v. *Arkwright*, printed case, 182. Dav. Pat. Cas. 129. The question of novelty arose in *Manton* v. *Manton*, Dav. Pat. Cas. 333; see 2 B. Moore, 456, and *Brunton* v. *Hawkes*, 4 B. & A. 541, *Minter* v. *Wells*, 5 Tyr. 163.

(*e*) *Edgeberry* v. *Stephens*, 2 Salk. 477.

(*f*) Ante, 29. Tennant's patent. Dav. Pat. Cas. 429.

(*g*) *King* v. *Else*, Bull, N. P. 76. Dav. Pat. Cas. 144.

(*h*) *Rex* v. *Cutler*, 1 Stark. N. P. C. 354, and see 3 Mer. 629. The defendant stated his invention to consist of a new mode of feeding the fire in a grate. The fuel necessary for supplying the fire was introduced at the lower part of the grate, in a perpendicular or oblique direction. The manner

which his invention consisted, that turned out to be old, and did not set forth any instrument, or any new particular mode of applying that principle, although some machinery had been invented. The patent was in consequence adjudged to be void for *want of novelty*, although the application of the principle, as described in the specification, was new. (*i*)

If the subject has been published, though unremarked, among other things, it is not new; for no man can appropriate the invention of another person. And if the effect has been produced by a similar method, it is known in law. If a contrary rule were to prevail, it would be impossible to say what publication of a fact should take away its novelty, and prevent its becoming the subject of a patent. (*j*)

When the objects of two grants are substantially the same, they may both be valid, if the modes of performing it was set forth in the description and drawings annexed. It was proved that grates had been made prior to the date of the patent upon the same principle, although they did not possess all the advantages of this patent one. The effect was produced in the old ones by contracting the grate, whilst in the new ones the grates remained of the same size. In both, the coals were *wound up from below* the grate.

(*i*) The same point was decided in *Saunders* v. *Aston*, 3 B. & Ad. 881. See S. C. post.

(*j*) *Hare* v. *Harford* and *Taylor*, C. P., 14 July, 1803. This case has been doubted. By the invention, in brewing beer the essential oil of hops was preserved, and the water boiled. The water had been boiled by a *similar method*, which must *necessarily* have preserved the oil, although not

of attaining the desired effect are essentially different. (*k*)

2. Must not have been used.

It is expressly provided by the statute of James that the subject fit for a patent must be one "*which others at the time of making such letters patent and grants shall not use.*" (*l*)

It must not have been used, either by *other persons*, or by the patentee himself.

Used by others.

It has been stated, that if several persons about the same time discover the same thing, that he is accounted the inventor who makes the first communication of it to the public. (*m*) Thus it was considered by the court that Dr. Hall had not *used* his discovery of the object-glasses, because he had not made it known; and that the mere knowledge of the fact, without its being

intended to do so. And see *Manton* v. *Parker*, Dav. Pat. Cas. 330. But it appears to be confirmed by *Minter* v. *Mower*, 6 A. & E. 755, The jury found that a person (not the patentee,) found out the principle, but not the practical purpose to which it was then applied, and that the patentee (plaintiff) had discovered such practical purpose; and the Court ordered a nonsuit to be entered: see S. C. post.

(*k*) *Huddart* v. *Grimshaw*, Dav. Pat. Cas. 290. And see *Russell* v. *Cowley*, 1 C. M. & R. 864. A patent claimed the invention of manufacturing tubes, by drawing them through rollers, using a maundril in the course of the operation. A later patent claimed the invention of manufacturing tubes by drawing them through fixed dies or holes, but the specification was silent as to the use of the maundril. The Court held that they would infer that the maundril was not to be used, and that the latter patent was good.

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

(*m*) Ante, p. 31. And see 2 Hen. Bla. 487.

published, was not "*a using*" within the meaning of the statute, so as to render Dolland's patent void, as one granted to a person who was not the real original inventor of the subject of it.

It has been seen (*n*) that the circumstance of several parts of Arkwright's machine having been *used* before the grant was obtained, weighed very strongly with the judge who tried the validity of his patent.

But if the secret of an invention be known only to a few persons, and one of them put it in practice and made an actual use of it, then a patent, afterwards obtained by any one of them, is void. This happened to Mr. Tennant, (*o*) whose grant was declared to be invalid, because a bleacher, who had not divulged the secret to any other person but to his two servants, had however *used* the same kind of bleaching liquor for several years anterior to the date of the patent.

An example is given by Mr. Davis (*p*) that seems to be a little at variance with this general rule. A person who sought a patent for making spectacles, incautiously told an acquaintance of the principle of the invention; by which means a person of the same trade immediately made a similar pair. The discoverer saw them in the shop window and employed a friend to purchase

(*n*) Ante, p. 29, in note, printed case, 50, 182, 861. Dav. Pat. Cas. 129, 139, and see 2 B. Moore, 452.

(*o*) Dav. Pat. Cas. 429.

(*p*) Dav. Pat. Cas. 445.

them for him. The patent passed the Great Seal a few days afterwards, and thus it is said "that his patent was rendered secure." It does not appear that this patent ever came before the Court. There are many reasons which may, it is conceived, be assigned why the grant would not be good in law. By the imprudence of the discoverer himself three persons at least became acquainted with his invention before the patent was sealed, and one actually made the article, and exposed it to sale. The moment the third person bought it, he, as one of the community, took possession of it. It was then made public, if it had not become so by the exposure to sale. It is difficult to imagine upon what principle this publicity could be done away with; certainly not by the gift of it back to the discoverer. There was knowledge of the secret,—an actual making,—and a public sale, by a person who was not the patentee. (*q*)

However, the case of *Lewis* v. *Marling*, (*r*) decided that the use must have been a public use, unless it could be shewn affirmatively that the patentee had a knowledge of the subject in its imperfect state, from the invention of another person. The patent was granted in 1818 to the plaintiffs, for improvements on shearing machines, for shearing or cropping woollen and other cloths. They

(*q*) See *Wood* v. *Zimmer*, 1 Holt, N. P. C. 60, and see *Cornish* v. *Keene*, 3 Bing. New Cases, 570.

(*r*) 10 Barn. & Cress. 22. See the same case at Nisi Prius, 4 C. & P. p. 52.

claimed as their invention four things:—1st. The application of the flat spring for directing and pressing the cloth to the cutting edges. 2d. The application of the triangular steel wire on the cylinder. 3d. The application of a proper substance fixed on or in the cylinder A. to brush the surface of the cloth to be shorn; and 4thly. "The described method of shearing cloth from list to list by a rotatory cutter."

As to the fourth thing claimed, the defendant contended that it was not new, and he proved that a similar machine was in use at New York twenty years ago, and that a specification of it was sent over in 1811 to one Thompson residing at Leeds, who employed two engineers to manufacture a machine from it; but it was never finished, in consequence of the disturbances made by the Luddites. This specification was shewn to several persons, but the machine was never brought into use. It appeared also that in 1816 a model for a machine, to shear from list to list by means of a rotatory cutter, was brought over from America by one Smith, and he showed it to three or four persons in his manufactory, but no machine was ever made from it, nor was it publicly known to exist; and Smith always used machines manufactured by the plaintiffs. It appeared also that many years ago *one Coxon* had made a machine to shear from list to list, which was tried by a person called on behalf of the defendant, (*s*)

(*s*) It was proved at the trial that he used it nearly six months. MSS.

but he did not think it answered, and soon discontinued the use of it.

For the defendant it was contended that this evidence deprived the plaintiffs of the right to a patent, as their invention was not new.

*Lord Tenterden* observed at the trial, that as the invention of the machine for shearing from list to list by a rotatory cutter had not been generally used or known in this country, the plaintiffs might be considered the inventors within the meaning of the statute 21 Jac. 1, c. 3, s. 6, notwithstanding the specification and the model which had been brought over from America, and the making of a machine to work in that manner by Coxon, and his lordship left to the jury the questions, whether it had been generally known, and whether the patent had been infringed by the defendant. The jury found a verdict for the plaintiffs.

A rule was afterwards moved for, that there should be a new trial, on the ground (among others) (*t*) that the question of novelty and prior use had not been properly left to the jury by the learned judge.

*Lord Tenterden* said, to impugn the novelty of the invention, evidence was given that one Coxon had previously made a machine for shearing from list to list, but it was not approved of, and never came *into use*. Another piece of evidence was, that a model had been sent over

(*t*) See post.

from America and exhibited to a few persons, but no machine was made from it, and the very persons who had the model, bought and used machines manufactured by the plaintiffs. It was also proved that a specification had been brought over from America and two persons employed to make a machine from it. But that was never completed, so that until the plaintiff's invention came out, no machine was *publicly known* or used here for shearing from list to list. I told the jury, that if it could be shown that the plaintiffs had seen the model or specification, that might be an answer to the claim of invention; but there was no evidence of that kind, and I left it to them to say whether it had been *in public use and operation* before the granting of the patent. They found that it had not, and I think that there is no reason to disturb their verdict.

Mr. *Justice Bayley* observed, if the model brought from America had been seen by the plaintiff, he could not afterwards have claimed to be the inventor. But if I discover a certain thing for myself, it is no objection to my claim to a patent that another also has made the discovery, provided I first introduce it *into public use.* Here there was no ground to doubt that the plaintiffs were the inventors of the machine, and first introduced it into *public use.*

Mr. *Justice Parke.*—There was no evidence in this case to show that the plaintiffs were not the inventors of this machine, in this country at least, but the statute further requires that it shall not

have been used by others, and it is said that the latter part of the condition has not been satisfied. But there was no evidence of the use of such a machine before the grant of the patent, and 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 use.

Before this decision was made, it was the generally received opinion in Westminster Hall, (*u*) that a knowledge of an invention, much less strong than those facts disclose, would have made a patent invalid.

That case has however been followed by another, *Jones* v. *Pearce*, (*v*) in which the words—public use—have been more fully explained.

Jones had a patent granted to him in 1826 for a new and improved description of carriage wheels, which were made entirely of iron.

(*u*) When that model was produced, to four counsel in consultation, (of whom one is now a judge and two are Queen's counsel,) one of the counsel exclaimed "there is an end of the patent—the production of the model will be sufficient, res ipsa loquitur."

(*v*) MS. July, 1832. And see *Morgan* v. *Seaward*, E. T. 1837. Before the date of a patent, a person, by the instructions of the patentee, and under an injunction of secrecy, made a pair of wheels on the principle mentioned in the patent for another person: which when made, were not exposed to view at the factory, but were shortly sent abroad for the use of a company, whose shareholders lived in England. The Court held that this publication did not deprive the invention of its novelty.

They were formed on the *principle of suspension*, that is, by suspending the weight on the circumference of the wheel instead of its being borne on the nave. In ordinary carriage wheels the weight is supported by the spoke or spokes which happen to be immediately under the box or nave of the wheel, while the spokes above the nave support no part of the weight. In Jones's wheels the weight, by means of iron rods, was suspended from the upper part of the wheel. That desirable effect was produced by the rods or spokes passing into the nave without being blocked in it, but where permitted to play a little into the nave as the spokes approached and came in contact with the ground.

On behalf of the defendant it was proved that Mr. H. Strutt, (*w*) of Belper, near Derby, had discovered the principle of suspension wheels for carriages from an observation on his water wheels, which were founded on the principle of suspending the water, and that he made, about 17 or 18 years ago, a wheel-barrow, a strong cart, and a small cart, composed of wood and iron, upon that principle. The strong cart had been used in a stone quarry about two miles from Belper, and the milk cart upon the farm. Neither of them had been sold or taken out of the neighbourhood of Belper. In consequence of Mr. Strutt's death

(*w*) A gentleman of great genius for mechanical discoveries, who died in early life much lamented.

the invention was not pursued. The carts after frequent repairs were thrown aside.

There was not any evidence to shew that Jones had ever seen or heard of the wheels made by Strutt.

Mr. *Justice Patteson*, who tried the cause, thus addressed the jury. Gentlemen—If on the whole of this evidence either on the one side or the other, it appeared that this wheel, constructed by Mr. Strutt's order in 1814, was a wheel on the same principles and in substance the same wheel as the other for which the plaintiff has taken out his patent, and that it *was used openly in public*, so that every body might see it, and had continued to use the same thing up to the time of taking out the patent, undoubtedly then that would be a ground to say that the plaintiff's invention is not new, and if it is not new, of course his patent is bad, and he cannot recover in this action; but if, on the other hand, you are of opinion that Mr. Strutt's is an experiment, and that he found it did not answer, and ceased to use it altogether, and *abandoned it as useless*, and nobody else followed it up, and that the plaintiff's invention which came afterwards was his own invention, *and remedied the defect*, (if I may so say,) although he knew nothing of Mr. Strutt's wheel, *he remedied the defects of Mr. Strutt's wheel*, then there is no reason for saying the plaintiff's patent is not good; it depends entirely upon what is your opinion upon the evidence with respect to

that, because, supposing you are of opinion that it is a new invention of the plaintiff's, the patent is then good.

Then the only remaining question would be, whether the defendant has or has not infringed the patent. Now, as I have told you before, it seems the defendant has constructed a wheel whose construction is on the suspension principle, —that alone would not make it an infringement of the plaintiff's patent, because the suspension principle might be applied in various ways; but if you think it is applied in the same way, as according to the plaintiff's patent it is applied, then the want of two or three circumstances in the defendant's wheel, which is contained in the plaintiff's specification, would not prevent the plaintiff recovering in this action for an infringement of his patent.

It would be quite a different thing if it was shown that the defendant had had communication long before with Mr. Strutt, and had taken up Mr. Strutt's invention in Derbyshire, and had constructed something like Mr. Strutt's, without any knowledge of the plaintiff's patent, and had actually borrowed it from Mr. Strutt's, which was good for nothing. It would be the hardest possible thing to say that this was an infringement of the plaintiff's patent, but it merely comes to this by reason of the variance between the defendant's and the plaintiff's; it is only less useful and less desirable, but is in effect the same thing; then the two points for your consideration clearly are

these—whether the plaintiff's invention is new, and if new, whether the defendant has so constructed his wheel as that it is an imitation of the plaintiff's patent; if you are of opinion for the plaintiff, on both those points your verdict will be for the plaintiff—but if you are of opinion on either of these two points against the plaintiff, then your verdict will be for the defendant. The jury found for the plaintiff. That verdict was not disturbed.

Used by himself before patent obtained.

Not only is it required that the subject shall not have been *publicly used*, but the patent will be void if the inventor had made any use of it himself prior to the time of obtaining his grant. Thus, the patent for British imperial verdigris, (*y*) because the inventor had, for four

(*y*) *Wood* v. *Zimmer*, 1 Holt, Rep. N. P. 58. (And see *Kay* v. *Marshall*, 5 Bingham's New Cases, 592.) This patent was for a new mode of making verdigris, to be called British Imperial Verdigris. It was one objection to it that the article was not new at the time of the patent; inasmuch as the patentee had previously sold it. Gibbs, C. J.—This question is somewhat new. Some things are obvious as soon as they are made public. Of others the scientific world may possess itself by analysis. Some inventions almost baffle discovery: but, to entitle a man to a patent the invention must be new to the world. The public sale of that which is afterwards made the subject of a patent, though sold by the inventor only, makes the patent void. It is in evidence that a great quantity was sold in the course of four months before the patent was obtained, and that the patentees were in the habit of selling his manufacture. His Lordship left it to the jury to say whether the

months prior to the sealing of the grant, sold the article under a different name, was, in consequence thereof, declared to be void.

That doctrine is very well illustrated in the case of *Pennock* and *Sellers* v. *Dialogue*, in the Supreme Court of the United States of America. (*z*) The patentees made their invention complete in 1811, and commissioned a person to sell the invented article for them, until the year 1818, when they applied for and obtained letters patent.

The Court, in delivering their judgment, made (among others) the following observations. "It is obvious that many of the provisions of our patent act are derived from the principles and practice which have prevailed in the construction of the law of England in relation to patents."

The true meaning of the words of the patent law, "not known, or used before the application," is, not known, or used *by the public* before the application.

If an inventor should be permitted to hold back from the knowledge of the public the secrets of his invention: if he should for a long period of years retain the monopoly, and make and sell his invention publicly, and thus gather

(*z*) See Vol. 2, p. 1, of Reports "by Richard Peters, Counsellor at Law, and reporter of the decisions of the Supreme Court of the United States," which are given with great ability and knowledge of the subject under discussion.

the whole profits of it, relying upon his superior skill and knowledge of the structure, and then, and then only, when the danger of competition should force him to procure the exclusive right, he should be allowed to take out a patent, and thus exclude the patent from any further use than what would be derived under it during his fourteen years, it would materially retard the progress of science and the useful arts, and give a premium to those who should be least prompt to communicate their discoveries.

Experiments.

Whether *experiments*, made with a view to try the efficacy of an invention, or the full extent of a discovery, are a *using* within the meaning of the statute of James, has not yet been decided. (*a*) It would be very difficult to say how much a substance or machine might be *used* by way of experiment before the patent is obtained, without running a great risk of invalidating the grant. (*b*)

3. Must be vendible.

The subject of a patent must be *vendible matter*. It seems reasonable that it should be something capable of being bartered in commerce,—or some substance in contradistinction to any thing that is to be learnt by practice. If it cannot be *sold*,—upon what principle can it reasonably claim protection from a statute made for the encouragement of trade and commerce?

(*a*) See *Hill* v. *Thompson*, 2 B. Moore, 457. A bill was introduced into Parliament in a late session to protect persons making experiments. It was thrown out on the second reading.

(*b*) See *Severne* v. *Olive*, 3 B. & B. 72.

There is not a case expressly decided on this point: but it is a fundamental proposition, which will be of great assistance in ascertaining what *methods* or processes may be denominated *new manufactures:* and therefore the dicta of the judges respecting it have been collected together.

Heath, J., said, (*c*) "The term 'manufacturer' precludes all nice refinements: it gives us to understand the *reason* of the proviso, that it was introduced for the benefit of trade; and that the subject ought to be that which is *vendible*, otherwise it cannot be a manufacture." "It must be for the *vendible* matter, and not for the principle."

Kenyon, C. J.—"I have no doubt in saying that this is a patent for a manufacture, which I understand to be *something made by the hands of man.*" An opinion that strongly impresses the idea of its being something *vendible.* (*d*)

And in the *King* v. *Wheeler*, (*e*) Abbott, C. J., observed, that the word "manufacture" had been *generally* understood to denote either a thing made, which was useful for its own sake, *and vendible as such*, as a medicine, a stove, a telescope, and many other things, or to mean an engine, or instrument, or some part of an engine or instrument, to be employed either in the making of some previously known article,

(*c*) 2 Hen. Bla. 482.
(*d*) 8 T. R. 99.
(*e*) 2 Barn. & Ald. 349, 350.

or in some other useful purpose, as a stocking frame, or a steam engine for raising water from mines. (*f*)

4. Must be material and useful.

The number of patents that have been cancelled for not being *beneficial* to the public is very small; although it is always distinctly left to the jury to say, whether the invention is a material and useful manufacture. (*g*)

(*f*) See S. C. post, as to methods, &c.

(*g*) *Hill* v. *Thompson*, 2 B. Moore, 450, 454. 3 Meriv. 629, and see *King* v. *Arkwright*, where it is said that the stripes on the fillets, if new, were not material enough to support a patent. Printed case, 185; Dav. Pat. Cas. 135; and see id, 186, id. 138. Buller, J.—Then the seventh article is what they call the *can*. Holt, (a witness) says, the only difference between the two, the spinning machine, and the present roving machine, is, that the latter has a can; and indeed, that, at one time, was admitted by the counsel for the defendant. If it be so, it brings the case to a short point indeed; for, if nothing else is *new*, the question is, whether it is *material* or *useful?* The witnesses upon the part of the prosecution say, it is of no use at all. In the first place, they had that before which answered the same purpose, though not made exactly in the same form; it was open at top, it twisted round, and laid the thread precisely in the same form, and had the same effect this had; so if it was new, it is of no use. But they say it is not new; for, though it was not precisely the same shape, in substance it was the same thing, that is not contradicted.

That part also stands without any contradiction upon the part of the defendant; for the defendant's witnesses satisfy themselves with telling you they think it intelligible, and it might do without the roller, though it might not be so effectual as with the roller. It is admitted by several it could do without, that appeared from the experiment made. They

In the case of *Bloxam* v. *Elsee*, the most important issue was left to the jury by the Chief Justice, whether the machine for which the patent was granted was capable of producing useful paper. The jury found that it was capable. (*g*)

An inventor may honestly imagine that there is utility in his discovery when there is not. Few men would risk the expense of obtaining a patent for an article, which they knew to be useless, when it is evident that their reward, depending on the sale, could not possibly be great, unless the manufacture was beneficial to the community. But it is not difficult to conceive that a person might endeavour to monopolize a known article of trade, by a patent for some immaterial alteration or addition to it, on the speculation that the public would give him credit for the patent article being superior to the old one. To prevent such deceit, this general rule is laid down, *that the new manufacture or subject must be material and useful.* It must, *of itself*, be a thing of some consequence in commerce. Although, as Lord Ellenborough observed, (*h*) in every department of science there are some things which are common and cannot be appropriated, and if one elementary thing be substituted for another, and make an important

shewed you by one of the engines, how it did with the roller, and how without; and that it was done without, just the same as with it.

(*g*) 6 Barn. & Cress. 173.

(*h*) *Huddart* v. *Grimshaw*, Dav. Pat. Cas. 297, 298.

improvement (as if .hat be done by a tube which was before done by a ring,) a patent for the improvement would be good, for it is a substantive invention: yet in general the substitution of one *material* for another in making a manufacture is insufficient to support a patent. (*i*)

(*i*) *Walker* v. *Congreve*, Eq. July, 1816. (And see *Russell* v. *Cewell*, 1 C. M. & R. 864.) Sir J. Leach, Vice-Chancellor, said, Though new, the invention, which was a *barrel* for carrying gunpowder, was not of such a nature as to come within the statute of monopolies; and did not exhibit such proof of skill and invention as entitled it to the protection of that law, which encouraged the exertions of genius, by enabling its possessors to reap more exclusively its reward.

Every thing was not an invention worthy of a patent; nor could every original former of a machin' be called an inventor.

Every novelty was not an invention entitled to the protection of the statute. A new principle must be discovered; skill and ingenuity must be exerted to entitle an inventor to a patent, the making of an old machine of new materials could not be a discovery, and the plaintiff could claim no protection for an invention, the only merit of which consisted in being made of brass instead of wood. When tea was first introduced into this country, earthenware teapots were used;—but could a person, who made the first one of silver, be entitled to a patent, restraining all his fellow-subjects from using silver teapots, except those bought of him.

Next it was said that the form was new: but was the invention of making *a barrel like a cylinder* worthy of being protected by the statute of monopolies? Well, but said the patentee, my barrel is strengthened with *hoops*. And was it a new thing displaying great ingenuity to strengthen a barrel with hoops? Was the *circular aperture* a great invention? No, but the method of shutting was new. And what was the novelty of placing upon a circular aperture a common pot lid? What was new was *unimportant*.

If a contrary rule were to prevail, a patent might be obtained for a thing, which, in itself, is a mere curiosity. And one great mischief at least would arise; for a person, who, applying this thing, trifling in itself, to an invention of his own, might thus produce something beneficial to the community, would be prevented from availing himself of the use of it for several years.

In the case of *Manton* v. *Parker*, (*k*) the question of *utility* was considered. By means of a perforation in the hammer of a gun, it was specified, that the air formerly confined would escape, but that, at the same time, the powder would be secured. On experiment it appeared that the powder passed as well as the air. The *utility* of the invention, and the purpose of the patent thus *failing*, the plaintiff was nonsuited.

The same point was again agitated in the case of *Brunton* v. *Hawkes*, (*l*) and was much con-

(*k*) Dav. Pat. Cas. 332, and see *Manton* v. *Manton*, Dav. Pat. Cas. 348.

(*l*) 4 Barn. & Ald. 455. Bayley, J.—Could there be a patent for making in one entire piece what before had been made in two pieces? I think not: but if it could, I think that still this would not be new. In the mushroom and the adze anchors, the shank is introduced into the anchor by a hole in the centre of the solid piece; and in reality, the adze anchor is an anchor with one fluke, and the double fluke anchor is an anchor with two flukes. After having had a one-fluked anchor, could you have a patent for a double fluked anchor? I doubt it very much. After the analogies alluded to in argument, of the hammer and pickaxe, I do not think that the mere introducing the shank of the anchor, which I may call the handle, in so similar a mode, is an invention for which a patent can be sustained.

sidered lately in the case of *Haworth* v. *Hardcastle*; (*l*) in that case the jury found that the invention was new and useful on the whole, but that the machine was not useful in some cases for taking up goods.

## II. A MACHINE OR INSTRUMENT.

Peculiar quality.

From the consideration of substances, it is easy to direct attention to the means by which some new or old thing may be made. Though a man cannot have a patent for making an article of trade by machinery in general terms, yet any particular *machine*, *engine*, or *instrument*, used in the production of a substance, is a new manufacture. (*m*)

It must possess the *properties* which have been shewn to be necessary not only to a substance, but to every other manufacture. One of its qualities must be pre-eminent—it must be very *useful*. If the article that is produced by the machine be old, it must be furnished to the public at a much cheaper rate. The community

(*l*) 1 Bing. N. C. 182. See S. C. post.

(*m*) *Boulton* v. *Bull*, 2 Hen. Bla. 492, (and see *Brown* v. *Moore*, Eq. Nov. 1815. And *The King* v. *Wheeler*, 2 B. & A. 345.) Eyre, C. J.—It was admitted that the word "manufacture" 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. 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 made to produce old or new effects; for a new piece of mechanism is certainly a thing made.

must receive some benefit from the invention; and when it is not a new article which is introduced, the old one must, in some respect, be rendered a better commodity for trade.

The cases of *Minter* v. *Wells*, (*l*) and *Minter* v. *Mower*, (*m*) illustrate that position.

### III. AN IMPROVEMENT, OR ADDITION.

An addition to, or improvement of, a manufacture, whether it be of a substance or machine, is considered as a new manufacture in law, and is allowed to be the subject of a patent. So early as in the reign of Elizabeth, in *Bircot's* case, (*n*) it was decided, that if the substance were *in esse* before, an addition, though it made the former article more profitable, was not a new manufacture.

This doctrine was overruled by Lord Mansfield; (*o*) who said, that the objection that there can be no patent for an addition, would go to repeal every patent that ever was granted: that it was a question open on the record, and the defendant might move in arrest of judgment. No such motion was ever made, and the decision has ever since been recognized as law.

But the patent must be *confined to the addition* or improvement, that the public may purchase it without being encumbered with other things. (*p*)

(*l*) 5 Tyrwhitt, 163.
(*m*) 6 Adol. & E. 735.
(*n*) 3 Inst. 184.
(*o*) In *Morris* v. *Branson*, Bull, N. P. 76.
(*p*) 2 Hen. Bla. 463.

If the grant extend to the whole, it will be invalid; for the property in the addition or improvement can give no right to the thing that has been improved. Thus in *Jessop's* case, (*q*) the patent was held to be void, because it was taken out for the whole watch, when the invention consisted merely of a single movement. *Huddart's* invention differed from that of *Belfour's*, because the thing which was effected with a ring or circle by the latter person was produced by a tube in the mode of making ropes by the former; and therefore he should have taken his patent for that improvement. (*r*)

(*q*) Cited by Buller, J., in *Boulton* v. *Bull*, 2 Hen. Bla. 489.

(*r*) *Huddart* v. *Grimshaw*, Dav. Pat. Cas. 265. See *Saunders* v. *Aston*, 3 B. & A. 881; and also see *Hill* v. *Thompson*, 2 B. Moore, 451, and ante, 54. The patent in this case was for "a new mode or art of making *great cables* "and other cordage, so as to attain a greater degree of strength "therein *by a more equal distribution* of strain upon the yarns." It appeared that a Mr. Belfour had invented some machinery which he thought would produce the same effect as Captain Huddiart's now did: but it failed.

It was contended that the object of the plaintiff and Belfour was exactly the same, the obtaining an equal stress upon each yarn. That Belfour's machine did not succeed, and the plaintiff's was only an *improvement* of it. That the subject of a bad patent becomes public property; and no person *improving it* can have a patent for the *whole*. Even if the first patent were good, leave to use it must be obtained, and then it may be made the *substratum* of another machine: but the second patent should be for the improvement. Ellenborough, C. J.—In inventions of this sort, and every other, through

There appears in the case of *Harmer* v. *Playne*, an exception to this rule,—that the patent should be for the addition, and that it should be kept *distinctly* apart by itself, in order that it may easily be distinguished from the *substratum* to which it has been applied. A patent had been granted to *Harmer* for a machine, of which he afterwards discovered some improvements. The second grant, in which was described the machine as improved, was of the privilege to make

the medium of mechanism, there are some materials which are common, and cannot be supposed to be appropriated in the terms of any patent. There are common elementary materials to work with in machinery: but it is the adoption of those materials to the execution of any particular purpose, that constitutes the invention. And if the application of them be new, if the combination in its nature be essentially new, if it be productive of a new end and beneficial to the public, it is that species of invention, which, protected by the King's patent, ought to continue to the person the sole right of vending it. But if, prior to the time of his obtaining a patent, any part of that which is of the substance of the invention has been communicated to the public in the shape of a specification of any other patent, or is a part of the service of the country, so as to be a known thing, in that case he cannot claim the benefit of his patent.

Now with respect to the tube it does seem to me, with submission to you, an important difference from the mere circle through which it passes, because it keeps it in a degree of confinement for a greater time, and more certainly obtains the end pointed out. In Mr. Belfour's specification the same end is to be obtained; and had the patent been taken out for that to be done by a tube, which was before done by a ring or circle, I should have thought the patent good, for that is a distinct substantial invention.

use of and vend "*his said invention*," which evidently appears at first sight to mean a patent for the *whole* machine. Yet, inasmuch as the second patent *recited* the first, it was held, that the grant was *merely* for the addition, and was valid. (*s*) Lord Eldon seemed to lean very much against this patent, when it was before him in Chancery prior to its being examined in a court of law. (*t*)

Peculiar kind of addition.

A person may take for the foundation on which he intends to erect the superstructure of his improvements, either a thing that has been long known, or one that has lately been made public; either the subject of an expired patent, or that of one which is void. (*u*) But if the improvement cannot be used without the subject of an existing grant, he must wait until it is expired. He may, however, at once take out a patent for the improvement by itself, and sell it. (*v*) In all these cases he must claim nothing more than the mere *addition*; and it is better to protest against considering any other part of the manufacture being taken as his own invention. (*w*)

Peculiar quality.

The general quality most peculiar to an addition, is, that it must be *useful*. It must be a real substantial improvement. (*x*) If the manufacture in its new state merely answer as well

(*s*) 11 East, 109. (*t*) 14 Ves. 133, 4, 5.

(*u*) *Huddart* v. *Grimshaw*, Dav. Pat. Cas. 271.

(*v*) Ex parte, Fox, 1 Ves. and Beam. 67.

(*w*) Post, Chap. IV. Specification.

(*x*) See ante, p. 54. as to the *utility* of the invention.

as it did before, the alteration is not such an invention as is worthy of a patent. (*y*) Buller, J., observed, that many parts of a machine may have been known before, yet, if there be any thing *material* and new which is an improvement of the trade, that will be sufficient to support a patent. The only difference between Mr. Arkwright's two machines—the old one for spinning, and the new one for roving, consisted in a *can*. Supposing that the new patent had been obtained for an improvement of the old machine, then the question, whether the *can* was absolutely necessary for roving, would have arisen. (*z*)

### IV. A COMBINATION OR ARRANGEMENT OF THINGS ALREADY KNOWN.

*A combination or arrangement* of old materials, when, in consequence thereof, a new effect is produced, may be the *subject* of a patent. This effect may consist, either in the production of a new article, or in making an old one in a better manner or at a cheaper rate.

This manufacture may be made of different substances mingled together; or of different machines formed into one; or of the arrangement of many old combinations. And there can be little doubt that if a person were to combine the different subjects of several expired

(*y*) *King* v. *Arkwright*. Printed Cas. 182. Dav. Pat. Cas. 129.

(*z*) Printed Cas. 185. Dav. Pat. Cas. 138. See ante, p. 29, n.

patents, he would be the inventor of a new manufacture.

Each distinct part of the manufacture may have been in common use; and every principle upon which it is founded, may have been long known, and yet the manufacture may be a proper subject for a patent. It is not for those parts and principles, but for the new and useful compound, or thing thus produced by combination, that the grant is made; it is for combining and using things before known with something then invented, so as to produce an effect which was never before attained. (*a*)

If to an old machine, consisting of combinations, an *improvement*, (*b*) be made by adding a

(*a*) *Manton* v. *Manton*, Dav. Pat. Cas. 346.

(*b*) *Bevill* v. *Moore*. For this case at Nisi Prius, see Dav. Pat. Cas. 361. In Bank see 2 Marsh. 211. The plaintiff was assignee of a patent granted to John Brown "for a machine for the manufacture of bobbin lace, or twist net, similar to and resembling the Buckinghamshire lace net, and French lace net, as made by the hand with bobbins on pillows."

At the trial, Gibbs, C. J., told the jury that if they thought Browne had invented a perfectly new combination of parts from the beginning, though all the parts separately might have been used before, his specification would be good. But if they should be of opinion that a combination of a certain number of those parts had previously existed up to a certain point, and that Browne had taken up his invention from that point only, adding other combinations to it, then his specification, which stated the whole machine as his invention, was bad. The jury were of opinion that, up to the point of

set of new combinations, the patent must be for the new combinations only; for then, as in the case of a simple improvement, the patent is granted only for the *addition.* If it be taken

crossing the threads, the combination was not new; and accordingly found a verdict for the defendants.

Gibbs, C. J.—I think a little confusion has been made between a *new machine for making lace, and lace made in a new method* by a machine partly old and partly new. In order to try whether it be, or be not, a new machine throughout, we must consider what the patent purposes to give to the patentee, and what privileges he would possess under the patent. Now the patentee is entitled to the sole use of this machine; and whoever imitates it, either in part or in the whole, is subject to an action at the suit of the patentee. Suppose it had been a new invention from beginning to end, and after Browne had obtained his patent, Heathcote had made a machine like those which he now makes;—is there any doubt that such a machine would have been an imitation, in part, of Browne's invention? Indeed all the defendant's witnesses agreed in stating that, though the same thought might have occurred to two persons, yet if Browne had seen Heathcote's machine, before he made his own, they should have had no doubt but that, up to a certain point, Browne's was an imitation of Heathcote's. It is not immaterial to consider that the drawing or plans of the machine were divided into six different sections, each containing a part of the machine in a different stage of its progress; and that as to one of them, which contained all the principles of the warp, the witnesses said that every part of that section existed in the old machine; and that a machine carried no further than that would have been a very useful invention. How then can it be said that Browne's specification, which described from its root a machine containing a part which was common to Heathcote's, does not contain more than Browne himself invented?

out for the whole machine thus combined, it will be void. In all instances of this kind of manufacture the ostensible object of the patent must be the *new combined matter*, and not any part of the old article, materials, ingredients, or machine. (*c*)

There may be, said Lord Eldon, 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. But, in order to its being effectual, the specification must clearly express that it is in respect of such *new combination* or *application*, and of that only, and *not* lay claim to the merit of original invention in the *use* of the materials. (*d*)

The case of *Lewis* v. *Davis* (*e*) is very important in shewing what "combination or arrangement of things already known" may be the subject of a grant. A patent had been granted in 1815 to Lewis, for a machine for shearing cloths.

Another patent was granted in 1818 to Lewis and another person, entitled "improvements of a machine for shearing and cropping woollen cloths, the same being improvements in a machine for which John Lewis had obtained a patent on the 27th July, 1815."

The specification of the patent granted in 1815, was given in evidence, from which it appeared

(*c*) 2 Hen. Bla. 487. Dav. Pat. Cas. 267, 8, 9.
(*d*) 3 Meriv. 629. (*e*) 3 Car. & Pay. 502.

that it was granted for a machine with rotatory cutters, which were used to shear the cloth *from end to end.*

In the specification to the patent granted in 1818, one of the things claimed was "to shear with rotatory cutters *from list to list*, in the manner specified."

It appeared in evidence that the first method of shearing cloth was by the use of common shears in mens' hands, which operation was performed from list to list: that a machine was invented in 1788, which carried the shears from list to list—that the next improvement was disclosed in the patent of 1815, by which the rotatory cutter passed *from end to end.*

The question therefore arose, whether these plaintiffs could have a grant for cutting cloth with a rotatory cutter *from list to list?*

It was shewn that some alteration in the machine for cutting from end to end was necessary, and had been made by the plaintiffs before it could be applied to cut from list to list. Those alterations or improvements were all useful. The defendant had not taken into his machine any of those alterations or improvements, being *three* mechanical contrivances, claimed by the plaintiffs, but had combined the rotatory cutter, which was old, with other mechanical contrivances.

The Lord Chief Justice said, it appears that a rotatory cutter to shear from end to end was known, and that cutting from list to list by means

of shears was also known. However, if before the plaintiffs' patent, the cutting from list to list, and the doing that by means of rotatory cutters *were not combined*, I am of opinion that this is such an invention as will entitle them to maintain the present action.

Another case to illustrate a combination of parts, is *Cornish* v. *Keene*. (*f*) The patent was

(*f*) 3 Bing. N. C. 570. Tindal, C. J., observed,—Now the first objection made to the patent so described, is, that the invention is not the subject matter of a patent. That it is neither a new manufacture, nor an improvement of any old manufacture; but is merely the application of a known material, in a known manner, to a purpose known before.

The question, therefore, as to this point is, does it come under the description of "any manner of new manufacture" which are the terms employed in the statute of James. That it is a manufacture, can admit of no doubt; it is a vendible article, produced by the art and hand of man; and of all the instances that would occur to the mind when inquiring into the meaning of the terms employed in the statute, perhaps the very readiest, would be that of some fabric or texture of cloth. Whether it is new or not, or whether it is an improvement of an old manufacture, was one of the questions for the jury upon the evidence before them; but that it came within the description of a manufacture, and so far is an invention which may be protected by a patent, we feel no doubt whatever. The materials indeed are old, and have been used before; but the combination is alleged to be, and if the jury are right in their finding, is new, and the result or production is equally so. The use of elastic threads or strands of Indian rubber, previously covered by filaments wound round them, was known before; the use of yarns of cotton or other non-elastic material was also known before; but the placing them alternately side by side together as a warp, and combining them by the means

taken out, and held good by the Court, "For an improvement or improvements, in the making or manufacturing of elastic goods or fabrics, applicable to various useful purposes," and the patentee in his specification, which was enrolled in July, 1833, described his invention in general terms to be designed for the production of an elastic web-cloth, or other manufactured fabric for bandages, and for such articles of dress as the same might be applicable to. He then described more particularly three distinct objects which he proposed. The third object proposed by the patentee was, "to produce cloth from cotton, flax, or other suitable material, not capable of felting, in which should be interwoven elastic cords or strands of Indian-rubber, coated, or wound round with filamentous material." He afterwards described the mode of effecting the third object to be, "by introducing into the fabric, threads or strands of Indian-rubber, which have been previously covered by winding filaments tightly round them, through the agency of an ordinary covering machine or otherwise; these strands of Indian-rubber being applied as warp or weft, or as both, according to the direction of of a weft, when in extreme tension and deprived of their elasticity, appears to be new; and the result, namely, a cloth, in which the non-elastic threads form a limit, up to which the elastic threads may be stretched, but beyond which they cannot, and, therefore, cannot easily be broken, appears a production altogether new. It is a manufacture, at once ingenious and simple. It is a web combining the two qualities of great elasticity, and a limit thereto.

the elasticity required. That by thus combining the strands of Indian-rubber with yarns of cotton, flax, or other non-elastic material, he was enabled to produce a cloth which should afford any degree of elastic pressure, according to the proportion of the elastic and non-elastic material." He added, "that the strands of Indian-rubber were, in the first instance, stretched to their utmost tension, and rendered not elastic, as described in a former specification to another patent; and being in that state introduced in the fabric, they acquired their elasticity by the application of heat after the fabric was made."

As to the possibility of combinations and proportions of quantities, times, &c., in a *process* being legal subjects of patents, mention will hereafter be made. (*g*)

Peculiar quality.

The peculiar quality of an arrangement is its *novelty*. It is the new adoption of the old materials to the execution of any particular purpose that constitutes the invention. (*h*) It must also be a substantial and *beneficial* alteration. A slight variation or transposition of parts will not sustain the patent.

Thus in *Saunders* v. *Aston*, (*i*) Lord Tenterden said, "It is stated early in the plaintiff's specification, that his improvements consist in 'the substitution of a flexible material, in the place of metal shanks on buttons.' Before this patent was obtained, the plaintiff had obtained another,

(*g*) Post, 84.

(*h*) *Huddart* v. *Grimshaw*, Dav. Pat. Cas. 278.

(*i*) 3 B. & A. 881.

for a mode of manufacturing buttons with metal shanks. Flexible shanks had been known long before. The present specification describes the mode of substituting one for the other. A great part of it merely repeats the process employed under the former patent, when metal shanks were used; and with regard to the modes of putting on the flexible shank, there was evidence that such shanks had been put on buttons for many years before, in several of the ways described by the plaintiff. It has been ingeniously contended that there was a novelty, at least in the application of the toothed collet to the production of a flexible shank, under the present patent. But the collet itself is not new; and although it is said in one part of the specification, that the teeth of the collet, when it is pressed down, 'materially serve to hold the materials forming the intended button firmly together,' the teeth being bent by coming in contact with the plate which bears the flexible substitute for metal shanks, yet it does not any where appear from the specification, that the patentee relies upon this collet as the material part of his invention. He declares that his invention consists in the substitution of a soft material for the metal shank; but he does not say a substitution by the special aid of this collet. And even assuming that the collet, where it is described as part of the machinery, is meant to be represented as the important part, then, indeed, if there were no other mode in which the object of the present invention could be accomplished, those in which the collet is so used, the patent

might, perhaps, be sustained; but it appears in evidence that this is not so. I think, therefore, the plaintiff is not entitled to recover." (*i*)

V. A PRINCIPLE, METHOD, OR PROCESS, CARRIED INTO PRACTICE BY TANGIBLE MEANS.

Though a philosophical principle, an elementary truth, simply and by itself, unorganized and known only in theory, cannot be monopolized, yet, (it is said,) *that a principle carried into practice* may be the subject of a patent. It is, (as some observe) not for the principle itself, but for the *method*, mode, manner, or process (founded on that principle) by which a thing new and beneficial is made, that the patent is granted. It is, (say others,) not so much for the method or process, (as these words are used in common acceptation,) as it is in fact for the device, substance, or thing made, or for the instrument or substantial means of producing the desired effect. In short, that the patent, though taken out for a *method*, is in reality for a *substance* or *machine*, if the thing described in the specification be some composition of *material* parts.

It will be endeavoured to shew, from the rules already laid down and investigated, that neither a principle nor a method, *as such*, can be the subject of a patent. The same conclusion will be deduced from the judgments delivered in several

(*i*) In *R.* v. *Fussell*, the patent was held by Lord Tenterden to be void, because the only alteration was using steam instead of hot water. MSS.

cases; and afterwards it will be the business of this section to attempt to establish, that it is for a principle or method, when it is carried into practice by tangible means, *and then only*, that a patent ought to be granted—that, in fact, it is for the tangible *means*, and not for the *method*; or in other words, that a patent, when it is *said* to be for a method, cannot be supported, unless the thing invented is a substance or a machine.

And hence it will be proper to examine an invention of this description, whether it be a proper subject for a patent, when—

1. It is a *principle.*
2. It is a *method* or *process.*
3. Patent for a *method,* but the subject is something material.

1. As to a principle.

That a *mere abstract* principle (*i*) cannot, under any pretence whatever, be monopolized, admits of no doubt. The elements of every science are common property—data—upon which every man may exercise his ingenuity, or otherwise the means of making improvements would be entirely destroyed.

A patent must be for a *vendible* matter, and how can a principle be matter, and become capable of being sold? (*j*)

(*i*) The law on this division will be found in the cases of *Boulton* and *Watt* v. *Bull*, C. P. 2 Hen. Bla. 463. *Hornblower* v. *Boulton*, 8 T. R. 98: and *King* v. *Wheeler*, 2 Barn. & Ald. 345, and *Hill* v. *Thompson*, 2 B. Moore, 451.

(*j*) Ante, 52.

Eyre, C. J., thought that a principle so far embodied and connected with corporeal substances, as to be in a condition to act and to produce effects in any art, trade, or mystery, or manual occupation, might be the subject of a patent. It is the better opinion that a patent for the *application* of a principle must be as bad as one for the principle itself. It seems impossible to specify a principle, or describe its application to all cases, which affords a very strong reason why it cannot possibly be the subject of a patent. (*k*)

Though a person cannot have a grant for the discovery of a *double use* of a thing known before, yet it is no objection to a patent that its subject is founded on the *same principle* as another, if the former be for a substance distinctly different from the latter. (*l*) In the case of *R.* v. *Cutler*, (*m*) it was remarked, by Ellenborough, C. J., that if the patentee had claimed a grant for his new in-

(*k*) 2 Hen. Bla. 485. Buller, J.—The very statement of what a principle is proves it not to be a ground for a patent, it is the first ground and rule for arts and sciences, or, in other words, the elements and rudiments of them. A patent must be for some new production from those elements, and not for the elements themselves. It is admitted, that if a man by science were to devise the means of making a double use of a thing known before, he could not have a patent for it. *A principle reduced to practice* can only mean a practice founded on principle, and that practice is the thing done or made; or, in other words, the manufacture which is invented.

(*l*) 2 Hen. Bla. 486. See *Brunton* v. *Hawkes*, 4 B. & A. 455.

(*m*) *The King* v. *Cutler*, 1 Stark. Rep. 354. Ante, 38.

strument, by which he supplied the fire-grate with fuel from below, and had not confined himself to the principle, which was old, his patent might have been supported. An opinion in which it is evidently presumed that two grants might be made for manufactures on the same principle.

And in *The King* v. *Wheeler*, (*n*) Abbott, C. J., observed:—"Or it may perhaps, extend also 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. But no merely philosophical or abstract principle can answer to the word manufactures. Something of a corporeal and substantial nature; something that can be made by man from the matters subjected to his art and skill, or at the least, some new mode of employing practically his art and skill, is requisite to satisfy this word. A person, therefore, who applies to the crown for a patent, may represent himself to be the inventor of some new thing, or of some new engine or instrument. And in the latter case, he may represent himself to be the inventor of a new method of accomplishing that object, which is to be accomplished by his new engine or instrument, as was the case of Watt's patent, in which he represented himself to be the inventor

(*n*) 2 Barn. & Ald. 350.

of a new method of lessening the consumption of steam and fuel in fire-engines, and by his specification he described certain parts to be used in the construction of fire-engines. Or, supposing a new process to be the lawful subject of a patent, he may represent himself to be the inventor of a new process, in which case it should seem, that the word 'method' may be properly used as synonymous with 'process.'"

Hence it may fairly be concluded, that neither a principle, nor the application or practice of principle, can be the subject of a patent. How far the first discoverer of a principle should be protected in a monopoly of that principle, and not be confined to the means by which he brought it into use, is a question of great difficulty; but it seems to be very dangerous to give, by legislative enactment, the monopoly of the first principles of science.

The case of *Hullett* v. *Hague*, (*o*) illustrates the position of law, that several persons may have several patents, founded on the same principle, if they use different mechanical contrivances.

The object to be obtained by the two patents, was, the evaporation of fluids at comparatively low temperatures; each party effected that object by the introduction of heated air into the fluid; but they both did it by different mechanical means, and were therefore entitled to hold their patents. The case cannot be understood without a state-

(*o*) 2 Barn. & Ad. 379.

ment of the specifications. *Hullett* was the assignee of *Knelle*r of a patent granted for "certain improvements in evaporating sugar," (which improvements were also applicable to other purposes). The specification was as follows: "I, *W. G. Knelle*r, do declare, that my invention consists in a method, or process, and certain apparatus as hereinafter described, by which I am enabled to evaporate liquids and solutions at a low temperature, and thereby to avoid the injury to which certain substances, which require a nice and delicate application of heat, such as sugar, for instance, are liable by being exposed to too high a temperature: and I do further declare, that my said invention and improvement consists in forcing, by means of bellows, or any other blowing apparatus, atmospheric or any other air, either in a hot or cold state, through the liquid or solution subjected to evaporation, and this I do by means of pipes, whose extremities reach nearly (or within such distance as may be found suitable under peculiar circumstances,) to the upper part or interior *area* of the bottom of the pan or boiler containing such liquid or solution, the other extremities of such pipes being connected with larger pipes which communicate with the bellows, or other blowing apparatus, which forces the air into them. The pan or boiler may be of any shape or dimensions, but I prefer it with a flat level bottom, and I introduce the liquid or solution to the depth of from four to six inches. The heat may be ap-

plied to the lower or exterior area of the bottom of such pan or boiler, by naked fire, steam, or hot air, in the usual manner, and by means well understood; the air then forced into the heated liquid or solution, keeps it in a constant agitation, abstracts its heat, and carries off the steam or vapour, which is to be expelled by raising the degree of heat under the pan or boiler, and increasing the quantity and velocity of the air injected into the liquid or solution; or, on the contrary, by lowering the heat and moderating the injection of air, the evaporation is retarded at the pleasure of the operator." The specification then, after describing at what degree of temperature this might be done, proceeded as follows:—" And I further declare, that this, my invention, may be applied to the evaporation of other liquids as well as sugar, and that the form or construction of the apparatus which I use to produce the above effect, may be varied according to circumstances, and the form or position of the pan to which it is to applied; but two things are essential in its construction; the first of which is, that however numerous the blowing pipes may be, their lower orifices should be distributed as evenly and equally over the whole surface of the bottom of the pan as possible; and secondly, that a stream of air should issue from the lower end of every one of them at the same time. To ensure this latter object, it is immaterial whether the bottom of the pan or boiler be perfectly level, but it is quite necessary that all the lower ends

of the blowing tubes should be on a level and parallel to the surface of the fluid to be evaporated, in order that there may not be a higher column of fluid in one tube than in another. The mode of construction necessary to produce these objects, may be various; but in order the more distinctly to explain my meaning and my mode of operating, I hereunto subjoin a drawing of the apparatus which I have used, and find to answer the purpose." (The drawing was annexed to the specification.) "The form of this apparatus may be varied, provided its essential properties of the air blowing through all the *descending* tubes, and these being so disposed as to produce greatly divided and equally distributed currents of air over the whole bottom of the vessel at once, are maintained; because my invention consists in producing rapid evaporation at low temperature than usual by the means hereinbefore described."

This specification having been read on the part of the plaintiff, the defendant put in another patent, under which he acted, granted to Richard Knight and Rupert Kirk, on the 9th of May, 1822, entitled "a patent for the invention of a process for the more rapid crystallization, and for the evaporation of fluids at comparatively low temperatures, by a peculiar mechanical application of air;" and the specification was as follows:—"We, the said Richard Knight and Rupert Kirk, do by these presents particularly describe and ascertain the nature of our said

invention, and in what manner the same is to be performed, as follows; that is to say," (They then stated the inconveniences resulting from the common process of boiling fluids by the too rapid access of heat, and proceeded as follows:) "To obviate this and similar difficulties, and also for the purpose of facilitating the process of evaporation of fluids in general, we declare this our invention to be peculiarly adapted, and we do hereby set forth and describe the means by which we effect the same; that is to say, we propel a quantity of heated air into the lower part of the vessel containing the liquor, syrup, or fluid, whether in a cold or heated state, and cause such heated air to pass through the whole body of the liquor, in finely divided streams. The means used by us for heating and applying the air to the fluid are as follows: that is to say, a quantity of air is propelled (by means of a blowing engine, bellows, or other machine used for propelling air,) through a pipe or pipes (made of lead, copper, iron, or other fit material,) into the *lower part* of the copper, pan or vessel containing the heated syrup, liquid, fluid, or other matter to be operated on, coiled or otherwise shaped and accommodated to the nature or form of the vessel; the said coil of pipe within and lying at the bottom of the said vessel being perforated with a number of small holes; the heated air being thus forcibly driven out in minutely divided currents passes rapidly through the liquid, and according to the quantity and tem-

perature of the air so passing through the liquid, a greater or a less quantity of the liquid will be converted into vapour and carried off with the air. In lieu of the perforated pipe, a shallow metallic vessel, of the nature of a cullendar, within the boiler, may be connected with the air pipe; and the cullendar being perforated with small holes, the heated air may be driven through this perforated cullendar, or any similar contrivance that may best suit the form of the vessel, or the nature of the fluid or material to be acted upon."

The specification then described how the heat might be applied, and proceeded thus:—"We further declare, that our invention consists *in the application of currents* of heated air, when forced or made to pass through the body of any fluid for the purpose of producing or facilitating evaporation; and we also declare, that the same may be advantageously applied to processes dependent upon the disengagement of aqueous vapour during the evaporation, concentration, and crystallization of various substances when dissolved in fluids, as in the manufacture of sugar, glue, salt, alum, soap, tallow, and similar processes." It was contended by the defendant's counsel, that the patent assigned to the plaintiff was void; first, because the assignor claimed, according to his specification, the merits of the same invention for which Knight and Kirk had obtained a patent several years before; the object of both patents being the same, viz., the causing

of evaporation by means of streams of atmospheric air introduced in any vessel near the bottom of the liquid; and the means also the same, viz., forcing the air through the liquid by bellows or other blowing machines. Secondly, supposing that the process described in the plaintiff's patent was an improvement on that pointed out in Knight and Kirk's specification, it was said that Kneller should have confined his patent to that improvement only. Lord Tenterden was of opinion, that although the object to be effected by the two patents was the same, the means of effecting it were different; and that the patent granted to Kneller must be considered as one granted for effecting that object by the particular method described in the specification. A verdict was found for the plaintiff, but liberty reserved to the defendant to move to enter a nonsuit.

A motion was made to enter a nonsuit, but it was refused: and in delivering the opinion of the Court, Lord Tenterden said,—Knight and Kirk's patent was, in substance, an invention of a process for the more rapid crystallization and for the evaporation of fluids at comparatively low temperatures; this object being effected by means of a coil of pipes lying at the bottom of the vessel, perforated with small holes, and thus operating on the liquid, or by a shallow cullendar placed at the bottom of the vessel. It was proved, that a pipe employed and acted upon in the manner described in the specification, viz. by forcing the air at the end of it, would accomplish that object.

The patent on which the plaintiff relied, and

for the infringement of which this action was brought, was for certain improvements in evaporating sugar, which improvements were also applicable to other purposes. By the specification Kneller declares that his invention consists in a method or process, and certain apparatus as thereinafter described. He does not claim as his invention the principle, but the apparatus, by which the principle of causing evaporation is to be carried into effect; for he states that, by his apparatus, he is enabled to evaporate liquids and solutions at a low temperature. It is evident that the object of the two patents is the same. But the mode of effecting that object is different. The specification continues, "and I further declare that my said invention and improvement consists in forcing, by means of bellows or any other blowing apparatus, atmospheric or any other air, either in a hot or cold state, through the liquid or solution subjected to evaporation." Now it was said, that the words which immediately follow, "and this I do by means of pipes," constituted a separate and distinct sentence from those which immediately preceded them, and that the patentee had stated his invention in the preceding sentence, and had claimed the same invention as that described by Knight and Kirk in their specification. But we think that the words, "and this I do by means of pipes," &c., must, in conjunction with those which immediately precede them, be taken to form one entire sentence, and that they amount altogether to an

allegation on the part of the patentee, that his invention consisted of the method or process of forcing, by means of bellows or any other blowing apparatus, hot or cold air through the liquid subjected to evaporation, this being effected by means of pipes placed as described in the specification. Now the method described in Knight and Kirk's patent appears to us to be perfectly different. It is either to have a pipe, accommodated to the form of the vessel, or a cullendar, *placed at the bottom* of the vessel. The method described in the plaintiff's specification is to have a large horizontal tube (*near the surface* of the liquid,) into which there are introduced a number of small perpendicular tubes, descending through the liquid to the bottom of the vessel, and having their lower ends exactly on a level, and parallel to the surface of the fluid. The air is then forced by the blowing apparatus from the open end of the large tubes to the other end, which is closed, and as soon as the large tube is filled the air descends through the smaller tubes to the bottom of the vessel, and bubbles up through the liquid, and the evaporation is thereby kept up constantly and equally in all parts. It appears to us that this is a method or apparatus perfectly distinct from the other, and for that method and apparatus the patent was taken out."

2. As to a method or process.

That a mere *method of making* a thing, or a *process*, or a *manner of operating*, cannot be the subject of a patent, is not quite so clear. Much discussion has taken place on this rule, which will

be laid before the reader, that he may form his own opinion.

The first case which is to be met with on this point, is that of Dr. Hartley, who had a patent for a *method* of securing buildings from fire. The invention consisted in disposing plates of iron in buildings so as to produce that effect.

That decision certainly goes the length of proving that a *method*, independent of the thing made, or the things used to produce the article, is a *new manufacture* within the meaning of the statute of James.

And the language of Eyre, C. J., (*p*) is very strong. He said that the effect produced was no substance or composition of things; it was a mere negative quality, the absence of fire: that the effect was produced by a new method of disposing iron plates in buildings; and that in the nature of things the patent could not be for the effect produced. He thought it could not be for the making the plates of iron, which, when disposed in a particular manner, produced the effect;

(*p*) In *Boulton* v. *Bull*, 2 Hen. Bla. 493. Dav. Pat. Cas. 208. And see 2 Hen. Bla. 492, where the same learned judge observed, that "under the *practice of making*—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;—*new methods* of manufacturing articles in common use, where the whole merit and effect produced are the *saving of time* and expense, and thereby *lowering the price* of the article, may be said to be new manufactures in one of the common acceptations of the word, and agreeable to the spirit and meaning of the act."

for they were things in common use. But, that the invention, consisting in the *method of disposing* those plates of iron so as to produce the effect, and that effect being a useful and meritorious one, the patent seemed to him to have been very properly granted to Dr. Hartley for his *method* of securing buildings from fire.

But it is worthy of observation, that Eyre, C. J., was the only judge, of many who delivered opinions on Watt's patent, who spoke in favour of the legality of Dr. Hartley's patent; and that he was of opinion that *even a principle* might be the subject of a patent (*q*).

Dollond's patent for the *method* of making the object glasses of telescopes comes next in the order of time: but that decision cannot be an authority here; for Buller, J., in a subsequent case said, (*r*) that "the question, whether the *subject*, and specification of that patent were good was not agitated at the time."

Delivering the opinion of the Court in a late case, (*s*) Abbott, C. J., enumerated the different kinds of things which might become objects of a patent, and observed, 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 and more expeditious

(*q*) Ante, 74.

(*r*) 2 Hen. Bla. 470. Dav. Pat. Cas. 172.

(*s*) The *King* v. *Wheeler*, 2 Barn. & Ald. 349.

manner, or of a better and more useful kind." And afterwards he added, "SUPPOSING a new process to be a lawful subject of a patent, the patentee may represent himself to be the inventor of a new process, in which it should seem that the word '*method*' may properly be used as synonymous with *process.*"

The doctrine of Eyre, C. J., had long been doubted; and the manner in which Abbott, C. J., expresses himself, confirms that doubt, but imposes the duty of giving the point a full investigation. It is conceived that such a device, method, or process, cannot be a manufacture within the meaning of the statute of James, because it is destitute of one of the qualities absolutely necessary to be found in a *new manufacture*, or subject proper for a patent,—*materiality*. The description given by that very learned judge, Eyre, C. J., is not of any thing that can be *made*. There is nothing corporeal, —nothing tangible,—nothing that can be bought or sold; no instrument by which the supposed benefit is produced, and which might, as an article of trade, be purchased and used by another person. (*t*)

(*t*) Ante, 36; and see *Boulton* v. *Bull*, 2 Hen. Bla. 486. Buller, J.—This brings us to the true foundation of all patents, which must be the manufacture itself; and so says the statute 21 Jac. I. c. 3. All monopolies, except those which are allowed by that statute, are declared to be illegal and void: they were so at common law; and the sixth section excepts only those of the sole working or making any manner of new

When an invention is not of *a thing made*, it can only be known, by being taught by the inventor himself, or by being learnt from *experiments* made on the faith of the description given of it in the specification. With that assistance, however well the method or process may be set forth, some time and experience must necessarily be required before a person can make use of the invention so beneficially as the discoverer. But the public are not bound to make experiments, (*u*) and therefore it seems reasonable to infer that a mere process or methed cannot be the subject of a patent.

But, supposing it possible that a new method of operating with the hands or a new process to be carried on by known implements or elements, might be so described as to be, by bare inspection, made as beneficial to the public as to the discoverer; that neither time nor labour, skill nor experience, are required to put it in practice: still it is not a substance or thing made by the hands of man, it is not *vendible*; which, it has been shewn, is an inherent primary quality of a new manufacture. (*v*)

manufacture; and whether the manufacture be with or without principle, produced by accident or by art, is immaterial. Unless this patent can be supported for the manufacture, it cannot be supported at all. I am of opinion that the patent is granted for the manufacture, and I agree with my brother Adair that verbal criticisms ought not to avail, but that *principle* in the patent, and *engine* in the act of Parliament, mean, and are, the same thing.

(*u*) 2 Hen. Bla. 484. (*v*) Ante, 52.

To permit a new method to be a manufacture within the meaning of the statute of James would be to establish the rule that if a man could make a *double use* of a thing known before, he might have a patent for it; a doctrine of which directly the reverse was laid down by Buller, J., and not disputed. (*w*)

The advantages of a method or process, in truth, arise from the *skill* with which it is performed. Suppose, for instance, that one person can with a certain machine produce a particular article of dress of a certain quality; and, another, with the same machine, by using it in a different manner, can make the same article in half the time, and reduce it to half the price; however new and ingenious this method may be, still it is nothing substantial or corporeal. (*x*) But suppose, that in *thus* using the machine some *apparently* inconsiderable alteration is made, that would be sufficient to support a patent; (*y*) and it is, indeed, difficult to imagine that any beneficial effect could be produced without some *material alteration* in the instrument itself; and then, why not oblige the inventor to take out a patent for the *improvement?*

It is expressly enacted in the statute of the 21 James I., that the new manufacture must not be "*hurtful to trade, nor generally inconvenient.*" To monopolize such methods as above enume-

(*w*) In *Boulton* v. *Bull*, 2 Hen. Bla. 486: and see *Manton* v. *Manton*, Dav. Pat. Cas. 344.

(*x*) Ante, 36. (*y*) Ante, 54.

rated appears to be particularly hurtful to trade. In every branch of it there are workmen who use the machines employed in their respective trades more skilfully than their fellows. This superior skill may be in consequence of a particular method of applying their implements. But it would be carrying the doctrine to a great length to decide that the workmen are entitled to patents for their respective methods of working.

And further, every master is bound to teach his *apprentice* the best way or means within his knowledge of following his trade. If, therefore, a master obtained a patent for fourteen years for a particular *method of operating with known instruments*, to produce a known article in less time than usual, or of making it better and more useful, such apprentice would not be allowed to exercise his hands in the most skilful manner he was able until several years after he had commenced business for himself. Such a patent would, indeed, be "generally inconvenient." There would be a monopoly in every handicraft trade; one person only in each calling would be allowed to work in the most skilful manner.

For these reasons,—that Dr. Hartley's case is the only one in support of the doctrine, and he did not first make iron, nor first discover the effect of iron on fire, so that he was not the inventor of any substance or *instrument*,—that method does not possess the qualities which have been shewn to be inherent in the *subjects* of patents, and can be known only by making experi-

ments, and that it is inconvenient to the public, particularly to masters and apprentices, that methods should be monopolized; it might perhaps, be fairly inferred that a method or process is not a new manufacture within the meaning of the statute of monopolies. The same inference will hereafter be made from the cases, which shew that a patent for a method may be obtained and supported, provided the subject of it be some material tangible substance. (*z*)

3. Patent for method, but subject is something material.

Though an attempt has been made to prove, that neither a philosophical principle nor a mere method or process can be monopolized, yet a principle, method, or process, when it is connected with corporeal substances, and when it is carried into effect by *tangible means*, may be the subject of a patent. (*a*) Such is the technical use that has for a long time been made of the word "*method*" in patents, that it is quite common for inventors to ask for a patent for a method of doing something, and then to set forth a description of some new substance or machine. It is a convenient way to avoid giving a title to the invention. And therefore, it is now clearly established, that if the patentee claim a method, and yet in the specification describe some tangible matter, the grant is valid. In other words, though the patent is for *something called* a method, yet the *real subject* of the grant is either

(*z*) Post.

(*a*) 2 Hen. Bla. 463. 8 T. R. 101. 2 Barn. & Ald. 350. See Evans's Statutes, 607.

a substance, machine, improvement, or combination.

Watt's patent.

This rule rests for support upon the celebrated case respecting Watt's steam engine. The patent was granted for a "*new method*" of lessening the consumption of steam and fuel in fire-engines; thus using the old one with some alterations in a more beneficial manner than was before known.

The specification stated that the method was founded on certain principles; and described the mode of applying those principles to the purposes of the invention, which was effected by certain *additions* to the old engine. The novelty consisted in keeping the steam vessel as hot as the steam that entered it; first, by inclosing it in a case of wood, or any other materials that transmit heat slowly; secondly, by surrounding it with steam or other heated bodies; and thirdly, by suffering neither water nor any other substance colder than the steam, to enter or touch it during the time of working. The condensation of the steam was produced in vessels distinct from the steam-vessel. This was entirely new, as in the old steam or fire-engines water was admitted into the cylinder or steam-vessel to condense the vapour. The remainder of the specification was merely speculative, and had not been carried into practice.

The *manner of making* these alterations was not set forth. An Act of Parliament reciting the patent to have been granted for making and

vending certain *engines* invented by Watt, extended to him for a longer term than fourteen years the privilege of making, constructing, and selling the *said engines*.

In the Common Pleas no decision took place, although it was twice before the Court. In the first instance, the judges were equally divided in opinion, and at the second time they confirmed the grant, upon an understanding that it should be carried on error into the King's Bench, for the opinion of the judges of that Court.

So much doubt having existed, and so much discussion having taken place on this topic, it may be useful to extract a few sentences from the opinions of the learned judges, who expressed their sentiments on the validity of Watt's patent: and to state the judgments more at length in the notes.

Eyre, C. J., supported the grant, because he thought that a principle might be the subject of a patent. (*b*)

Rooke, J. (*c*) What does method mean, but mode or manner of effecting? what method can there be of saving steam or fuel in engines, but by some variation in the construction of them? A new invented method therefore, conveys, to my understanding, the idea of a new mode of construction.

Kenyon, C. J. (*d*) The principal objection

(*b*) 2 Hen. Bla. 492. (*c*) 2 Hen. Bla. 478.
(*d*) 8 T. R. 98.

made to this patent by the plaintiffs in error, is that it is a patent for a philosophical principle only, neither organized, nor capable of being organized ; and if the objection were well founded in fact, it would be decisive, but I do not think it is so. No technical words are necessary to explain the subject of a patent. By comparing the patent and the manufacture together, it evidently appears that the patentee claims a monopoly for an engine or machine composed of material parts, which is to produce the effect described ; and that the mode of producing this is so described as to enable mechanics to produce it.

Ashhurst, J., was of the same opinion.

Grose, J. (*e*) I do not consider it as a patent

(*e*) *Hornblower* v. *Boulton*, 8 T. R. 103. Taking it, however, as a patent for an engine, it is objected that the thing was made before, and that the patent should have been for the *addition only*, and not for the whole engine : but I do not consider it as a patent for the whole engine, but only for the addition to or improvement of the old engine. The *method* is disclosed in the specification, and it is by the adoption of what is there disclosed, and by managing it in the way described.

The patent, therefore, is only for that additional improvement as described in the specification. It signifies nothing whether the patent be for the engine so made, or for the method of making it, if that method be sufficiently described in the specification.

I incline to think that a patent cannot be granted for a mere principle : but I think that, although in words, the privilege is to exercise a method of making or doing any thing ; yet if that thing is to be made or done by a manufacture, and the mode of making that manufacture is described, it then

for the old engine, but only for an addition to, or improvement of the old engine.

Lawrence, J. (*f*) The word "engine" may

becomes in effect, by whatever name it may be called, not a patent for a mere principle, but for a manufacture, for the thing so made, and not merely for the principle upon which it is made.

(*f*) 8 T. R. 106. I should feel great difficulty in deciding that a principle might be the subject of a patent. In order to see what the invention was, it is necessary to refer to the specification. "Engine" and "method" mean the same thing, and may be the subject of a patent. "Method," properly speaking, is only placing several things and performing several operations in the most convenient order; but it may signify a contrivance or device. So may an engine, and therefore I think it may answer the word method. So principle may mean a mere elementary truth; but it may also mean constituent parts. The clause is not for an improvement to a fire engine for any particular purpose, but generally to an invention for lessening the consumption of steam, applicable to all fire engines for whatever purpose they may be used, and whatever may be their construction, by an alteration of, and addition to, parts which are common to all, and upon which their powers of working depend.

In the argument, the engine, to diminish the consumption of steam was confounded with that which it was intended to improve. Some difficulties in the case have arisen from considering the word engine in its popular sense; namely, some mechanical contrivance to effect that to which human strength without such assistance is unequal. But it may also signify device; and that Watt meant to use it in that sense, and that the legislature so understood it, is evident from the word "engine" and "method" being used as controvertible terms. Now there is no doubt but that, for such a contrivance, a patent may be granted as well as for a more complicated machine; it equally falls within the description of a "manu-

signify *device*, and that Watt meant to use it in that sense, and the legislature so understood it, is evident from the words "engine" and "method" being used as controvertible terms.

On the other hand, Heath, J., (*g*) observed, No doubt the inventor *might have had* a patent for his *machinery*, but could not have one for a method.

facture," and unless such devices did fall within that description, no addition or improvement could be the subject of a patent.

(*g*) *Boulton* v. *Bull*, 2 Hen. Bla. 481. The question is, inasmuch as this invention is to be put into practice by means of machinery, whether the patent ought not to have been for one or more machines; the method is a principle reduced to practice, it is in the present instance the general application of a principle to an old machine. No doubt that the patentee might have had a patent for his machinery. If there may be two different species of patents, the one for an application of a principle to an old machine, and the other for a specific machine, one must be good and the other bad; that which is the subject of a patent ought to be specified, and it ought to be that which is *vendible*, otherwise it cannot be a manufacture. Another objection may be urged against the patent, upon the application of the principle to an old machine, which is, that whatever machinery may be hereafter invented, would be an infringement of the patent if it be founded on the same principle. If this were so, it would reverse the clearest positions of law respecting patents for machinery, by which it has been holden that the organization of a machine may be the subject of a patent, but the principles cannot. If a patent were obtained for a principle, the organization would be of no consequence; the patent for the application of a principle must be as bad as the patent for the principle itself.

And Buller, J., (*h*) said, I consider the patent as granted for the whole engine instead of an improvement; and void for requiring too much.

Hence it appears, that, of the very learned judges who delivered their opinions upon Watt's patent for "A METHOD of lessening the consumption of fuel in the steam-engine," and his specification, in which were described the *alterations and additions* of machinery to be made in that engine to produce the intended effect, *six* held that it was good, and *two* thought that it was void.

Among the six learned judges who thought that this patent was valid, five conceived, that if it were doubtful whether a patent could be granted for a *method*, yet, technical words placed aside, this one was in reality, for a substantial *improvement* in the steam-engine, although it was *called a method*, and that it ought therefore to be supported; whilst the other judge, Eyre, C. J., thought that a principle or method, if reduced to practice, might of itself, be the subject of a

(*h*) 2 Hen. Bla. 488. We are not told wherein the invention consists, whether there be an addition to the old machine, or whether it be only in the application of the old parts of the machine, or in what is called at the bar the principle only, or in what that principle consists. There is nothing new in the engine. I consider this patent as granted for the whole engine. The fire engine was known before; and, though the patentee's invention consisted only of an improvement of the old machine, he has taken the patent for the whole machine, and not for the improvement alone. A patent for an addition is good: but then it must be for the addition only, and not for the old machine too.

patent. And it may be collected from the expressions of the two learned judges who thought the patent void, that it was their opinion that the invention was a substantial *improvement*, and would have supported a patent for an improvement; but, that inasmuch, as the patentee *claimed a method*, and in the specification described *an improved engine*; the latter did not support the former, and therefore, that the grant was invalid.

From these opinions, it is submitted that a method *as such* cannot be the subject of a patent; that when an inventor obtains a patent for a new method, if he does not give to the world some new and useful substance or machine, something material and tangible, the grant is invalid.

Upon this point, therefore, the law seems to be, that the terms, *mode*, *manner*, *method*, *principle*, *process*, &c., are to be considered as synonymous. And that a patent for a method is only good, when in the specification there is something of a corporeal and substantial nature properly described.

It is to be lamented that Mr. Watt did not take out his patent for an improvement of the steam-engine, as Buller, J. and Heath, J. thought that he ought to have done. Much discussion would then have been prevented, and the anomaly that a method *under any circumstances* could be the subject of a patent, would, in all probability, have never been introduced.

The judges who finally decided this case felt that Mr. Watt deserved to have the full benefit

of his invention, and were, therefore, perhaps, inclined to think favourably of his specification; and at last, it was declared to be a valid patent, because the invention, though *called a method*, was, in fact, *something substantial* and very beneficial to the public.

The circumstance, that the validity of that grant was questioned, when this part of the law had not been much investigated, accounts for the contrariety of opinions expressed upon it. Lest such a patent or specification should not be able successfully to bear the test of a legal inquiry, an inventor under similar circumstances, had much better take out his patent for an improvement.

The opinions of the Court of Exchequer, in *Minter* v. *Wells* (*i*) are important on this point, although the merits of that patent were afterwards decided in *Minter* v. *Mower*. (*j*)

Lord Lyndhurst said,—Every invention of a machine, necessarily includes the application of some principle, and in this instance, the application of the principle of a lever to the back and seat of a chair, is the machine, the invention of which is claimed by the plaintiff. He has not summed up the extent of his invention, so as to include in it the principle of the lever, but merely the invention of applying it, in the manner specified. The claim is not leverage only, but self-adjusting leverage; nor that only, but the appli-

(*i*) 5 Tyr. 163. (*j*) 6 A. & E. 735.

cation of it in the manner described. He says, "I claim the application of a self-adjusting lever-age, applied to the back and seat of a chair, whereby the weight on the seat acts as a counter-balance to the pressure against the back of such chair, as above described." That back and seat are so placed and contrived that the pressure on the back is varied and counterbalanced by that on the seat. Any machine applying a self-adjusting lever to the back and seat of a chair, by which the effect of one counterbalancing the other is produced, would be an infringement of this patent: for the claim is for a self-adjusting lever, as applied to the back and seat of a chair, in whatever shape or form it may be made. Mr. B. Parke said,—What is claimed as an invention is not the principle of the lever, but merely the mechanical contrivance by which the principle is combined with, and made applicable to, the construction of a chair adjusting itself in a manner regulated by the mere act of sitting in it. The plaintiff only claims the combination, and that is admitted to be new. (*k*)

## VI. A CHEMICAL DISCOVERY.

THE discoveries in chemistry have of late been so numerous, and are become so important to the community, by the assistance which is derived from them in the improvement of many articles of trade, that it is the opinion of many persons,

(*k*) *Minter* v. *Wells* and *Another*, 5 Tyrwhitt's Rep. 165.

that if methods or processes in general cannot be the subjects of patents, yet a *chemical process* ought to be considered as a new manufacture within the meaning of the statute of 21 James. It is upon that account that they have been placed in a division by themselves. If distinct rules should ever be laid down, by which encouragement might be held out to ingenious men to make experiments in this branch of science; care at the same time must be taken that support and importance are not given to mere curiosities.

Patent medicines.

However, as the law now stands, a *chemical discovery* (*l*) comes within the description of a manufacture only when it gives to the community some substance, (*m*) or compound article, *new* and *unused*, *vendible* and *beneficial*. (*n*) Of this description are MEDICINES, a fruitful source of patents. They partake of the nature of a substance, and also of that of a *combination*, or a compound of ingredients.

It is no available objection to a patent for a medicine, that the properties of the several drugs of which the subject is composed were already

(*l*) The patents of this description which have come before the Courts, are in the cases of *Turner* v. *Winter*, 1 T. R. 602; *King* v. *Wheeler*, 2 Barn. & Ald. 345; *Hill* v. *Thompson*, 2 B. Moore, 424. The latter case at Nisi Prius, in 1 Holt, 636; and in Equity, 3 Meriv. 622, &c., neither of which patents could successfully bear a legal inquiry.

(*m*) Heath, J. 2 Hen. Bla. 481, 482; and by Buller, J., id. 487.

(*n*) Ante, 37.

known, if the grant be for the *specified compound*, and not for the articles or ingredients of which the mixture is made.

On the other hand, authorities are not wanted to shew that the *mere process* of a chemical discovery is a new manufacture. Mr. Justice Dallas, in delivering the opinion of the Court on Hill's patent (*o*) for "The invention of certain Improvements in the smelting and working of Iron," said, "It has not been contended that it is a patent introducing into use any one of the articles mentioned therein, as singly and separately taken; nor could it be so contended, for the patent itself shews the contrary; and if it had been a patent of such a description, it would have been impossible to support it, for slags, as well as mine rubbish and lime, had undoubtedly been made use of before it was passed. But it is said, it is a patent for combinations and proportions, producing an effect altogether new, *by a mode and process*, or series of processes, unknown before, or to adopt the language made use of at the bar, it is a patent for a *combination of processes* altogether new, leading to one end." From whence it might be inferred, that a *chemical* process may be the subject of a patent.

Referring the reader to the authorities quoted, and the arguments urged in a former part of this work, to shew that a method or *process in general* is not a *new manufacture*, I shall merely observe

(*o*) *Hill* v. *Thompson*, 2 B. Moore, 448, ante.

that if a new substance is really produced, by the chemical process, the grant, by the same reasoning that a method may be claimed when the object is a machine, will be valid. (*p*)

There should be a body of laws framed expressly for discoveries in chemistry, because the rules which apply to the inventor of a machine, do not adapt themselves readily to the discoverer of a chemical truth.

## VII. A FOREIGN INVENTION.

THE liberality of the Courts of English Jurisprudence soon gave to the words "New Manufactures," a signification so extensive and general, that, in the oldest case in our reports it was decided, that a patent might be granted for a new manufacture which was "*new in this realm*," although it was originally invented abroad. (*q*)

The *foreign article*, if it have the requisite qualities (*r*) when published in this kingdom, may, to become a new manufacture within the meaning of the statute of James, belong to any one of the classes of subjects for patents above enumerated. (*s*)

From the decision in *Edgeberry* v. *Stephens* it might be inferred, that if an Englishman publish an invention whilst abroad, he is nevertheless

(*p*) Ante, 96.
(*q*) *Edgeberry* v. *Stephens*, 2 Salk. 477.
(*r*) Ante, 37. (*s*) Ante, 31.

entitled to a patent for it, if he apply for one before it is known in this country.

This construction of the statute has been of the greatest benefit to commerce by thus naturalizing the inventions of other nations. And indeed without such a rule patentees would, upon almost every trial for infringements, be met with evidence that the manufactures or parts of them were not new, because they were known in some distant country.

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General observations on new manufactures.

Though a new manufacture has really been invented, the benefits arising from it will be lost to the inventor, if the patent is not rightly taken out. Yet it is often very difficult to know under which of the divisions of this Chapter inventions ought to be arranged.

When the effect is some new *substance* or composition of things, the patent ought to be taken out for the new substance or composition without regard to the mechanism or process by which it has been accomplished; which, though perhaps also new, can only be useful as producing the new substance.

When the thing discovered is no particular substance, but is the means of producing one; when it is a *machine*, the patent can only be maintained for the mechanism. But whether it is best in the case of *improved machinery* that the patent should be obtained for the whole,

protesting against any claim to the old parts, or whether it would be taken simply for the improvement, be it a single piece or combination, is a question for the judgment of the inventor.

But a very slight combination of mechanical means, which form an instrument that is new and useful will support a patent.

It matters not that two patents profess by their titles to be for the same objects, if the inventions are really different in their nature, and in the effects they produce. Under the title *method*, patents are made for every kind of new manufacture: and several grants are often obtained at the same time with the general title for an *improvement* of a particular article.

# CHAP. IV.

## OF THE SPECIFICATION.

THE part of the grant most important to the public, and with which the inventor is more immediately concerned, is the SPECIFICATION—the instrument in which is contained the *description* of the new manufacture for the information of the public.

The rules of law respecting the specification of an invention will lead to the consideration of

I. *Its nature and general properties.*
II. *Its connection with the patent.*
III. *The particular description of each kind of manufacture.*

### I. THE GENERAL PROPERTIES OF A SPECIFICATION.

IN the specification (*a*) the invention must be

(*a*) *King* v. *Arkwright*, printed case, 172. Dav. Pat. Cas. 106.

Buller, J.—Upon this point it is clearly settled, that a man, to entitle himself to the benefit of a patent for a monopoly, must disclose his secret, and specify his invention, in such a way, that others may be taught by it to do the thing for

accurately ascertained, and particularly described: it must be set forth in the most minute detail. The disclosure of the secret is considered as the *price* which the patentee pays for this limited monopoly; and therefore it ought to be full and correct, (for the benefits thus secured to him are great and certain,) in order that the subject of his patent may, at its expiration, be well known, and that the public may reap from it the same advantages as have accrued to him.

The courts of law have ever looked with jealousy on the specification, lest the *bargain* between the public and the inventor, as Lord Eldon called it, should be too much in favour of the

which the patent is granted; for the end and meaning of the specification is to teach the public, after the term for which the patent is granted, what the art is; and it must put the public in possession of the secret in as ample and beneficial a way as the patentee himself uses it. This I take to be clear law, as far as it respects the specification; for the patent is the reward which, under an act of Parliament, is held out for a discovery; and therefore, unless the discovery be true and fair, the patent is void. If the specification in any part of it be materially false or defective, the patent is against law, and cannot be supported.

It has been truly said by the counsel, that if the specification be such that mechanical men of common understanding can comprehend it to make a machine by it, it is sufficient: but then it must be such that mechanics may be able to make a machine by following the directions of the specification without any new inventions or additions of their own. The question is, whether, upon the evidence this specification comes within what I have stated to you to be necessary by law in order to support it.

patentee; (*b*) and hence more questions have arisen upon it in the courts of law than upon any other part of the grant, and more patents have been declared *void* on this than on any other ground. It therefore behoves the inventor to be very circumspect.

## II. THE CONNECTION OF THE PATENT AND SPECIFICATION.

The patent and the specification have always been considered as connected together, and dependent on each other for support. The one may be looked at, to understand the other. If the specification be obscure, the patent may be referred to for an explanation; and to learn what the patent is, the specification may be read. (*c*) Still, however, the specification must contain within itself a full description of the invention. When taken together they should be complete, and afford every information that may be required.

The title of patent.

The patent and specification are linked together by the *title* given to the invention in the patent, and the *description* of it set forth in the specification.

The specification must support the title of the patent. The latter should not indicate one thing, and the former describe another as the subject of the grant: because, if the petitioner had repre-

(*b*) Dav. Pat. Cas. 434.

(*c*) 3 T. R. 95; and see 2 Hen. Bla. 478.

sented himself as the inventor of the matter really discovered, it might perhaps be well known that the thing was of no utility, or was in common use, and he might not have obtained a grant as the inventor. (*d*) And therefore a patent taken out for a tapering brush was not supported by the specification of a brush, in which the hairs or bristles were made of unequal lengths. (*e*)

Claiming too much in the title.

This doctrine, with respect to the inventor claiming too much, was illustrated by Lord Eldon, who observed,—" I will go farther, and say that not only must the invention be *novel and useful*, and the specification intelligible, but also that the specification must not attempt to *cover more* than that which, being both matter of actual discovery, and of useful discovery, is the only proper subject for the protection of a patent. And I am compelled to add, that if a patentee seek by his specification any more than he is strictly entitled to, his patent is thereby rendered ineffectual, even to the extent to which he would be other-

(*d*) *Rex* v. *Wheeler*, 2 Barn. & Ald. 350, 1.

(*e*) *King* v. *Metcalfe*, 2 Stark. N. P. C. 249. The patent was for the manufacture of hair brushes, which were described to be tapering brushes. It appeared that the hair or bristles in each compartment of the brush varied in length from a quarter of an inch to an inch.

Ellenborough, C. J.—Tapering means conveying to a point; according to the specification, the bristles would be of unequal length; but there would be no tapering, no conveying to a point.—His lordship advised the jury to find that it was not a tapering, but only an unequal brush.—Verdict for the Crown.

wise fairly entitled." (*f*) As if there be a patent for a machine, and for an improvement upon it, which cannot be sustained for the machine; although the improvement is new and useful, yet the *grant altogether* is invalid on account of its attempting to cover too much. (*g*)

Indeed the title of the patent being a definition or short description of the patent, should not be very *extensive*, nor yet very *confined*, but should be commensurate with the thing invented, and correctly inform the public of the exact nature of the thing, which they may expect to find described more at length in the specification. A patent was, therefore, considered as taken too extensively, and consequently void, when, a new *lamp* being the object, the *title* indicated that the invention was an improved mode of *lighting cities*, towns, and villages. (*h*)

(*f*) *Hill* v. *Thompson*, 8 Taunt. 375. 3 Meriv. 629. See S. C. in 2 B. Moore, 454; and 1 Holt, N. P. C. 636. *Gibbs* v. *Cole*, 3 P. Wms. 255.

(*g*) *George* v. *Beaumont* and *Others*, Eq. MSS.; and see 2 Hen. Bla. 489.

(*h*) *Cochrane* v. *Smethurst*, K. B. 1 Stark. 205. The patent was granted for "A method or methods of more completely lighting cities, towns, and villages." The novelty consisted in an improvement of Argand's lamp, in which the flame is placed between two currents of air, by bringing in a current of atmospheric air, whilst the impure air escaped by means of a tube, through the external part of the lamp, which conducts the air to the flame. The most important part of the invention, the exclusion of the foul air from returning, was obtained by the non-absorbing cover, which formed what was called the

And another patent, which was for a new or improved method of drying and *preparing malt*, was considered as incorrectly made, and not sustained by a specification, in which was described a method for heating, &c., *ready made malt.* (*i*)

*line of exclusion.* It was contended by defendant, after some technical objections, that the specification was larger than the patent, because it alluded to ship lights, convoy signals, theatres, churches, &c., and to the *generality of the words*, "or otherwise by preserving it in a state of purity."

Le Blanc, J., inquired if there was any specification of the use of the line of exclusion, or a description of what it is.

The Attorney-General contended, that Lord Cochrane had not by his patent claimed too much, although he might have inserted too much in his specification.

Le Blanc, J.—Under the general terms of the patent, must it not be taken with reference to the specification; *and if the specification is too large, is not the patent so too?*

The Attorney-General.—Bringing in a current of pure atmospheric air is not new: but bringing the current of atmospheric air, and excluding all other air, is new. Le Blanc, J.—I think the patent cannot be supported: it is in substance a patent for an improvement in street lamps, and should have been so taken. Plaintiff nonsuited.

(*i*) *King* v. *Wheeler*, 2 Barn. & Ald. 350. In fact the malt, by being thus exposed to a great degree of heat, would colour more beer than it otherwise would do. But such was not stated to be the object of the patent.

Abbott, C. J.—Upon reading the patent and the specification, it appeared to me that the proviso had not been complied with.

It is obvious, that if the patentee had not invented the matter or thing, of which he represents himself to be the inventor, the consideration of the royal grant fails, and the grant consequently becomes void; and this will not be the less true

An invention for giving paper, by the application of a certain composition, such a surface as rendered the lines of copper and other plate printing more clear and distinct, may properly be described in the title of a patent as an improvement in copper and other plate printing. (*k*)

A patentee summed up his invention thus: "My invention is 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 Court held that the patent was valid; for, without assuming to appropriate the principle of the lever, it claimed the invention of means by which that principle was applied to a chair in a new manner. (*l*)

Many patents appear to be for the same thing, a circumstance which sometimes puts the grants in jeopardy. It is better to prevent all objections to the *title* that the patent should be taken out

if it should happen that the patentee has invented some other thing, of which, upon a due representation thereof, he might have been entitled to a grant of the exclusive use.

The language of the patent may be explained and reduced to a certainty by the specification: but the patent must not represent the party to be the inventor of one thing, and the specification shew him to be inventor of another, because perhaps if he had represented himself as the inventor of that other, it might have been well known that the thing was of no use, or was in common use, and he might not have obtained a grant as the inventor of it.

(*k*) *Sturz* v. *De la Rue* and *Others*, 5 Russell's Rep. 322.

(*l*) *Minter* v. *Wells* and *Another*, 5 Tyrwhitt's Rep. 163.

for those parts *by name*, which are new and essentially different from any prior invention.

And moreover, if one thing be mentioned in the patent as a new manufacture, and the specification describe the manner of making another thing *quite different*, although the patent would be good, if the manufacture claimed had been described, or, if on the contrary, the subject specified had been claimed, yet for this incongruity, and because the patent is not supported by the specification, it is void. Thus, a patent, for an invention founded on a principle already known, for lifting fuel into the fire-grate from below the grate, in the specification whereof was described a new apparatus, was held to be bad for not claiming the new instrument as the thing invented. (*m*)

The rules of law respecting the title of the patent have not been relaxed, and it would be imprudent, under any change in the system, that they should be much altered.

In the case of *Bloxam* and *another*, assignees of *Fourdrinier* and *another* v. *Elsee*, (*n*) it appeared that a patent was granted to *Gamble* for a *machine* for making paper in single sheets without seam or joining *from one to twelve feet and upwards wide*, and from one to forty-five

(*m*) *King* v. *Cutler*, 1 Stark. N. P. C. 354. Ante, 38.

(*n*) 6 Barn. & Cress. 169, 178. It has been the happiness of the author of this Treatise to assist, as a member of Parliament, in obtaining for Messrs. Fourdrinier a public reward of 15,000*l.* for their services, a reward well merited.

feet and upwards in length, the method of making which machine had been communicated to him by a certain foreigner, with whom he was connected.

The description in the specification, shewed that the machine invented, was so constructed as to be capable of producing paper of *one definite width only*, and in order to vary the width, a new machine was required.

The patent was declared to be void, and the Chief Justice (Abbott) said, I think one of the objections which has been taken in this case is valid, and must prevail; and consequently, it is not necessary to give any opinion upon the others. By the patent, it appears that the patentee had represented to the crown that he was in possession of a machine for making paper in single sheets, without seam or joining, from one to twelve feet and upwards wide, and from one to forty-five feet and upwards in length. Upon this representation the patent is granted. The consideration of the grant is the invention of a machine for making paper in sheets of width and length, varying within the limits designated. If any material part of the representation was not true, the consideration has failed in part, and the grant is consequently void, and a defendant in an action for infringing the patent has a right to say that it is so. Now, I think it impossible to say that both width and length are not important parts of this representation. It may be that if the representation had mentioned length only, a patent

would have been granted for the invention, which (in its improved state at least) is eminently useful in a very important manufacture, as saving both time and labour in a very considerable degree. But although I may think this probable, I am not at liberty to pronounce judicially that it would have been so. I must, therefore, see whether the representation was true. It has been contended, in support of the patent, that the recital does not import, that paper of different widths was to be made by one and the same machine, but may mean only that the width might be obtained by different machines, each adapted and constructed to the extent required. But I think this construction of the recital cannot be allowed; for it is a different thing whether a manufacturer must supply himself with several different machines or with one only, capable alone of accomplishing all the purposes to be obtained by many. And if the width is not to be considered as material, the length cannot so be considered, and then the representation will only be that he has invented machines, by the use of several of which, paper of various widths and lengths may be made without seam or joining. And this will be at variance with all the specifications, which plainly shew that whatever was done, was done by one and the same machine. Then if the representation be, (as I think it is,) that paper of various widths may be obtained by one and the same machine, I must look to the evidence to discover whether the patentee was possessed of a

machine, or of the invention of a machine, capable of accomplishing this object. And unfortunately, the evidence shews that he was not. I say unfortunately, because it is to be lamented that the advantage of great ingenuity, labour, anxiety, and expense, should be lost to those who have bestowed them. The patentee was at the time possessed of one machine, and one only, and this adapted to one degree of width, and one degree only. And he was not then possessed of any method by which different degrees of width might be manufactured by that machine or any other. (*o*)

A patent was granted (*p*) for "certain improvements in extracting sugar and syrups from cane juice and other substances containing sugar, and in refining sugar and syrups." The specification stated a method of depriving syrups of every description of colour, 'by filtering them through charcoal, produced by the distillation of bituminous schistus, and used alone or mixed with animal charcoal, or even through animal charcoal alone, when placed in thick beds. It was alleged that the title had claimed a larger invention than was disclosed by the specification; but the Court held, that the specifi-

(*o*) It appeared afterwards to the Committee of the House of Commons, that if Mr. Fourdrinier had been present in Court, he would have explained that one machine for a wide breadth might easily and readily have been adapted to different breadths of papers of less width each.

(*p*) *Derosne* v. *Fairrie*, 5 Tyr. 393.

cation sufficiently described both branches of the invention recited in the title of the patent, *viz.*, the refining sugar, by melting it after it had granulated, and applying the patent process to it when thus brought into a syrup; and also the refiuing the syrup as extracted from the cane juice, before it had been so far subjected to the action of fire as to granulate and become sugar.

## III. THE DESCRIPTION OF EACH KIND OF MANUFACTURE.

WITH respect to the description of the thing found out, whilst tracing the several properties of a good specification, the same arrangement of the different kinds of new manufactures will be adopted as that which was followed in the former chapter. That classification was made to keep the several kinds of subjects distinct, in order, that being viewed apart, *general rules* for describing them might more easily be framed, and more readily understood.

*I. Substance.*

In the specification of a substance, the *thing itself* should be accurately ascertained. The *materials* of which it is composed, the *method* by which it is made, and the *use* to which it is to be applied, should be accurately developed, and particularly described; for corporeal substances seldom afford any information of the mode of making, or the manner of using them.

In the former chapter, under the division *substance*, were investigated the qualities that must necessarily be found in every manufacture fit to

be the subject of a patent. At a similar and corresponding place in this chapter, will now be enumerated those causes which render all sorts of specifications incorrect, and in consequence, make the patents void.

In the divisions appropriated for the rules illustrative of the modes for making proper descriptions of each subject, will hereafter be investigated, such mistakes as are likely to be fallen into by persons attempting to describe particular subjects of patents.

General rules.

It is a *fundamental rule*, on which all others for making and judging of a specification depend, that the secret must be disclosed, and the invention described in such a manner, that men of *common understanding*, with a *moderate knowledge* of the art, may be enabled to make the subject of the patent.

The description must be *confined* to the manufacture, that the novelty may be known. Extraneous matter, however learned, must not be introduced to darken it. Though it is addressed to the public in general, it need not be so circumstantial, or so explanatory, that persons entirely ignorant of the elements of the science from which the subject is taken, may thereby alone be able to learn and use the invention. Nor, on the other hand, should the description be so concise as to become obscure. (*q*)

(*q*) Bull. N. P. 76. Dav. Pat. Cas. 106, 128. 2 Hen. Bla. 484, 496. 11 East, 107, 8. 2 Barn. & Ald. 354.

Thus in *Crosley* v. *Beverley*, (*r*) at nisi prius, in which case, the patent was granted for an improved gas apparatus, no direction having been given respecting the condenser, (which is a necessary part of every gas apparatus,) Lord Tenterden said :—" A workman, who is capable of making a gas apparatus, would know that he must put in a condenser; the patentee does not direct it to be put in, but he does not say that it is to be left out."

The *clearness* of the description will, of course, depend upon the matter of the invention; but, upon the whole, it may be observed, that if a person of moderate capacity, having a little knowledge of the science which led to the invention, can immediately see the method pointed out, and easily apprehend the purport for which the subject was invented, without study, without any invention of his own, and without experiments, the disclosure is fully and fairly made.

That this general proposition, as to the requisite description, may be fully understood, the grounds upon which patents have been cancelled for the insufficiency of the specification will now be examined. The specification is bad, when

1. The terms are *ambiguous.*
2. Necessary *descriptions are omitted.*
3. Parts claimed are *not original.*
4. Things are put in to *mislead.*

(*r*) 3 Car. & P. 513.

5. The *drawings* are incorrect.
6. *One of different ways*, or different ingredients named, fails.
7. *One of several effects specified* is not produced.
8. The things described are *not the best known* to the patentee.

1. Terms ambiguous.

If the *terms* in which the description of the subject is expressed be *ambiguous*, if the words are used in any other sense than that in which they are generally understood, the invention may be wholly or partially concealed; and therefore, on that account, the grant would be invalid.

Taking the title, patent, and specification of *Campion's* letters patent (*s*) together, it was very difficult to say whether the word "*whatever*" referred to the total exclusion of starch, or whether when combined with the words "without any starch," it was merely a description of the thread of the sail-cloth which had been improved. For that ambiguity the patent was declared to be void.

It is mentioned in *Turner's* specification, (*t*) "take any quantity of lead, and calcine it; or minium, or red lead," whence it was inferred that the lead only was to be calcined, and a doubt arose whether the minium or the red lead was to be calcined. Such an objection, if the only one, would probably not invalidate a

(*s*) *Campion* v. *Benyon*, 3 B. & B. 5.
(*t*) *Turner* v. *Winter*, 1 T. R. 602.

grant, though a similar ambiguity is carefully to be guarded against. In that case, however, calcination would not produce the effect; fusion was necessary.

It was objected to the same patent, that the substance intended to be produced, and *called* white lead, could only be applied to a few of the purposes of white lead. The answer, that it was not intended to make white lead was not sufficient. In the specification, the inventor should have stated that the effect produced a substance *similar* to white lead, and then have set forth the useful purposes to which this new substance might be converted; and ought not to have misapplied the *term* white lead.

There was also another word in that specification which was not intelligible. It was directed that *fossil* salt should be used. Now, fossil salt is a genus having many species, and only one of the latter *sal gem* would answer the intended purpose.

For those reasons the patent was declared to be void.

If a term have a *technical* meaning, or one differing in the usage of trade from the ordinary sense annexed to it, the word may be received in its perverted sense; and if the manufacture be otherwise intelligibly described, a mere verbal inaccuracy will not vitiate the patent; (*u*) but if a word be not used in its common acceptation, then it should be explained. Thus, in *Wheeler*'s

(*u*) 2 Hen. Bla. 485.

specification, (*v*) it appeared, that by the word "malt," the patentee meant barley fully prepared for making beer; but that the word "malt," in its common acceptation, is applied to the grain as soon as it has germinated by the effect of moisture, and before it has been dried; and it was held that he ought to have explained his meaning.

In another case, (*w*) one of the ingredients was a white substance imported from Germany, and which could be purchased at one or two colour shops in London. The only description or denomination given to it in the specification was, "The purest and finest chemical white lead;" but there was no article known by that denomination in the trade, or in the shops where white lead is usually sold, and the finest white lead that could be obtained would not answer the purpose. The specification was held to be insufficient.

If, in a manufacture something well known be used, and the inventor give a design of it which appears to be of a different thing, though he means that the thing known should be used, the specification is in terms ambiguous; and it will be considered as being worded with an endeavour to conceal the invention and deceive the public. Thus, Mr. Arkwright, although he used the old spiral cylinder in his machine, so managed

(*v*) *King* v. *Wheeler*, 2 Barn. & Ald. 349. Ante, 111.
(*w*) *Sturz* v. *De la Rue* and *Others*, 5 Russell's Rep. 322.

the drawing and description, that on the face of the specification it appeared that he intended to use a parallel cylinder. (*x*)

2. Necessary descriptions omitted.

The several distinct parts of the subject of a patent may be divided into the *new* and the *old*. In a specification, all that is new, must of course, be clearly elucidated. The old parts may be distinguished as they are *material* and *immaterial* in producing the desired effect.

Any particular thing, although in common use, when it is applied in a new manner to the production of a new effect, is material, and becomes a part of the substance of the invention, and must be described. And if it is not mentioned, and its use pointed out, the description will be defective. It is only the *well known and immaterial* old parts that need not be described. (*y*)

A material alteration, from rollers in general, had been made in the rollers of Arkwright's machine of which no description was given, and it was considered as wilfully concealed. (*z*)

Mr. Arkwright's machine was intended to prepare for spinning, not only cotton, but silk, flax, and wool; yet he described all the parts of it as one entire instrument. He did not state, as he should have done, that the hammer in the front of it was *only* to be used in preparing flax. (*a*)

(*x*) Printed Case, 175. Dav. Pat. Cas. 113.

(*y*) *Hill* v. *Thompson*, 2 B. Moore, 450, 455, &c. Ante, 54.

(*z*) Printed Case, 173. Dav. Pat. Cas. 107.

(*a*) *King* v. *Arkwright*, Printed Case, 175. Dav. Pat. Cas. 117.

Other parts, which were put on or off as occasion required, appeared as though they were fixed, and to be used in every stage of manufacturing each of the articles. (*b*) Those omissions in the description were considered of sufficient importance to invalidate the patent.

Every part of the invention which is new must be accurately described, as to the manner in which it is to operate. In the case of *Felton* v. *Greaves*. (*c*) The patent was granted for a machine for an expeditious and correct mode of giving a fine edge to knives, razors, *scizzors* and other cutting instruments. The machine described in the specification consisted of two circular rollers of steel made *rough*, *like files*, and the instrument to be sharpened was passed backward and forward in an angle formed by their intersection. It appeared in evidence that if the machine was intended to give a fine edge to *scizzors* that the one roller should be smooth.

In the specification it was also stated that *other materials* besides steel *might* be employed, and it appeared that if Turkey stones, instead of steel, were used for both the rollers, it was possible to succeed with scizzors. The Lord Chief Justice observed :—" The specification describes both the rollers as files. It is not stated either that the rollers must be one rough and the other smooth, or that Turkey stones must be substituted for the

(*b*) *King* v. *Arkwright*, Printed Case, 173. Dav. Pat. Cas. 109.

(*c*) 3 Car. & Payne's Rep. 611.

files, when it is intended to sharpen the edges of scizzors. The specification is insufficient."

There are persons who imagine that if they introduce the words, "and for other useful purposes," into the title of the patent that the title must be good; and that if they insert the words, "other materials may be used," or "any other substance from which the thing can be obtained," into the description, that it is impossible to find fault with the specification. There is not a greater error. In the last case it appeared that the words, "other materials," did not assist the description or save the specification.

In addition to the old authorities, another case (*d*) has been decided, by which it appears that the words "any other substance" had been nearly fatal to an important patent. In the introductory part of the specification, Clegg, the original patentee, used these words, "My improved gas-apparatus is for the purpose of extracting inflammable gas by heat from pit-coals, tar, *or any other substance* from which gas or gases, capable of being employed for illumination, can be extracted by heat;" and then he went on to mention the other inventions. In the description of the retort, he called it "a horizontal flat retort, in which coal, or other materials capable of producing inflammable gas, are heated, and the gas extracted by distillation;" and in the

(*d*) *Crosley* v. *Beverley*, 1 Mood. & Malk. 283; and see 3 Car. & P. 513.

course of it he spoke of the "coal or other substance," being "spread in a thin layer." Throughout the description of the retort, and the explanation of the drawings, he always spoke of "coal," or "coal or coke," or "coal or other substance," only.

It appeared that the retort was incapable of obtaining gas, except very imperfectly, or by considerable modifications, *from oil.*

The date of the patent was December 9, 1815, that, of the specification, June 8, 1816. At these periods it was known, as a philosophical fact, that gas was producible from oil; but it had not been proposed to manufacture such gas for purposes of illumination. Some speculations, indeed, were then going on, and a patent was obtained about the same time for making it: and the manufacture was subsequently brought into use, though not very generally.

The counsel for the defendant submitted that the unfitness of the retort for making gas from oil was fatal to the patent, and contended that it was the duty of the patentee not to overstate the limits within which his invention would be useful, that no person may be led to unavailing expense in trying it upon purposes for which it is unfit.

Lord Tenterden said—"I must look at the whole of the specification together; and doing so, I think it is evident that it only represents the retort as suited to materials of the same kind as coal. I am of opinion also that I ought to understand the "other substances" mentioned to

signify *substances then known* to be available for the purpose of illuminating with gas, not every thing which will burn with a flame; for all these, in a certain sense, will produce gas. It is clear, on the evidence, that oil was not then generally considered as such a substance; and the fact that some speculations were going on at the time with respect to its being so, will make no difference. The patentee cannot be required to foresee the success of these speculations, if they have succeeded; but I must consider him, as a practical man, to have spoken of things which practical men then treated as usable for the purpose specified. On both grounds, therefore, I must decide against the objection. The law is severe enough in breaking up patents altogether for a fault in any part of them, without straining it in favor of such an objection."

This position of law was further illustrated in the case of *Crompton* v. *Ibbotson.* (*e*) The patent was for an improved method of drying and finishing paper. The specification contained these words: " the invention consists in conducting paper by means of a cloth or cloths against a heated cylinder; which cloth may be made *of any suitable material*, but *I prefer* it to be made of linen warp and woollen weft; which cloth is shewn in the drawing by blue lines."

It appeared by the evidence of the plaintiff's witness, that, as to the conducting medium, he

(*e*) Danson & Lloyd's Reports, 33.

had tried several things, but he was not aware of any thing that would answer the purpose except the material which the patentee said he preferred. Whereupon Mr. Justice Bayley directed a nonsuit.

A motion was made to set aside that nonsuit. It was refused, and Lord Tenterden said, the patent was obtained for the discovery of a proper conducting medium. The plaintiff found, after repeated trials, that nothing would serve the purpose except the cloth described in the specification; yet he says the cloth may be made of "any suitable material," and merely that he prefers the particular kind there mentioned. Other persons, mislead by the terms of this specification, may be induced to make experiments which the patentee knows might fail, and the public has not the full and entire benefit of the invention—the only ground on which the patent is obtained.

But this rule must not be extended to the rudiments of a science, nor to the mere incidents of a subject. If gold were directed to be used in a state of fusion, the manner and *utensils* for putting it in that state need not be mentioned. (*f*)

3. Parts claimed, not original.

That the new parts of the subject may be more clearly seen and easily known, the patentee must not only claim neither more nor less than his own invention, but he must *not appear* even unintentionally to appropriate to himself any part which is old, or has been used in other ma-

(*f*) *Turner* v. *Winter*, 1 T. R. 602.

nufactures. (*g*) Those parts that are old and immaterial, or are not of the essence of the invention, should either not be mentioned, or should be named only to be designated as old.

(*g*) *Huddart* v. *Grimshaw*, Dav. Pat. Cas. 295. Ellenborough, C. J.—As to the bobbins, they are not worth mentioning; the springs and tube are the things in which it should seem the principal originality of the invention consists. It is contended that the springs are not an essential part of the invention: if they are enrolled as an essential part, whether they are so or not, it would certainly go to destroy this patent, because no deceptive things are to be held out to the public; those that are material are to be held out as material; according to the evidence of Mr. Rennie, they are material. It appears to me that the springs in Belfour and Huddart's machine both produce the same end to regulate the tension. Now if it is a spring to regulate the tension of the yarn, which is essential to be regulated, it does seem to me; but it is for your judgment to say whether it is a material part of the invention, and relied upon as such, as it should seem it is by both; and if it is the same, then that which has been communicated by Mr. Belfour, Mr. Huddart cannot take the benefit of.

It is for you to say, for that is the substance of the case, as to the invention of the patent, *whether any essential part of it was disclosed to the public before.* If you think the same effect in substance is produced, and that the springs in Mr. Belfour's, by producing tension, obtains a material end in the making of ropes in this way proposed, and that it is in substance the same as in the other, this patent certainly must, upon principles of law, fall to the ground. If you think it is not the same, or if you think it is not material, though we have had the evidence of Mr. Rennie upon its materiality—if you think this patent has been for a new invention, carried into effect by methods new, and not too large beyond the

The patentee is not required to say that a screw or bobbin, or any thing in common use, is not part of his discovery; yet he must not adopt the invention of another person, however insignificant it may appear to be, without a remark. If any parts are described as essential without a protest against any novelty being attached to them, it will seem, though they are old, that they are claimed as new. (*h*) The construction will be against the patentee that he seeks to monopolize more than he has invented, or that, by dwelling in his description on things that are immaterial or known, he endeavours to deceive the public, who are not to be deterred from using any thing that is old by its appearing in the specification as newly invented. They are to be warned against infringing on the rights of the patentee, but are not to be deprived of a manufacture which they before possessed. (*i*) It seems, therefore, to be the safest way in the specification to describe the whole subject, and then to point out all the parts which are old and well known.

actual invention of the party, in that case the patent may be sustained. But if you think otherwise in point of law or expediency, the patent cannot be sustained.

The verdict was for the plaintiff, with nominal damages: but it is evidently at variance with the opinion of Lord Ellenborough.

(*h*) *Boville* v. *Moore*, Dav. Pat. Cas. 404; and see *Manton* v. *Parker*, Dav. Pat. Cas. 329.

(*i*) Dav. Pat. Cas. 279, and 3 Meriv. 629.

In the case of *Campion* v. *Benyon*, (*j*) it appeared that the patent was taken out "for an improved method of making sail-cloth, without any starch *whatever*." The improvement or discovery consisted in a new mode of texture, and not in the exclusion of starch, and the advantage of excluding that substance had been discovered and made public before that time. The Court held that the patent was void, as claiming, in addition to what the patentee had discovered, the invention of something already made public. Mr. Justice Park observed, "In the patentee's process he tells us that the necessity of using starch is superseded, and mildew thereby entirely prevented: but if he meant to claim as his own an improved method of texture or twisting the thread to be applied to the making of unstarched cloth, he might have guarded himself against ambiguity, *by disclaiming* as his own discovery the advantage of excluding starch."

One of several things not new.

Upon the same principles of reasoning, but certainly with much more force, if there be several things specified that may be produced, and *one* of them is *not new*, the whole patent is void. This point underwent a very full discussion in the case of *Brunton* v. *Hawkes*. (*k*)

(*j*) 3 B. & B. 5.

(*k*) 4 Barn. & Ald. 550. Abbott, C. J.—It seems to me, therefore, that there is no novelty in that part of the patent as affects the anchor; and, if the patent had been taken out for that alone, I should have had no hesitation in declaring that it was bad. Then, if there be no novelty in that part

4. Parts or things put in to mislead.

**If things useless and unnecessary have been mixed with a substance, or attached to a machine,**

of the patent, can the plaintiff sustain his patent for the other part, as to the mooring-chain? As at present advised, I am inclined to think that the combination of a link of this particular form, with the stay of the form which he uses, although the form of the link might have been known before, is so far new and beneficial as to sustain a patent for that part of the invention, if the patent had been taken out for that alone. But, inasmuch as one of the things is not new, the question arises whether any part can be sustained. It is quite clear that a patent granted by the crown cannot extend beyond the consideration of the patent. The king could not, in consideration of a new invention in one article, grant a patent for that article and another. The question then is, whether, if a party applies for a patent, reciting that he has discovered improvements in three things, and in the result it turns out that there is no novelty in one of them, he can sustain his patent. It appears to me that the case of *Hill* v. *Thompson*, which underwent great consideration in the Common Pleas, is decisive upon that question.

Bayley, J.—I have no doubt that if the patent be bad as to part, it is bad as to the whole. If the patent is taken out for many different things, the entire discovery of all those things is the consideration upon which the king is induced to make the grant. That consideration is entire; and, if it fails in any part, it fails *in toto*. Upon an application for a patent, although the thing may be new in every particular, it is in the judgment of the crown, whether it will or will not, as matter of favour, make the grant to the person who has made the discovery. And when application is made for a patent, for three different things, it may be considered by the persons who are to advise the crown as to the propriety of the grant, that the discovery as to the three things together may form the proper subject of a patent, although each *per se* would not induce them to recommend the grant. It seems to me, there-

though the *terms* are intelligible, and every necessary description has been introduced, and the *parts claimed* are only those which have been newly invented, the patent is void. Of this nature are those parts that have *never been used* by the patentee. It is from that circumstance inferred, that they have been introduced to overload the subject, and, by clouding the description, to mislead the public, and conceal the real invention. Thus in Arkwright's machine the introduction of several things, (*l*) which were never used by him, was considered as done merely to mislead the public.

If any considerable part of a manufacture be *unnecessary* to produce the desired effect, it will be presumed that it was inserted only with a view to perplex and embarrass the enquirer. In the specification to Turner's patent (*m*) for producing a yellow colour, among other things minium is directed to be used, which it appeared would not produce the desired effect. In the same case, among a great number of salts which were specified, it was left to the public to use those they pleased, without either of them in particular being pointed out, and only one would answer the intended purpose. For either of

fore, that if any part of the consideration fails, the patent is *void in toto*.

(*l*) Ante, p. 29, n.; and see Printed Case, 182, 186, 187; and see Dav. Pat. Cas. 129, 139, 140; also *Hill* v. *Thompson*, 2 B. Moore, 450.

(*m*) *Turner* v. *Winter*, 1 T. R., 602; ante, 120.

these reasons the validity of a patent could be impeached.

This rule, that if any considerable part of the things described in the specification be unnecessary, it will be presumed that it was inserted only with a view to perplex and embarrass the inquirer, was confirmed by the case of *Savory* v. *Price.* (*n*)

That patent had been granted for a method of making a neutral salt or powder, possessing all the properties of the medicinal spring at Seidlitz, under the name of "Seidlitz Powder."

The specification enrolled within the time required by the patent, *set out three distinct recipes*, and described the modes and proportions in which the results were to be mixed, in order to produce the "Seidlitz Powder."

It was proved that the three products so mixed answered the purpose professed in the patent, and that *the combination was new* and useful.

But upon cross-examination of the plaintiff's witnesses, the following facts were established. The recipe *No.* 1. produced the substance called "Rochelle Salts." Rochelle Salts were known to the world before 1815 under that name, and also as Soda Tartarizata.

Recipe *No.* 2. produced "Carbonate of Soda," which was known before 1815, and was in the Pharmacopœia of 1809; and a more expensive, but more perfect way of making it was also known, and it might be bought in shops.

(*n*) Ryan & Moody, 1.

The recipe *No.* 3. produced "Tartaric Acid," the method of making which was known at the time of the patent, and under that or some other name it might be bought in chemists' shops; and other methods of making it were known, all of which would be equally efficacious for the combination of Seidlitz Powders.

Rochelle salts, carbonate of soda, and tartaric acid *mixed in the manner prescribed*, produced the Seidlitz Powders.

The Chief Justice said,—"It is the duty of any one, to whom a patent is granted, to point out in his specification the plainest and most easy way of producing that for which he claims a monopoly; and to make the public acquainted with the mode which he himself adopts. If a person, on reading the specification, would be led to suppose a laborious process necessary to the production of any one of the ingredients, when, in fact, he might go to a chemist's shop and buy the same thing as a separate simple part of the compound, the public are misled. If the results of the recipes, or of any one of them, may be bought in shops, this specification, tending to make people believe an elaborate process essential to the invention, cannot be supported."

Although the unnecessary part had *occasionally* been used, it would still be a question whether it had not been put there to mislead the public.

But this rule is not so strictly enforced that a person is compelled to *go on using* every part of

his invention to secure and continue his patent-right. If any particular parts have been once fairly introduced, and not laid aside, until, by some discovery or contrivance made subsequent to the date of the patent, they were found to be unnecessary, the patentee may, without prejudice, leave them out; or cease to make use of them. But the presumption is against the inventor, until he give a good reason for the discontinuance. (*o*)

Matters of intention.

Watts in his specification gave a description of several things which, being incomplete, would not have supported a patent; and yet, inasmuch as he did not claim them as part of the subject of his patent, it was considered that they were *matters of intention only*, and that the specification was not rendered less intelligible by the introduction of them. (*p*)

5. The drawings incorrect.

It is not absolutely necessary to annex to the specification a model, diagram, picture, or drawing, descriptive of the manufacture. (*q*) If without it the subject is clearly described, it is better omitted. It is however an easy way of illustrating the parts of a machine, and, therefore, has generally been adopted. It was formerly said that in every instance in which a drawing was

(*o*) *Boville* v. *Moore*, Dav. Pat. Cas. 398.

(*p*) *Boulton* v. *Bull*, 2 Hen. Bla. 480. Dav. Pat. Cas. 187-8.

(*q*) 2 Hen. Bla. 479. Dav. Pat. Cas. 187; and see Ex parte Fox, 1 Ves. & Beam. 67.

introduced, it was indispensable that it should be drawn on a *scale*, &c. : (*r*) that in it the diameters of wheels, the lengths of levers, &c., every proportion and relation of the parts, ought to appear in due ratio to each other: and that the whole should be capable of being put together without leaving the length, breadth, or relative velocity, of any of the parts to be found out by conjecture and experiments, or the patent would be void. Arkwright's machine, (*s*) though shewn in a perspective drawing, could not be made for want of a scale to determine its dimensions.

This rule has of late been modified. If a common mechanic can make the subject of the patent from the drawing in perspective, it is not necessary that there should be a scale. It was also formerly considered that the words of the specification ought of themselves to be sufficiently descriptive of the improvement; that the specification ought to contain within itself all the necessary information, without the necessity of having recourse to a diagram; and that, if a diagram were given, it ought to be taken merely as an illustration, and not as constituting a principal, or essential part of the specification; and, therefore, that a person was not bound to look at the diagram to learn the invention. But a very learned judge has however held, that if a drawing or figure enable a workman of ordinary skill to con-

(*r*) *Harmar* v. *Playne*, 11 East, 112. 14 Ves. 130. S. C.

(*s*) *King* v. *Arkwright*, Printed Case, 176. Dav. Pat. Cas. 111.

struct the improvement, it is as good as any written description. (*t*)

On the trial at nisi prius, it was objected in the case of *Bloxam* v. *Elsee*, (*u*) that the specification was bad, because there were several words in it not in English; such as *vice de pression*, *vice repulsion*, and *vice de re-action*, for different screws; and the French word *chapitre*, for a cap, also occurred. It was, however, proved, that, from the drawings annexed to this specification, a skilful mechanic might make the machine; but it was contended that, as a specification could not be made by drawings alone, it must be made in apt words, intelligible to mechanics; and if this specification were held good, every thing mentioned in a specification might be called by a wrong name, and drawings referred to for the whole. Even the scale appended to the drawings was a scale of *pieds* and *pouces*, terms unknown to English mechanics.

The Lord Chief Justice observed, "It was proved that the names to the scale were quite immaterial; for relative proportion, which was all that was wanted, the scale would have been as good if there had been no names at all.

"An inventor of a machine is not tied down to make such a specification as, by words only, would enable a skilful mechanic to make the

(*t*) *Brunton* v. *Hawkes*, 37 vol. Rep. of Arts, N. S. p. 105; and see S. C. 4 Barn. & Ald. 541. 1 Stark. N. P. C. 201, and post.

(*u*) 1 Car. & P. 558.

machine, but he is to be allowed to call in aid the drawings which he annexes to the specification; and if, by a comparison of the words and the drawings, the one would explain the other sufficiently to enable a skilful mechanic to perform the work, such a specification is sufficient."

6. One of different ways fails.

The consequences which attend the introduction of any thing into the specification, merely to misguide the public, have been mentioned. The means must be adapted to the end. (*u*) The description must not give *several ways* and methods, which may or may not answer, according to the skill exercised in the attempt to produce the manufacture. Thus, in the specification of Winter's patent, (*v*) a great number of salts were mentioned, by which it appeared that the public might take either of them to make the subjects of the patent. There was only one of them that would produce the effect, and therefore, his patent was void. Even if there be only one thing which will not answer the intended purpose, the specification is incorrect.

In *Derosne* v. *Fairie*, (*w*) the specification stated a method of depriving syrups of every description of colour, by filtering them through charcoal, produced by the distillation of bituminous schistus, and used alone or mixed with animal charcoal, or even through animal char-

(*u*) Dav. Pat. Cas. 331. And see *Manton* v. *Parker*, Dav. Pat. Cas. 328. 2 B. Moore, 457, 458.

(*v*) *Turner* v. *Winter*, 1 T. R. 602.

(*w*) *Derosne* v. *Fairie* and *Others*, 5 Tyr. Rep. 393.

coal alone when placed in thick beds. It appeared that iron was combined with the *bituminous schistus* found in this country, and it was doubtful whether the charcoal distilled from the schistus was not only disadvantageous but injurious to the matter going through the process. The charcoal sworn to have answered the purpose of the patent, was received from Derosne at Paris, where it had been made, and was declared by him to be the residuum of bituminous schistus from which the iron had been extracted. But no means existed of ascertaining in this country, of what substance it actually was the residuum, nor did the specification mention any process for extracting the iron from bituminous schistus. The Court held, that whether the latter omission avoided the patent or not, the patentee ought to prove, either that the presence of iron in the bituminous schistus used in the process of filtering was not absolutely disadvantageous to the matter going through that process, or that the method of extracting the iron from it was so simple and known, that a person practically acquainted with the subject could accomplish it with ease, or that bituminous schistus, as known in England, could be used in this process with advantage; and a verdict having been found for the plaintiff, the Court set it aside on terms, and granted a new trial. (*x*)

7. Some of several effects specified, not produced.

Not only must there not be any unnecessary

(*x*) There was not any further litigation, but the patentee disclaimed the use of bituminous schistus.

*means* mentioned in the specification, but *effects* that cannot accurately be produced must not be mentioned and described. The patentee should inform the inquirer of the *exact* nature of the manufacture invented. If the article described have not the qualities, or the machine produce not the results which are set forth in the specification, the grant is invalid. (*y*)

(*y*) See *Haworth* v. *Hardcastle*, 1 Bing. N. C. 1822. Tindal, C. J.—"The motion for entering a nonsuit was grounded on two points. First, that the jury had, by their special finding, negatived the usefulness of the invention to the full extent of what the patent and specification had held out to the public. Secondly, that the patentee had claimed in his specification, the invention of the rails of staves over which the cloths were hung, or, at all events, the placing them in a tier at the upper part of the drying-room."

As to the finding of the jury, it was in these words:

"The jury find the invention is new, and useful upon the whole, and that the specification is sufficient for a mechanic, properly instructed, to make a machine; and that there has been an infringement of the patent; but they also find that the machine is not useful in some cases for taking up goods."

The specification must be admitted, as it appears to us, to describe the invention to be adapted to perform the operation of removing the calicoes and other cloths from off the rails or staves, after they have been sufficiently dried. But, we think we are not warranted in drawing so strict a conclusion from this finding of the jury, as to hold that they have intended to negative, or that they have thereby negatived, that the machine was not useful, in the generality of the cases which occur for that purpose. After stating that the machine was useful on the whole, the expression, that in some cases, it is not useful to take up the cloths, appears to us, to lead rather to the inference, that, in the generality of cases, it is found useful.

Such is the law too, if the patentee take his grant for the invention of several things, and he fail in *any one* of them. By Winter's invention (*z*) three things were to be produced; one reason for its being considered void was, that the second article, which was called in the patent "white lead," was, in fact, quite a different substance, and which could be used only for a very few of the purposes for which common white lead is applied. Bainbridge's patent (*a*) for the improvement of the hautboy was for *new notes*—in the plural number. On proof, it appeared that he had only found out *one* new note, and he consequenly failed in an action of damages for an infringement of the grant, al-

And if the jury think it useful in the general, because some cases occur in which it does not answer, we think it would be much too strong a conclusion to hold the patent void. How many cases occur, what proportion they bear to those in which the machine is useful, whether the instances in which it is found not to answer are to be referred to the species of cloth which are hung out, to the mode of dressing the cloths, to the thickness of them, or to any other cause distinct and different from the defective structure, or want of power in the machine, this finding of the jury gives us no information whatever. Upon such a finding, therefore, in a case where the jury have given their general verdict for the plaintiff, we think that we should act with great hazard and precipitation if we were to hold that the plaintiff ought to be nonsuited, upon the ground that his machine was altogether useless for one of the purposes described in his specification.

(*z*) *Turner* v. *Winter*, 1 T. R. 602.

(*a*) *Bainbridge* v. *Wigley*, K. B. Dec. 1810; and see *Brunton* v. *Hawkes*, 4 Barn. & Ald. 451.

though great ingenuity had been exerted, and the fingering was rendered less complicated by the invention.

In the case of *Lewis* v. *Marling*, (*b*) a most important point was settled. A patent was granted for improvements on shearing machines for shearing or cropping woollen and other cloths. The patentees in their specification claimed, (amongst other things,) "the application of a proper substance fixed on or in the cylinder *to brush* the surface of the cloth to be shorn." The brush for the surface of the cloth was soon found to be useless, and the patentees never sold any machines with it.

The Court decided, that if the patent be granted for several things, one of which is supposed (at the time of enrolling the specification,) to be useful, but is afterwards found not to be so, yet the grant is good in law. The opinions of the judges are very excellent.

Lord Tenterden observed, "As to the objection, on the ground that the application of a brush was claimed as a part of the invention, adverting to the specification, it does not appear that the patentee says the brush is an essential part of the machine, although he claims it as an invention. When the plaintiffs applied for the patent, they had made a machine to which the brush was affixed, but before any machine was

(*b*) 10 Barn. & Cress. 22.

made for sale, they discovered it to be unnecessary. I agree, that if the patentee mentions that as an essential ingredient in the patent article, which is not so, nor even useful, and whereby he misleads the public, his patent may be void; but it would be very hard to say that this patent should be void, because the plaintiffs claim to be the inventors of a certain part of the machine not described as essential, and which turns out not to be useful. Several of the cases already decided have borne hardly on patentees, but no case has hitherto gone the length of deciding that such a claim renders a patent void, nor am I disposed to make such a precedent."

Mr. Justice Bayley said, "I am of the same opinion. To support a patent, it is necessary that the specification should make a full and fair disclosure to the public of all that is known to the patentee respecting his invention. If it does not, the consideration on which he obtains his patent fails. If he represents several things as competent to produce a specific effect, when only one will answer, that is bad; or if he suppresses any thing which he knows will answer, that also is bad. But it is objected here, that the plaintiffs described the application of the brush as parcel of their discovery. At the time when the patent was obtained, a brush was used, and there is no reason to doubt that the plaintiffs at that time thought it necessary."

Mr. Justice Parke.—"The objection to the

patent as explained by the specification may be thus stated: the patent is for several things, one of which being supposed to be useful is now found not to be so; but there is no case deciding that a patent is on that ground void, although cases have gone the length of deciding, that if a patent be granted for three things, and one of them is not new, it fails in toto. The prerogative of the crown as to granting patents, was restrained by the statute 21 Jac. 1, c. 3, s. 6, to cases of grants, 'to the true and first inventors of manufactures, which others at the time of granting the patent shall not use.' The conditions, therefore, is, that the thing shall be new, not that it shall be useful; and although the question of its utility has been sometimes left to a jury, I think the condition imposed by the statute has been complied with, when it has been proved to be new."

8. Thing described not the best.

Although the description may be otherwise complete and correct, although the means may be adapted to the end, and the things specified be produced; yet, if the subject be not given to the public in the best and *most improved state* known to the inventor, the patent is void. If, at the time of obtaining the grant, he was acquainted with a mode of making his manufacture more beneficial than by the one specified, the concealment will be considered fraudulent. Thus, Lord Mansfield held a patent for "steel trusses" to be void, because the inventor had omitted to mention, that in tempering the steel, he rubbed

it with tallow, which was of *some use* in the operation. (*c*)

In the specification for a patent for making verdigris, (*d*) aqua fortis, which was used by the inventor, was not mentioned. It appeared that the patentee mixed the aqua fortis with great secrecy, which raised the presumption that he knew of its value when the grant was sealed. The patent was, therefore, declared to be void.

Nor can any *alteration*, known to the inventor before he procures the patent, be made, however insignificant it may be, even if it were nothing more than the means of working the machine a little more expeditiously, without raising a presumption that the patentee fraudulently con-

(*c*) *Liardet* v. *Johnson*, Bull. N. P. 76; and see 1 T. R. 608.

(*d*) *Wood* and *Others* v. *Zimmer* and *Others*, 1 Holt, 58. Gibbs, C. J.—It is said that this patent makes verdigris, and is therefore sufficient. The law is not so. A man who applies for a patent, and possesses a mode of carrying on that invention in the most beneficial manner, must disclose the means of producing it in equal perfection, and with as little expense and labour as it costs the inventor himself.

The price that he pays for his patent is, that he will enable the public, at the expiration of his privilege, to make it in the same way, and with the same advantages. If any thing which gives an advantageous operation to the thing invented be concealed, the specification is void. Now, though the specification should enable a person to make verdigris substantially as good without aqua fortis as with it; still, inasmuch as it would be made with more labour by the omission of aqua fortis, it is a prejudicial concealment, and a breach of the terms which the patentee makes with the public.

cealed the best method. A lace machine, (*e*) for which Mr. Boville had obtained a patent, was worked with greater expedition *by bending together* two teeth of the dividers, or by making one longer than the others, than if it were used as specified. This mode of using it was known to the inventor before he obtained the patent; and, therefore, Gibbs, C. J. thought that the patent was bad on that account.

Cheaper materials.

If the patentee use *cheaper materials* in making the manufacture than those he has enumerated, his grant will not be sustained by his proving that the articles specified will answer the purpose as well. (*f*)

It signifies not in what manner this advantage

(*e*) *Boville* v. *Moore*, Dav. Pat. Cas. 400. Gibbs, C. J.—There is another consideration respecting the specification, which is also a material one; and that is, whether the patentee has given a full specification of his invention; not only one that will enable a workman to construct a machine answerable to the patent, to the extent most beneficial within the knowledge of the patentee at the time; for a patentee, who has invented a machine useful to the public, and can construct it in one way more extensive in its benefit than in another, and states in his specification only that mode which would be least beneficial, reserving to himself the more beneficial mode of practising it, although he will have so far answered the patent as to describe in his specification a machine to which the patent extends; yet he will not have satisfied the law by communicating to the public the most beneficial mode he was then possessed of for exercising the privilege granted to him. And see *Brown* v. *Moore*, Rep. of Arts, 28th Vol. p. 60.

(*f*) 1 T. R. 607. 1 Holt's N. P. C. 60. *King* v. *Wheeler*, 2 Barn. & Ald. 345.

accrues to the patentee ;—it is not necessary that any palpable alteration has taken place ; that something has been added or something taken away from the invention as specified, to render the patent void : it will be invalid if *by any means* whatever a benefit is derived by the patentee, which was concealed from the public at the time the patent was obtained, even if it be merely a small part of a machine on which a particular motion is impressed at a given moment in a particular direction. (*g*)

Inadvertence.

If this improved manner of using the invention be *unintentionally* left undescribed, still the patent is void. "If it was inadvertent," says Gibbs, C. J., speaking of Boville's omission in not describing the bending of the teeth, "if he actually knew and meant to practise that mode, and inadvertently did not state the whole in his specification, he must answer for his inadvertence." (*h*)

Subsequent discovery.

But if it appear that this better mode of using

(*g*) *King* v. *Arkwright*, Printed Cases, 50. The cylinder in the specification was a parallel one : but that which was used, spiral.

(*h*) *Boville* v. *Moore*, Dav. Pat. Cas. 413. Gibbs, C. J., observed to the jury,—You will say whether you think there is any fraudulent concealment in the specification. A juryman. —It might be inadvertent, and not fraudulent. Gibbs, C. J.— Certainly ; and if it were inadvertent, if he actually knew and meant to practise that mode, and inadvertently did not state the whole in his specification, he must answer for his inadvertence : but it might be a subsequent discovery. Verdict for the defendant.

the manufacture be a *subsequent discovery*; that the patentee has since the date of the grant found out this new means of carrying on his own invention to a better effect; then the grant will continue valid: (*i*) but, as before stated, the presumption of concealment will be against him.

Another important rule of law was established in the case of *Crosley* v. *Beverley*. (*j*) Mr. Clegg, the patentee, had a grant for an improved gas apparatus, and he claimed a gas meter (or part of it), as described in the specification. It appeared, on the examination of Mr. Clegg himself, that he had invented the method of making the gas-meter, as described in the specification, in the time *between the dates of the patent and the specification.* Before he took out the patent he had completed the design of the meter, but he had not actually made one, and he found several improvements upon it before he sent in his specification, in which he described the meter so improved as the invention claimed by him. The Court was clearly of opinion the patent was valid

(*i*) *Boville* v. *Moore*, Dav. Pat. Cas. 401. Gibbs, C. J.—If Mr. Brown, since he obtained his patent, had discovered an improvement, effected by bending the teeth or adding a longer tooth, he might apply that improvement; and his patent will not be affected by his using his own machine in that improved state: but if, at the time he obtained his patent, he was apprised of this more beneficial mode of working, and did not by his specification communicate it to the public, that must be considered as a fraudulent concealment, although it was done inadvertently, and will render the patent void.

(*j*) 9 Barn. & Cress. 63.

in law, and Lord Tenterden observed, that he was at a loss to know upon and for what reason a patentee is allowed time to disclose his invention, unless it be for the purpose of enabling him to bring it to perfection. If, added his Lordship, in the intermediate time another person were to discover the improvements for so much of the machine, the patent would not be available. And Mr. Justice Bayley said,—"It is *the duty* of a person taking out a patent to communicate to the public any improvement that he may make upon his invention before the specification has been enrolled."

II. *Machine.* Upon these grounds, and for these reasons, applicable to the specifications of almost all kinds of manufactures, many patents have been declared to be void. The inventor bearing them in mind, and attending to the nature of each kind of manufacture, whether it be a substance, or machine, &c., as it is distinguished from the rest in the last Chapter, will be able, by avoiding similar errors, to make a correct specification for any invention. Indeed, no further assistance can be given to him than that which may be derived from a few general observations on the description peculiar to each manufacture.

The *description of a machine* must disclose the nature of the invention, and the manner in which it is to be performed. It must be minute without perplexity, and luminous without being overwrought. When it descends to particulars, the elements that are known to all should not be

noticed; nor yet, in its fulness, should any thing be included that is not necessary to render it intelligible. It should be such that a common mechanic, with a reasonable degree of skill upon the subject may comprehend it. Though it need not be so full as to instruct a person ignorant of the first principles of mechanics in the method of its formation and use; yet, on the other hand, a person eminently skilled in the subject must not be required to make it. A reasonable knowledge and skill (of which the jury decide) must be possessed by the person who complains that the specification is obscure, and that he cannot make the machine. No contrivance or addition, no trial or experiment, it is said, must be resorted to for a full knowledge of the invention. (*k*) This rule must, however, be taken in a limited sense. Though no inventive faculty must be exercised, nor any thing new added, yet trials, if they are not essentially necessary, may be made. If the inventor leave any thing to be found out by experiment, the specification is bad: unless the data, manner of performing, and the expected results are so clearly given, that it may easily be done.

Scientific books.

Reference may be made to the rudiments of that science by which the principles of the machine are explained, but not to scientific books. (*l*) A proposition, or truth generally known, needs no reference; and that which can

(*k*) 2 Hen. Bla. 484.

(*l*) 11 East, 105.

be found only in some particular treatise must be explained, but not claimed as new.

If a piece of machinery be contemplated for the purpose of giving a full description of it, the several parts, as wheels, rollers, screws, springs, &c. &c., must be set forth, together with the proportion of their diameters, thickness, tension, &c. (*m*) Then the method by which they are united, and the relative velocities of the moveable parts. (*n*)

If the thing specified be the component parts of *two* machines, the union of the parts that make up each of them must be clearly shewn. (*o*) If parts of the machine are to be put on and off during some of its operations, in order to produce the desired effect, or if several articles are intended to be worked on, or several manufactures to be produced,—it must be distinctly stated *what* those parts are, their *proportions* for different purposes, and *where* they are to be applied. (*p*)

III. *Improvements or additions.*

It has been shewn that the grant must not be more extensive than the invention; (*q*) and that, where the patent is for an improvement or addition, the inventor cannot monopolize the whole subject. The specification will, therefore,

(*m*) *King* v. *Arkwright*, Printed Cas. 174. Dav. Pat. Cas. 111.

(*n*) Id. Printed Cas. 62, 179. Dav. Pat. Cas. 122.

(*o*) Id. Printed Cas. 174 and 177. Dav. Pat. Cas. 111 and 117.

(*p*) Ibid. (*q*) Ante, 59.

be incorrect, if it contain a description of *more* than the improvement or addition; (*r*) unless it particularly distinguish the new from the old parts.

The inventor is not bound down to any particular mode of describing his improvement, so that he informs the public *exactly* in what his invention consists. He may describe it by *words*, or by *diagrams*: (*s*) but he must confine himself to his invention.

The patent for the improvement of a thing, or for the thing improved, is in essence for the same manufacture. (*t*) The inventor may either accurately describe the addition, and then point out the method by which it is applied to the known parts; or he may describe the whole as one

(*r*) *Bramah* v. *Hardcastle*, MSS., post, 156; and *Williams* v. *Brodie*, cited by counsel in *King* v. *Arkwright*, Printed Cas. 162.

(*s*) *Macfarlane* v. *Price*, 1 Stark. 199. Action for infringement.—The patent was for certain improvements in the making of umbrellas and parasols. The specification professed to set out the improvements as specified in certain descriptions and drawings annexed: but no distinction was made either in the description, or by any marks in the drawings, between what was new and what was old.

Ellenborough, C. J.—The patentee in his specification ought to inform the person who consults it what is new and what is old. The specification states that the improved instrument is made in manner following. That is not true, since the description comprises what is old as well as what is new. Then it is said, that the patentee may put in aid the figures. But how can it be collected from the whole of these, in what the improvement consists?

(*t*) 2 Hen. Bla. 481, 2.

machine, and then particularize the parts newly discovered.

It is not absolutely necessary that the old parts should be described. They may be referred to generally, if the whole is not thereby rendered unintelligible. Thus in Jessop's case, (*u*) whose invention consisted of a single movement in a watch, it was said to be sufficient to refer generally to a common watch, and then to give directions how the new part was to be added to it.

There is one decision on an *improvement* which appears to be an anomaly. Harmar (*v*) obtained

(*u*) 2 Hen. Bla. 489.

(*v*) *Harmar* v. *Playne*, 11 East, 101. The patent was for "a machine invented for raising a shag on all sorts of woollen cloths, and cropping or shearing them, which together come under the description of dressing woollen cloths, and also for cropping or shearing of fustians." There were drawings of the machine. Harmar afterwards invented some improvement of his machine, for which he prayed a patent; which patent was granted upon the usual condition, that he should ascertain the nature of the said invention or the said improvements. The second specification recited the first patent, and described the *whole* of the machine, without shewing in words or marking in the drawing where the first machine ended, or from what point the improvements began. The improvement could only appear by comparing together the two specifications. It was contended for the plaintiff, that the patent and specification referring to it are to be construed together as one instrument. The first patent being enrolled, the public were bound to take notice of it: and being recited in the second, the improvements easily appeared by comparing them. That it was more convenient to give a description of the whole, than by a literal compliance to state what the improvements were.

For the defendant it was said, that improvements should

a patent for a machine. Having very much improved it, he procured another patent, in which the first was recited. In the second specification, without any reference being made to the description of the former subject, the whole machine so improved was set forth, without the new parts being distinguished from the old ones. The second grant was held to be good, because the second patent, by reciting the first, referred to its specification, which by the enrolment was matter of record, and therefore supposed to be within every person's knowledge.

be distinctly marked and made known by this second specification alone, without further search or trouble.

Le Blanc, J.—Suppose the specification had merely described the improvements,—must not the party still have referred to the original specification, or at least have brought a full knowledge of it with him, before he could understand truly to adapt the new parts described to the old machine?

Ellenborough, J.—It would lead to great inconvenience, if books of science were allowed to be referred to. A person ought to tell from the specification itself what the invention was for which the specification was granted, and how it is to be executed. If reference may be made to one, why not to many works? It may not be necessary indeed, in stating a specification of a patent for an improvement, to state precisely all the former known parts of the machine, and then to apply to those the improvement: but on many occasions it may be sufficient to refer generally. But, however, I feel impressed by the observation of my brother Le Blanc, that the *trouble and labour* of referring to and comparing the former specification with the latter would be fully as great if the patentee only described in this the precise improvements of the former machine. Reference may be made to general science. The Court certified to the Lord Chancellor in favour of the specification.

It must be here observed that Harmar referred to his *own* patent. It seems by the same reasoning, that it might be laid down as a general rule, that every person, making a manufacture from the subjects of several expired patents, might recite and refer to the specifications of them, without taking any notice of their contents.

Sometimes it is difficult to determine, whether the improvements be an addition of new parts, properly so called, or the parts of an old machine newly arranged with some material alteration. In the latter case it is safer to claim the whole as a new engine; and then in the specification to distinguish accurately betwcen the old and new manufacture, shewing the peculiar qualities of each, the improvement effected, the means that produced it, and the use to which it is to be applied.

Different ways of specifying an improvement.

From these decisions it appears that there are several ways of making a correct specification of an improvement:—

First. By describing the whole manufacture, and then particularizing with great exactness the addition or improvement of the inventor. (*v*)

Secondly. By a description of the whole manufacture, pointing out the parts that either are old or not material to the invention.

Thirdly. By giving an accurate and intelligent description of the improvement, and the

(*v*) In *Bramah* v. *Hardcastle*, before Lord Kenyon, 1789, the inventor did not distinguish the part he really invented from the parts that were old in his new water closet.

manner in which it is applied to the subject, or parts that are old.

Fourthly. By describing the whole manufacture, if it be an improvement of another for which a patent has been obtained, taking care to refer in the new specification to that of the former patent.

The observations of the Court in *Minter* v. *Mower*, (*w*) are worthy of attention in drawing a specification of a machine. In the specification the invention was described to be of "An improvement in the construction, making, or manufacturing of chairs," and to consist in the application of a self-adjusting leverage to the back and seat of a chair, whereby the weight on the seat acted as a counterbalance to the pressure against the back, and whereby a person sitting in the chair, might, by pressing against the back, cause it to take any inclination, and yet might be supported. In an action for infringing the patent, it was pleaded that the specification did not describe the invention. It was proved that a chair had previously been sold, to which a similar leverage was applied, acting by the pressure in the same way, but having also other machinery which prevented the inclination of the back from being shifted, except when a spring was touched by the hand. The jury found, that without such other machinery, the chair previously sold would have produced an equilibrium by the self-adjusting leverage; that the maker of it was the inventor

(*w*) *Minter* v. *Mower*, 6 Adol. & Ell. Rep. 735.

of the machine, and found out the principle, but not the practical purpose to which it was now applied; and that the plaintiff had discovered such purpose.

Lord Denman, ordering a nonsuit, thus delivered the judgment of the Court.

"An action between the same parties has already been decided by the Court of Exchequer, in which the patent claimed by the plaintiff was deemed good and valid. But, on the trial in this Court, an entirely new fact was given in evidence, and affirmed by the verdict of the jury; namely, that a chair very closely resembling that made by the plaintiff's patent had been made and sold before that patent was taken out. The words of the jury were these:—'We are of opinion that Browne (*w*) was the inventor of the machine, and found out the principle, but not the practical purpose to which it is now applied. We think that Minter (the plaintiff,) made that discovery.'

"This statement might not be fatal to the plaintiff's title, if his invention were truly set forth in the specification; but the material issue in this cause being simply, whether the plaintiff did thereby particularly describe and ascertain the nature of the said invention, we find it needful to examine the terms of it.

"Now, the patent is taken out for "An im-

(*w*) A workman, see ante, p. 27, also *Barker* v. *Shaw*, before Holroyd, J., at Lancaster, 1823, in which the plaintiff was nonsuited, because his workman invented the improvement in hats.

provement in the construction, making, or manufacturing of chairs;' the method of making the machine, and the way in which it acts, are then fully described, without any mention of any of the means employed in Browne's chair. The specification thus concludes:—'What I claim as my invention, is 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.' Now, it was perfectly clear, upon the evidence, that this description applies to Browne's chair, though that was encumbered with some additional machinery. The specification, therefore, claimed more than the plaintiff had invented, and would have actually precluded Mr. Browne from continuing to make the same chair that he had made before the patentee's discovery. We are far from thinking that the patentee might not have established his title by shewing that a part of Browne's chair could have effected that for which the whole was designed. But his claim is not for an improvement upon Browne's leverage, but for a leverage so described that the description comprehended Browne's. We are, therefore, of opinion, that the patent cannot be sustained, and a nonsuit must be entered."

IV. *Combination.*

Every combination appears at first sight to be subject to the same rules for describing it, as an improvement or addition. The same end, a clear and intelligent description of the manufacture,

without any extraneous matter, is to be obtained: but the manner of attaining it is somewhat different.

If it is only a combination of substances, materials, or parts of machines in common use, previously applied for the same or different purposes, then the specification will be correct which sets out the whole as the invention of the patentee; (*x*) if he clearly express that it is in respect

(*x*) *Boville* v. *Moore*, 2 Marsh. 211. S. C. Dav. Pat. Cas. 411. A patent was taken out by Mr. Brown, for "a machine or machines for the manufacture of bobbin lace, or twist net, similar to and resembling the Buckinghamshire lace net, and French lace net, as made by the hand with bobbins or pillows," who assigned it to the plaintiff.

Gibbs, C. J.—Now, gentlemen, the objections made to this specification upon this part of the case are, that it goes farther than it ought; that it states more to be the invention of Mr. Brown than really was so; and I think I may state generally to you, that they say that all that precedes the crossings of the threads is old, whereas he has stated it as part of his invention; and besides that they state, that the forks and dividers which he has stated as part of his invention are equally old. I think with respect to the principle, if there existed at the time Mr. Brown took out his patent engines for the making of lace, of which his was only an improvement, then his patent ought to have been only for *an improvement;* and certainly, if he could have supported his patent for an *engine*, his specification ought to have pointed out those parts only which were of his invention, as those to which his privilege applied; and if you should be of opinion that he has in his specification stated more than he is entitled to, as what was his invention, then in my opinion his specification is bad.

Now the answer that the plaintiffs have endeavoured to give to that objection is this:—They say there is nothing in

**of such new combination or application, and of that only, without laying any claim to the merit**

the world that is absolutely new; you may refer it all to first principles. The wheels are well known; and yet you may state them in your specification as one of the means by which you effect your purpose. Levers are well known: but yet you may state them in the same way; that certainly is so. They go on to say, their invention consists not in this or that particular part, of which their machine is composed, as being new, but in the conformation of all the parts of it; the novelty consisting in that conformation: and if the new conformation of all those parts was of the plaintiff's invention, then, although every one of the parts was old, they would be entitled to a patent for a machine composed by that new conformation of the whole; but if you find that another person had combined all those parts up to a given point, and that Mr. Brown took up his combination at that point, and went on combining beyond that, if the subsequent combinations alone were his invention, the former combinations he will have no right to. Those combinations could not exist before, unless there had existed an engine in which they were found; and if there existed before this time an engine in which they were found, it is for you to say, whether this which Mr. Brown has invented is any more than an improvement of that engine, or whether it is the invention of a new engine? If Mr. Brown has only invented an improvement of the old engine, be it Heathcote's, or be it any one or two engines which existed before, then his specification by which he claims the whole to himself will be bad. If, on the other hand, you think that he has invented an engine, which consists of a perfectly new conformation of parts, although all the parts were used before, yet he will be entitled to support his patent for a new machine.

Now, I wish to have what I state upon this subject, observed by the counsel on both sides, that they may be aware how I put it. If a combination of those parts existed before;

of original invention in the use of the materials. Nothing more than the invention must be claimed. Every old part which is essential and material in producing the intended effect will be considered as claimed, if it be not designated as old. If the part in common use be even an elementary principle, or a single combination, and effect a new end, it becomes a part of the substance of the invention, and must be protested against as not being claimed.

If the invention consist of a new *set of combinations*, added to a manufacture composed of combinations, then, though the effect produced be different throughout, the specification should only describe the new combinations which have been invented, and how they are to be added to the old ones.

If the *combination* consist of the subjects of *several patents* which have expired, or of *some*

if a combination of a certain number of these parts existed up to a given point before, and Mr. Brown's invention sprung from that point, and added other combinations to it; then I think this specification, stating the whole machine as his invention, is bad. If, on the other hand, you think he has the merit of inventing the combination of all the parts from the beginning, then I think the specification is good, and that he is entitled to your verdict.—Verdict for the defendant

Gibbs, C. J.—Gentlemen, I will just ask you this:—do you find that the combination of the parts up to the crossing of the threads is not new?

Foreman.—Yes, my Lord.

Juryman.—The threads then taking a new direction, and certainly the most valuable part to the plaintiff, is a new invention: but we are of opinion it is nothing more than an improvement.

*new ones* that have been bought, it would appear from the reasoning of Ellenborough, C. J., that a description of the method by which they were combined, with a reference to the several specifications, would be all that is required to sustain the patent. (*y*)

V. *Method carried into practice.*

Pursuing the same order in giving rules for making specifications as was followed in the former chapter, when the different subjects of patents were examined, the necessary description of the fifth kind of new manufactures, principles *or methods carried into practice* by tangible means, must now be investigated.

Specification of a principle.

It was shewn in the last chapter, that a principle could not be the object of a patent. The impossibility of giving a description of it in every instance in which it might be used, was urged as a strong argument against its being allowed to be monopolized.

Specification of a method.

Reasons have also been assigned why a method *merely as such*, is not a proper subject for a patent. If a method can be the subject of a patent, the description of it must indeed be very accurate. It must be so clear and evident that no experiments must be necessary to learn it, and to put it in practice as beneficially as the patentee enjoys it.

Specification of the tangible means of principle carried into practice.

If neither a principle nor a method can be the subject of a patent within the meaning of the statute of James; if, when a patent is obtained for a method, it is in fact granted for *tangible*

(*y*) *Harmar* v. *Playne*, 11 East, 107. Ante, 159.

*means* of carrying that method into practice; (*z*) it is quite evident that the specification of a method is governed by the same rules as if the description was to be given of some one kind of the above mentioned manufactures, whether the *real subject* of the patent be a machine, improvement, or combination, and therefore, that any further comment would be superfluous.

VI. *Chemical discovery.*

When a chemical discovery is the foundation of the invention for which the patent has been granted, inasmuch as the substance or thing produced, and not the principle, process, or method, is the legal subject of the patent, it ought to be described. The ingredients, their proportions, the times of mixing, &c., ought to be fully stated, and then the beneficial *use* to which the substance can be applied. (*a*)

VII. *Foreign invention.*

A manufacture, when first introduced into England, whether it be a substance or machine, an improvement of something already known here, or a combination of native discoveries, still it must be fully and correctly explained. Its specification is regulated by the same laws, and is subject to the same critical examination, as if it were an English invention.

(*z*) Ante, 73.

(*a*) *Turner* v. *Winter*, 1 T. R. 602. The specification to this patent is what a scientific man, unacquainted with legal strictness, would naturally have made. It contains almost every fault generally found in the descriptions of this class of manufactures. It is, therefore, given fully in the different parts of the text.

General observations on specifications.

Thus it appears that *every part* which is new, however minute, must be clearly described. In the specification of a *substance*, the simplest elements of which it can be formed, and the best modes of making and using it, must be accurately stated. In descriptions of *machines* there must with scrupulous fidelity be set forth the cheapest materials, the most exact proportions of the parts, the most expeditious and the best mode of conducting them, with the precise times of putting on, or taking off, any part of the machine: and an *improvement* or new *combination* must be kept distinctly apart from the old manufacture.

The public must be put in possession of the manufacture in a way as ample and beneficial as the patentee enjoys it.

It has been shewn that it is a technical, but unjust rule of law, that if the inventor claims anything in the *title* to his patent, or in the specification, which is not *new*, or has been before *used*, then the whole patent becomes void. It has also been contended, that every part should be useful as well as new; but that was overruled by the judges in the case of *Lewis* v. *Marling* (*b*).

In the first section of 5 & 6 Wm. 4, c. 83, the law has been altered in the following words:—

"Any person who, as grantee, assignee, or otherwise, hath obtained, or who shall hereafter

(*b*) 10 B. & C. 22.

obtain letters patent, for the sole making, exercising, vending, or using of any invention, may, if he think fit, enter with the clerk of the patents of England, Scotland, or Ireland, respectively, as the case may be, (having first obtained the leave of his Majesty's Attorney General or Solicitor General in case of an English patent, of the Lord Advocate or Solicitor General of Scotland in the case of a Scotch patent, or of his Majesty's Attorney General or Solicitor General for Ireland in the case of an Irish patent, certified by his fiat and signature,) a *disclaimer of any part of either the title of the invention or of the specification, stating the reason for such disclaimer*, or may, with such leave as aforesaid, enter a memorandum of *any alteration in the said title or specification*, not being such disclaimer or such alteration as shall *extend the exclusive right* granted by the said letters patent; and such disclaimer or memorandum of alteration, being filed by the said clerk of the patents, and enrolled with the specification, shall be deemed and taken to be part of such letters patent or such specification in all Courts whatever: *provided* always, that any person may enter a caveat *in like manner as caveats are now used to be entered* (*c*), against such disclaimer or alteration; which caveat being so entered, shall give the party entering the same a right to have notice of the application being heard by the attorney

(*c*) See post, Chap. V. as to the manner of entering *caveats*.

general, or solicitor general, or lord advocate respectively: *provided also*, that no such disclaimer or alteration shall be receivable in evidence in any action or suit (save and except in any proceeding by scire facias) *pending at the time* when such disclaimer or alteration was enrolled, but in every such action or suit the original title and specification alone shall be given in evidence, and deemed and taken to be the title and specification of the invention for which the letters patent have been or shall have been granted: *provided also*, that it shall be lawful for the attorney general, or solicitor general, or lord advocate, before granting such fiat, to require the party applying for the same to *advertise his disclaimer* or alteration in such manner as to such attorney general, or solicitor general, or lord advocate shall seem right, and shall, if he so require such advertisement, certify in his fiat that the same has been duly made.

The entry of a disclaimer of part of a specification, under the 5 & 6 Wm. 4, c. 83, s. 1, does not give a right of action for infringements, committed previously to the disclaimer (*d*).

(*d*) *Perry* v. *Skinner*, in Exch. E. T. 1837. Law Journal, p. 127.

# CHAP. V.

## OF THE PRACTICE OF OBTAINING LETTERS PATENT FOR INVENTIONS.

HAVING pointed out the person, who is the first inventor, and shewn what things are new manufactures within the meaning of the statute of James, and what are the several properties of the specification,—*the practical part*, the mode of obtaining the letters patent, the manner of modifying them when obtained, and the method of procuring protection for the invention in foreign countries (*a*), next demand attention. We shall consider the matter in the following order:—

I. *The method of taking out Patents for England, Scotland, Ireland, and the Colonies.*
II. *The Acts of Parliament to enlarge Patent rights.*
III. *The proceedings before the Judicial Committee of the Privy Council, &c.*

(*a*) The laws of foreign countries under which protection may be had for British inventions, will be given in a separate chapter. See Chap. X.

## I. THE METHOD OF TAKING OUT PATENTS FOR ENGLAND, SCOTLAND, IRELAND, AND THE COLONIES.

That no improvident grant may be obtained from the Crown, the petitioner is required to attend at several offices under government, that the claims set forth in his petition may be carefully scrutinized and fully considered by the law officers of the Crown. Hence many instruments are made preparatory to the patent itself. This course necessarily increases the price of money paid for the patent: but it secures alike the public from imposture, and the Crown from deceit; and prevents the evils arising from an illegal privilege of exclusively making and vending some particular manufacture which may not be worthy of protection.

As many of the instruments are furnished at the public offices, those only are given in the APPENDIX, which must be prepared either by the petitioner or his agent. But it is thought that the interest of the inquirer would not be best consulted, nor the fullest information afforded to him, without a full description of the contents of every one of the documents; as by that means he will be enabled not only to examine whether the instruments are correct, but at once be able to see the whole routine of procuring the patent, and the conditions upon which it is obtained.

The manner in which all letters patent are to be passed is pointed out by the statute 27 Hen. 8, c. 11: but it would be useless to shew how

the method varies according to the matter of the grant, and therefore this Chapter will be confined to the manner of passing *patents for inventions.*

1. The petition.

The first step to be taken by an inventor is to present a *petition* (*b*) (which is written on unstamped paper) to the Queen, to grant to him letters patent.

It recites that he has discovered something (naming it) likely to be of general benefit, of which he is the true and first inventor, and that it has never before been used. He then prays for letters patent to secure to himself the sole use of his invention for fourteen years.

The patent is in general made out for England only; but it will be extended to the Colonies, if they are named in the prayer of the petition.

The declaration.

Formerly, an affidavit sworn before a Master, or Master extraordinary in Chancery, must accompany and support the allegations of the petition, but now (*c*) a declaration is made in lieu thereof.

(*b*) See form of the petition in the Appendix.

(*c*) See 5 & 6 Wm. 4, c. 62, s. 11, it is enacted, That whenever any person or persons shall seek to obtain any patent under the great seal, for any discovery or invention, such person or persons shall, in lieu of any oath, affirmation, or affidavit which heretofore has or might be required to be taken or made, upon or before obtaining any such patent, make and subscribe, in the presence of the person before whom he might, but for the passing of this act, be required to take or make such oath, affirmation, or affidavit, a declaration to the same effect as such oath, affirmation, or affidavit; and

The *petition* and declaration are then left at the office (*d*) of the Secretary of State for the Home Department.

2. Attorney General's report.

When the petition has lain a few days in the office at the Home Department, an answer, which is a reference of it by the Secretary of State to the Attorney or Solicitor General for his opinion, will be given. It is generally written on the back or margin of the petition, which, when thus marked, is taken to the chambers of either of those crown law officers, from whom in a few days, a report thereon may be obtained.

The report, after reciting the reference, the petition, and the affidavit, states, that inasmuch as it is at the hazard of the petitioner whether the invention be new, or will have the desired success, and as it is reasonable that her Majesty should encourage arts and inventions which may be for the public good, it is therefore the opinion of the reporter, that the royal letters patent should, as desired, be granted to the petitioner, *provided a particular description* (*e*) of the nature of the invention should be enrolled within a given time in the Court of Chancery.

It is this opinion, that a *particular description* of the invention should be enrolled, which gives such declaration, when duly made and subscribed, shall be to all intents and purposes, as valid and effectual as the oath, affirmation, or affidavit in lieu whereof it shall have been so made and subscribed.

(*d*) At the Treasury staircase, Whitehall.

(*e*) This proviso was first introduced into the patents in the reign of Queen Anne.

rise to that important instrument, the "*Specification.*" (*e*)

This report is now made as matter of course, and without any trouble to the petitioner, unless a caveat, of which mention will be made hereafter, has been entered.

3. The bill for the patent.

The report is taken from the office of the Attorney General to that of the Secretary of State for the Queen's warrant.

This warrant is an echo of the report, and gives authority to her Majesty's law officer to prepare a bill containing the grant for the royal signature. In it the exact time in which the specification must be enrolled is mentioned.

The warrant is carried to the patent office (*f*) of the Attorney or Solicitor General for the bill which is to be marked as examined by him. At the bottom, her Majesty is informed by her Attorney General that all such clauses, prohibitions, and provisoes, as are therein inserted, are usual and necessary in grants of the like nature.

The bill is the rough draft of the patent, and contains all its allegations. Indeed, it is verbatim the same as the patent, except the attestation to the latter instrument.

When prepared, the bill is carried to the office of the Secretary of State, for the *Queen's sign manual*, (*g*) from whence it is taken to be passed

(*e*) Other provisoes are occasionally introduced, as that the patentee shall supply the public service at rates to be fixed by public officers. See Ex parte *Pering*, 4 A & E. 949.

(*f*) No. 4, Old Buildings, Lincoln's Inn.

(*g*) Equity Cas. 54—209; and see 2 Inst. 554, 555.

at the *signet office.* (*g*) The clerk of the signet prepares a warrant to the Lord Keeper of the Privy Seal, whose clerk gives another warrant, in which the body of the patent is recited, directed to the Lord Chancellor.

4. The patent.

The warrant from the Lord Keeper of the Privy Seal is taken to the patent office of the Lord Chancellor, where the patent is made out and sealed. (*h*)

(*g*) In Somerset House.

(*h*) For an abridgment of the contents of a patent see the Introduction, ante, p. 22; and for its parts at full length, see Appendix.

The following sums of money are paid for letters patent for an invention, as appeared by several returns made to the House of Commons in the year 1826.

1. Return from the office of Secretary of State for the Home Department, England.

| | | | |
|---|---|---|---|
| Reference to the Attorney or Solicitor General | £2 | 2 | 6 |
| Royal Warrant . . . . . | 7 | 13 | 6 |

With an addition of 1*l.* 7*s.* 6d. if the patent of invention extends to Her Majesty's Colonies and Plantations abroad; and if the patent is granted to more than one person, an additional fee upon the royal warrant of 1*l.* 7*s.* 6*d.* for each additional person.

| | | | |
|---|---|---|---|
| King's Bill . . . . . | £7 | 13 | 6 |

With an addition of 1*l.* 7*s.* 6*d.* if the patent extends to the Colonies; and if granted to more than one person, an additional fee upon the King's Bill of 1*l.* 7*s.* 6*d.* for each additional person.

2. From the office of the Secretary of State for the Home Department, Scotland.

| | | | |
|---|---|---|---|
| Reference to the Lord Advocate . . | £2 | 2 | 6 |
| Royal Warrant and Stamp . . . | 16 | 17 | 0 |

When a patent has once passed the great seal, its date cannot be altered. (*i*)

And if granted to more than one person, an additional fee of 2*l.* 15*s.* for each additional person.

3. From the office of the Secretary of State for the Home Department, Ireland.

| | | | |
|---|---|---|---|
| Reference to the Lord Lieutenant . . | £2 | 2 | 6 |
| Warrant and Stamp . . . . | 9 | 3 | 6 |

And if granted to more than one person, an additional fee of 1*l.* 7*s.* 6*d.* for each additional person.

Signed by Geo. R. Dawson.

*Whitehall, 6th April,* 1826.

4. Return from the Attorney or Solicitor General's offices of the expenses incurred there for taking out a patent for England.

| | | | |
|---|---|---|---|
| To the Attorney General for his report . | £3 | 3 | 0 |
| To the Clerk . . . . . | 1 | 1 | 0 |
| If a caveat be entered the Clerk receives . | 0 | 5 | 0 |
| To the Attorney General for his approving, settling, and signing the bill . . . | 5 | 0 | 0 |

If the patent is opposed (which sometimes happens) the following fees are charged:

| | | | |
|---|---|---|---|
| To the Clerk for every summons summoning the parties to attend before the Attorney General . . . . . | 0 | 5 | 0 |
| To the Attorney General for the hearing of the parties by themselves or their agents and witnesses; each party . . . . | 2 | 12 | 6 |
| To the Clerk . . . . . | 0 | 12 | 6 |

The same fees are paid whether the patent passes the office of the Attorney or Solicitor General.

Signed by H. Haines and H. Owens,
*Clerks to the Attorney and Solicitor General.*

10*th April,* 1826.

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(*i*) Ex parte Beck, 1 Bro. Cha. Ca. 578.

The nature of the description required (*j*) in the specification, and the manner in which it must be given, have been fully investigated. It must be under the *hand and seal* of the in- 5. The specification.

5. Return from the Patent Office of the Attorney General of the expenses incurred there for taking out a patent for England.

| | | | |
|---|---|---|---|
| Stamp duty on the warrant from the King to prepare a bill for His Majesty's signature to pass the great seal . . . . | £1 | 10 | 0 |
| To the Clerk of the Patents for preparing the bill and docquet, and his fee . . . | 5 | 10 | 6 |
| Stamp duty on the bill . . . . | 1 | 10 | 0 |
| Ingrossing Clerk . . . . . | 1 | 1 | 0 |
| To the Clerk of the Patents for preparing and engrossing two transcripts of the bill to be passed through the signet and privy seal offices, parchment for such transcripts, and transmitting the same to those offices; each transcript 13*s.* 9*d.* . . . . | 1 | 7 | 6 |
| Stamp duty on each transcript 1*l.* 10*s.* . | 3 | 0 | 0 |

Signed by M. Poole,
*Clerk in the Patent Office.*

10*th April*, 1826.

6. Return from the Signet Office of the fees payable there for a common patent for an invention for England, and also for Ireland.

| | | | |
|---|---|---|---|
| For England . . . . . | £4 | 7 | 0 |
| For Ireland . . . . . | 3 | 3 | 0 |

*Signet Office,*
10*th April*, 1826.

Signed Thos. Venables,
*Deputy Clerk of the Signet attending.*

7. Return from the Privy Seal Office, of the ordinary ex-

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(*j*) Ante, Chap. IV.

ventor; (*k*) and is sometimes accompanied with a design or drawing in the margin, to which, from the body of the patent, references must be made, to render the whole instrument intelligible.

Before the invention is particularly described in the specification, a recital is made, that a patent had been granted to the inventor to secure to him the whole benefit arising from it; and

penses payable there for a grant of a patent for an invention passing the Privy Seal for England.

| | | | |
|---|---|---|---|
| Office Fees | £4 | 0 | 0 |
| Stamp | 0 | 2 | 0 |
| | 4 | 2 | 0 |

*Privy Seal Office,*
*April,* 1826.

JOHN THOMAS FANE,
*Clerk of the Privy Seal in attendance.*

8. Return from the Lord Chancellor's Patent Office, of the fees payable there on a patent for an invention for England passing under the great seal.

| | | | |
|---|---|---|---|
| Patent Office | £5 | 17 | 8 |
| Stamps | 30 | 2 | 0 |
| Boxes | 0 | 9 | 6 |
| Deputy | 2 | 2 | 0 |
| Hanaper | 7 | 13 | 6 |
| Deputy | 0 | 10 | 6 |
| Recipe | 1 | 11 | 6 |
| Sealers | 0 | 10 | 6 |
| | £48 | 17 | 2 |

Every additional name pays an additional fee to the Hanaper of 2*l.* 13*s.* 6*d.*

*Patent Office, Adelphi,*
17*th April,* 1826.

Signed, JAMES SETON,
*D. C. Patents.*

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

that therein a proviso was inserted requiring a description of the invention, and that in consequence of such requisition the patentee makes the specification. The terms of that proviso are given in the Introduction. (*m*)

The time allowed for enrolment.

The time formerly allowed for the enrolment of the specification was four months: but it is now generally confined to *two months*, unless the inventor make a declaration that he intends to apply for patents for Scotland and Ireland, and then it is extended to four months if for Scotland only, but otherwise to six months. A few instances have occurred in which a still longer time has been allowed to enrol the specification: but in one case the Lord Chancellor would not put the great seal to a patent by which the specification was to be concealed for a considerable length of time. The Attorney General will, under special circumstances, enlarge the usual period at any moment before the patent is sealed.

When the patent is once sealed, the *specification* must be *acknowledged* before a Master in Chancery, and lodged in one of the *Enrolment Offices* (*n*) before the expiration of the time therein mentioned. The day is inclusive. If the patent, therefore, be enrolled on the last day of the given time, it is sufficient. (*o*)

The legislature alone can grant relief, if the

(*m*) Ante, 20.

(*n*) Petty Bag Office, and Rolls Yard, Chancery Lane. The Master of the Rolls will order clerical errors to be amended.

(*o*) *Watson* v. *Pears*, 2 Campb. 294.

time has transpired: the Lord Chancellor has refused to interfere on such an occasion. (*p*)

If the time for the enrolment be expired, or any thing else has occurred in suing for the patent, whereby it will be rendered void, it is advisable to conceal the invention, and to begin *de novo* with another petition for a patent. It is a very safe way to remedy all defects in form.

Certificate of enrolment.

A *certificate* of the enrolment, which is always indorsed on the back of the specification, may be had at the same time.

Inspection of specification.

The specifications are kept open at the Enrolment Office for the inspection of the public, and copies of them may at all times be obtained. Attempts have been made to induce the Lord Chancellor to dispense with the enrolment of the specification, or to keep it concealed, which have always been unsuccessful. (*q*) In some cases the legisla-

(*p*) Ex parte *Hoops*, printed by mistake for *Koops*, 6 Ves. Jun. 599. Ex parte Beck, 1 Bro. Cha. Ca. 578. Application was made for time to enrol Koop's specification. Lord Eldon. —I cannot do that; for the patent is void if the proviso be not complied with. You should have applied to the Attorney General before the patent passed for a longer time upon the special circumstances. I cannot take the great seal from a patent, and repeal it in the most essential point: it is a legal grant, with a proviso for the benefit of all the King's subjects. You can do nothing except by an act of Parliament to enlarge the time mentioned in the proviso.

(*q*) Ex parte *Hoops* (for *Koops*) 6 Ves. 595. The object of the petition was, that the Lord Chancellor would dispense with the enrolment, or that some provision should be made to prevent the specification from being made public: suggesting