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that where there is no other ground of discrimination the priority of application would decide the right. 109

It will appear, when we come to the subject of the specification, that the patentee must be entitled to a patent for all that he alleges himself to have invented, or his patent will be void. It follows, from this doctrine, or rather is included in it, that if the patentee is the prior inventor of only a part of what is patented, the patent will be void.<sup>110</sup>

In a suit for an infringement of a patent for an improved iron carriage wheel, by which the weight was made to bear upon the circumference, instead of bearing upon the centre or nave, it appeared that a carriage wheel of wood and iron had been invented and used eleven or twelve years before, by Mr. Strutt, in which also the weight had been made to bear upon the circumference, the inventor of which died soon after the invention, which had not been followed up, no new wheels of the same description having been made after the first three made by the inventor himself. Mr. Justice Patteson instructed the jury that if it appeared that Strutt's wheel was on the same principles, and in substance the same wheel as the plaintiff's, and it had been used openly and in public, so that every body might see it, and that the use of it had continued up to the time of the

<sup>109</sup> Forsyth v. Reviere Chitty Jr's. Prer. of the Crown, 182 n.

<sup>&</sup>lt;sup>116</sup> The King v. Cutler, 1 Stark. N. P. 354; Brunton v. Hawkes, 4 B. & Ald. 540.

plaintiff's taking out his patent, it would be a ground to say that the plaintiff's invention was not new; but if it appeared that Strutt's wheel was a mere experiment, that he found it did not answer, and that he ceased to use it, and abandoned it as useless, and nobody else followed it up, and that the wheel in question in the case was the plaintiff's own invention, and remedied the defect in Strutt's wheel, (though he should not have seen that wheel,) there was then no reason for saying the invention of the plaintiff was not new. The jury found a verdict for the plaintiff.<sup>111</sup>

## Sec. XVII.—PREVIOUS PUBLICATION.

It follows, from the doctrines already stated, that a mere previous hint, or oral suggestion or description of the invention, will not, of itself, defeat the patent of a subsequent original inventor, that is, one who did not derive any hint from any other person; since the person who thus first gave a hint or suggestion of the invention is supposed not to have reduced it to practice, or, in other words, had not matured his conception into what the law regards as an *invention* which is the subject of a patent. The law is the same in this respect in England and the United States, and it makes no difference whether the de-

<sup>111</sup> Jones v. Pearce, Godson's Sup. 10.

scription or suggestion is by the inventor himself, or by another, and whether the knowledge of the inventor be derived from the invention of a subsequent patentee, or from the invention of some other person; for, from whatever source it is derived, it will not, as long as it is not reduced to practice, defeat a subsequent patent.

But there is a material difference in the effect of an oral publication in England or France, and the United States, where the invention has been reduced to practice in consequence of such a publication; for, as we have seen, in England and France, the novelty of the discovery is tested in reference to the date of the patent, whereas in the United States it is tested in reference to the date of the discovery. We perceive how prejudicial the rule adopted in England and France, must be to the interests of the inventor, and to the beneficial operation of the patent law, by depriving the inventor of all the advantage of communication with others on the subject of his invention previous to taking out his patent, for if he so makes it known, it may give others an opportunity to defeat his patent by piracy.

An instance of the danger an inventor is under of losing the benefit of his invention, by letting it in any way transpire before he has the great seal, is mentioned by Mr. Davis. A person had invented an improvement upon spectacles, and as his patent was in a state of forwardness, he had not been suffi-

ciently cautious in keeping the invention to himself, so that another person, in the same trade, had acquired a knowledge of it, and hastily got a pair made upon the same construction, and exposed them in his window; fortunately, however, the inventor happened to pass the shop, and seeing them, employed a friend to go and purchase them, in which he succeeded, and his patent passed the great seal the next day, before there was time to get any more made; and it is said that by this the patent was rendered secure.<sup>112</sup>

Upon this case, Mr. Godson remarks, "that it did 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, two 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."113

<sup>&</sup>lt;sup>112</sup> Dav. Pat. C. 445.

Such is Mr. Godson's view of the English doctrine on this subject. In whatever relation we view the subject, we meet with the inconveniences of that unfortunate doctrine. Whereas, on the contrary, in the United States, where the law is satisfied if the invention was new at the time of its being made, the inventor, by making his invention known as soon as he has reduced it to practice, not only does not thereby incur any risk of losing the advantages of it, but rather makes them more secure to himself, by supplying himself with proof of the date of his invention.

The doctrine of the English courts, that the inventor, by discovering his secret, and permitting the use of his invention before obtaining a patent, though without the intention of waiving his privilege, in fact forfeits his right to a patent, has been adopted in France in its full rigor, as appears from an adjudication of the Court of Errors, of February, 1806. In that case the inventors of a carding machine had disclosed their invention to the municipal administration of Orleans, who, at their request, had tested its utility by a public inspection and experiment, of which they had given a formal certificate to the inventors. The inventors had besides voluntarily permitted a manufacturer to use their machine to card with. It was adjudged that in thus giving publicity to their invention, they had voluntarily made it public property, and consequently, that the patent subsequently obtained by them, though in other respects legal, was invalid."114

The inventors complained of this decision as being too rigorous, and contended that their intention to abandon their privilege ought not to be presumed, but, on the contrary, that their right ought to remain unimpaired, unless an intention to abandon it were clearly proved. But M. Renouard, in 1825, approves of the judgment, on the ground that it was immaterial to the public, whether it was the intention of the inventors to abandon their privilege, or retain it; that the only question was, whether publicity had been given to the invention, from whatever cause, for it was this publicity which gave the public the right, and consequently deprived the inventors of their privilege. He thinks, however, that the inventor has, in such case, an action against one who may have injured him by the piracy.

The same author puts the case of a patent being taken out by the party who has pirated the secret, before the invention has been patented by the inventor, and is of opinion that, though the inventor is thereby despoiled of the privilege of taking out another patent, yet he has the right to be substituted in the patent taken out, for the party who has thus fraudulently obtained it. For in such case, he says, the public has obtained such possession

Renouard, c. 5. 5. 1. p. 170, cited by him from the General Juris-prudence of M. Dalloz, t. 2. p. 263.

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of the invention as is inconsistent with his privilege. Neither the English law nor our own, has any form of proceeding for such subrogation or substitution; but our law admits of the inventor's taking out a patent himself, and then procuring the one previously taken out to be cancelled, or treating it as null and void, and prosecuting the piratical party, and those claiming and using the right under him, for an infringement of his patent. 115

The case is otherwise if the invention has been described in some public work. The act of Congress is explicit upon this point. The sixth section of the act of 1793, in enumerating a number of defences in an action for the infringement of a patent, on the establishment of either of which, the court may declare the patent to be void, mentions, as one of these defences, proof that the invention was not originally discovered by the patentee, but had been in use, or had been described in some public work, anterior to the supposed discovery of the patentee. If the invention be orally described by one, and another, upon the suggestion, reduces it to practice, the latter is not the inventor. But the mere fact of the invention having been orally described by one person to another, but never described in any published work, will not defeat the right of a subsequent original inventor, to a patent; that is, a subsequent inventor who derives no advantage from such prior descrip-

<sup>&</sup>lt;sup>115</sup> See Renouard, c. 8. s. 2. p. 313, 314.

But if the thing has been described in some public work, whether it has been reduced to practice or not, a patent cannot, under the act of Congress, be subsequently taken out for it. In this case, the description belongs to the public, and any one person cannot, by reducing the thing to practice, deprive others of the advantage of the description. In this case, even if the party who reduces the invention to practice, merely follows the published description, he is not an inventor, and so, upon the general construction of the patent laws, is not entitled to a patent. But the law does not confine itself to the case of a party who may be proved to have availed himself of the published description. It enacts generally and absolutely that where a thing has been described in a public work, it shall thereupon cease to be patentable. "It may be," says Chief Justice Marshall, "that the patentee had no knowledge of this previous description; still his patent is void; the law supposes he may have known it.",116

And the same rule has, by construction, been incorporated into the English law, upon this subject.<sup>117</sup> And the French law, as we have seen, contains an express provision to the same effect.<sup>118</sup>

<sup>116</sup> Evans v. Eaton, 3 Wheat. 454.

<sup>117</sup> The King v. Arkwright, Davies's Pat. Cas. 129; Hill v. Thompson, 2 J. B Moore, 458.

<sup>118</sup> Renouard, c. 5. s. 1. p. 176.

Upon this provision, two questions may arise; first, what is a description? and second, what is "a public work?" We have no decisions upon these questions. Upon the first, M. Renouard remarks that "it is not enough to defeat a patent that the thing has been mentioned in some public work, it must have been described;119 that is, the publication must give such an explanation of the thing, as may, in some degree, answer the purpose of the specification in a patent. The courts would not, probably, require that the description should fully answer as a specification, but they would not consider any statement to be a description within the meaning of this clause, which should not serve as a direction for making, doing, or compounding the thing to which the description related. This is the construction adopted by M. Renouard.

The same author considers the other of the above questions, What is to be considered a publication of the description within the meaning of the French law, the phraseology of which is not precisely equivalent to that of our act of Congress, the expression of the French law, section 16, being, that the patent shall be void if the thing patented had already been "described in printed and published works." As the law makes no distinction as to the language or

<sup>119</sup> c. 5. s. 1. p. 176.

place, M. Renouard thinks that a description in a work printed in any language at any place is within the provision of the law. It does not appear what publication will be considered by our courts a "public work" within the act of Congress. The court certainly will not limit the construction to a work published in the United States, nor to works published in the English language; but whether they will take the position laid down by M. Renouard remains to be seen when a case shall arise of a publication abroad in a foreign language of a theoretical description of a machine or composition not made, or a process not reduced to practice. For, as we shall see, if the thing has been reduced to practice in a foreign country, it cannot afterward be the subject of a patent in the United States.

## Sec. XVIII.—Foreign Inventions.

In regard to the novelty of the invention, there is one material difference between the construction given to the section of the English statute of monopolies, that constitutes the English patent law, and our patent acts. The exception of the general prohibition of monopolies in the English act of parliament, as we have seen, is of the monopoly of the "sole working or making of any manner of new manufacture within this realm;" which has been constru-

ed to extend, not only to inventions originally made in England and not known elsewhere, but also to inventions made abroad and introduced into England, since such inventions were considered to come within the conditions of the exception, because they were new in England. This construction arose out of the practice of granting patents at the common law for imported inventions.

In the case of the Clothworkers of Ipswich, that occurred nine years before the statute of monopolies was passed, 120 it was said by the court, that hifaman hath brought in a new invention and a new trade within the kingdom, in peril of his life and combaniption of his estate or stock, &c. or if a man liath made a hew discovery of any thing, in such cases the king of his grace and favor, in recompense of his eees and travel, may grant, by charter unto him, that he only shall use such a trade or traffic for a certain time, because, at first the people of the kingdom are ignorant, and have not the knowledge or skill to use it. But when that patent is expired, the king cannot make a new grant thereof; for when the trade is become common, and others have been bound apprentices in the same trade, there is no reason that such should be forbidden to use it."121 The same doctrine prevailed after the statute of monopolies was passed.

<sup>&</sup>lt;sup>120</sup> Godbolt, 252.

<sup>&</sup>lt;sup>121</sup> And see 9 Johns. R. 58, 582, 583, 584. Per Kent C. J.

It was early held, under that statute, that a grant of a monopoly may be to the first inventor by the 21 Jac. 1; and if the invention be new in England, a patent may be granted, though the thing was practised beyond sea before; for the statute speaks of new manufactures within this realm; so that if they be new here, it is within the statute; for the act intended to encourage new devices useful to the kingdom, and whether learned by travel or by study, it is the same thing. The patent law of France is similar in this respect. The

But the American patent law expressly excludes any such construction. The first section, in which the subject of patents is described, does not, in imitation of the English, say that patents may be granted for any art, &c. or any new improvement in the United States. If it had stopped here, however, the question might have been raised, and it would have been open to construction, whether an art, &c. new in the United States, though previously known abroad, did not come within the act. But in the fifth section, setting forth the defences that may be made by the defendant in an action for an infringement of a patent right, to lay the foundation not only for a verdict for the defendant in the particular case, but also for pro-

<sup>&</sup>lt;sup>122</sup> Agreed by Holt and Pollexfen. Edgeberry v. Stephens, 2 Salk. 447.

<sup>123</sup> Renouard, Paris Edit. of 1825, p. 423, law of 1791, s. 9.

curing a judicial declaration that the patent is void, it is provided that for this purpose the defendant may prove "that the thing thus secured by patent, was not originally discovered by the patentee, but had been in use, or had been described in some public work, anterior to the supposed discovery by the patentee." And again in the additional patent act of April 17th, 1800, the first section, authorizing a person, who has been resident in the United States two years, to take out a patent, provides that such person, in making application for a patent, "shall make oath, that such invention, art, or discovery, hath not, to the best of his knowledge or belief, been known or used either in this or any foreign country; and that every patent which shall be obtained pursuant to this act, for any invention, art, or discovery, which it shall afterwards appear had been known or used previous to such application for a patent, shall be utterly void." This law put it beyond all question that an alien, having resided in the United States the requisite period, though he might take out a patent for an original invention, could not take out one for an invention previously known or used in a foreign country.

The provisions in the statute of 1793 respecting patents taken out by citizens of the United States, were not so explicit upon this point. Still, as that law requires that the invention should not have been previously known, and declared the patent void if it had been described in any public work, there was no

room for the construction that a previous foreign invention or publication did not defeat the patent.

It has accordingly been uniformly held that there is no difference, as to the effect on an American patent, whether a previous invention and publication took place in the United States or abroad. In an action for an infringement of a patent for making suspenders, the defendant proved that similar suspenders had been used in France and England before the patent was taken out. Mr. Justice Washington instructed the jury that to entitle the plaintiff to recover they must be satisfied that he was the original inventor, not only in relation to the United States, but to other parts of the world. Even if there was no proof that the plaintiff knew that the discovery had been made before, still he could not recover, if in truth he was not the original inventor. It is

M. Renouard<sup>126</sup> discusses at length the provision of the French law that allows patents for foreign inventions, and concludes that it is wholly inexpedient. His argument is, that the patentee cannot, in such case, give any equivalent, as in that of an original invention of his own, that has not been known abroad, since the invention, if useful, would be sooner introduced without the right of patenting it. He accord-

<sup>&</sup>lt;sup>124</sup> Shaw v. Cooper, 7 Pet. S. C. R. 292.

<sup>&</sup>lt;sup>125</sup> Dawson v. Follen, 2 Wash. C. C. R. 311.

<sup>126</sup> P. 428.

ingly approves entirely the American patent law in this respect. 127

Sec. XIX.—Delay to take out a Patent. Abandonment of the Invention. Dedication to the Public.

The case of Dolland's invention of an improvement in the telescope has already been mentioned, where Dr. Hall, who had first invented the same improvement, delayed to take out a patent for a long time, and kept his invention secret. Dolland having subsequently made the same invention without any knowledge of its having been previously made by Dr. Hall, took out a patent, which was held to be valid.128 In that case the mere fact of delay, without any act or neglect showing an intention to dedicate the invention to the public use, was held to be a forfeiture of the right to take out a patent as against another who took the proper steps to secure his right. The doctrine of this case seems to have been recognised in a subsequent one.129 This principle can hardly be objected to, since the first inventor, if he chooses not to give the public the use of his invention, which the patent law was intended to encour-

<sup>&</sup>lt;sup>127</sup> Treatise on Patents, c. 5, s. 4, p. 196.

<sup>&</sup>lt;sup>128</sup> 2 H. Bl. 483.

<sup>129</sup> Forsyth v. Reviere, Chitty Jr's. Prer. of the Crown, 182, n.

age, but to keep it to himself, ought not to have the right to stand in the way of the public interest, and that of any other inventor who is willing to give the public the use of the invention after the expiration of the temporary monopoly provided for by the patent laws.

M. Renouard cites from Merlin's Additions to his Repertoire,130 the opinion that an inventor does not lose his privilege of a patent by delay while he exercises his invention in secret. But M. Renouard thinks a distinction is to be made on this point, being of opinion that if the inventor delivers the products of his invention in the mean time, and others, by examining or analyzing such products, detect the secret, he thereby loses his privilege. 151 This distinction, however, seems to be by no means contrary to the doctrine laid down in Merlin, as cited by M. Renouard, which seems to admit of the construction that others may not, in the mean time, before the first inventor has taken out his patent, have found out the art or process by the means supplied to them by the inventor for that purpose, by the distribution of the products of his invention. The position, however, of both M. Renouard and the authority cited by him, is, it seems, that the inventor does not forfeit his privilege by mere delay and practising his art in se-

<sup>130</sup> T. 16, 1824, mot, Brevet d' Invention.

<sup>&</sup>lt;sup>131</sup> C. 5, s. 1, p. 173.

crecy, provided no other person in the mean time discovers it.

A case of more frequent occurrence is that of an invention not being kept a secret; and the question is, whether a right to take out a patent is lost by mere delay, though no other person than the inventor has, in the mean time, used the invention. We suppose the party to have actually made the invention, that it is new, and that it is the proper subject of a patent, and there is no question of the right of the party to a patent; may this right be forfeited by mere delay? Mr. Justice Washington thinks that the inventor does not thus forfeit his right. The case under consideration was that of another person having erected and used the machine, after its invention by the party claiming a patent, but before his patent was taken out. After the patent was taken out the patentee brought an action against the defendant for continuing to use the machine, which had been erected before it was taken out; and it was contended, by the defendant, that it would be a great hardship upon other persons, and prejudicial to the public, if the inventor were permitted then to take out a patent, and stop the machines previously erected. Mr. Justice Washington said, upon this question, that "not only may individuals be injured by a liberal construction of the words of the law, but the public may suffer, if an obstinate or negligent inventor should decline obtaining a patent, and at the same time keep

others at arms' length, so as to prevent them from profiting by the invention for a length of time, during which the fourteen years are not running on. But all the hardship must rest with Congress to correct. It is beyond our power to apply a remedy." <sup>132</sup>

And in a case before Mr. Justice Livingston, in the southern district of New York, a similar doctrine is laid down, where it is said, "If the patentee be the inventor, it is immaterial that the invention has been known and used for years before the application." <sup>133</sup>

The doctrine here stated may, however, be doubted, though no decision has as yet been made directly to the contrary. The ground of the doubt is, that the doctrine seems to be in direct opposition to the object and principles of the patent law, namely, the encouragement of the arts; and the degree and extent of encouragement are defined by the law, namely, a monopoly of fourteen years. But if a party were thus permitted to lie by, and yet not forfeit his right to take out a patent, it would operate as a discouragement, by depriving others of the right of making and using the invention, without any equivalent benefit for such deprivation, while the inventor delays; and it would also contravene the law,

<sup>132</sup> Evans v. Weiss, 3 Hall's Law Journal, 189.

<sup>133</sup> Goodyear v. Matthews, 1 Paine's R. 301.

by allowing a longer exclusive privilege than is intended to be granted by the law.

This doctrine seems also to be inconsistent with the letter of the patent law, by which the privilege of a monopoly is granted for *new* and useful inventions not before known or used, before the application for the patent; and certainly an invention may, by delay, cease to be new.<sup>134</sup>

Again, the presumption may very naturally arise, from a neglect to take out a patent, that the inventor has abandoned his invention. Could he be permitted to lie by twenty years and then take out a valid patent for fourteen years? If so, then why not fifty? This certainly would not be conceded without an imperative unquestionable provision of law, leaving no room for a reasonable construction, whereas there is by no means any such stubborn provision. On the contrary, the courts all hold that the inventor may forfeit his title to the privilege offered by the law, and there is nothing in the phraseology of the law that forbids the courts to construe unreasonable delay into a forseiture. And if twenty or fifty years may be construed to be unreasonable, any shorter time may be so construed, if such should be the opinion of the court. Certainly a much shorter period than twenty years would, ac-

<sup>&</sup>lt;sup>134</sup> And see the reasoning of Mr. Justice Story in the case of Sellers & Pennock v. Dialogue, infra in this section.

cording to the ordinary mode of construing men's conduct, be ground of presumption of an abandonment. It must, to be sure, be a question of fact in the particular case, and may more properly be so treated, than to be the subject of an express uniform rule, for the inventor ought to be dealt with upon the most liberal principles, and not to be prejudiced by a delay which may be reasonably accounted for and explained, upon some other ground than that of an abandonment of his privilege. When he cannot account for the delay upon reasons that are consistent with the object and principles of the patent laws, there seems to be very strong ground for holding that he abandons his privilege. 135

On the subject of delay to make experiments to perfect the invention, Mr. Godson remarked, in 1825, 186 speaking of the English jurisprudence, that "whether experiments 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. 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."

<sup>135</sup> See Morris v. Huntington, 1 Paine, 345.

<sup>135</sup> Treatise on the Law of Patents, p. 64.

<sup>137</sup> See Hill v. Thompson, 2 B. Moore, 457.

Here the doubt expressed is, how far the inventor may make experiments without invalidating his patent by the very act of making the experiments, though no one else should use the machine. The other and greater hazard he would run in England would be the loss of his right by piracy, since a piratical use of the machine would there defeat his patent no less than one authorized by himself.

In the United States, the jurisprudence in this respect is well settled on different principles, much more favorable to the interests of the inventor, and much more in accordance with the spirit of the patent laws. In a case in the District Court of the United States, before Mr. Justice Thompson, 138 he said, "No man is permitted to lie by for years and then take out a patent. If he has been practising his invention with a view of improving it, and thereby rendering it a greater benefit to the public, before taking out his patent, that ought not to prejudice him. But it should always be a question submitted to the jury, what was the intent of the delay of the patent, and whether allowing the invention to be used without a patent should not be considered as an abandonment or present of it to the public." The doctrine here laid down as to the experiments, and the use of the invention for the purpose of perfecting

<sup>138</sup> Morris v. Huntington, 1 Paine's R. 345.

it, is assumed and taken for granted, in so much that a formal statement of it is superfluous, in the opinion of the whole Supreme Court, delivered by Mr. Justice Story. 139

We next consider how far an acquiescence of the inventor in, or his connivance at, the use of the invention by others, before taking out his patent, will effect its validity? And here we are again considering a question that belongs to the American and not to the English jurisprudence; for in the latter, as we have seen, the piracy of an invention and the use of it by others, without the consent or acquiescence of the inventor, and in spite of his vigilance to prevent it, is held to defeat the patent right; much more should this result be held to follow the use of it by others with his knowledge and consent. And on this subject there is no doubt, according to our law, that if the inventor allows and encourages others to use his invention without interposing or asserting his claim to an exclusive privilege, or if he authorizes such use of it in a way inconsistent with his claim to such privilege, he thereby dedicates it to the public and forfeits his right to take out a patent. This doctrine is founded upon the plainest principles of common honesty, for it would be inconsistent with the

<sup>139</sup> Pennock & Sellers v. Dialogue, 2 Pet. S.C. R. 1.

obvious rules of fair dealing that the inventor should either tacitly or expressly authorize others to erect machines and put them into operation, and then, by obtaining a patent, defeat their labors and render their property of no value.

The plainest case of this description, and one on which all the decisions are agreed, is that of a sale by the inventor, of the articles which are the subjects of his invention. It has been uniformly held that if the inventor, before taking out a patent, manufactures and sells the articles to which his invention relates, he thereby loses his right to a patent. So it has been held in England. A patent was granted for a new mode of making verdigris, to be called British imperial verdigris. It was objected that the manufacture was not new; for that four months previously to the grant of the patent, the patentee had sold the same article under the name of Dutch imperial green. It was contended, that until the patent was obtained, the discovery was new; that the secret was locked in the patentee's own breast; and that the property was not rendered common whilst he kept the secret. Gibbs C. J. "The 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."140

It is a striking circumstance that the Chief Justice should have used such qualified language as he is eported to have done in this case in England, where the common doctrine advanced is that the inventor loses his right by the piracy of his invention before the grant of the patent. The ground of that doctrine must be, that if the thing is in use, by wrong, before the grant of the patent, the grant is void. Certainly the case is much stronger if it is in use by right. There seems, therefore, to have been no need of limiting the decision to a public sale, for to hold that any sale, however private, followed by the use of the thing by the purchaser, before the issuing of the patent, would not render the patent void, would be inconsistent with the course of English jurisprudence on this subject.

In the jurisprudence of the United States, though the inventor is much more liberally treated than in that of England, still it has been distinctly held that a sale of the article before the grant of the patent, will render it void. This question was very much discussed in the case of Pennock and Sellers v. Dialogue, first in the Circuit Court of the United States for the District of Pennsylvania, and afterwards in the

<sup>140</sup> Wood v. Zimmer, 1 Holt's N. P. C. 58.

<sup>141</sup> Mellus v. Silsbee, 4 Mason, R. 108.

Supreme Court of the United States. 142 The invention in question was that of an improvement in hosepipe in the mode of riveting the joints. The inventors had manufactured the article and authorized others to manufacture it for seven years before the grant of the patent; and thirteen thousand feet of the article had been made and sold before the patent was taken out. It was held clearly, both in the Circuit and the Supreme Court, that the patent was void. Mr. Justice Washington, in charging the jury in the Circuit Court, said, "We are clearly of opinion that if an inventor makes his discovery public, looks on and permits others freely to use it without objection, or assertion of claim to the invention, of which the public might take notice, he abandons his inchoate right to the exclusive use of the invention, to which a patent would have entitled him, had it been applied for before such use. And we think it makes no difference in the principle, that the article so used and afterwards patented, was made by a particular individual, who did so by the private permission of the inventor. As long as an inventor keeps to himself the subject of his discovery, the public cannot be injured; and even if it be made public, but accompanied by an assertion of the inventor's claim to the discovery, those who should make use of the subject

<sup>&</sup>lt;sup>142</sup> 2 Pet. S. C. R. 1.

of the invention, would at least be put upon their guard. But if the public, with the knowledge and consent of the inventor, is permitted to use the invention without opposition, it is a fraud upon the public afterwards to take out a patent."

Mr. Justice Story, giving the opinion of the Supreme Court in the same case, said, "It has not been, and indeed cannot be denied, that an inventor may abandon his invention, and surrender or dedicate it to the public. This inchoate right, thus once gone, cannot afterwards be resumed at his pleasure, for when gifts are once made to the public in this way, they become absolute. The question which generally arises at trials, is a question of fact, rather than of law—whether the acts or acquiescence of the party furnish, in the given case, satisfactory proof of an abandonment or dedication of the invention to the public."

The court notices the clause of the constitution on this subject, which gives to Congress the power "to promote the progress of science and the useful arts, by securing for limited times to authors and inventors, the exclusive right to their respective inventions or discoveries." The limited time, it was observed, was fixed by the act of Feb. 21, 1793, which also prescribes the terms and conditions which must be complied with. The thing to be patented is to be such as "was not known or used before the application," and the patent is granted "for a term

not exceeding fourteen years" and gives "the full and exclusive right of using and vending to others to be used, the said invention or discovery."

"Another provision of the act referred to by the court as bearing upon the case, was that of the sixth section, whereby a defendant, charged with having infringed a patent, may plead "that the thing was not originally discovered by the patentee, but had been in use, or had been described in some public work, anterior to the supposed discovery by the patentee." The words "not known or used before the application," it was observed, could not mean that the thing was not known or used before the application, by the inventor himself; for that would be to prohibit him from the only means of obtaining a patent. The use as well as knowledge of the invention must be indispensable to enable him to ascertain its competency to the end proposed, as well as to perfect its component parts. The words, then, to have any rational interpretation, must mean, not known or used by others before the application. But how known or used? If it were necessary, as it well might be, to employ others to assist in the original structure or use by the inventor, himself, or if, before the application for a patent, his invention should be pirated by another, or used without his consent, it can scarcely be supposed that the legislature had within its contemplation such knowledge or use. We think the true meaning must be, not known or used by the

public before the application, and, thus construed, there is much reason for the limitation imposed by the act. 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 the whole profits of it, relying upon his own superior skill and knowledge of the structure; and then, and then only, when the danger of competition should force him to secure the exclusive right, he should be allowed to take out a patent, and thus exclude the public from any further use than what should be derived under it during the 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. If an invention is used by the public, with the consent of the inventor, at the time of his application for a patent, how can the court say that his case was, nevertheless, such as the act was intended to protect. If such a public use of it is not a use within the meaning of the statute, what other use is? If it be a use within the meaning of the statute, how can the court extract the case from its operation, and support a patent, where the suggestions of the patentee are not true, and the conditions on which alone the grant was authorized to be made, do not exist. Upon most deliberate consideration we are of opinion that the true construction of

the act is, that the first inventor cannot acquire a good title to a patent, if he suffers the thing invented to go into public use, or to be publicly sold for use, before he makes application for a patent; this voluntary act or acquiescence in the public sale or use, is an abandonment of his right, or rather creates a disability to comply with the terms and conditions on which alone the secretary is authorized to grant him a patent."

In the above case the court lays stress upon the particular phraseology of the first section of the act of 1795, namely, that the thing must not have been "known or used before the application." Now we have seen already that these words are not accepted literally in regard to the novelty of the invention, except as to the knowledge given or the public use authorized by the inventor himself. In other respects it is enough that the thing was new and not known or used at the time of the invention. This construction was, as has been remarked, forced upon the court by a provision in the sixth section of the same act. 143 The result is that in respect to a knowledge and use by others, it is enough that the thing was not known and used at the time of the invention; others may have invented it or used it after the invention and before the application by the patentee,

<sup>143</sup> Supra, sect. 16, p. 153.

without his consent or knowledge, and his right will not thereby be affected; but if he authorized the public use before the application, his right is forfeited.

This interpretation does indeed give one literal construction and application of this part of the first section of the act. But we cannot think that it is by any means the strongest and clearest ground of the decision in the above case; though it is certainly entitled to some weight, for the invention should be in all respects new and unknown to others and not used by them at the time of the invention by the patentee, but at the time of the application it cannot be wholly unknown and unused, for it must necessarily then have been known and used by the inventor himself, and it is not, as we have seen, necessary that it should then be unknown to others, and the piratical use of it by others will not, of itself, as many cases show, defeat the right of the inventor. As to its having been known to others before the application, there appears to be no objection whatever to its having been so, if the doctrines above laid down on this subject are correct. It is only by the public use of it with his consent or approbation or connivance, that he will forfeit his right. The support, then, that this last doctrine derives from the first section is the less important, since the language of the statute "not known or used, before the application," puts the knowledge and use upon precisely the same footing, whereas the decision of the court renders it of no importance

whatever, whether the invention is or is not known to others at the time of the application. This is an objection to putting great stress upon a literal construction of the expression not used by others, which stands in the same connexion. But the two other grounds of the decision are quite sufficient, and seem to be conclusive, namely, that the provision of the constitution on this subject, and the statutes passed in pursuance of it, authorize a monopoly only for a limited time, and that the inventor may abandon his right, and dedicate it to the public.

A sale of the articles to which the patent relates, previously to taking out the patent, is one of the ways of dedicating it to the public use. This is not, however, the only way, and it is, as is remarked in some of the cases already cited, a question for the jury, from all the facts, whether the inventor has, by his acts or neglect, abandoned his invention, and dedicated it to the public.<sup>144</sup>

The law on this subject is very explicitly laid down by Mr. Justice Story, in two cases that came before him in the Circuit Court of the United States in the district of Massachusetts.

In an action for the violation of a patent for a machine for making cotton and wool cards, it was contended that the patent should have been for an

<sup>144</sup> Morris v. Huntington, 1 Paine, 345; Pennock & Sellers v. Dialogue, 2 Pet. S. C. R. 1; Kent's Com. Vol. 2. p. 369.

improvement of such machinery only. Story J. said, "That it would not protect the plaintiff's patent, that he was the inventor of all the material improvements in the old machine, (as is asserted) if he suffered them to be used freely and fully by the public at large for so many years, combined with all the usual machinery; for in such a case I think he must be deemed to have made a gift of them to the public, as much as a person who voluntarily opens his land as a highway, and suffers it to remain for a length of time devoted to public use." 145

In the other case the same judge said, "If the inventor dedicates his invention to the public, he cannot afterwards resume it, or claim an exclusive right in it. It is like the dedication of a public way or other public easement. The question in such cases is a question of fact—Has he so dedicated it? I agree his acts are to be construed liberally; that he is not to be stopped by licensing a few persons to use his invention to ascertain its utility, or by any acts of such peculiar indulgence and use, as may fairly consist with the clear intention to hold the exclusive privilege. But if the inventor proclaims his invention to all the world, and suffers it to go into general and public use without objection; if he asserts no exclusive right for years, with a full knowledge, that the public are led by it to a general use,

<sup>145</sup> Whittemore v. Cutter, 1 Gallison, 482.

such conduct amounts to strong proof, that he waives the exclusive right and dedicates the invention to the world. After such conduct, the attempt to regain the exclusive right and secure it by a patent, would operate as a fraud upon the public; and would hold out inducements to incur heavy expenses in putting inventions into operation, of which the party might be deprived at the mere will or caprice of the inventor." 146

Mr. Justice M'Lean, giving the opinion of the Supreme Court of the United States upon this subject, said, "Vigilance is necessary to entitle an individual to the privilege secured under the patent law. It is not enough that he should show his right by invention, but he must secure it in a mode required by law. And if the invention, through fraudulent means, shall be made known to the public, he should assert his right immediately, and take the necessary steps to legalize it. The patent law was designed for the public benefit, as well as for the benefit of inventors. For a valuable invention, the public, on his complying with certain conditions, give him, for a limited period, the profits arising on the sale of the thing invented. This holds out an inducement for the exercise of genius and skill in making discoveries which may be useful to society, and profitable to the discoverer. But it was not the intention of this law,

<sup>146</sup> Mellus v. Silsbee, 4 Mason, 108.

to take from the public that of which they were fairly in possession. In the progress of society, the range of discoveries in the mechanic arts, in science, and in all things which promote the public convenience, as a matter of course, will be enlarged. This results from the aggregation of mind, and the diversity of talents and pursuits, which exist in every intelligent community. And it would be extremely impolitic to retard or embarrass this advance, by withdrawing from the public any useful invention or art, and making it a subject of private monopoly. Against this consequence, the legislature have carefully guarded, in the laws they have passed on the subject. It is, undoubtedly, just that every discoverer should realize the benefits resulting from his discovery, for the period contemplated by law. But these can only be secured by a substantial compliance with every legal requisite. His legal right does not rest alone upon this discovery; but also upon the legal sanctions which have been given to it, and the forms of law with which it has been clothed. No matter by what means an invention may have been communicated to the public before a patent is obtained; any acquiescence in the public use, by the inventor, will be an abandonment of his right. If the right were asserted by him who fraudulently obtained it, perhaps no lapse of time could give it validity. But the public stand in an entirely different relation to the inventor. The invention passes into the possession of innocent

persons, who have no knowledge of the fraud, and at a considerable expense, perhaps, they appropriate it to their own use. The inventor or his agent has full knowledge of these facts, but fails to assert his right; shall he afterwards be permitted to assert it with effect? Is not this such evidence of acquiescence in the public use, on his part, as justly forfeits his right? If an individual witness the sale and transfer of real estate, under certain circumstances, in which he has an equitable lien or interest, and does not make known this interest, he shall not afterwards be permitted to assert it. On this principle it is, that a discoverer abandons his right, if, before the obtainment of his patent, his discovery goes into public use. His right would be secured by giving public notice that he was the inventor of the thing used, and that he should apply for a patent. Does this impose any thing more than reasonable diligence on the inventor? And would any thing short of this be just to the public? The acquiescence of the inventor in the public use can, in no case, be presumed, when he has no knowledge of such use. But this knowledge may be presumed from the circumstances of the case. This will, in general, be a fact for the jury. And if the inventor do not, immediately after this notice, assert his right, it is such evidence of acquiescence in the public use, as for ever afterwards to prevent him from asserting it. After his right shall be perfected by a patent, no presumption

arises against it from a subsequent use by the public. When an inventor applies to the Department of State for a patent, he should state the facts truly; and indeed he is required to do so under the solemn obligations of an oath. If his invention has been carried into public use by hand; but for a series of months or years he has taken no steps to assert his right, would not this afford such evidence of acquiescence as to defeat his application as effectually as if he failed to state that he was the original inventor? And the same evidence which should defeat his application for a patent, would, at any subsequent period be fatal to his right. The evidence he exhibits to the Department of State is not only ex parte, but interested; and the questions of fact are left open to be controverted by any one, who shall think proper to contest the right under the patent. The strict construction of the act, as it regards the public use of an invention, before it is patented, is not only required by its letter and spirit, but also by sound policy. A term of fourteen years was deemed sufficient for the enjoyment of an exclusive right of an invention by the inventor, but if he may delay an application for his patent, at pleasure, although his invention be carried into public use, he may extend the period beyond what the law intended to give him. A pretence of fraud would afford no adequate security to the public in this respect, as artifice might be used to cover the transaction. The doctrine of presumed acquiescence, where the public use is known, or might be known to the inventor, is the only safe rule which can be adopted on this subject. Some of the decisions of the Circuit Courts were overruled in the cases of Pennock & Sellers v. Dialogue. They made the question of abandonment to turn upon the intention of the inventor. But such is not considered to be the true ground. Whatever may be the intention of the inventor, if he suffers his invention to go into public use, through any means whatsoever, without an immediate assertion of his right, he is not entitled to a patent, nor will a patent, obtained under such circumstances, protect his right."

The facts of the case to which the above doctrines were applied, were as follows. Shaw, the patentee, came to this country in 1817, from England, and being an alien, he could not take out a patent for his invention (which was that of the percussion gunlock) within two years, that is until 1819. He did not take his patent out until 1822. His invention had, in the mean time been sold in England, in 1819, by his brother, to whom he had entrusted the secret, and was in public use there the two following years; and during the latter of those years also in France. Though it was alleged that during this time he was delaying for the purpose of making some improvement in his lock, yet it did not appear that

<sup>147</sup> Shaw v. Cooper, 7 Pet. S. C. R. 292.

he had made any material alteration in it. He had taken no steps during this time to assert his right, and he could not satisfactorily account for this delay. It was considered, therefore, that he had forfeited his right.

The preceding cases present a distinct view of the doctrines of the courts of the United States upon this subject. In the last case, Mr. Justice M'Lean, in giving the opinion of the court, lays very considerable stress upon public notice being given by the patentee of his claim, as affecting the validity of his patent. But if he had given such notice it would not have satisfied the other ground of the decision, viz. that the patent act gives only a limited monopoly, and that it would be a fraud upon the law to permit an inventor to extend that period by using his invention any considerable time before taking out his patent. For this reason it would seem to be by no means safe for an inventor unnecessarily to delay taking out a patent, on the ground that he had given sufficient public notice of his intention so to do.

A patent once granted is not forfeited in the United States by the neglect of the patentee to put his invention into practical operation. Our law differs in this respect, from that of France, which provides that unless the patentee reduces his invention to use within two years from the granting of the patent, he forfeits his privilege. This provision is

<sup>148</sup> Renouard, c. 9, s. 2, p. 319.

rather rigid, for a general rule, since some inventions, requiring extensive preparations and large outlays, cannot be brought into operation in that time. A law containing a provision of this description ought also to provide for lengthening the time in particular cases. But the laws of England and the United States, contain no provision on this subject. Mr. Justice Washington distinctly lays down the doctrine that no neglect of the patentee, to put his invention into practical operation, will be construed to be an abandonment of his patent right.149 And such is the language of all the cases. 150 Our law appears to go upon the presumption that the public benefit may in this case be left wholly to the influence of the interest of the patentee; and confides to him the absolute control and disposal of his invention for the period of his monopoly.

There may be instances of inventions, the use of which are vitally material to the public safety, just as in some instances the appropriation of individual property to the public use is essential to the public defence. In the latter case the general safety is not subjected to the caprice or inordinate cupidity of the proprietor, for his property may be taken for

<sup>&</sup>lt;sup>145</sup> Gray & Osgood v. James, 1 Pet. C. C. R. 403.

Whittemore v. Cutter, 1 Gallison's R. 478; Thompson v. Haight, U. S. Law Journal, Vol. 1. p. 563; Morris v. Huntington, 1 Paine's R. 345; Pennock & Sellers v. Dialogue, 2 Pet. S. C. R. 1; Wood v. Brimmer, 1 Holt. N. P. C. 58; Kent's Com. Vol. 2. p. 369.

the public use without his consent, and a reasonable compensation allowed. And such would be the rules, probably, in regard to the use of a patent right, which is no more sacred than other personal property. This provision of law is limited to the case of the use of property by the public as a corporate political body, and does not reach the case of an indirect benefit derived to the public by the use of a thing by individuals. In this respect the law leaves patent rights upon the same footing as other personal property, the proprietor of which may, by his own caprice or folly, deprive the public and himself of the benefit that would result from a reasonable use of it, and there does not seem to be any pressing urgency for a different rule in regard to different species of property. There is, it is true, no absolute insurmountable objection to a regulation on this subject in relation to patents, for the public may grant patents or lands upon such conditions as may be deemed expedient, and for the general benefit; but as a general rule, unless the case is plain and urgent, it is the better policy to leave private rights to the discretion and interest of proprietors, where their interest evidently coincides with that of the public, since the inconveniences attendant upon an attempt by law to supply their want of reasonable discretion, would, in a majority of cases, be greater than those consequent upon their abuse of the discretion and control allowed by the law.

### CHAPTER VIII.

Appeal to Board of Examiners. Interfering Applications. Previous Foreign Patent by the Applicant. Secret Filing of the Specification. Caveat.

By the 7th section of the act of Congress of 1836, it is provided that whenever, on examination, it shall appear to the Commissioner of Patents that the applicant for a patent, for an invention, "was not the original and first discoverer thereof, or that a part of that which is claimed as new had before been invented or discovered, or patented, or described in any printed publication in this or any foreign country, or that the description is defective and insufficient, he shall notify the applicant thereof, giving him, briefly, such information and references as may be useful in judging of the propriety of renewing his application, or of altering his specification to embrace only that part of his invention which is new." The applicant may thereupon withdraw his application, and receive back twenty dollars of the thirty dollars paid into the treasury by him, and leave his model in the patent office. But if he persist in his claim, whether he chooses to alter the specification or not, he must again make the usual oath, and if the commissioner still refuses to grant the patent, he may appeal to a board of examiners, consisting of three persons appointed by the Secretary of State, "one of whom, at least, to be selected, if practicable and convenient, for his knowledge and skill in the art, manufacture appertains." The commissioner is to furnish this board with his objections to the application in writing. The applicant is to be heard by the board, which may, if a majority sees fit, reverse the decision of the commissioner in whole or in part, and their opinion being certified to the commissioner, he is to be governed by it as to any further proceedings to be had on the application. The applicant is to pay twenty-five dollars towards the expenses, the examiners being entitled to receive not over ten dollars each.

By the 8th section of the same law, it is no objection to an application that the applicant has taken out foreign letters patent, and that they have been published within six months preceding his application.

By the same section, on the request of the applicant, his specification and drawings may be filed secretly in the office not longer than one year, and on the model being furnished, the patent may issue, dated back at the time of the specification, not exceeding, however, six months. He is, in such case, entitled to notice of any interfering application for a patent.

It is provided, by the same section, that interfering applications, or an application supposed by the commissioner to interfere with any subsisting patent, may be referred to a board of examiners appointed as above.

It is provided by the 12th section of this law, that any citizen of the United States, or alien who shall have been resident in the United States one year next preceding, and who shall have made oath of his intention to become a citizen thereof, who shall have invented any new art, machine or improvement thereof, and shall desire further time to mature the same, may file in the patent office a caveat, setting forth the design and purpose thereof, and its distinguishing characteristics, and praying protection of his right, till he shall have matured his invention. And such caveat shall be filed in the confidential archives of the office and preserved in secrecy. And if application shall be made by any other person within one year from the time of filing such caveat, for a patent of any invention with which it may in any respect interfere, it shall be the duty of the commissioner to deposit the descriptions, specifications, drawings and model, in the confidential archives of the office, and to give notice by mail to the person filing the caveat, of such application, who shall within three months after receiving the notice, if he would avail himself of the benefit of his caveat, file his description, specifications, drawings and model; and if in the opinion of the commissioner, the specifications of claim interfere with each other, like proceedings may be had as in case of interfering applications.

#### CHAPTER IX.

- Divers Patents for the same Invention. The joining of divers Inventions in the same Patent. Patent for a part of an Invention.
- Sec. 1. Divers valid Patents cannot be taken out for the same thing.
  - 2. Patent for a Combination, and for the separate Things combined.
  - 3. Distinct Inventions cannot be joined in the same Patent.
  - 4. Patent for a part of a Machine.
- Sec. I.—Divers valid Patents cannot be taken out for the same Thing.

It is a well settled doctrine, that divers valid patents cannot be taken out for the same invention, whether by the same or by different patentees.

That different patentees cannot take independent valid patents for the same thing, follows from what has already been said on the subject of patents, in a preceding chapter, where it is stated that the invention must be new and original, and prior to any other invention of the same thing, in order to be the subject of a valid patent, which necessarily excludes the possibility of two valid patents for the same thing. It is also inconsistent with the character of a patent as an exclusive privilege.

This doctrine has been particularly laid down by Mr. Justice Story. He says, "I have very great doubts, whether, when a patent is once granted to any person for an invention, he can legally acquire any right under a subsequent patent for the same invention, unless his first patent be repealed for some original defect, so that it might truly be said to be a void patent." In a subsequent case the same judge says more positively, "An inventor can have but a single valid patent for his invention; and the first he obtains, while it remains unrepealed, is an estoppel to any future patent for the same invention founded upon the general patent act. If the patentee could successively take out, at different times, new patents for the same invention, he might perpetuate his exclusive right during a century, whereas the patent act confines this right to fourteen years from the date of the first patent. If such a proceeding could obtain countenance, it would completely destroy the whole consideration derived by the public for the grant of the patent, viz. the right to use the invention at the expiration of the term specified in the original grant."2

The same judge says, that "a grant of a subsequent patent for an invention, is an estoppel to the patentee to set up any prior grant for the same in-

<sup>&</sup>lt;sup>1</sup> Barrett v. Hall, 1 Mason, 473.

<sup>&</sup>lt;sup>2</sup> Odiorne v. the Amesbury Nail Factory, 2 Mason, 28.

vention, which is inconsistent with the terms of the last grant." But it seems rather that the prior patent should be an estoppel to set up a subsequent one; for the latter, according to the above doctrine, would be void as long as the former should remain unrepealed; and the same learned judge so lays down the doctrine in the case just cited.4 "A joint patent may well be granted upon a joint invention. There is no difficulty in supposing, in point of fact, that a complicated invention may be the gradual result of the combined mental operations of two persons acting together pari passu, in the invention. And if this be true, then as neither of them could justly claim to be the sole inventor in such a case, it must follow, that the invention is joint, and that they are jointly entitled to a patent. And so are the express words of the act of 1793, c. 156, s. 1, which declares, that if any person or persons shall allege that he or they have invented, &c., a patent shall be granted to him or them for the invention."5

On the principles above stated, the same person cannot, at the same time, be the joint and separate patentee of the same thing. "A joint patent for an invention," says Mr. Justice Story, "is utterly inconsistent with several patents for the same inven-

<sup>&</sup>lt;sup>3</sup> Barrett v. Hall, 1 Mason, 473.

<sup>&</sup>lt;sup>4</sup> Odiorne v. Amesbury Nail Factory, supra, p. 213.

<sup>&</sup>lt;sup>5</sup> Barrett v. Hall, 1 Mason, 472.

tion by the same patentees. For it is impossible, that any person can be, at the same time, the joint and the sole inventor of the same invention. If, therefore, each of the joint patentees obtain a several patent for the same invention, as his own exclusive invention, and afterwards, without surrendering the first patent, they obtain a joint patent for the same as a joint invention, either the former sole patents are void, or the joint patent is void. For, besides the apparent inconsistency of the patents, if all could be sustained, then a recovery upon the joint patent would be no bar to a suit upon the several patents; and the parties might obtain a double recompense for the same infringement. There is an additional reason which deserves great consideration; and that is, that if sole and joint patents could be sustained by the same parties for the same invention, they might be successively taken out, so that the term of the exclusive right might be prolonged for a great length of time, instead of being limited to fourteen years."

Sec. II.—Patent for a Combination, and for the separate Things combined.

But an invention of a combination, and that of a part or the whole of the things combined, may be

<sup>&</sup>lt;sup>6</sup> Barrett v. Hall, 1 Mason, 473.

joined in the same patent.7 The reason is that, though they are separate inventions combined in one thing, and may therefore be joined in the same patent without violating the rule about to be stated on the joining of different inventions in one patent, yet the taking of a patent for the combination, after taking one for the separate parts, is not a double patent, or, in other words, is not the patenting, under the claim of the combination, the same thing which had before been claimed under the separate parts; for a machine may be the combination of a number of others, each of which, when invented, might have been the subject of a patent, and yet the combination of them might also, when first made, be the subject of a patent, and accordingly, if both the parts or some of them, and the combination, be invented by the same person, he may specify these distinctly in the same patent, or, if he invent them at different times, he may make the parts the subject of one or more patents, and then take a patent for the combination.

Sec. III.—Distinct Inventions cannot be joined in the same Patent.

The doctrine is equally clear that different, distinct and independent inventions cannot be joined in the

<sup>7</sup> Per Story, J., Moody v. Fiske, 2 Mason, 112.

same patent. Mr. Chief Justice Marshall says, in giving the opinion of the court, "Under the general patent law alone, a doubt may well arise, whether improvements on different machines could regularly be comprehended in the same patent, so as to give a right to the exclusive use of the several machines separately, as well as a right to the exclusive use of those machines in combination." So Mr. Justice Story says, "Though several distinct improvements in one machine may be united in one patent, it does not follow that several improvements in two different machines, having distinct and independent operations, can be so included. Much less that the same patent may be for a combination of different machines, and for distinct improvements in each." And in another case the same judge says, that "a patent under the general patent act, cannot embrace various distinct improvements or inventions; but in such case the party must take out separate patents. If the patentee has invented certain improved machines, which are capable of a distinct operation, and also has invented a combination of those machines to produce a connected result, the same patent cannot at once be for the combination and for each of the improved machines; for the inventions are as

<sup>&</sup>lt;sup>8</sup> Evans v. Eaton, 3 Wheaton, 454.

<sup>&</sup>lt;sup>9</sup> Moody v. Fiske, 2 Mason, 112.

distinct, as if the subjects were entirely different."<sup>10</sup> So Mr. Justice Wilde, of the Supreme Court of Massachusetts, was of opinion, where a joint patent for a reel and lap-frame was granted to two persons, that as these were distinct and separate inventions and machines, the joint patent was for that reason void; but that the parties might procure its repeal and obtain separate patents for each machine.<sup>11</sup>

In regard to the case put by Mr. Justice Story, of joining the invention of an improvement of one machine in the same patent with an invention of a combination of the machine, so improved with others, I cannot but think they may be joined, where the improvement in the separate machine, and the combination, have the same object; for, suppose the combination to be of two machines, one of which is improved; the improvement is one addition, or modification, and the combining it with the other, is a second modification or addition. The case cannot easily be distinguished from divers improvements of the same machine, and that such divers improvements may be joined in one patent, there seems to be no ground to doubt.

A case decided in the English Court of King's Bench, presents a combination of things in the same patent, of very considerable diversity, though all the

<sup>&</sup>lt;sup>10</sup> Barrett v. Hall, 1 Mason, 475.

<sup>&</sup>lt;sup>11</sup> Stearns v. Barret, 1 Pick. 448.

different things were used in connexion, viz. an improvement in ships' anchors, cables, and windlasses.<sup>12</sup> The objection was not made to this patent that it embraced distinct subjects of patents, so that on this point the case has only the feeble authority arising from the fact that the counsel did not raise the objection, and that the court did not, of its own motion, notice it.

Though the doctrine that divers inventions cannot be joined in the same patent, is, as we have seen, laid down pretty positively, the reasons are not given. We first look for the reason in the words of the statute, which are, if any one shall allege that he has invented any new art, machine, or manufacture, or any new improvement in any art, &c., being wholly in the singular number. But this fact cannot be of great weight, since the phraseology is the same in this respect, in regard to new machines or new improvements of old ones, and a construction whereby the joining of different improvements of the same machine in one patent should be excluded, would certainly be exceedingly strict, and in opposition to the general practice. The question may thus be fairly considered as left at large by the statutes.

M. Renouard says, on this subject, "one cannot combine in the same application divers principal subjects of a patent, as this would be a way of eluding

<sup>12</sup> See Hill v. Thompson, 2 J. B. Moore, 424.

the payment of the taxes, and accordingly that an application for a patent combining divers inventions, would be rejected.13 This may be a sufficient reason, and yet it is not one of the most pressing importance, especially in the United States, where the tax is small, and intended only as a reimbursement of the expenses of clerk hire in the patent office. That this rule has been very liberally expounded in favor of patentees, appears from the fact that the reports do not present any case of a patent being objected to and declared void on this ground. M. Renouard, in the place cited above, considers the question as one submitted to the discretion of the executive offi-It has been incidentally said, by Mr. Justice Story, that the court does not go behind the patent to ascertain whether the requisite oath was taken, or the legal see of thirty dollars paid. It would not follow from this, however, that the court would not notice that the specification was such as to combine independent inventions in the patent. There is this difference between a case of the non-payment of the tax, and the joining of different inventions, that the latter appears on the face of the patent, whereas the former does not so appear; and another difference is, that the executive officers are responsible for the collecting of the tax; whereas, their decision in con-

<sup>&</sup>lt;sup>13</sup> Ch. 7. s. 5. p. 293, 294.

<sup>&</sup>lt;sup>14</sup> Whittemore v. Cutter, 1 Gallison, 429.

struing the law as to questions affecting the validity of the patent, is not final, but only preliminary and provisory, being subject to the adjudications of the judicial tribunals, to whose judgment on such questions the inventor has a constitutional right. Upon all such questions, he is entitled to a hearing and trial. This seems, accordingly, to be a question properly cognizable by the courts, and they would probably adjudge a patent combining entirely distinct inventions upon different subjects, to be void. But they probably would not so adjudge, except in a very palpable case. The passage above cited from M. Renouard, suggests a very just and liberal mode of applying this rule, and one consistent with the practice both in England and the United States; for he says an application which should embrace more than one principal subject, or invention, would be rejected; that is, whatever is accessary and auxiliary to the principal subject, may be joined in the same patent, but nothing more. This is a convenient, practical test in applying this rule; for if two inventions have no dependence or connexion, and one is not accessary or auxiliary to the other, they are properly subjects of distinct patents.

## Sec. IV.—PATENT FOR A PART OF A MACHINE.

We next consider whether a patent may be taken out for a part of a machine. A patent for an im-

provement is usually for a part of an entire thing, and often at least, if not most frequently, for something, that cannot be used separately to any practical purpose. It is not necessary, then, that the subject of the patent or exclusive right should be capable of an independent separate use. But suppose the case of two persons, independently of each other, inventing the parts of a new machine, are they entitled to separate patents? Mr. Justice Story says, "if two persons invent several parts of a machine capable of a distinct use, then those parts might be considered as separate inventions, for which such inventor might perhaps be entitled to a separate patent." 15

This qualification that the inventions should be capable of a separate use, seems to present a pretty clear case of a right to separate patents. But if the parts belong essentially together, and are useless when separate, this is a plain case of joint invention; though the inventors may have had no communication with each other; and so a case in which separate patents cannot be taken out.

<sup>15</sup> Stearns v. Barrett, 1 Mason, 153.

### CHAPTER X.

Title of the Patent. Form. Difference in Form between English and American Patents. Construction of Patents.

Having considered what subjects of invention and discovery are patentable, and what party is entitled to a patent, and what things may be joined or separated, we come now to the inquiry, as to the mode of taking out a patent, and what steps and forms are necessary in order to secure the exclusive privilege granted by the patent acts. The principal subjects to be considered in this connexion, are the specification, the drawings, models, and specimens, the oath of the inventor, the petition, the payment of the tax or fee, the reference to arbitration in case of interfering claims, the letter patent, and the examination of the letter by the attorney general, and his certificate. It is proposed to notice here the different modes of granting patents in England and the United States, and as consequent upon this difference, a diversity in the rules of construction of patents. Unless this diversity is first noticed and kept in view, there will be some confusion and obscurity between the English and American cases on the subject of the specification.

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In England the patent is granted before the specification is made, a certain time being allowed by the patent for enrolling the specification, varying from two to six months or longer, according to the circumstances, it being left to the discretion of the ex-

<sup>&</sup>lt;sup>1</sup> Evans v. Chambers, 2 Wash. C. C. R. 125.

ecutive officers to fix the time. Though in one case in England Mr. Justice Grose is reported to have said, that the specification was fairly to be considered a part of the patent itself,2 the cases are entirely otherwise, and it is well settled there that the patent is distinct from the specification, and controls it in construction, and that the patentee cannot cover any thing by the specification which is not covered by the patent, or draw from the specification any construction whereby to comprehend in the patent any thing which would not be comprehended without recurrence to the specification.8 No position is better settled in English jurisprudence, and yet Mr. Justice Le Blanc intimates, in one case<sup>4</sup> that if the specification is too large the patent is so too; that is, if you look into the specification and find that the invention is broader than the patent, or in other words that the inventor has taken out a patent for only a part of what he is entitled to, it is void. But this doctrine is certainly untenable in the English law. Under the English patents the specification generally limits the description in the patent, that is, it claims only a part of what is comprehended in the more general description in the patent.

<sup>&</sup>lt;sup>2</sup> 8 T. R. 105.

<sup>&</sup>lt;sup>3</sup> Campion v. Benyon, 3 Brod. & Bing. 5. The King v. Wheeler, 2 B. & Ald. 345; Bainbridge v. Wigley, Rep. of Arts, Sec. Ser. Vol. 27, p. 127; Rex v. Metcalf, 2 Stark. N. P. C. 249; Cochrane v. Smethurst, 1 Stark. N. P. C. 205.

<sup>&</sup>lt;sup>4</sup> Cochrane v. Smethurst, 1 Stark. 205.

In the United States, the doctrine is different on this subject, the specification being always drawn up before the patent is granted, and being referred to in the patent. It is well settled in our courts that it is a part of the patent, in the common form of which, the specification being annexed, is expressly referred to as "a part of these presents." Accordingly Mr. Justice Story says, "Under the patent laws of the United States, the specification forms a part of the patent, and may control the generality of its terms; in England the specification is separate from it."

This diversity in the law in England and the United States, will be found to be of material importance in the construction of patents, and it will appear very clearly that, from the above circumstance, the jurisprudence in the United States is free from some of the embarrassments to which it is subject in England.

Both in English and American patents a title is necessarily given to the invention, whereby it is patented. The American patent act of 1793, s. 1, provides, that, on a petition for the purpose, the secretary of state may cause letters patent to be granted, "giving a short description of said invention or discovery." This short description is usually the title of the invention in the words of the patentee, either prefixed

<sup>&</sup>lt;sup>5</sup> Barrett v. Hall, 1 Mason, 477; Whittemore v. Cutter, 1 Gallison's R. 437.

to his specification, or being the introductory part of it. In American patents any defect in this title may be remedied by the specification. The accuracy in the title required by the English law, renders the choice of titles matter of the greatest difficulty, since, if the title is too narrow, the patentee either fails of securing the exclusive privilege entirely, or, at least, to the extent to which he is entitled to it, and, if it is too broad, the patent is void by reason of its covering too much. Many English patents have been defeated on this ground. The difficulty has been partly overcome by the allowing of great generality and indefiniteness in the description.

"Such," says Mr. Godson, "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 a substance, machine, improvement, or combination."

Godson on Patents, 88.

Thus Watt's patent for his improvement in the steam engine was for "a method of lessening the consumption of steam and fuel in steam engines," a description which would cover a large part of the improvements in steam engines and boilers invented from Watt's day to the present, and yet it was held to be a sufficient description and a valid patent, after much doubt and discussion, and the case has been a leading one on the subject to the present time.

But this liberality in the construction of the language used in the patent, has not always saved the patentee from the loss of his privilege; and indeed the courts have, in some instances, departed from the liberality that marked the final decision in Watt and Boulton's case, and adopted principles of construction upon which it would be very difficult, if not absolutely impracticable, to secure a patent right under the English law.

Bainbridge's patent, granted in 1807, for an improvement in the flageolet or English flute, by the addition of notes, in the plural, whereas only a note was added, was held to be void on account of the inaccuracy of this description in the title.8

So Lord Cochrane's patent for "a method or methods of more completely lighting cities, towns and villages," which consisted in an improved lamp, was

<sup>&</sup>lt;sup>7</sup> Boulton v. Bull, 2 H. Bl. 463.

<sup>&</sup>lt;sup>8</sup> Bainbridge v. Wigley, K. B. 1810. Rep. of Arts, Second Series, Vol. 18, p. 127.

held to be void on account of the generality of the title.9

So Metcalf's patent for "tapering brushes," was adjudged by Lord Ellenborough to be void on account of the inaccuracy of this description. It appeared, from the specification, that the improvement consisted in making the bristles of unequal length instead of their being of the same length, as they had been in former brushes. A tuft of such bristles compressed in the hand or between the fingers, would be in some sort tapering. The specification made it plain enough what was meant by tapering. But Lord Ellenborough ruled that the description in the patent was defective, and that the "difficulty arising from the grammatical consideration" could not be removed. 10

So Wheeler's patent for "a new and improved method of drying and preparing malt," which consisted in a preparation of barley for the purpose of coloring beer, was held to be void on account of the supposed inaccuracy, in calling it malt."

Now in every one of these cases, if, as in American patents, the specification could have been resorted to for a construction of the title, the objections, on which the patents were declared void, would have disappeared.

<sup>&</sup>lt;sup>9</sup> Cochrane v. Smethurst, 1 Stark. 205; S. C. Rep. of Arts, Second Series, Vol. 27, p. 192; S. C. Gods. Pat. 104, n.

<sup>10</sup> Rex v. Metcalf, 2 Stark. N. P. C. 249.

<sup>11</sup> The King v. Wheeler, 2 Barn. & Ald. 345.

The difference in the jurisprudence of the two countries in this respect, is not in the general rules of interpretation and construction of grants or written instruments, for these do not differ; the English courts apply the same principles of construction that ours would apply; but as one of these rules is, that in construing any document, the whole is to be considered, and each part interpreted accordingly, the difference consists in the title constituting the whole instrument in the English patents, whereas ours embraces the specification. These very cases, some of which would have been differently decided in the United States, may, therefore, be authorities in our courts for the construction of written instruments.

It is a general rule in construing written instruments that other documents referred to in them must be taken into consideration. Thus the drawings annexed to a specification in compliance with the statute, are considered to be a part of the specification, and so to be taken into consideration, in putting a construction upon it.<sup>12</sup>

The English cases furnish some examples of another rule of construction common to specifications and other writings, namely, that where definite

<sup>&</sup>lt;sup>12</sup> Earle v. Sawyer, 4 Mason's R. 9. In this case, Mr. Justice Story considers Lord Eldon's remarks on drawings or pictures as he calls them, in Fox ex parte, 1 Ves. and B. 67, to be in accordance with the above rule of construction.

and specific, and also very general descriptive terms are used in reference to the same subject matter, the meaning of the latter may be modified and restrained by the former. This is illustrated in the case of a patent for "an apparatus for extracting inflammable gas by heat, from pit-coal, tar, or any other substance, from which gas or gasses, capable of being employed for illumination, can be extracted by heat." It was proved that the apparatus would not succeed in making gas from oil, and it was objected to the patent that there was nothing to prevent a person, who saw the specification, from considering that it was meant to be included, and so that the specification covered more ground than the invention, and was not true, and that accordingly, the patent was void. But Lord Tenterden ruled that the phrase "any other substance" must be construed to be applicable to substances of the same sort, (ejusdem generis), with those enumerated, and so that the description was sufficiently accurate, and the patent valid.

Though words are used in an unusual sense, yet this will be no ground of objection, if the patent or specification itself, or the customary technical phraseology of the art to which the patent relates, furnishes an explanation. In the cases relating to Watt's patent, there was much discussion on the

<sup>13</sup> Crossley v. Beverly, 3 Car. & P. 513.

construction of words used in the patent, and in the specification. It was held, as we have seen, that an engine might be described as a method of lessening the consumption of fuel and steam in fire-engines. In the specification, the invention was said to consist of the following principles, and the patentee then proceeded to describe the machinery and apparatus for which he claimed a patent, thus defining what he meant by principles, and though the word was thus used in an unusual sense, and inaccurately, yet as the sense in which it was used was apparent from the specification, this was held to be no ground of objection.14 So Lord Ellenborough remarked, in another case, that if a term used in the specification had a meaning annexed to it by the usage of trade, different from its ordinary use, it might be received in the peculiar perverted sense.15

Technical words are often used in patents and specifications, and sometimes it is not practicable to describe an invention without the use of them. And it has been held that words of a foreign language and figures may be introduced into the specification.<sup>16</sup>

A mistake in the use of one word for another, so as either to pervert the sense, or make nonsense, may be rectified in the case of a patent as well as in

<sup>&</sup>lt;sup>14</sup> Boulton v. Bull, 2 H. Bl. 463; Hornblower v. Boulton, 8 T. R. 95. And see Jones v. Pearce, Gods. sup. 16.

<sup>15</sup> The King v. Metcalf, 2 Stark, N. P. 249.

<sup>16</sup> Bloxam v. Elsee, 1 Car. & P. 558.

other written instruments, by other parts of the document. Thus, where the word painting was used by mistake in the patent for the word printing, Mr. Justice Washington held that the error might be corrected by other parts of the patent and the specification.<sup>17</sup>

#### CHAPTER XI.

# Specification.

- Sec. 1. Leading Objects in the Specification. Distinction between English and American Patents as to the Specification.
  - 2. General Requisites.
  - 3. Known Processes, Methods and Machinery need not be described. Surplusage.
  - 4. The Specification is addressed to Artists. Technical Terms.
  - 5. Must be true and not mislead.
  - 6. Must be full, clear, and exact.
  - 7. What is claimed as new must be distinguished from what is old. The Patentee must not claim too much.

<sup>&</sup>lt;sup>17</sup> Kneass v. Schuylkill Bank, C. C. U. S. Penn. Oct. 1820, Coxe's Dig. 532.

- 8. The Specification must direct how to make, and describe the best way known to the Inventor of making the article.
- 9. Reference in the Specification to Drawings.
- 10. The consequence of a defect in the Specification.

Sect. I.—Leading Objects in the Specification.

Distinction between English and American Patents as to the Specification.

The specification is no less important than the invention itself, and the instances of patents being declared void by the courts on account of the defects of the specification, are probably quite as many as those of failure from the insufficiency of the invention. It requires no little skill and knowledge of the subject of the invention, to draw up an adequate and apt specification. And skill and knowledge of the subject will not suffice for this purpose, without also a knowledge of the law of patents generally.

The frequent failure of patents in consequence of defects in the specification through inadvertency, has heretofore been a subject of loud complaint, both in England and the United States, until the legislatures of both countries, that of the United States in 1832, and that of Great Britain in 1835, passed laws to remedy this evil. These provisions have been mentioned above, and will be more particularly stated in a subsequent section of the present chapter.

<sup>1</sup> Pages 25 and 44.

<sup>&</sup>lt;sup>2</sup> Section 10.

The patentee may, by availing himself of the remedy thus provided, avoid the absolute loss of his monopoly, on account of those defects in the specification which were before the frequent occasion of its loss. In treating of the specification, the cases and the law will be stated just as if those acts had not been passed, the reader being apprized that for some of the defects, on account of which the patent right would otherwise be defeated, those acts afford a partial remedy, that is, he does not absolutely lose his privilege, provided he takes advantage of the provisions thus made in his favor.

There are two objects in view in making a specification. As the law grants the patentee a monopoly, and not only awards damages, but inflicts a penalty for a violation of the exclusive privilege, it very equitably requires that the invention shall be so described in the specification, that every person may, by examining it, know what the patentee claims, and be able to distinguish what may be an infringement. The other object of the specification is to give the public the advantage of the invention after the expiration of the patent. The consideration of the patent being the advantage to be derived to the public after its expiration, it is necessary, in order that this advantage may be realized, that the invention shall so be described in the specification, that one acquainted with the art or manufacture, to which it relates, or with which it is most nearly connected, may not only understand the invention, but be able, by following the directions given in the specification, with the assistance of the drawings, to construct the machine or perform the process which is the subject of the patent. These two objects of the specification are the foundation of the rules and decisions in regard to it.

The English jurisprudence prescribes one rule on this subject which is not applicable to ours, namely, the one already mentioned,4 that the specification must agree with the title or patent, for in England the patent is for the title or general description of what is particularly described in the specification, and so also is our patent, but as our law makes the specification a part of the patent, the title or general description may not only be explained, but also controlled and enlarged by the recital of the more particular and full description given in the specification; for if it appear that the patentee has not, in his title, given a correct general description of his invention, but has fully and accurately described it in the specification, he ought not to lose his privilege on this account, since no wrong is done to the public, and no imposition is practised upon individuals. The case is different in England, as we have already suggested, where the rule that the specification must agree with the patent or title, and cannot enlarge it,

<sup>&</sup>lt;sup>3</sup> Evans v. Eaton, 7 Wheat. 433.

<sup>&</sup>lt;sup>4</sup> Supra, p. 225.

has determined the fate of many patents. It will be sufficient to refer to the English cases on this subject generally, without repeating the reasoning or examining the grounds.<sup>5</sup>

Mr. Justice Grose, it is true, says in one case, "I consider the patent and specification so connected together as to make a part of each other, and that to learn what the patent is, I may read the specification and consider it as incorporated in the patent." 6 he means merely, that the specification may explain, and indeed its object is to explain, the title or patent, but it cannot enlarge the patent, and it must not be inconsistent with it. Thus the same judge says again in the same case, that "Although in words, the privilege granted by a patent 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 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." For he and the other judges of the King's Bench did not consider it any

<sup>\*\*</sup>Campion v. Benyon, 3 Brod. & Bing. 5. A. D. 1821; Per Dallas J. The King v. Metcalfe, 2 Stark. N. P. C. 249; Per Ellenborough C. J. 1817; The King v. Wheeler, 2 Barnw. & Ald. 348, (1819); Per Abbott C. J. Hornblower v. Boulton, 8 T. R. 102, (1815); Barrett v. Hall, 1 Mason's Reports, 476; Per Story J. 1818.

<sup>4</sup> Hornblower v. Boulton, 8 T. R. 105.

Hornblower v. Boulton, 8 T. R. 105.

inconsistency to explain a method, mode, or principle to be a machine or material product; that is, the inventor might get a patent of the method of doing a thing, and thus, in the specification, describe the thing as done by means of a machine.

In the United States, on the contrary, the specification is a part of the patent, not merely for the purpose of explaining the title or general description of the invention, but to all intents and purposes; and may either enlarge or control the general description, or be enlarged and controlled by it, according as one or the other seems to be the true construction, taking the whole instrument together.<sup>8</sup>

## Sec. II.—General Requisites of the Specification.

The general requisites of a specification are given in the patent act of 1793, s. 3. by which it is provided that "every inventor, before he can receive a patent, shall deliver a written description of his invention, and of the manner of using, or process of compounding the same, in such full, clear, and exact terms, as to distinguish it from all other things before known, and to enable any person, skilled in the art or science, of which it is a branch, or with which it is most nearly connected, to make, compound, and use

<sup>&</sup>lt;sup>8</sup> Barrett v. Hall, 1 Mason, 477.

the same. And in case of any machine, he shall fully explain the principle, and the several modes in which he has contemplated the application of the principle or character, by which it may be distinguished from other inventions." Or, more concisely, the specification must be full, clear, exact, distinguish the invention from other things, and enable an artist, skilled in the subject, to make the thing.

These requisites, it is apparent, are blended and intermixed, since it is by observing the first of these requisitions that the latter are complied with; for if the specification is full, clear, and exact, this will inform the public what the patentee alleges himself to have invented, and distinguish it from other things, and enable an artist to practise the art, or perform the process, or make the machine or composition in question. And then the specification, in order to be clear, must be sufficiently full and exact.

These requisites thus run so much into each other, in their nature and character, and again are found to be so frequently blended together in the same case, and in the same sentence, that it is difficult to treat of them separately, and yet there is so much variety and diversity among them, that they cannot be treated of together indiscriminately, without confusion. It is proposed, therefore, to arrange them in different sections, at the same time giving it to be understood that, for the above reasons, the division is not complete; since what is said of one requisite, is,

in many instances, equally applicable to another, as will be obvious to the reader, and again, where the judges, in giving their opinions, blend the different requisites together, it is not thought expedient, in every instance, nor indeed is it always practicable, to analyze their remarks, and distribute parts of the same sentence under different heads.

Sec. III.—Known Processes, Methods and Machinery need not be described. Surplusage.

Though the specification must be full, it need not describe in detail, processes, methods, and machinery, that are well known and in ordinary use among those skilled in the art, science, or business to which the invention relates, or with which it is most nearly connected. A specification of an improved gas apparatus did not give any directions respecting a condenser. It was held that this did not invalidate the patent, it being well known to persons capable of constructing a gas apparatus, that a condenser was an essential part of it. To introduce such descriptions may not merely be superfluous; it

<sup>&</sup>lt;sup>9</sup> Kneass v. Schuylkill Bank, C. C. U. S. Penn. Oct. 1820, Coxe's Dig. 532.

<sup>&</sup>lt;sup>10</sup> Crossley v. Beverly, 3 Car. & Payne, 513. See also The King v. Arkwright, Dav. Pat. Cas. 135; Hubbart v. Grimshaw, Dav. Pat. Cas. 297; Hill v. Thompson, 2 J. B. Moore, 450.

may have the effect of rendering the specification defective by involving the description of the invention with a multitude of immaterial details, whereby it might be rendered obscure, and perplex those who should attempt to learn from it what the patentee claimed, that they might avoid an infringement, or who should resort to it after the expiration of the monopoly, to learn how to make the article.

But where superfluous details and erroneous statements are apparently introduced for the purpose of throwing obscurity upon the invention, and disguising it, and evidently having that tendency, the patent will thereby be rendered void, as we shall see more particularly below." Watt's specification was an instance where mere superfluity was held not to vitiate the patent; for in addition to the description of his steam-engine, he intimated new projects of invention, concerning which, Eyre C. J. said, "If there be a specification to be found in that paper which goes to the subject of the invention as described in the patent, I think the rest may well be rejected as superfluous." "12

So the description of processes and machines, well known and in use, or for which other persons have patents, may be superfluous and immaterial, provided it distinctly appears that the patentee does not

<sup>11</sup> Sec. 5. Savory v. Price, 1 R. & M. 1.

<sup>12</sup> Boulton v. Bull, 2 H. Bl. 498.

claim to include them in his monopoly; if it appear that he includes them, or any part of them, it will vitiate his patent, as will appear more particularly below.<sup>13</sup> In this respect, patented subjects stand upon the same footing with those which have been in common use without having been patented, since every body is presumed to know what has been patented.<sup>14</sup> It may be necessary to give a partial description of a well known, or patented process or machine, in order to give a clear description of an improvement; any thing further than this will at best be immaterial and superfluous, if it does not vitiate the patent.<sup>15</sup>

Sec. IV.—The Specification is addressed to Artists. Technical Terms.

The patentee is allowed, in his specification, to address himself only to persons of competent skill in the matter to which the patent relates. 16 It is not necessary, that the specification should contain an explanation level with the capacity or every person, which often would be impossible. 17 "Suppose," says

<sup>13</sup> See Sect. 8.

<sup>14</sup> Odiorne v. Winkley, 2 Gall. 51.

<sup>&</sup>lt;sup>15</sup> See below, Sec. 4. 2 H. Bl. 497.

Per. Abbott C. J. The King v. Wheeler, 2 Barnw. & Ald. 354; Per. Lord Longhborough, Arkwright v. Nightingale, Dav. Pat. Cas. 56.

<sup>17</sup> Per. Story, Lowell v. Lewis, 1 Mason, 182.

Eyre C. J. that "a new invented chemical process, and the specification should direct that some particular chemical substance should be poured upon gold in a state of fusion, it would be necessary in order to this operation, that the gold should be put into a crucible, and should be melted in that crucible, but it would be hardly necessary to state, in the specification, the manner in which, or the utensils with which the operation of putting gold into a state of fusion was to be performed. They are mere incidents with which every man, acquainted with the subject, is familiar." Mr. Justice Washington, speaking of the provisions of the act of Congress of 1793, relating to specifications, remarks, that "the expressions are very strong, and seem intended to accommodate the description, which the patentee is required to give, to the comprehension of any practical mechanic, skilled in the art of which the machine is a branch, without taxing his genius or his inventive powers."

As the specification is addressed to artists acquainted with the subject of the patent, it is no ground of objection that it contains technical terms. It would be quite impracticable to give a description of many inventions without the use of such terms, and the description is often rendered much more clear by the use of them, even where others might,

<sup>10 2</sup> H. Bl. 497.

<sup>19</sup> Gray & Osgood v. James and others, 1 Pet. C. C. R. 376.

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by circumlocution, be used instead of them. It was objected to a specification, in one case, that it contained French terms; but it was considered by Abbott C. J. to be sufficient.<sup>20</sup>

Sec. V.—The Specification must be true, and must not mislead.

That the specification must be true in all its material parts, cannot be doubted, for the wrong statement of what is material, will render the specification defective, either as a notice of what the invention is, or as a direction for practising it. If the patent and specification state an invention which has not been made by the patentee, the patent is no doubt void. "If," says Abbot C. J. "the patentee has 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, if it should happen, that the patentee has invented some other matter or thing, of which, upon a due representation thereof, he might have been entitled to a grant of the exclusive use."21

The case on Turner's patent is an illustration of a defect from an erroneous statement of the process

<sup>&</sup>lt;sup>20</sup> Bloxam v. Elsee, 1 Car. & P. 558.

<sup>21</sup> King v. Wheeler, 2 Barn. & Ald. 349.

and result. In an action for an infringement of that patent, which was "for producing yellow color for painting in oil or water, and making white lead, and separating the mineral alkali from common salt, all by one process," it was objected, that the white lead produced by following the directions in the specification, was not what was sold as such, but a white substance, the basis of which was lead, and which was applicable only to some of the uses of common white lead. Ashhurst J. "It is said that the patentee did not profess to make common white lead. But that is no answer; for if the patentee had intended to produce something only like white lead, or answering some of the purposes of common white lead, it should have been so expressed in the specification." The patent was held to be void.22

In Watt's patent and specification, his invention is represented to be one for lessening the consumption of fuel and steam in the use of steam engines; and Eyre C. J. thought that it we assential, under such a representation, that such should be the practical result of his invention.<sup>23</sup>

In the case on Bloxam's patent for a machine for making paper, the patent was held to be void, because the patentee represented that his machine would do what in fact could not be effected by

<sup>&</sup>lt;sup>22</sup> Turner v. Winter, 1 T. R. 602.

<sup>&</sup>lt;sup>23</sup> Boulton v. Bull, 2 H. Bl. 498.

it. It was recited in the letters patent that the patentee had represented to the king 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. It also appeared by the specification, that the machine then invented was so constructed as to be capable of producing paper of one definite width only, and that in order to vary the width a new machine was required. By the subsequent improvements, however, one and the same machine became capable of producing paper of various widths. C. J. Abbot. "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 labor 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

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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 be so 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 show that whatever was done, was to be 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 shows that he was not. I say unfortunately, because it is to be lamented, that the advantage of great ingenuity, labor, 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 by any other."24

We have already seen that mere immaterial mistakes25 or unnecessary, superfluous descriptions and directions, which do not mislead a person consulting the specification, are harmless surplusage.26 where superfluous processes or machinery are described for the purpose of misleading the person consulting the specification, and preventing him from getting a knowledge of the process or machine patented, or of the best mode of using or making it, this will vitiate the patent. Thus a patent for a process for making Seidlitz powders was held to be void because the patentee, in his specification, gave three recipes for producing three different substances, of which he directed the mixture to produce the Seidlitz powder, without disclosing that these three substances were Rochelle salts, carbonate of soda, and tartaric acid. Abbott, C. J. "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

Bloxam v. Elsee, 6 Barn. & Cress. 169.

<sup>25</sup> Buller's N. P. 75. Day. Pat. Cas. 433.

supra, Sec. 3.

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 any one of them, may be bought in the shops, this specification, tending to make people believe an elaborate process essential to the invention, cannot be supported."<sup>27</sup>

Arkwright's patent for cotton spinning machinery is another instance of a patent being void by the introduction of things into the specification which were never used by the inventor, and which were introduced merely to mislead the public.<sup>28</sup>

The concealment in the specification of what is necessary to a knowledge of the machine, is fatal to the patent, no less than the introduction of facts intended to mislead.<sup>29</sup>

Sec. VI.—The Specification must be full, clear, and exact.

The specification must not only be true and full;

<sup>&</sup>lt;sup>27</sup> Savory v. Price, 1 Ryan & Moody, 1.

The King v. Arkwright, Dav. Pat. Cas. 129. 139, 140. See also infra, Sec. 8; Hill v. Thompson, 2 J. B. Moore, 448; Liardet v. Johnson, Bull. N. P. 76; 1 T. R. 608; Turner v. Winter, 1 T. R. 602.

<sup>&</sup>lt;sup>29</sup> Gray & Osgood v. James and others, 1 Pet. C. C. R. 196; Wood v. Zimmer, Holt's N. P. C. 58.

it must also be clear, in distinction from its being obscure and ambiguous, and exact, in distinction from its being vague, loose, and indefinite. These requisites are, however, laid down by judges, in some instances, with too great strictness and severity. In some of the English cases, a jealousy of patent rights as an infringement of the rights of the community by the common law, leads the judges to a very strict construction against patentees.

Thus in the case on Turner's patent, Mr. Justice Ashhurst says, "as every patent is calculated to give a monopoly to the patentee, it is so far against the principles of law, and would be a reason against it, were it not for the advantages which the public derive from the communication of the invention after the expiration of the time for which the patent is granted. It is, therefore, incumbent on the patentee to give a specification of the invention in the clearest and most unequivocal terms, of which the subject is capable. And if it appear that there is any unnecessary ambiguity affectedly introduced into the specification, or any thing which tends to mislead the public, in that case the patent is void." 30

The doctrine on this subject is stated with less severity in a more recent case, in which it is said that every patent being a monopoly, that is, an infringe-

<sup>&</sup>lt;sup>30</sup> Turner v. Winter, 1 T. R. 602.

ment of public right, and having for its object, to give the public warning of the precise extent of the privilege conferred on the patentee, the court is bound to require that such warning should be clear, and accurately describe what the inventor claims as his own. If the instrument contain any ambiguity on a material point, that is a ground on which it may be avoided altogether.<sup>31</sup>

Mr. Justice Story says, upon this subject, that "it out it to appear with reasonable certainty, what the patentee claims, and that it should not be left to minute references and conjectures from what was previously known."<sup>32</sup>

In another case the same judge remarks, that a general statement that the patented machine is in all material respects, (without stating what these are) an improvement on an old machine, is no specification at all.<sup>33</sup>

Mr. Justice Washington also considered an ambiguous, unintelligible specification, as in effect, no specification at all.<sup>31</sup> And Mr. Justice Story, speaking of a specification of an improvement in a machine, says, "If the terms be so obscure or doubtful, that the court cannot say what is the particular improve-

<sup>&</sup>lt;sup>31</sup> Campion v. Benyon, 3 Brod. & Bingh. 5.

<sup>&</sup>lt;sup>32</sup> Lowell v. Lewis, 1 Mason's R. 189.

<sup>&</sup>lt;sup>55</sup> Barrett v. Hall, I Mason, 489.

<sup>&</sup>lt;sup>34</sup> Kneass v. Schuylkill Bank, C. C. U. S. Penn. Oct. 1820, Coxe's Dig. 532.

ment which the patentee claims, and to what it is limited, the patent is void for ambiguity."35

In a more recent case, the same judge lays down the law on the subject very distinctly, in giving his opinion upon the specification, in the case of Ames's patent for an improvement on a machine for papermaking. He says, "Let us see what is the invention as claimed by the inventor in this case. I agree that if he has left it wholly ambiguous and uncertain, so loosely defined, and so inaccurately expressed, that the court cannot, upon a fair interpretation of the words, and without resorting to mere vague conjecture of intention, gather what it is, then the patent is void for this defect. But if the court can clearly see what is the nature and extent of the claim, by a reasonable use of the means of interpretation of the language used, then the patentee is entitled to the benefit of it, however impersectly and inartificially he may have expressed himself. And for this purpose, we are not to single out particular phrases standing alone, but to take the whole in connexion."36

The case in which the above remarks were made, is an illustration of the doctrine laid down by the judge. In the specification, the patentee, after describing the machinery and apparatus for making

<sup>35</sup> Barrett v. Hall, 1 Mason's R. 476; and see M'Farlane v. Price, 1 Stark. R. 199.

<sup>36</sup> Ames v. Howard, 1 Sumner's Rep. 485.

paper, to which his patent related, proceeded, "I do not claim the felting, vats, rollers, presses, wirecloth, or any separate parts of the above described machinery or apparatus, as my invention. What I claim as new and as my invention, is, the construction and use of the peculiar kind of cylinder above described, and the several parts thereof in combination for the purpose aforesaid." The cylinder had been described particularly, together with the onstruction and operation of the machinery and apparatus generally. The question was, whether, under this specification, the patentee had claimed and patented the cylinder and the several parts thereof, in combination with each other. Upon this construction, the court remarked that it would be mere tautology, for if the patentee claimed the cylinder, this was a claim of the several parts thereof in combination, and, vice versa, if he claimed the several parts in combination with each other, this was nothing more nor less than claiming the cylinder. This construction was to be avoided if any other could be put, not inconsistent with the specification generally, that would give significance to the words. The court was accordingly of opinion "that the patent was for the construction and use of the peculiar kind of cylinder, and the several parts thereof in combination with the other parts of the machinery, for the purpose of making paper." To make this specification clear, it was necessary to insert, after combination the words,

"with the other machinery," and to interpret "the purpose aforesaid," to mean, the purpose of making paper.

Here were obscurity and ambiguity, but the specification, in the opinion of the court, taken altogether, afforded means of giving a construction consistent with the validity of the patent. Instead of adopting a rigid, cautious, and jealous interpretation, after the example of the English courts in many similar cases, and thereby defeating the patent, when it was admitted by the court that the plaintiff had a right to one, it was saved by adopting a broad, liberal, and fair construction.

In the case of Metcalfe's improvement in brushes, the decision was against the validity of the patent, on the ground of the alleged inaccuracy of the description of them in the patent, as "tapering" brushes. It was a scire facias brought to repeal the patent. The specification directed that the hairs or bristles should be taken of a length that was described, and before their insertion in the holes in the stock of the brush, should be mixed up together, so that when they were collected and drawn through the holes, and secured by a brass wire, the bristles would be of unequal lengths; whereas, according to the usual mode, the bristles were inserted in the stock, so as to be as nearly of the same length as possible, and were afterwards cut down so as to be of the same length. The counsel for the patentee stated that by compressing the bristles in each tuft, the effect would be to make them converge to a point. Lord Ellenborough: "If the word topering be used in its general sense, the description is defective. Tapering means, gradually converging to a point. According to the specification, the bristles would be of unequal length, but there would be no converging to a point." His lordship advised the jury to find that it was not a tapering, but only an unequal brush. A verdict was rendered for the crown.<sup>37</sup>

It has been remarked upon this case, 38 that the description proposed by Lord Ellenborough, that of unequal brush, is, to say the least, no more clear and exact than that of tapering brush, used by the patentee. One cannot readily imagine a description more vague, indefinite, and ambiguous, than that given by Lord Ellenborough in this case, and the fact that no better substitute suggested itself to his mind as a general description in a title of the invention, ought to have been a sufficient ground for a very liberal interpretation of the title given by the patentee, which, it is true, gave no distinct idea of the invention, and, as we have seen, the titles of patents frequently give no distinct idea of the invention. The patent in this case would, as has been suggested, have been good

<sup>37</sup> The King v. Metcalfe, 2 Stark. N. P. C. 249.

<sup>&</sup>lt;sup>38</sup> Westminster Review, No. 44, April, 1835.

in the United States,<sup>39</sup> as the defect was in the title, and remedied in the specification.

In the case of a machine for sharpening scissors, the specification was considered to be defective in exactness. A patent was granted for a machine for giving a fine edge to knives, razors, scissors, and other cutting instruments. The specification described a machine for sharpening cutting instruments, by passing their edges backward and forward in an angle formed by the intersection of two circular files. The specification also stated that other materials besides steel might be employed, according to the delicacy of the edge required. It was proved that if both rollers were files, it would not do for scissors; and that for these one of the rollers should be smooth; but that if Turkey stone were used for both the rollers, instead of steel, it would be possible to sharpen scissors with a machine so constructed. Lord Tenterden. "The specification describes both the rollers as files, and on reading it with attention, I cannot find that the scissor-sharpener is described as having the two rollers different. It appears to me, therefore, that the specification is insufficient, as it nowhere states that the rollers for scissors must be one rough and the other not. With respect to constructing the rollers of Turkey stone, I cannot find that it is any where stated in the specification, that Turkey stones

<sup>&</sup>lt;sup>59</sup> Supra.

used on both sides will do for scissors. The plaintiff must be called."40

In an action for an infringement of a patent for an improvement of the hautboy by increasing the number of notes, (in the plural) it appeared by the specification that the patentee had invented only one new note. The patent was held to be invalid, although it was proved that great ingenuity had been exerted, and that the fingering was rendered less complicated by the invention. The defect in this case was also in the title and not in the specification; and as the invention was sufficiently described in the latter, the patent would have been good in the United States.

No cases have ever given rise to more discussion on the accuracy and exactness requisite in the specification, than those on Watt's patent for an improvement in the steam engine. As much of this part of the law of patents has arisen from these cases, they will be given at some length. They establish the doctrine that any inaccuracy in the use of words in the specification, which the specification itself supplies the means of correcting, will not defeat the patent. They also assume the doctrine of the other English cases, that the general description in the title, which is the only one inserted in the English

<sup>40</sup> Felton v. Greaves, 3 Car. & Payne, 611.

<sup>41</sup> Bainbridge v. Wigley, K. B. 1810, 18 Rep. of Arts, 2d Ser. 127.

patents, cannot be enlarged or contradicted, though it may be limited and explained in the specification.

The patent was granted to Mr. Watt for "a new invented method for lessening the consumption of steam and fuel in steam-engines." The specification stated that the method consisted of certain principles, and attempted to describe the application of these principles. The novelty consisted in keeping the cylinder, or steam-vessel, as hot as the steam which enters it, during the whole time the engine is at work; 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 come in contact with it during that time. The steam was condensed in vessels distinct from the cylinder, and communicating with it. This was entirely new, as in the old steam-engines water was admitted into the cylinder to condense the steam. The specification did not state in what manner the new machine was to be constructed, in what respects it varied from the old one, or in what way the improvements were to be added; but it appeared that it was sufficient to enable a mechanic, acquainted with the steam-engines previously in use, to construct one with this improvement.42

<sup>&</sup>lt;sup>42</sup> An act of Parliament was passed to extend the patentee's term, which, after reciting that the patent was "for making and vending cer-

Rooke J. "It is objected to this patent, first, that it is not for steam-engines upon the particular construction which contains this new improvement, but for a new invented method of lessening the consumption of steam and fuel. The obvious meaning of these words is, that the patentee has made an improvement in the construction of steam-engines; for 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. I think those words are tantamount to fire-engines of a newly invented construction. At least, I think, they will bear this meaning, if they do not necessarily exclude every other. The specification shows that this was the meaning of the words as understood by the patentee, for he has specified a new and particular mode of constructing fire-engines. If he has so understood the words, and they will bear this construction, then I think that this objection, which is merely verbal, is answered."

"It is further objected, that no particular engine is described in this specification, but that it only sets



tain engines, by him invented, for lessening the consumption of steam and fuel in fire-engines," granted to him the sole right of "constructing and selling such engines for twenty-five years;" it was, however, provided, that this grant should be subject to "every objection in law competent against the said patent."

forth the principles. If the patentee sets forth his improvement intelligibly, his specification should be supported, though he professes only to set forth the principle. When he set his inventive faculties to work, he found steam-engines already in existence, and the natural qualities of steam already known, and mechanically used. He only invented an improvement in the mechanism, by which they might be employed to greater advantage. There is no newly discovered natural principle as to steam, nor any new mechanical principle in his machine; the only invention is a new mechanical employment of principles already known. The greater part of the specification describes a practical use of improved mechanism, the basis on which the improvement is founded. Had a drawing or model been made, and any man copied the improvement, and made a machine in a different form, no doubt this would have been an infringement of the patent; because the mechanical improvement would have been introduced into the machine, though the form was varied. It follows from thence that the mechanical improvement, and not the form of the machine, is the object of the patent; and if this mechanical improvement is intelligibly specified, of which a jury must be the judges, whether the patentee call it a principle, invention or method, or by whatever other appellation, we are not bound to consider his terms, but the real nature of his improvement, and the description he

has given of it, and we may, I think, protect him without violating any rule of law."

Heath J. "The question is, inasmuch as this invention is to be put in practice by means of machinery, whether the patent ought not to have been for one or more machines, and whether this is such a specification as entitles the patentee to the monopoly of a method? The method is a principle reduced to practice; it is, in the present instance, the general application of a principle to an old machine. following objections arise to the patent, which I cannot answer; namely, that 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. The patent that admits the most lax interpretation, should be bad, and the other alone conformable to the rules and principles of common law, and to the statute on which patents are founded. I approve of the term manufacture in the statute, because it precludes all nice refinements, it gives us to understand the reason of the proviso, that it was introduced for the benefit of trade. 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. This is a new species of manufacture, and the novelty of the language is sufficient to excite alarm. I shall consider how far the arguments in support of this patent, will apply to the invention of original machinery, founded on a new principle. The steam-engine furnishes an instance. The Marquis of Worcester discovered the expansive force of steam, and first applied it to machinery. As the original inventor, he was clearly entitled to a patent. Would the patent have been good if applied to all machinery, or to the machines which he had discovered? The patent decides the question. It must be for the vendible matter, and not for the principle. 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 always holden that the organization of a machine may be the subject of a patent, but principles cannot. If the argument for the patentee were correct, it would follow, that where a patent was obtained for the principle, the organization would be of no consequence. Therefore, the patent for the application of the principle must be as bad as the patent for the principle itself. It has been urged for the patentee, that he could not specify all the cases to which his machinery could be applied. The answer seems obvious, that what he cannot specify he has not invented."

Buller J. "The true question in the case is,

whether the patent can be supported for the engine? I have already said I considered it as granted for the engine, and if that be the right construction of the patent, that alone lays all the arguments about ideas and principles out of the case. The objections to this patent, as a patent for the engine, are two: first, that the fire-engine was known before; and secondly, though the plaintiff'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. As to the first, the fact which the plaintiff's counsel were forced admit, that there was nothing new in the machine, is decisive against the patent. And the second objection is equally fatal."

Eyre C. J. "There can be no patent for a mere principle; but for 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, mystery, or manual occupation, I think there may be a patent. Now this is, in my judgment, the thing for which the patent stated in this case was granted, and this is what the specification describes, though it miscalls it a principle. It is not that the patentee has conceived an abstract notion, that the consumption of steam in fire-engines may be lessened, but he has discovered a practical manner of doing it; and for that practical manner of doing it, he has taken his patent. The patent is not for a principle,

but for a process. If, upon the true construction of the statute, there may be a patent for a new method of manufacturing or conducting chemical processes, or of working machinery, so as to produce new and useful effects, then I am warranted to conclude, that this patent was, in its original creation, good."

"As to the specification, I admit, that if this patent is to be taken to be a patent for a fire-engine, the specification is not sufficient; it is not a specification of mechanism of any determinate form, having component parts, capable of precise arrangement, and of particular description. On the other hand, if the patent is not for a fire-engine, but, in effect, for a manner of working a fire-engine, so as to lessen the consumption of steam, which, as I conceive the words of the patent import, it appears to me that the specification clearly points out and explains the method to every man who has a common acquaintance with the subject, and is intelligible even to those who are unacquainted with it."

The Court of Common Pleas being thus equally divided, no judgment was given. 43

The question came afterwards to be decided in the Court of King's Bench, in the case of Hornblower v. Boulton, 8 T. R. 95, and it was unanimously held, that the invention was the subject of a patent, and

<sup>43</sup> Boulton v. Bull, 2. H. Bl. 463.

the patentee having, in his specification, sufficiently described his invention, had a valid right under the patent and act of Parliament.

Kenyon C. J. "By comparing the patent and manufacture together, it evidently appears that the patentee claims a monopoly for an engine or marchine, composed of material parts, which are to produce the effect described, and that the mode of producing this is so described as to enable mechanics to produce it."

Ashburst J. was of opinion that the patentee was entitled to the benefit of the patent.

Grose J. "It is argued that this is a patent for a mere principle, and not for a new manufacture, and that nothing can be the object of a patent but a new manufacture. But it seems to me that in this specification, the patentee does describe a new manufacture, by which his principle is realized, that is, by which his steam vessel is kept as hot as the steam during the time the engine is at work, by which means the consumption of steam and fuel is lessened. Thus, he specifies the particular parts requisite to produce the effect intended, and states the manner in which they are to be applied. Can it then be said, that the making and combining these parts is not some manner of new manufacture? I cannot say that it is not. But then it is objected that the patent should have been for that manufacture; whereas it is for principles, which the specification describes.

To which I answer, that the patent is not merely for principles, nor does the specification describe principles only. The patentee states the principles on which the invention proceeds, and shows in his specification the manufacture, by means of which those principles are to take effect."

"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 old engine, but only for the addition to, or improvement of the old engine. And so the act of Parliament considers it. The method is disclosed in the specification, and it is by the addition of what is there disclosed, and by managing it in the way described."

Lawrence J. "Two objections have been made to this patent: first, that it is not for any formed or organized machine or manufacture, but for mere principles; secondly, that the specification is bad. By looking at the patent and the recital in the act of Parliament, it appears that Watt obtained a patent for an engine or mechanical contrivance for lessening the consumption of steam in steam-engines. It is clear, that the legislature understood that the patent was for an engine or some mechanical contrivance, and the form of the patent and the specification does not contradict this. 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."

"Then, taking this to be a patent for an engine, it is objected that the specification is bad. The patent must be supported as granted for an improvement and addition to old engines, known and in use, and I think that the patent is good in this point of view. For Watt claims no right to the construction of engines for any determinate object, except that of lessening the consumption of steam and fuel in fire-engines. His patent supposes the existence of such engines, and his contrivance, method, or engine, is for lessening the consumption of fuel in such pre-existing engines, and for nothing else. Some of the 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 words engine and method being used as convertible 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 "manufacture;" and unless such devices did fall within that description, no addition or improvement could be the subject of a patent."

Wheeler's patent for a preparation for coloring beer was adjudged bad, on account of the inaccuracy of the description in the title, and the insufficiency of the specification. It was for "a new and improved method of drying and preparing malt." In the specification it was stated that the "invention consisted in the heating of malt to 400 degrees and upwards, of Fahrenheit's thermometer, according to a process or processes hereaster described." Abbott C. J. "This is a patent for the invention of a method, that is, of an engine, instrument or organ, to be used for the accomplishment of some purpose; or at least of a process to be so used. The patentee does not profess to be the inventor of any engine, instrument, or organ; he says, that a coffee-roaster, or a kiln, or any thing by which the grains may be kept in motion during their exposure to the requisite degree of heat, may be used. Neither has he described any certain or precise process, which, admitting that there may be a patent for a process only, ought unquestionably to be done. He does not mention the state in which the malt is to be taken, for the purpose of undergoing the process, whether in a moist or dry state, as was before noticed; he does not say, what heat beyond 400 degrees of Fahrenheit may be used; he

does not furnish the operator with any means of knowing when he has this degree of heat; he does not say, during what length of time the process is to be continued, but contents himself with saying, that "the proper degree of heat and time of exposure will be easily learned by experience, the color of the internal part of the prepared grain affording the best criterion;" not even mentioning what the color is, which is to be the criterion. A specification which casts upon the public the expense and labor of experiment and trial, is undoubtedly bad. If it be said that all these matters will be well or easily known to a person of competent skill (and to such only the patentee may be allowed to address himself), then the inventor will not in reality have given any useful or valuable information to the public; so that in either way of viewing the case, there is either no certain and clear process described, or the process described is such as might be practised without the assistance of the patentee." The patent was adjudged to be void.44

It has been suggested, 45 that this decision is an illustration of an illiberal application of the rules on the subject of specifications. Whether it be so or not will evidently depend, in a great degree, upon what may be supposed to be known to persons prac-

<sup>44</sup> King v. Wheeler, 2 Barn. & Ald. 345.

<sup>45</sup> Westminster Review, No. 44.

tised in the manufacture of malt, and in the art of brewing. The writer just alluded to, supposes that a person conversant with these manufactures would very readily learn to make and use the new invented malt by the directions given in the specification. However this may have been in the particular case, the doctrines and principles of the decision are no doubt correct, and the precedent is equally good, whether the court applied these doctrines to the actual case before them, or to one supposed by them through mistake.

Sec. VII.—What is claimed as New must be distinguished from what is Old. It must appear what is claimed as New. The Inventor must not claim too much.

It is a general rule that the patentee must not claim, in his specification, any more than he has invented, and that by claiming too much his patent is void. And if the specification contains a description of what is old and known as well as what is new, what is claimed as new must be distinguished. The form of making this distinction is immaterial; it is enough that it plainly appears from the specification and patent, what is claimed by the patentee as

<sup>&</sup>lt;sup>46</sup> Dixon v. Mayor, Coxe's Dig. 533; and see cases below

his invention, and that he claims nothing more than he has invented. Mr. Justice Park says, any ambiguity may be avoided by the patentee's disclaiming that which is not his own discovery. The more frequent form, however, is to state positively what the patentee does claim, saying that he claims only such and such things. In other cases it is stated both negatively what he does not claim, and positively what he does claim as his invention. It is sufficient if it appear by the specification, in whatever manner, what he does claim, and that the claim is not broader than the invention.

In specifying an improvement in a machine it is often necessary to describe the whole machine as it operates with the improvement, in order to make the description intelligible, and enable an artist to construct the machine, as the inventor is bound to do in his description, and which, if he fails to do, he falls into the fault of obscurity. On the other hand, if the whole machine, as well the old as new part, be thus described, it is requisite to distinguish what part the patentee claims, since if this does not satisfactorily appear, the patent will, as we have seen, be void for ambiguity; or, if the obvious construction is, that he claims the whole machine in its improved state, the patent will be void by reason of the patentee's claiming too much.

<sup>&</sup>lt;sup>47</sup> Champion v. Benyon, 3 Brod. & Bing. 5.

The mode of expression generally used in the books in relation to this subject, is, that the specification must distinguish the new from the old. The only object of this distinction is, however, to specify what the patentee claims, and the mere discrimination of the new from the old would not necessarily show this, for perhaps he does not claim all that is new. When the cases say, therefore, that the specification must distinguish the new from the old, we must understand the meaning to be that it must show distinctly what the patentee claims, the only object of this distinction being for this purpose. This doctrine is illustrated by some of the cases already stated, and it runs through them all wherever this question arises.<sup>40</sup>

The Court of King's Bench held it sufficient, in one case, to describe the whole machine as improved, and refer to the patent of the original machine on which the improvement was made, the two specifica-

Hill v. Thompson, 3 Meriv. 629; Barrett v. Hall, 1 Mason's R. 576; Boville v. Moore, 2 Marsh. R. 211; McFarlane v. Price, 1 Stark. R. 199; Woodcock v. Parker, 1 Gallis. R. 438; Whittemore v. Cutter, 1 Gallis. R. 478; Odiorne v. Winkley, 2 Gallis. R. 51: Evans v. Eaton, 3 Wheat. 354; S. C. 7 Wheat. R. 356; S. C. 1 Pet. C. C. R. 342; Dixon v. Mayer. 4 Wash. C. C. R. 68; Champion v. Benyon, 3 Brod. & Bing. 5; George v. Beaumont and others, Rep. of Arts. N. S. Vol. 27, p. 252; Cochrane v. Smethurst, 1 Stark. R. 205; The King v. Elsee, Bull. N. P. 76. Rogers v. Abbot, 4 Wash. C. C. R. 514. Watson v. Bladen, 4 Wash. C. C. R. 580. The act of Congress of 1836, and the act of Parliament of 1835, as subsequently stated, in Sec. 10 of this chapter, make provision whereby the patentee may avoid the entire loss of his privilege in consequence of including too much in his specification.

tions being so framed that a person, by consulting both, might distinguish what was new. A patentee of a machine for dressing woollen cloths, duly enrolled his specification, and, several years afterwards, obtained another patent for certain improvements in the machine, in which the grant of the former patent was recited. The specification of the latter patent contained a full description of the whole machine in its improved state, but did not point out or distinguish the improvements from the former machine by any verbal description, or by any delineation or mark in the drawing. The improvements, however, could be ascertained by referring to the first specification, and comparing it with the second specification and the drawings. It was held that the second specification was sufficient. Lord Ellenborough. "I own I was disposed to think that it was a departure from the terms of the proviso, for the patentee merely to tell the inquirer who came to consult the specification, how he might learn what the invention was, instead of giving him that information directly. But I feel impressed by the observation of my brother Le Blanc, that the trouble and labor 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 upon the former machine. Reference must indeed often be necessarily made in these cases to matters of general science, or the party must carry a

reasonable knowledge of the subject matter with him, in order clearly to comprehend specifications of this nature, though fairly intended to be made."49

But this is certainly a very inartificial way of drawing up a specification; and though in the case before the court the comparison of the two specifications may have rendered it quite obvious what the patentee claimed as the subject of his second patent, such might not be the result in the specification of other improvements. This is by no means a skilful or safe mode of making a specification of an improvement.

Upon this subject Mr. Justice Story says, "The patentee is clearly not entitled to include in his patent the exclusive use of any machinery already known; and if he does, his patent will be broader than his invention, and consequently void. If therefore the description in the patent mixes up the old and the new, and does not distinctly ascertain for which in particular the patent is claimed, it must be void; since if it covers the whole, it covers too much, and if not intended to cover the whole, it is impossible for the court to say what, in particular, is covered, as the new invention. The language of the St. 1793, c. 156, s. 3, is decisive on this point. It is, however, sufficient if what is claimed as new appear with reasonable certainty on the face of the patent,

<sup>49</sup> Harmar v. Playne, 11 East, 101.

either expressly or by necessary implication. But it ought to appear with reasonable certainty, for it is not to be left to minute references and conjectures from what was previously known or unknown; since the question is not, what was before known, but what the patentee claims as new; and he may in fact claim as new and patentable what has been long used by the public."50

The law is laid down in the same manner by Mr. Justice Buller. A patent was granted for a new invented manufacture of lace, called French lace. The specification went generally to the invention of mixing silk and cotton thread upon the frame. It was clearly proved that, prior to the patent, silk and cotton thread had been used together and intermixed upon the same frame; and the counsel for the patentee acknowledged the fact, but said he could prove, that the former method of using the silk and cotton thread was quite inadequate to the purpose of making lace, on account of its coarseness, and that the patentee alone had invented the method of intermingling them, so as to unite strength with firmness. Buller J. "It will be to no purpose. The patent claims the exclusive liberty of making lace composed of silk and cotton thread mixed; not of any particular mode of mixing it, and therefore, as it has been clearly

<sup>50</sup> Lowell v. Lewis, 1 Mason, 189.

proved and admitted, that silk and cotton thread were before mixed on the same frame for lace in some mode or other, the patent is clearly void, and the jury must find for the crown."51

In putting a construction upon a specification as to the extent of the patentee's claim, the whole is to be taken into consideration, and general expressions which accepted literally would cover too much ground, may be limited by other parts of the specification. A specification stated the invention to be an approved apparatus for "extracting inflammable gas by heat, from pit-coal, tar or any other substance from which gas or gasses, capable of being employed for illumination, can be extracted by heat." It was proved that the apparatus would not succeed in making gas from oil; and it was argued, that there was nothing to prevent a person who saw this specification from considering that oil gas was meant to be included in it. Lord Tenterden ruled, that "the words 'other substance,' must mean other substance ejusdem generis, and that oil was not meant to be included in it, it being proved that, at the time in question, oil was considered much too expensive to be used for the making of gas for the lighting of streets and buildings, though it was known to afford an inflammable gas."52

The King v. Elsee, Dav. Pat. Cas. 144.

<sup>&</sup>lt;sup>13</sup> Crossly v. Beverly, 3 Car. & P. 513.

The patent for Brown's improvement on a lace-machine, was ruled by Gibbs C. J. to be void, because the specification claimed the whole machine, though a considerable part of it had been long in use.<sup>53</sup>

So in an American case, where the general description in the letters patent stated that the grant was for "a new and useful improvement in manufacturing cotton and wool cards," Mr. Justice Story held that the specification must be considered as controlling the generality of expression and limiting the grant to the machine specifically described therein.<sup>51</sup>

It is sufficient to defeat the patent, though the part claimed, which is not new, or not invented by the patentee, be unimportant. Mr. Justice Story says, that, "Where the patentee claims any thing as his own invention, in his specification, courts of law cannot reject the claim; and if it is included in the patent, and found not to be new, the patent is void, however small or unimportant such asserted invention may be. Where he sums up the particulars of his invention, and his patent covers them, he is confined to such summary; and if some part, which he claims in his summing up as his invention, prove not to be in fact his invention, he cannot be permitted to sustain his patent by showing that such part is of

Bovill v. Moore, Dav. Pat. C. 361. See also Williams v. Brodie, cited Dav. Pat. Cas. 96.

<sup>&</sup>lt;sup>54</sup> Whittemore v. Cutter, 1 Gallison, 437.

slight value or importance in his patent. His patent covers it, and if it be not new, the patent must be void."55

The ground of this doctrine is stated in the Englisb courts to be the failure of the consideration for which the grant of the patent is made. Where a patent was granted for improvements in the manufacturing of ships' anchors, windlasses, and chain-cables, but it appeared that there was no novelty in the construction of the anchors, it was held that the patent was wholly void, although the other improvements might be new. Abbott C. J. "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 only difference between the case of Hill v. Thompson, (2 J. B. Moore, 424,) and this, is, that here the patentee, instead of saying that he has made certain improvements, states the improvements, but still he claims the merit of having invented improvements in the manufacture of three things. The consideration is entire, and if it turns out that there is no novelty in one of the improvements, the consideration fails in the whole, and the patentee is not entitled to the benefit of that other part of his invention."

<sup>55</sup> Moody v. Fiske, 2 Mason, 112.

Bailey J. "When an 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, therefore, that if any part of the consideration fails, the patent is void in tcto."

Best J. "This has been compared, in argument, to the case of a grant of lands. If, in the same deed, there were included three conveyances of three distinct estates on three considerations, one might be set aside, and another be good; but if the grant were upon one consideration which was bad, the whole would be void, because the consideration would fail altogether. Now the present case is similar to that, because here, the consideration to induce the king to grant the patent, was the statement made by the plaintiff in his petition, that there had been three inventions, when in fact there had been only two. The united consideration upon which the whole grant was made, is therefore void; and, consequently, the grant itself is void." 56

In the description of an improvement, the phrases "improved machine," and "improvement of a ma-

<sup>&</sup>lt;sup>56</sup> Brunton v. Hawkes, 4 B. & Ald. 540.

chine," mean substantially the same thing. 57 patentee should not claim a new mode or device as detached from the machinery, but as combined with the machinery or construction by which the effect, whether new or old, is produced. "If," says Mr. Justice Story, "an invention consist in a new combination of machinery, or in improvements upon an old machine to produce an old effect, the patent should be for the combined machinery, or improvements on the old machine, and not for a mere mode or device for producing such effects, detached from the machinery. This doctrine may not be of as extensive consequence under our patent act, where the specification forms a part of the patent, and may control its generality, as in England, where the specification is separated from it; but it distinctly shows the necessity of an exact description, so that the patent may conform to the invention."58

This subject came up very early in the cases on Watt's patent. In one of these cases Mr. Justice Buller said, that since the case of Morris v. Branson, in 1776, "it has been the generally received opinion in Westminster Hall, that a patent for an addition is good. But then it must be for the addition only, and not for the old machine too. In Jessop's case, the patent was held to be void, because it ex-

Barrett v. Hall, 1 Mason's R. 475; Boulton v. Bull, 2 H. Bl. 463. 482; Evans v. Eaton, 3 Wheaton, 454.

<sup>58</sup> Barrett v. Hall, 1 Mason, 476.

tended to the whole watch, and the invention was of a particular movement only. It was admitted in the reply, that the patent should be applied to the invention itself; but it was contended that if, in consequence, the patent gave a right to the whole engine, that would be no objection. To this I answer, that if the patent be confined to the invention, it can give no right to the engine, or to any thing beyond the invention itself. Where a patent is taken for an improvement only, the public have a right to purchase that improvement by itself, without being encumbered with other things. A fire engine of any considerable size, I take it would cost about 1200l., and suppose the alteration made by the plaintiff, with a fair allowance for profit, would cost 50 or 1001. is it to be maintained, that all the persons who already have fire engines must be at the expense of buying new ones from the plaintiffs, or be excluded from the use of the improvement? So in the case of the watch, may not other persons in the trade buy the new movement, and work it up in watches made by themselves? Where men have neither fire engines nor watches, it is highly probable that they will go to the inventor of the last and best improvements for the whole machine; and if they do, it is an advantage which the inventor gets from the option of mankind, and not from any exclusive right or monopoly vested in him." 59

Boulton v. Bull, 2 H. Bl. 489.

A case came before Lord Ellenborough at nisi prius, on a patent for an improvement in making parasols and umbrellas, in which it was objected that the specification did not clearly direct how to make the article, and did not distinguish what was new. The specification professed to set out the improvements as specified in certain descriptions and drawings annexed. The subjoined description contained a minute detail of the construction of umbrellas and parasols, partly including the usual mode of stretching the silk of the umbrella, and also certain improvements, which consisted chiefly in the insertion of the stretchers, which were knobbed at the sockets formed in the whalebone, instead of attaching them to the whalebone in the usual way. Drawings were given of the umbrellas and parasols in their improved state; but throughout the whole specification no distinction was made between what was new and what was old. The counsel for the plaintiff contended that the specification was sufficient, since one of the annexed drawings contained a representation of the particular invention which had been pirated, and was confined to the exhibition of the insertion of the knobbed stretchers in the whalebone sockets, from which an artist would be able to construct an umbrella on the improved plan. Lord Ellenborough. "The patentee, in his specification, ought to inform the person who consults it, what is new and what is old. He should say, my improvement consists in

this, describing it by words, if he can, or, if not, by reference to figures. But here the improvement is neither described in words nor by figures, and it would not be in the wit of man, unless he were previously acquainted with the construction of the instrument, to say what was new and what was old. The specification states, that the improved instrument is made in manner following: this is not true, since the description comprises that which is old, as well as that which 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? The plaintiff was nonsuited." 50

The objection was made to Brunton's patent for an improvement in the chain cable, that the patentee claimed the form of the link which was before in use, instead of claiming the mode of supporting it, which, in fact, was his invention. Best J. "I doubt whether this patent can be sustained, for the specification cannot stand as a description of a new combination of known principles; it claims an invention as to a part of it, which certainly is not new. I allude particularly to the form of the link. The specification states, that the object to be gained is the greatest possible strength from a given quantity of materials, keeping in mind the direction in which

<sup>60</sup> McFarlane v. Price, 1 Stark. N. P. C. 199.

the strain is to be borne. It afterwards says, that this is to be done by the use of that which is new, viz. by the stay introduced between the links, and which, instead of entering them, embraces their sides. If that alone was to be done, it would be new; but the specification further goes on to say, "it is evident, that of all the forms and constructions that can be given to a link, that form and construction, which shall be able to convert a lateral into an end strain, by yielding support to the opposite sides of the link, is the one that should be preferred." It appears to me, that the patentee here first claims the merit of originally using the links in the particular form described in his specification, instead of circular links. Now there can be no doubt that links of that form had been used long before."61

Sec. VIII.—The Specification must direct how to make, and describe the best way known to the Inventor of making, the article.

The act of Congress of 1836, s. 7, following very closely that of 1793, s. 3, requires the inventor to describe his invention, in his specification, so as "to

Brunton v. Hawkes, 4 Barn. & Ald. 540. The French law does not require the new to be distinguished from the old, but M. Perpigna, Treatise on Patents, translated in the Law Library, p. 27, says, it would be better if it conformed to the English and American law in this respect.

enable any person, skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound and use the same." This is only an express enactment of what has been the established construction of the English statute of monopolies. And, following out the spirit and principle of this rule, the cases decide that the specification must not only direct how the thing patented is to be made, used, or compounded, but must also direct the most economical and advantageous materials, construction and method for this purpose, known to the inventor, and must not mislead the person who consults it. The patent law is founded on the principle of giving the public the full benefit of the invention, which it could not do, unless the best mode of using the invention were described. "The end and meaning of the specification," says Mr. Justice Buller, "is to teach the public, after the time 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. If the specification, in any part of it, be materially false or defective, the patent is against law and cannot be supported. 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 persons skilled in the art or science to which the invention relates may be able to

make the machine by following the directions of the specification, without making any experiments, and without any new invention or addition of their own."82

Mr. Justice Story thus states the law on this subject. "The law confers an exclusive patent right on the inventor of any thing new, and useful, as an encouragement and reward for his ingenuity, and for the expense and labor attending the invention. But this monopoly is granted for a limited term only, at the expiration of which the invention becomes the property of the public. Unless, therefore, such a specification was made as would, at all events, enable other persons, of competent skill, to construct similar machines, the advantage to the public, which the act contemplates, would be entirely lost, and its principal object would be defeated. It is not necessary, however, that the specification should contain an explanation, level with the capacities of every person, (which would, perhaps, be impossible,) but, in the language of the act (of 1793), it should be expressed in such full, clear and exact terms, that a person skilled in the art or science of which it is a branch, would be enabled to construct the patented invention."63

The King v. Arkwright, Dav. Pat. Cas. 106. Per Ashurst, J. Turner v. Winter, 1 T. R. 606, and see remarks of Buller, J. in Boulton v. Bul, 2 H. Bl. 484.

Lowell v. Lewis, 1 Mason R. 182, and see Langdon v. De Groot, 1 Paine's R. 203, which was a patent for folding thread, and one objec-

And so Lord Ellenborough says, "A specification should be sufficient to enable persons of reasonably competent skill in such matters, to construct the machine."64

It is enough if the specification is made clear by an examination of the drawings referred to in it. 65 Where it was objected that the dimensions of a stay of a link of a chain cable were not given in the written specification, Abbott C. J. said to the jury, "If a drawing or figure will enable a workman of competent skill to construct the improvement, it is as good as any written improvement." 66

Mr. Justice Buller remarked, in an early case, that "wherever it appears that the patentee has made a fair disclosure, I have always had a strong bias in his favor, because, in that case, he is entitled to the protection which the law gives him; but where the discovery is not fully made, the court ought to look with a very watchful eye to prevent any imposition on the public;" and Mr. Justice Gibbs says that "a patentee who has invented a machine useful to the public, and can construct it one way more

tion stated by the court is that the specification did not describe the manner of folding.

<sup>64</sup> Harmar v. Playne, 11 East, 101.

Shaw, 4 Mass. R. 1. Fox ex parte, 1 Ves. & B. 67.

Brunton v. Hawkes, Rep. of Com. of H. of Com. 1829, App. 206. Mr. Farey's Papers.

<sup>&</sup>lt;sup>67</sup> Turner v. Winter, 1 T. R. 606.

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."

A mistake or an incorrectness in what is not material, will not render the patent void. <sup>69</sup> It is enough that the specification is substantially full and accurate. This is distinctly implied by Abbott, C. J. in a case already cited. <sup>70</sup> It is no objection that a mistake is made by which nobody can suffer, that is, by which no person could be led into an infringement of the patent, without any such instruction on his part, while it is in force, and which will not prevent an artist from constructing the machine, by following the specification, after the patent has expired.

The rules above stated have been applied in a number of cases. In the specification of Arkwright's machine to prepare cotton, silk, flax and wool for spinning, he described all the parts of it as one

<sup>68</sup> Bovill v. Moore, Dav. Pat. Cas. 361.

<sup>69</sup> The King v. Murray, Buller's N. P. 76, a.

Bloxam v. Elsee, 6 B. & C. 169, supra 244; and other cases cited supra s. 3 and 5.

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; and on this ground, among others, his patent was set aside.<sup>71</sup>

The King v. Arkwright, Dav. Pat. Cas. 117. See Godson Pat. 121; opinion of Ashurst in Turner v. Winter, 1 T. R. 606; Newbury v. James, 2 Meriv. 446; Hornblower v. Boulton, 8 T. R. 100.

Mr. Farey, in a note to the case of Arkwright, in the Appendix to the Report of the Committee of the House of Commons, 1829, p. 185, says, "The invention for which Mr. Arkwright took his two patents for spinning and preparing, have proved of immense value to the nation; they are universally employed for one great branch of cotton spinning, called twist, for strong hard cotton thread, and still remain nearly on the system that Mr. Arkwright himself established during the patents; also, when combined with the previous invention of Hargrave's spinning jenny, (which was done some years afterwards by Mr. Crumpton,) in what is called the mule, they form the other branch of cotton spinning for fine and soft yarn. The spinning of long wool and flax, and preparing of flax, (after the stages of combing and heckling,) are modifications of Arkwright's system; and also the preparing of short wool for woollen cloth, the spinning thereof being done by Hargrave's jennies. Of the three inventors of spinning, Hargrave, Arkwright and Crumpton, to whom the nation have owed so much, the first was persecuted, and died in the greatest poverty, amidst a population who were rising to opulence by his means. Arkwright possessed a vigor of mind to command, control and instruct working people, far beyond the talent of a mere artist or inventor, and succeeded in realizing a princely fortune by his manufactory; but his money was not gained by virtue of his invention; for the bulk of it was acquired after his patent was set aside; and others who had invented nothing, but merely copied what he did, made immense fortunes by spinning, as well as himself. Crumpton, whose combination of Hargrave's and Arkwright's inventions in the mule, has much more than doubled the national advantages conferred by his predecessors, was, like Hargrave, ruined in his circumstances, and languished in poverty during a long life, in the very town which had grown up from insignificance to wealthy importance by the practice of his invention. In 1812, his case reached the knowledge of Parliament, and £5000 reward was given him; but it came too late to have the effect of removing the established impression, that an inventor is almost certain to be ruined, even if his invention succeeds, and proves ever so valuable to others."

In an action for the infringement of a patent right for producing a yellow color for painting in oil or water, and making white lead, and separating the mineral alkali from common salt, it appeared that the specification commenced as follows: "Take any quantity of lead, and calcine it, or minium, or red lead, litharge lead, ash or any calx, or preparation of lead, fit for the purpose." At the trial, it was objected to the specification that, after directing that the lead should be calcined, it stated that minium might be used, which would not answer the purpose. Neither was it said that the minium should be calcincd or fused; but if minium had any reference to the preceding words, then it was to be calcined, which would not produce the effect, fusion being necessary. Buller, J. said, that "it was not pretended by any of the plaintiff's witnesses that he ever made use of minium. And it was proved by the defendant's witnesses, that from the specification, they should be led to use minium, because minium is lead already calcined, which is what the specification directs in the first instance. But minium will not answer the purpose. Then as to fusion, it is said, that the public are directed, by the words of the specification, to continue the heat till the effect is produced; which must necessarily lead to fusion, though fusion is not expressly mentioned. But that is no answer to the objection; for the specification should have shown by what degree of heat the effect

was to be produced. Now it does not mention fusion, and, as one of the witnesses said, in order to produce the effect, you must go out of the patent; for fusion is beyond calcination, and in some sense contrary to it; and by mentioning calcination, it should seem that fusion was to be avoided. He was accordingly of opinion that on this ground the patent was void." Ashurst J. "The first objection to the specification is, that the public are directed 'to take any quantity of lead, and calcine it, or minium, or red lead;' from whence it is inferred that calcining is only to be applied to lead; I confess, if the objection had rested here, I should have entertained some doubt.""

The same specification proceeded as follows: To any given quantity of the above-mentioned materials, add half the weight of sea salt. with a sufficient quantity of water to dissolve it, or rock salt, or salt gem, or fossil salt, or any marine salt, or salt water proper for the purpose. It was objected that fossil salt was improperly mentioned. For fossil salt is a generic term, including all mineral salts, only one of which, sal gem, would answer the purpose; because that alone has marine acid. Ashurst J. "I understand that sal gem is the only one which can be applied to this purpose; so that throwing in

<sup>&</sup>lt;sup>72</sup> Turner v. Winter, 1 T. R. 602.

fossit salt can only be calculated to raise doubts and mislead the public. That word could not have been added with any good view; it must produce many unnecessary experiments; therefore, in that respect, the specification is not so accurate as it should have been." The patent was held to be void.

In the same case, Buller, J. said, that "if the patentee could only make the color with two or three of the ingredients specified, and he has inserted others in the specification which will not answer the purpose, that will avoid the patent. If the patentee makes the article for which the patent is granted, with cheaper materials than those which he has enumerated in the specification, although the latter will answer the purpose equally well, the patent is void, because he does not put the public in possession of his invention, or enable them to derive the same benefit from it which he himself does."<sup>74</sup>

So Mr. Chief Justice Gibbs says, "A person who applies for a patent, and proposes a mode of carrying on the invention in the most beneficial manner, must disclose the means of producing it in equal perfection, and with as little expense and labor 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

<sup>73</sup> Turner v. Winter, 1 T. R. 602.

<sup>74</sup> Turner v. Winter, 1 T. R. 607.

way, and with the same advantages. If any thing which gives an advantageous operation to the thing invented, be concealed, the specification is void."75

A patent was granted for a new mode of making verdigris. The patentee was accustomed, during the process of the manufacture, clandestinely to introduce aqua fortis into the boiler, by means of which a more rapid solution of the copper was produced. This was not stated in the specification. Gibbs C. J. "Although 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 labor by the omission of aqua fortis, it is a prejudicial concealment, and a breach of the terms which the patentee makes with the public. If it is proved that aqua fortis was used by the inventor as an ingredient, the patent is void."

A patent was obtained for a new method of drying and preparing malt. It was objected that the patent was void, because it appeared from the specification, that it was merely a method of giving to malt, previously prepared, the qualities of being soluble in water and coloring the liquor in which it should be dissolved, which was accomplished by the application of a high degree of heat. Abbott C. J. "It

<sup>75</sup> Wood v. Zimmer, Holt's N. P. C. 58.

<sup>76</sup> Wood v. Zimmer, Holt's N. P. C. 58

was argued that the term, malt, is applied to the grain as soon as it has germinated by the effect of moisture, and before it has been dried; that malt in that state might be taken and used for the objects of the invention; and that, as these were to be accomplished by heat, it was an invention for drying malt. But if this were so, then the specification would be defective in not informing the reader, that the malt to be used for the intended object might or ought to be taken in that state, and in leaving him to discover by experiment whether it should be taken in that state, or after drying, which, according to the most common use of the word malt, he might very reasonably suppose."

On the subject of the patentee's describing the best way of practising the art or making the article patented, the English jurisprudence presents one rule which is not applicable in ours. As the inventor is, in England, allowed a certain time after the grant of the patent to enrol his specification, and as during that time he may make new discoveries and improvements, he is required to describe in his specification, not merely the best method known to him at the time of taking out the patent, but he must include also all his subsequent discoveries and improvements, down to the time of specifying.<sup>78</sup> In

<sup>&</sup>lt;sup>77</sup> King v. Wheeler. 2 Barn. & Ald. 353.

<sup>78</sup> Crossley v. Beverly, 9 Barn. & Cross. 63. In stating this doc-

the United States, as the specification is drawn up before the patent is made out, the above rule is not applicable.<sup>79</sup>

## Sec. IX.—Reference in the Specification to Drawings.

The third section of the act of Congress of 1793, after prescribing the requisites of the specification, provides that the inventor shall accompany it "with drawings and written references, where the nature of the case admits of drawings." The act of 1836, s. 6, contains the same provision, correcting the phraseology merely by saying "drawing or drawings," which does not alter the construction.

The drawings are a part of the specification where they are referred to in it, 80 "and may help and make good a specification which would otherwise be defective." 81

trine, Lord Tenterden remarks that time is given for enrolling the epecification, for the purpose of allowing the inventor an opportunity to perfect his invention.

To insert a provise into all patents to require the patentee to execute a complete specification of the invention for which the patent was granted, and also to enroll the same in the court of chancery within a specified time. Before that time the patentee was not called upon for any specification." Mr. Savery's patent of 1698, for some kind of fire engine, had no such clause. Rep. of Com. of House of Com. 1829, App. p. 170. Mr. Farey's Papers.

<sup>&</sup>lt;sup>80</sup> Earle v. Sawyer, 4 Mass. R. 1. See supra c. 10,

gt Kent's Com, v. 2, p. 270,

The English and American jurisprudence coincide in this doctrine. Where it was, in 1825, objected to a specification that there was some little obscurity in it, and that it contained French terms, Abbott C. J. said, that "the inventor of a machine was not tied down to make such a specification, as, by words only, would enable a skilful mechanic to make the 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 will explain the other sufficiently to enable a skilful mechanic to perform the work, such a specification is sufficient." <sup>82</sup>

So in a previous trial, in 1820, on Brunton's patent for chain cable's anchors and windlasses, where it was objected that the dimenions of the stay of the link were not described in words, Abbott, C. J. said to the jury, "If a drawing or figure will enable a workman of competent skill to construct the improvement, it is as good as any written description." 83

So Lord Ellenborough, in 1816, said to the jury, on the subject of distinguishing what was claimed; "The inventor should say, 'My improvement consists in this,' describing it in words if he can, if not, by reference to figures."<sup>84</sup>

<sup>&</sup>lt;sup>23</sup> Bloxam v. Elsee, 1 Carr. & P. 558.

Brunton v. Hawkes and another. Rep. of Comm. of House of Com. 1829, p. 206. App. Mr. Farey's notes.

<sup>84</sup> Macfarlane v. Price, 1 Stark. R. 199.

Lord Eldon says, the inventor may, if he chooses, annex to his specification a picture or model descriptive of it; but then, he adds, what is inconsistent with the opinion of other English judges above cited, and what is clearly not law in the United States; "his specification must be in itself sufficient, or I apprehend it will be bad." 85

In Earle v. Sawyer, 86 Mr. Justice Story said, "it was argued, that, by the very terms of the patent act, there must be a written description (without any reference to drawings) in such full, clear and exact terms, as to distinguish the things patented from all other things; and that, in case of a machine, the act requires drawings in addition thereto. For this position, the case of Fox ex parte, 57 before Lord Eldon, has been cited. As I understand the language of Lord Eldon, it is not intended to assert the doctrine for which it is cited. It means that the specification must in itself be sufficient, and that the mere annexation of a picture or model will not help any defect in the specification. This may be true, where such picture or model is not referred to, as constituting a part of the specification itself. But if the explanations of the specification call for the drawings, and refer to them as a component part in

<sup>85</sup> Fox ex parte, 1 Ves. & B. 67.

<sup>&</sup>lt;sup>86</sup> 4 Mason, 9.

<sup>&</sup>lt;sup>87</sup> 1 Ves. & B. 67.

the description, they are just as much a part of the specification, as if they were placed in the body of the specification. Indeed, in many cases, it would be impracticable to give a full and accurate description of the form, adjustments and apparatus of very nice and delicate machinery, without drawings of some of the parts, as every thing might depend on size, position and peculiar shape. Lord Eldon could not have meant, that if drawings and figures were necessary to a full description of a machine in the specification, there was still some stubborn rule of law prohibiting it. That would be to require the end and yet to refuse the means."

"The question must, after all, be decided by our own law on this subject. The st. 1793, c. 156, § 3, requires that the inventor "shall deliver a written description of his invention, &c.; and he shall accompany the whole with drawings and written references, where the nature of the case admits of drawings," &c. This is an explicit direction to annex drawings, where the nature of the case admits of them, with written references; and when so annexed, they become part of the written description required by the act. They may be indispensable to distinguish the thing patented from other things before known. Surely then the act could not intend studiously to exclude them as part of the written description. That would be to require the end and deny the means."

It was held by the King's Bench, in England, that a specification in a former patent might be referred to in a subsequent one, so as to be made a part of it.<sup>88</sup>

But specimens and models, deposited in the patent office, cannot be resorted to for the purpose of supplying any defect in the specification.

Sec. X.—Consequences of a Defect in the Specification.

Before the British act of 5 and 6 Wm. IV. c. 83, (1835,) the consequence of a defect in the specification, in England, was an absolute loss of the privilege of the patent right. By the first section of that act, the patentee or his assignee "may, with the leave of the attorney or solicitor general, enter 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, 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 patent;" and such disclaimer or memorandum is thereafter to be considered a part of the title or specification. 89

<sup>88</sup> Harmar v. Playne, 10 East, 101. Supra, s. 7, p. 270.

<sup>&</sup>lt;sup>89</sup> This act was introduced by Lord Brougham, and is the result of 38

In the early American cases, after the act of 1793, it appears to have been supposed that the law had by that act been varied from the English; so that the patent right was forfeited and lost, only in case of the defects specified in the 6th section being designed and fraudulent. It is provided by that section that, in a case for an infringement, the defendant may give in evidence, in his defence, "that the specification does not contain the whole truth relative to his discovery, or that it contains more than is necessary to produce the described effect, which concealment or addition shall fully appear to have been made for the purpose of deceiving the public."

Mr. Justice Story, in giving an opinion in the Circuit Court, in 1813, on an examination of this section, remarked: "We think that the manifest intention of the legislature was not to allow any defect or concealment in a specification to avoid the patent, unless it arose from an intention to deceive the public." <sup>93</sup>

In the same year, Mr. Justice Washington, instructing the jury in the Circuit Court of the United States for Pennsylvania, said on the subject of concealment, "the matters not disclosed must appear

the examinations made by the committee of the House of Commons, in 1529, and remedies some of the most material defects of the English law as it stood before.

<sup>90</sup> Whittemore v. Cutter, 1 Gall. R. 429.

to have been concealed for the purpose of deceiving the public, in order to invalidate the patent."31

In 1817, again, these judges appear still to have entertained the same opinion.92 But it was, at the same time, remarked by Mr. Justice Story, that the doctrine was liable to grave objections on the score of expediency.93 And it was subsequently abandoned and the English doctrine adopted, that a defect in the specification, from want of compliance with the requisitions of the third section of the act of 1793, rendered the patent void; but that, if the defect arose from mistake, a new patent could be taken out for the unexpired part of the term. In this respect our law, on this subject, differed from the English.

This doctrine, as to the surrender and renewal of the patent, was suggested by Mr. Justice Thompson in a case that came before him in 1824, in which he remarked, "I see no insuperable objection to entering a vacatur of the patent of record in the department of state, if taken out inadvertently and by mistake. All the proceedings in that department, on the subject of patents, are ex parte, except in the case of interfering applications. The department

Park v. Little & Wood, 3 Wash. C. C. R. 196.

<sup>&</sup>lt;sup>92</sup> Lowell v. Lewis, 1 Mass. R. 182. Gray and Osgood v. James and others, 1 Pet. C. C. R. 401, 402.

<sup>93</sup> Whittemore v. Cutter, 1 Gall. R. 429.

act rather ministerially than judicially, and upon the representation of the applicant, without entering into the question of right, and there seems to be no good reason why, on a like ex parte application, the patent may not be surrendered, and cancelled of record, if no misconduct be imputable to the patentee in taking it out. And in such case, as the exclusive right is not to exceed fourteen years, the second patent may be limited according to circumstances, and thereby secure, both to the patentee and the public, their respective rights." <sup>94</sup>

This doctrine was afterwards distinctly adopted by the Supreme Court.<sup>95</sup>

In confirmation of the construction thus given to the patent law of 1793, the fifth section of the additional law of 1832 was passed, by which it is enacted that "whenever any patent shall be invalid or inoperative, by reason that any of the terms and conditions prescribed in the third section in the said act (of 1793) have not, by inadvertence, accident or mistake, and without any fraudulent or deceptive intention, been complied with on the part of the said inventor, it shall be lawful for the secretary of state, upon the surrender to him of such patent, to cause a new one to be granted to the said inventor,

<sup>94</sup> Morris v. Huntington, 1 Paine, 355.

<sup>&</sup>lt;sup>95</sup> Townsend and Grant v. Raymond, 6 Pet. S. C. R. 220. Shaw v. Cooper, 7 Pet. S. C. R. 292.

for the same invention, for the residue of the period then unexpired, for which the original patent was granted, upon his compliance with the terms and conditions prescribed in the said third section of said act."

The law was thus put upon a liberal footing in respect to patentees, and the act of 1836, section 13, makes a similar provision. It provides, that, "whenever any patent shall be inoperative or invalid, by reason of a defective or insufficient description or specification, or by reason of the patentee claiming in his specification, as his own invention, more than he had or shall have a right to claim as new; if the error has or shall have arisen by inadvertency, accident or mistake, and without any fraudulent or deceptive intention, it shall be lawful for the commissioner, upon the surrender to him of such patent, and the payment of the further duty of fifteen dollars, to cause a new patent to be issued to the said inventor, for the same invention, for the residue of the period then unexpired, for which the original patent was granted, in accordance with the patentee's corrected description and specification. And in case of his death or any assignment of the original patent, a similar right shall vest in his executors, administrators or assigns. And the patent so waived, together with the corrected description and specification, shall have the same effect and operation in law, on the trial of all

actions thereafter, for causes subsequently accruing, as though the same had been originally filed in such corrected form, before the suing out of the original patent."

### CHAPTER XII.

Signing of the Specification. Attestation. Oath. Delivery of Drawings, Models and Specimens. Petition. Fees.

- Sec. 1. Signing of the Specification. Attestation.
  - 2. The Oath.
  - 3. Delivery of Drawings, Models and Specimens.
  - 4. The Petition.
  - 5. Payment of the Fee.

Sec. I.—Signing of the Specification. Attesta-

The third section of the act of 1793 required that the specification should be signed by the inventor and attested by two witnesses. The act of 1836 makes a slight alteration by providing, section 6, "that the descriptions and drawings, signed by the inventor and attested by two witnesses, shall be filed in the patent office." The former act said

nothing of the drawings being signed by the applicant; but the signing of the specification referring to the drawings is in effect attesting the latter. Whether a distinct signature will be required under this law remains to be decided. None of the acts on this subject have required the applicant to affix a seal to the specification.

### Sec. II.—THE OATH.

It seems to be reasonable that a patent should not be granted except upon probable grounds of a right. The law of 1793, therefore, required that the applicant, "before he could receive a patent, should swear or affirm that he did verily believe that he was the true inventor or discoverer of the art, machine or improvement for which he solicited a patent, which oath or affirmation might be made before any person authorized to administer oaths." The substituted law of 1836, section 6, varies a little from the former law on this subject. It provides that "the applicant shall make oath or affirmation that he does verily believe that he is the original and first inventor or discoverer of the art, machine, composition or improvement, for which he solicits a patent, and that he does not know or believe that the same was ever before known or used; and also of what country he is; which oath or affirmation may be made before any person authorized by law

to administer oaths." The phrase, "original and first inventor," is substituted for that of true inventor in the act of 1793. That part of the oath relating to the invention being ever before known or used, is added, and not superfluously, for it often happens that a man truly invents a machine, and then finds out that some one had previously invented the same machine. The last part, stating of what country the applicant is, was also added, the purpose, under the law of 1836, being to determine the see to be paid. Under the former law the citizenship of the applicant was material, for unless he was a citizen of the United States or resident for two years, he could not take out a patent. But it did not intimate what proof of either fact was to be given. It was a frequent practice to insert the fact of citizenship or residence in the affidavit. We observe that this oath is not absolute, that the applicant is the original inventor; he is required to swear that he verily believes himself to be such; for though he may positively know whether he invented the machine, he cannot know certainly whether he is the original and first inventor.

The law of 1836, s. 15, provides "that whenever it shall satisfactorily appear that the patentee, at the time of making his application for a patent, believed himself to be the first inventor or discoverer of the thing patented, the same shall not be held to be void on account of the invention or discovery, or

any part thereof having been before known or used, in any foreign country, it not appearing that the same or any substantial part thereof had been patented or described in any public work."

This is an alteration of the law on the subject of the novelty of the invention, of some importance; but it does not affect the oath, since, notwithstanding this provision, the applicant must, at the time of making his application, believe himself to be the first inventor. If, before making his application, he learns that the thing had been already invented and used abroad, though not patented or described in any printed publication, he cannot take the oath; but if he learns it subsequently, it seems that, according to the above section, this will not invalidate his patent.

The provision as to the oath is in the alternative, that is, that the applicant is the inventor or discover; and this suggests the question whether the petitioner must make oath, in the words of the law, that he believes himself to be the inventor or discoverer, or to use one of those terms only, which he considers to be most applicable; for though both words may be applicable to some patentable subjects, only one of them is so to others, since it would be absurd to describe one as being the discoverer of a new threshing machine or loom, though, in regard to compositions of matter, the word discovery is, perhaps, generally the more applicable. As we cannot

suppose the law to intend to insist rigidly on the abuse of words, the more reasonable construction is, that the applicant may use both or either of the words in his oath, as he may suppose one or the other only, or both of them, to be appropriate.

In an action for the violation of a patent right, it appeared that the oath taken by the patentee was, that he was the true "inventor or improver of the machine." It was held, by Mr. Justice Story, that the oath taken by the inventor not being conformable to the statute, formed no objection to a recovery in the action. "The taking of the oath was but a prerequisite to the granting of the patent, and in no degree essential to its validity." According to this decision, therefore, the form of the oath is not of great importance, for if the commissioner of patents objects to it, the inaccuracy is corrected at once; if no objection is made and the patent is granted, its validity will not be affected by any inaccuracy in the form of the oath.

The form of the oath in England differs from ours only by inserting the allegation that the inventor, "after considerable application and expense, hath invented," &c. and "which invention, he believes, will be of general benefit and advantage." It does not allege the citizenship of the applicant. The

<sup>&</sup>lt;sup>1</sup> Whittemore v. Cutter, 1 Gallison, 429.

omission of the first of these allegations, in the American form, is evidently an improvement; since it is immaterial whether the inventor made the invention after considerable application and expense, or by mere accident, and without any application and expense at all. The other allegation, of a belief that the invention will be of general benefit and advantage, seems to be superfluous, though inventors make it, no doubt, very readily and conscientiously.

# Sec. III.—Delivery of Drawings, Models and Specimens.

By the law of 1836, s. 6, the specification must be accompanied with a drawing or drawings and written references, where the nature of the case admits of drawings, and with specimens of ingredients and of the composition of matter, sufficient in quantity for the purpose of experiments, where the invention or discovery is of a composition of matter. The law of 1793, s. 3, was substantially the same.

The same section of the law of 1836 requires that the inventor shall furnish a model of his invention, in all cases which admit of representation by model, of a convenient size to exhibit advantageously its several parts. This is a variation from the former act of 1793, s. 3, which required a model, "pro-

vided the secretary should deem such model to be necessary."

### Sec. IV.—THE PETITION.

By the act of 1836, section 6, "Any person or persons, having discovered or invented any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement on any art, machine, manufacture or composition of matter, not known or used by others, before his or their discovery or invention thereof, and not at the time of his application for a patent, in public use or on sale, with his consent or allowance, as the inventor or discoverer, and shall desire to obtain an exclusive property therein, may make application in writing to the commissioner of patents, expressing such desire, and the commissioner, on due proceedings had, may grant a patent therefor."

The provisions of the act of 1793, s. 1, on this subject were not literally the same, though they were substantially,<sup>2</sup> for the above section is merely an expression of the construction already put upon the former act, excepting that part which directs the application to be addressed to the commissioner of patents instead of the secretary of state.

<sup>&</sup>lt;sup>2</sup> See exposition of the act of 1793, by Mr. Justice Story, supra, pp. 156, 157.

#### Sec. V.—THE FEE.

A patent is, as we have seen, a reward for a meritorious consideration, and a grant for a valuable one,3 and the laws by which provision is made for granting these monopolies are founded on a public policy peculiar to useful inventions and discoveries. The practice of selling monopolies, or granting them, except on these grounds, was expressly abolished in England by the statute of 21 James I. c. 3, and is inconsistent with the sound principles of legislation, as at present very generally admitted. It is not consistent with those principles to demand any price in money from an inventor, as the whole or a part of the consideration for the exclusive privilege granted to him. And yet it is not a little remarkable that in both England and France the sum paid by the inventor is considered to be in part the price of his privilege, and is frequently so represented by the persons examined before the committee of the House of Commons in 1829.

The patent laws of the United States are more in conformity with the principles above stated. The law of 1836, section 9, provides "that before any application for a patent shall be considered by the commissioner, the applicant shall pay into the

treasury of the United States, or into any of the deposite banks to the credit of the treasury, if he be a citizen of the United States, or an alien and shall have been resident in the United States for one year next preceding, and shall have made oath of his intention to become a citizen thereof, the sum of thirty dollars; if a subject of the king of Great Britain, the sum of five hundred dollars; and all other persons, the sum of three hundred dollars. And the moneys received into the treasury under this act shall constitute a fund for the payment of the salaries of the officers and clerks, and all other expenses of the patent office."

One reason of the distinction between the fees paid by Americans and foreigners is, I presume, the greater fees paid for patents abroad, and the amount demanded of a subject of Great Britain is greater than that demanded of other foreigners, because a greater sum is demanded in England than in other foreign countries. Another motive may be to prevent patents being taken out by foreigners for inconsiderable inventions.

The fee is graduated upon the principle of merely defraying the expenses of the patent office out of the contributions made by the patentees. This is the utmost extent to which the exaction can be justified, and it is questionable whether it ought not to stop short of this. The granting of patents is a matter in which the public has as great an interest

on one side, as patentees have on the other; and if the latter are required to defray one half of the expense of clerk hire and other expenses incidental to the executive administration of these laws, it is quite their full proportion, especially since they are put to the expense of models to be deposited in the patent office, merely for the public benefit, and not at all for their own. This fee, as fixed by the law, is not a material obstacle to the beneficial operation of the patent laws.<sup>4</sup>

The exactions in France are higher, being divided into a tax (taxe) and expenses (frais), the latter being between nine and ten dollars, (fifty francs.) The tax varies with the duration of the monopoly, and thus, as well as by the name, countenances the construction that it is in part the price of the monopoly. For a patent for five years it is three hundred francs, for ten, eight hundred, and for fifteen, fifteen hundred; an amount sufficient to be a material obstacle in the way of the beneficial operation of

<sup>&</sup>lt;sup>4</sup> As small as the fee is in the United States, the committee of Congress who reported the law of 1836, stated that the surplus accruing from this fee is 152,000 dollars. The same committee report that the average annual number of patents issued from 1790 to 1800 was 26; from 1800 to 1810, 91; from 1810 to 1820, 200; and during the last ten years preceding the time of making the report, 535; and that the number in 1835 was 776; and that the whole number issued at the patent office up to March 31st, 1836, was 9,731, being more than double the number issued in France or England during the same period.

the provisions of the law intended for the encouragement of inventive genius.<sup>5</sup>

The discouragement interposed by the exactions under the English patent law is still more oppressive, the expense of obtaining a patent for England being about six hundred and ten dollars; for England and Scotland, ten hundred and sixty-five dollars; for England, Scotland and Ireland, seventeen hundred and fifty dollars.6 This large tax has contributed materially to diminish the usefulness of the English patent law.7 It ought to be kept in mind by legislators that the persons most likely to make mechanical inventions, and to whom, in fact, the public is mostly indebted for them, are generally not able to bear heavy pecuniary burthens. The consequence of imposing such burthens is, that they often entirely lose the fruits of their ingenuity by not being able to take out patents, or are obliged to throw a greater part of them into the hands of persons of wealth, to whom they are under the necessity of resorting to make the advances necessary for securing the privilege.

If it be alleged in justification of these exactions, that they discourage applications for patents for

The annual revenue from patents in France was stated by M. Renouard, in 1825, to be about 15,000 dollars. C. 3. § 3. p. 162.

<sup>6</sup> Report of Com. of House of Com. 1829, App.

<sup>&</sup>lt;sup>7</sup> Kent's Comm. v. 2, p. 270.

frivolous inventions, it may be replied that a much smaller tax would be amply sufficient for this purpose. But, in truth, this is no justification; first, because frivolous patents are of no public injury, and, secondly, because the burthen weighs very unequally, being a slight obstacle to a wealthy individual or company, but an absolute prohibition to a mechanic without capital.

### CHAPTER XIII.

Proceedings in issuing Patents.

- Sec. 1. Authority of the Commissioner of Patents.
  - 2. Appeal to Examiners.
  - 3. Conflicting Applications.
  - 4. Signature.
  - 5. Recording.

# Sec. I.—Authority of the Commissioner of Patents.

By the act of 1793, it was made the duty of the secretary of state to cause patents to be issued, the patent being submitted to the attorney general, and by him certified to be made out in conformity to the law, before being signed by the President. The law

of 1836 has assigned the duty of superintending the issuing of patents to the commissioner of patents. The seventh section of that law provides, that on an application being made for a patent, and a specification filed, and the fee paid, "the commissioner shall make, or cause to be made, an examination of the alleged new invention or discovery; and if on such examination it shall appear that the same had been invented or discovered by any other person in this country prior to the alleged invention or discovery thereof by the applicant, or that it had been patented, or described in any printed publication in this or any foreign country, or had been in public use, or on sale with the applicant's consent or allowance prior to the application, if the commissioner shall deem it to be sufficiently important, it shall be his duty to issue a patent therefor. But whenever, on such examination, it shall appear to the commissioner that the applicant was not the original and first inventor or discoverer thereof, or that any part of that which is claimed as new had before been invented or discovered or patented, or described in any printed publication in this or any foreign country, as aforesaid; or that the description is defective and insufficient, he shall notify the applicant thereof, giving him briefly such information and references as may be useful in judging of the propriety of waiving his application or of altering his specification to embrace only that part of the invention or discovery

which is new. In every such case, if the applicant shall elect to withdraw his application, relinquishing his claim to the model, he shall be entitled to receive back twenty dollars, part of the duty required by this act, on filing a notice of such intention in the patent office."

According to the phraseology of the statute of 1793, by which Mr. Justice Story suggests that the intention may have been to prevent insufficient specifications, the secretary of state and attorney general appear to have been invested with a discretionary authority on the subject of issuing patents; but that act did not prescribe the particular questions upon which it was the duty of one or the other of these officers to decide. It was provided that on application, "it should be lawful for the secretary to cause letters patent to be made out," which should be "delivered to the attorney general to be examined, who, if he found the same conformable to that act, should certify accordingly." The law accordingly admitted of the construction that it was left to the discretion of the secretary of state whether to cause the patent to be made out,2 and the attorney general, if he found the patent in any respect not conformable to law, might withhold his certificate,

<sup>&</sup>lt;sup>1</sup> Whittemore v. Cutter, 1 Gall. 429.

<sup>&</sup>lt;sup>2</sup> See Whittemore v. Cutter, 1 Gall. R. 429.

and thus prevent the issuing of the patent. But, in practice, neither of those officers ever undertook to form any opinion of the originality, novelty, importance, or usefulness of the invention, or the sufficiency of the specification. The agency of those officers in issuing patents was considered to be merely ministerial. French patents contain an express provision that the government does not, by issuing the patent, intend to guaranty the novelty or usefulness of the invention; though an examination is made of the specification and drawings. In England, the agency of the attorney general, in regard to the issuing of patents, is considered to be merely ministerial.4 In one respect, however, a discretion is exercised in England by the attorney general, in the issuing of patents, namely, in determining the time within which the specification is to be filed. A compliance with the terms of the patent, in this particular, is considered to be material to its validity, but no other point is predetermined which affects the validity of the patent.

It is evident that the judgment of any officer of the government, on the novelty and originality and utility of the invention, and the sufficiency of the

<sup>&</sup>lt;sup>3</sup> It has been suggested that the attorney general could not be supposed to examine every specification critically. North Am. Rev. v. 23, p. 302.

<sup>4</sup> Grant v. Raymond, 6 Pet. S. C. R. 241.

specification, must be formed upon very superficial grounds. In the United States, for instance, the commissioner must pass upon from two to three patents in a day upon an average; a time scarcely sufficient to enable him to understand the specification, supposing him to have some previous knowledge of the subject of the invention. He cannot, therefore, be expected to reject the application except in a very plain case.

## Sec. II.—APPEAL TO EXAMINERS.

The law of 1793 made no provision for an appeal from the decision of the secretary of state rejecting a claim for a patent, and in practice, as we have seen, no claim was rejected. The only particular provision for any preliminary decision on the claim, was by the ninth section, relating to conflicting claims. The act of 1836, section 9, goes on to provide for an appeal from the decision of the commissioner. If the applicant, in case of a decision by the commissioner against him, "shall persist in his claim for a patent, with or without any alteration of the specification, he shall be required to make oath or affirmation anew," as at the time of his applica-"And if the specification shall not have been so modified as, in the opinion of the commissioner, shall entitle the applicant to a patent, he may, on appeal, and upon request in writing, have the deci-

sion of a board of examiners, to be composed of three disinterested persons, who shall be appointed for that purpose by the secretary of state, one of whom to be selected, if practicable and convenient, for his knowledge and skill in the particular art, manufacture or branch of science to which the alleged invention appertains, who shall be under oath or affirmation for the faithful and impartial performance of the duty imposed upon them by said appointment. Said board shall be furnished with a certificate, in writing, of the opinion and decision of the commissioner, stating the particular grounds of his objection, and the parts of the invention which he considers as not entitled to be patented. And the said board shall give reasonable notice to the applicant, as well as to the commissioner, of the time and place of their meeting, that they may have opportunity of furnishing them with such facts and evidence as they may deem necessary to a just decision; and it shall be the duty of the commissioner, to furnish to the board of examiners such information as he may possess relative to the matter under consideration. And on an examination and consideration of the matter by such board, it shall be in their power, or of a majority of them, to reverse the decision of the commissioner, either in whole or in part, and their opinion being certified to the commissioner, he shall be governed thereby, in further proceedings to be had on such application."

applicant is to pay twenty-five dollars towards the expenses of this examination, and the examiners are to receive not exceeding ten dollars each for their services.

The small compensation fixed for these examiners will evidently prevent the constitution of a competent board and a thorough investigation; for a common laborer, supposing him to be competent, could hardly, at this rate of compensation, afford the time for an investigation of such a case. The rate of compensation fixed upon shows that only a very hasty and superficial trial is intended by the statute; and accordingly that it is not intended that the board shall reject the claim except in a very plain case. And this is all that is expedient, for a thorough trial before a competent tribunal would be exceedingly expensive—as much so as that of patent cases ordinarily—and after all not very satisfactory. To produce a full and thorough investigation of a patent case, presenting questions no more complicated and difficult than are met with in such cases generally, it is necessary not only to have a very able tribunal, but also all the evidence bearing upon the question, which can be collected by the activity and sagacity of opposing parties spurred on by conflicting interests and other excitements, together with the suggestions and arguments of acute and learned advocates. The proceedings provided for by this statute do not prevent such a trial subsequently, if the patent be granted; for it would be against all analogy that others should be bound by proceedings of which they had no notice. The decision of the board against the applicant is final, since his patent is denied; but if it is in favor of a grant of the patent, he still stands upon the same ground as if no preliminary trial had taken place, except the weight, more or less, of the decision of the examiners; for any one may infringe his patent right and dispute its validity in an action brought by the patentee for the infringement. examiners, then, will very naturally lean in favor of the applicant, and give him the advantage of all doubts, and all presumptions that can be made in his favor, since this course can work no material injury; whereas, by adopting a different one, a great and irreparable wrong might be done. In this view and with such a course of proceeding, this provision may be very useful in preventing the issuing of patents to which the applicants have no colorable ground of claim.

# Sec. III.—Conflicting Applications.

The subject of the preceding section is a conflict between the claim of the patentee and the supposed rights of the whole community. The next inquiry relates to an interference of the claim of the applicant with that of other individuals for the same exclusive privilege. The questions do not exclude each other, since two several applicants might apply for a patent which the commissioner might be of opinion ought not to be granted at all, and the questions would then be whether it ought to be granted at all, and, if so, which has a good claim for it.

On the subject of interfering claims, the law of 1793, section 9, provided for an arbitration, one arbitrator to be appointed by each applicant, and the third by the secretary of state. The award of the arbitrators was held not to be conclusive upon any question excepting that of issuing the patent.5 The act of 1836, section 8, provides for the case of interfering applications, and also that of an application interfering with an unexpired patent. "Whenever an application shall be made for a patent, which, in the opinion of the commissioner, would interfere with any other patent for which an application may be pending, or with any other unexpired patent which shall have been granted, it shall be the duty of the commissioner to give notice thereof to such applicants or patentees, as the case may be; and if either shall be dissatisfied with the decision of the commissioner on the question of the priority of right, or invention, on a hearing thereof, he may appeal from such decision, on the like terms and conditions

<sup>\*</sup> Stearns v. Barrett, 1 Mason's R. 153.

as are provided," in case of a rejection of an application in other cases, "and the like proceedings shall be had to determine which or whether either of the applicants shall be entitled to a patent as prayed for."

But in this case the decision of the examiners is not final, as it is in that of the rejection of a claim where there are not opposing parties. By the sixteenth section of the same act of 1836, "Whenever there shall be two interfering patents, or when a patent, on application, shall have been refused on an adverse decision of a board of examiners, on the ground that the patent applied for would interfere with an unexpired patent previously granted, any person interested in such patent, either by assignment or otherwise, in the one case, and any such applicant in the other case, may have remedy by bill in equity; and the court having cognizance thereof, on notice to adverse parties and other due proceedings had, may adjudge and declare either the patents void in whole or in part, or inoperative and invalid in any particular part or portion of the United States, according to the interest which the parties to such suit may possess in the patent, or the inventions patented, and may also adjudge that such applicant is entitled, according to the provisions and principles of this act, to have and receive a patent for his invention, as specified in his claim, or for any part thereof, as the fact of priority of right or invention

shall in any case be made to appear. And such adjudication, if it be in favor of the right of such applicant, shall authorize the commissioner to issue such patent, on his filing a copy of the adjudication, and otherwise complying with the requisitions of this act. Provided, however, that no such judgment or adjudication shall affect the rights of any person except the parties to the action and those deriving title from or under them subsequent to the rendition of such judgment."

Under this section all cases of applications interfering with unexpired patents, and of patents interfering with each other, are made subject to judicial investigation by bill in equity. If either party is interested exclusively in a patent applied for or granted, only in respect to a particular district, the decision is binding only co-extensively with such a district. In case an assignee of an unexpired patent for a district, opposes the grant of a patent, and the court decides in favor of the grant, the validity of the patent is thereby established, it should seem, as between the parties and their assigns in respect to such district, though it is open to dispute in any other; and so it may be open to be disputed in that district by any one not a party to the proceeding in equity. It is possible, accordingly, that contrary decisions may be given in different districts between different parties interested in the same patents, and this fact is not the ground of any objection to this

provision of the law; since any provision which would be binding upon others than parties to the proceedings, would open a door to collusive suits. And as to inconsistencies of decisions in different districts on the same patent, it is evident that different decisions in reference to the same patent in different districts may be made, without any inconsistency in the verdicts or adjudications, since each verdict and adjudication must be determined by the evidence given in each case, and this may be such as to show the validity of the patent in one district, and its invalidity in another.

# Sec. IV.—SIGNATURE.

Under the law of 1793, s. 1, patents were signed by the president. As the signing is a mere ministerial act, the responsibility as to granting the patent having been formerly with the secretary of state and attorney general, and being, under the act of 1836, with the commissioner of patents, there seems to be no particular propriety in assigning the duty of signing patents to the president; for considering it to be a grant, Congress may authorize any officer or person to execute the document by which it is made. The English patents are signed by the king, which was probably the precedent followed in the act of 1793 in assigning the same duty to the president. It does not appear that the same inconvenience has

been experienced in the United States as in England in obtaining the signature. From the testimony given before the committee of the House of Commons, in 1829, it seems that patents are often delayed for the royal sign-manual on account of the sickness of the king, or other hindrance. It is represented by the witnesses that despatch in obtaining the patent depends very much upon the vigilance and activity of the applicant; they say it is a race between different applicants. No complaint of delay on this score has been made in the United States, and despatch has not been of the same importance here as in England, where the validity of the patent, on the score of the novelty of the invention, or the precedence of one patent to another, often depends on despatch in getting the application through the offices, whereas in the United States the delay of the signature does not affect the patent right, since, as has been already stated, the inventor is not ousted of his right if he himself is guilty of no neglect, though twenty persons, getting some knowledge of his invention, should hasten to pirate it.

As the president has many important duties, it seems to be expedient that the duty of signing patents should be assigned to some other officer, not to relieve applicants from any embarrassment, occasioned to them in consequence of this duty belonging to the president, but for the more convenient official despatch of this branch of the administration

of the laws. The act of 1836, s. 5, accordingly provides that patents issued from the patent office "shall be issued in the name of the United States, and under the seal of said office, and be signed by the secretary of state, and countersigned by the commissioner of said office." The certificate of the attorney general is dispensed with by this act.

# Sec. V.—Recording.

It is provided by the act of 1836, s. 5, that "patents shall be recorded together with the descriptions, specifications and drawings, in said [patent] office in books to be kept for that purpose."

The recording is in effect the publication of the patent, including the specification. In England, as we have seen, the patent is issued before the specification is filed. The patent gives only a very general description of the subject; from which the public can hardly have notice of the invention, and artists are not thereby enabled to avail themselves of it. The enrollment of the specification is there required by the patent to be made within a certain

It has been suggested that under the law of 1793 it was contrary to law to issue the patent before it was recorded, though it was said to be a frequent practice so to issue patents. North Am. Rev. v. 23, p. 302. The act of 1836, by a change of phraseology, seems to avoid any objection to the validity of the patent on this score

time, varying in different patents from one to six months, or longer. The English courts are very strict in requiring a compliance with the condition as to enrollment,8 and held that, except by act of parliament, it cannot be dispensed with.9

## CHAPTER XIV.

Duration, Surrender, Renewal and Prolongation of Patents.

The act of Congress of 1836, s. 5, following that of 1793, s. 1, provides that the commissioner of patents may make out letters-patent granting to the petitioner or petitioners therefor, his, her, or their administrators, executors or assigns, "for a term not exceeding fourteen years, the full and exclusive right

<sup>&</sup>lt;sup>7</sup> Heathcote ex parte Rep. of Arts, Second Series, v. 29, p. 252, Westm. Rev. Jan., 1835, Foster's Am. Ed. p. 102; Watson v. Pears, 2 Camp. 294; Castle v. Burditt, 3 T. R. 623; Glassington v. Rawlins, 3 East, 407.

<sup>&</sup>lt;sup>8</sup> Ex parte Beck, 1 Bro. C. C. 578.

<sup>&</sup>lt;sup>9</sup> Koops ex parte, 6 Ves. 599. But of all the patents granted during the reign of Geo. 3, down to 1816, being 3256, it has been stated that parliament had not dispensed with the enrollment of the specification, in more than two or three instances. Rep. of Arts, Second Series, v. 29, p. 253, 319.

and liberty of making, using, and vending to others to be used, the said invention or discovery."

The clause, "not exceeding fourteen years," is the same that is used in the sixth section of the English statute of monopolies. Mr. Godson construes that clause in the English act, to leave it optional with the king, when he sees occasion, to grant a patent for less than fourteen years.

Though the phraseology of the act of Congress is not literally inconsistent with the construction that the commissioner may exercise a discretion as to the period for which the patent is granted, yet in practice, under the similar provision of the statute of 1793, authorizing the secretary of state to cause patents to be issued, the inventor, if he brings himself within the terms of the law as to the originality, importance and utility of his invention, and takes the requisite steps to obtain a patent, has been considered to be entitled to a grant of a patent for the full term of fourteen years, excepting in the case of the surrender and renewal of the patent, in which case the new patent is only for the unexpired part of the term for which the original patent was granted. The only case then, in which the patent would be granted for a less term, would be that of an application to that effect, an application not likely to be

made, as there is not, by our law as by that of France, a difference of fee or tax, according to the length of the period of the exclusive privilege.

Where the first patent is void through mistake or inadvertence in drawing up the specification, a new one may be taken out for the unexpired part of the period of fourteen years.<sup>2</sup> It has heretofore been a frequent practice in England and the United States, to apply to the legislative authority for the prolongation of the term of the patent. The usual reason alleged for such an application is that the patentee has not been reimbursed his expenses, or has not reaped the advantages to which he is fairly entitled from his invention. By a standing rule of the House of Lords, applications for confirming or prolonging the term of patents are required to be made only at a session of parliament, commencing within two years before the expiration of the original term; and by another rule such applications are to be entertained only when made by the original inventor or his personal representatives.3 By the terms of the grant of a prolonged term the patent is still made subject to all the objections to which it was liable before such prolongation.4

<sup>&</sup>lt;sup>2</sup> Supra, ch. XI. s. 10, act of 1836. Grant v. Raymond, 6 Pet. S. C. R. 218. Ames v. Howard, 1 Sumner's Rep. 482.

<sup>&</sup>lt;sup>3</sup> Dwarris on Statutes, 358.

<sup>4</sup> Gods. Pat 158. Hesse v. Stevenson, 3 Bos. & Pul. 565.

By the second section of the additional act of Congress, passed on the 3d of July, 1833, it was provided that application to Congress to prolong or renew the term of a patent, should be made before its expiration, and should be notified at least once a month, for three months before its presentation, in two newspapers in which the laws of the United States were published in the State or territory in which the patentee resided; and that the petition should set forth particularly the grounds of the application; and should be verified by oath, should be accompanied by a statement of the ascertained value of the invention, and of the receipts and expenditures of the patentee, so as to exhibit the profit or loss arising therefrom.

This law was enacted to prevent the recurrence of a case like that of the renewal of Oliver Evans's patent for his hopperboy so long after the expiration of the original term, that others had, after its expiration, erected hopperboys, the use of which, it was held, was stopped by the renewal of the patent.<sup>5</sup>

But the law of 1836, sect. 18, makes a new provision on this subject, that a patentee may make application to the commissioner in writing for the extension of his patent, setting forth the grounds of his application, and on payment of forty dollars into the

treasury by the patentee, the commissioner shall cause the application to be published in one or more of the principal papers in Washington, and such other papers as he may deem proper, published in the section of the country most interested against the extension of the patent, with notice of the time and place of considering the application, that any person may appear and show cause why the extension should not be granted. And the secretary of state, the commissioner of patents, and the solicitor of the treasury, shall constitute a board to determine on the application, on hearing the evidence for and against the same, to which board the patentee must produce a statement in writing under oath of the expenditures for and value and profits of the invention. And if the board shall be satisfied that the patentee, without his fault or neglect, has failed to obtain, from the use and sale of the invention, a reasonable remuneration for the time, ingenuity and expense bestowed on the same, and the introduction thereof into use, and that the term should be extended, it shall be the duty of the commissioner to extend the patent for the additional term of seven years, by making a certificate to that effect on the patent, which certificate, and also that of said board, are to be recorded in the patent office, and such renewal shall extend for the benefit of assignees and grantees to the extent of their respective interests in the patent. But no grant of such extension is to be made after the expiration of the original term.

This provision is, no doubt, intended to supersede, in some degree, applications to the legislature for the extension of patents. Whether the legislature will entertain applications in the nature of an appeal from the decision of the board, remains to be determined.

The provision seems to be an improvement in the law of patents. It is questionable whether the provision as to assignees should not have been more explicit, for as the professed object is to reimburse and reward the inventor and those who have been at the expense of introducing the invention, the benefit of the extension ought to be confined to such parties as far as this may be practicable, consistently with the agreements of the patentee with other assignees. Perhaps, however, the discrimination between different assignees cannot be made by law, on account of the difficulty of framing a provision to meet the case. As the law now stands, the patentee, in order to secure to himself the benefit of this provision, should provide for it by a stipulation in his contracts with others for licenses, or a sale of the shares in the patent.

### CHAPTER XV.

Property in Patents and in Unpatented Secrets.

The interest of a patentce in his patent is a species of personal property, created by grant under the authority of the State, and one that could not exist without a positive law for its support. It is true that an invention that could be used in secret, without an exposure of the process by the exhibition of the products, might be retained and its advantages enjoyed by the inventor, independently of a law for its protection. But the patent law does not deprive the inventor of any advantage of this description. He may still, notwithstanding the law, guard his secret and enjoy its advantages as he might have done before the law was enacted. He is not required to make and publish his specification. But then it would not be a property; it would, after all, be only his secret.1

It is obviously impossible for an inventor to avail himself of the advantages of his improvement in this way in regard to most inventions, and it is very difficult to do it in any case. The process will sooner or later be divulged by the persons he employs, or

<sup>&</sup>lt;sup>1</sup> Godson, p. 171.

will be liable to be detected in the results or products. The improvement made in the art of bleaching, mentioned in Tenant's case,2 was practised six years before the patent was applied for. In other cases an inventor might expect to carry on his manufacture in secret for a still longer period. Dr. Swainson kept the secret of making his vegetable syrup for more than thirty years. In the few instances, however, in which there would be any chance of keeping the secret, there would be the constant inconvenience of the risk of detection and the consequent loss of the advantages of the discovery. Accordingly very few inventors decline the terms proposed by the patent laws for a temporary monopoly, as the price of the full disclosure of their discoveries, with the expectation of being able to reap the advantages of them for a longer period than that allowed by the statute by carrying on a secret manufacture.

There have been instances of suits and applications for injunctions, to protect inventors in the advantages of unpatented inventions, but without success. These proceedings have generally related to medicines. A bill for an injunction and an account was filed against a manufacturer and vendor of Swainson's vegetable syrup. The bill stated that

Dav. Pat. Cas. 429.

Isaac Swainson was, for more than thirty years before his death, the sole proprietor of the secret or recipe for preparing the medicine called Velno's Vegetable Syrup, which he had purchased for £6000, and by his will had bequeathed to the plaintiff, who, since his decease, had continued to make the same preparation as specified by the recipe, and made great profit; and would have made much greater, if the defendant had not imposed on the public a spurious composition under the same name, which his advertisements stated to be the same in composition and quality as that made by Swainson and the plaintiff. The bill prayed an account and injunction, &c. The defendant demurred generally. Sir Thomas Plummer, V. C. "This bill proceeds upon an erroneous notion of exclusive property now subsisting in this medicine, which Swainson having purchased, had a right to dispose of by his will, and, as it is contended, to give the plaintiff the exclusive right of sale of. If this claim of monopoly can be maintained, without any limitation of time, it is a much better right, than that of a patentee; but the violation of right with which the defendant is charged, does not fall within the cases in which the court has restrained a fraudulent attempt by one man to invade another's property; to appropriate the benefit of a valuable interest in the nature of good-will, consisting in the character of his trade or production, established by individual merit; the other representing

himself to be the same person, and his trade or production the same, as in Hogg v. Kirby,<sup>3</sup> combining imposition on the public with injury to the individual. This is not that sort of case. The observation is correct, that the bill, stating the defendant's medicine to be spurious, asserts it not to be the same as the plaintiff's. The defendant does not hold himself out as the representative of Swainson, setting up a right in that character to the medicines purchased by him; but merely represents that he sells, not the plaintiff's medicine, but one of as good a quality. He is perfectly at liberty to do so. If any exclusive right in this medicine ever existed, it has long expired. The demurrer must be allowed."

Another case occurred, in regard to Dr. James's pills, before Lord Eldon. From the bill in the court of chancery, in 1817, it appeared that by certain articles of agreement between Dr. James, the inventor and proprietor of certain pills for the gout, rheumatism, &c. and Newbery, the plaintiff's deceased father, it was agreed that James should prepare the aforesaid pills, and sell and deliver them to Newbery at a certain rate, to supply his customers, and that James should not sell any of such medicines to any other person, except in the course of his private practice. Newebry was also to be

<sup>&</sup>lt;sup>3</sup> 8 Vesey, 215.

<sup>4</sup> Canham v. Jones, 2 Ves. & B. 218.

instructed in the secret of preparing the pills, but it was not to be disclosed by him except to his representatives after his death. It also appeared that letters patent had been granted, in 1747, to James for the exercise of his invention, and that James had assigned to Newbery, his executors, &c. one moiety of the invention during the term of fourteen years. The agreement contained in the articles was to be continued so long as either of the parties, their executors, &c. or any or either of them, should desire. Newbery bequeathed to the plaintiff all his interest in the preparing and vending the medicines. The defendants had succeeded to the rights of James, who died in 1776. The bill prayed a specific performance of the agreement, and an injunction to restrain the defendants from disclosing the secret of preparing the medicines except to the persons mentioned in the agreement. An injunction was granted only and the sale of the medicines, expressly without prejudice to any question that might be made as to the possibility of sustaining such an injunction. On a motion to dissolve the injunction, Lord Eldon said, "that the difficulty in such a case was, how to decree the specific performance of the agreement. Either it was a secret, or it was none. If a secret, what means did the court possess, of interfering so as to enforce its own orders? If none, there was no ground for interfering. In this case, the medicines in question were the subject of a patent which had

expired; and the agreement which the bill sought to enforce was an agreement by which, independently of the patent, the proprietors had entered into covenants not to sell that which was the subject of the patent, except to each other. But, in order to support the patent, the specification should be so clear as to enable all the world to use the invention so soon as the term for which it has been granted is at an end." Lord Eldon concluded by saying that he thought he ought not to continue the injunction; and that, if he did not mention the case again, his opinion must be considered to be that the injunction must be dissolved.

In the same case, a similar agreement had been made between James and the plaintiff, respecting an invention by James of certain pills called Analeptic Pills, but for which no patent had been obtained. Lord Eldon remarked, that, "with regard to the Analeptic Pills, if the art and method of preparing them were a secret, what signified an injunction, the court possessing no means of determining, on any occasion, whether it had or had not been violated? This court could do nothing but put the parties in a way to try their legal rights by an action. That was the utmost extent to which it would go, and he would not even order the injunction to be continued

Newbery v. James, 2 Meriv. 446.

in the mean time, till an action should be tried. The only way by which a specific performance could be effected would be by a perpetual injunction; but this would be of no avail, unless a disclosure were made to enable the court to ascertain whether it was or was not infringed; for if a party comes here to complain of a breach of injunction, it is incumbent on him first to show that the injunction has been violated."<sup>6</sup>

A motion was made for an injunction to restrain the defendant from making use of or communicating certain recipes for veterinary medicines, and from printing and publishing certain papers of directions for the mode of administering them. The plaintiff, who was the proprietor of the medicines, had employed the defendant as an assistant, under an agreement, by which he was to be instructed in the general knowledge of the business, but was not to be taught the mode of composing the medicines; afterwards the defendant left the plaintiff, and the latter had lately discovered that he had, while in his service, surreptitiously got access to his book of recipes, and copied them, and was selling the medicines, with printed papers for administering them, which were almost literal copies of those composed by the plain-Lord Eldon granted the injunction, upon the

Newbery v. James, 2 Meriv. 446. See also Williams v. Williams, 3 Meriv. 157.

ground of there having been a breach of trust and confidence; but confined it, so as not to prevent the defendant from administering the medicine to any animals then under course, it being stated in the papers of directions, that a sudden discontinuance would be prejudicial.

But though an inventor cannot assert a right of property in an invention independently of the patent law, still he has an interest in his invention for which he proposes to take out a patent, before he has actually taken it out, and such an interest as he may, to some purposes, vindicate in a suit. It has been held, in England, that a man has such a property in his invention before a patent is procured, that if Le agree to inform another person of the secret, who binds himself in a penalty not to avail himself or take any undue advantage of the communication, he may maintain an action for the breach of that contract.<sup>8</sup> In the United States, an agreement for the assignment of a patent right before the patent is taken out, is a matter of familiar practice, and its validity is recognised by the adjudged cases.9

So an agreement on the interest that the parties to the agreement shall respectively have in the patent when taken out, has been held valid. Two

<sup>7</sup> Yovatt v. Winyard, 1 Jac. & W. 394.

Smith v. Dickenson, 3 Bor Pull. 630.

<sup>&</sup>lt;sup>9</sup> Herbert v. Adams, 4 Mason's R. 15.

persons, in order to secure to themselves the benefit of an invention, mutually covenanted that one should have the exclusive use and sale of the machines in Massachusetts and Rhode Island, and the other in the rest of the United States, and that neither should use them in the district of the other, under the forfeiture of a certain sum for each machine so used. They subsequently obtained a joint patent for the invention. It was held, in a suit by the one against the other for a breach of the covenant, that if the patent was void, still the contract was valid. Wilde J. said, "the patent formed no part of the consideration of the contract, for it existed only in contemplation when the contract was made. The most that can be said is, that the contracting parties had, at the time, the expectation of securing the ' profitable use of their invention by obtaining a valid patent, and nothing is averred in the pleadings from which we can infer that this expectation has been defeated or is likely to be."10

Stearns v. Barrett, 1 Pick. 443.

### CHAPTER XVI.

Assignment. Agreement to Assign.

The eleventh section of the act of 1836 provides that "every patent shall be assignable in law, either as to the whole interest or any undivided part thereof, by any instrument in writing; which assignment, and also every grant and conveyance of the exclusive right under any patent, to make and use, and to grant to others to make and use, the thing patented within and throughout any specified part or portion of the United States, shall be recorded in the patent office within three months from the execution thereof."

This varies from the corresponding provision in the act of 1793, s. 4, which provided only for the recording of the assignment of a share, not for that of a license.

The inventor may assign his interest before taking out the patent, for then he has a right which becomes property on the patent being taken out. This right, or inchoate property, has been so far respected in England that the inventor may enforce an agreement made respecting it.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Herbert v. Adams, 4 Mason, 15.

<sup>&</sup>lt;sup>2</sup> Smith v. Dickinson, supra.

An assignment of the right, before the patent is taken out, will according to the report of Dr. Jones, who is familiarly acquainted with the practice at the patent office, enable the assignee to take out the patent originally. But this practice seems to be very questionable. The law requires the oath of the inventor himself, and contains no provision for issuing the patent to any other person except to his personal representatives in case of his decease. The effect, however, of taking out the patent in the name of the inventor and recording the assignment previously made, is the same as issuing the patent in the name of the assignee.

As between the parties to the assignment, it has been held in Massachusetts to be valid without being recorded.<sup>5</sup> But, at least, third parties are not liable to be affected by an unrecorded assignment, since to admit them to be so would render the provision for the recording nugatory. In order to enable the assignee to bring, or join in, a suit upon the patent right, it is necessary that the assignment should be recorded.

It has been intimated that possession and use are material circumstances in considering the validity of a transfer of a patent right as well as that of other

Digest of the Decisions on Patents, 1831, No. 20, p. 26.

<sup>&</sup>lt;sup>4</sup> Herbert v. Adams, 4 Mason R. 15.

Morrill v. Worthington, 14 Mass. R. 389.

personal property. A patentee, having mortgaged the patent right, continued in the notorious use of it until he became bankrupt. Lord Chancellor Eldon was inclined to the opinion that the patent right passed to his assignees, that is, that the title of the mortgagee was not good against the assignees, and ordered an action at law to try the question. It does not appear, however, that it came to a trial at law. In the United States the assignment, in such case, would probably be good if recorded.

On an agreement for the assignment of a patent, it has been held that a covenant to assign a patent right in as full a manner as the inventor had engaged to assign it, to the covenantor, does not necessarily imply that there shall be a covenant of warranty in the assignment.<sup>7</sup>

The defendant covenanted to assign to the plaintiff a sixteenth part of a patent right to a machine for cutting files, of which one Hatch was the inventor and patentee; and on receiving an assignment there-of from Hatch, transferred it to the plaintiff, without having first caused Hatch's assignment to be registered in the office of the secretary of state; this was held not to be a breach of the covenant. The court said, that it was for the plaintiff to cause the assignment of Hatch to be registered, as in cases of convey-

Ex parte Granger, Evans's Statutes, v. 4, p. 67, n.

Morrill v. Worthington, 14 Mass. R. 389.

ance of real estate which the purchaser always procures to be recorded; and that the defendant might legally assign the right which he acquired from Hatch, before such registry was made.<sup>8</sup>

A question on the construction of an assignment, whether it granted the right of one machine only, or that of making, using and vending any number, has been brought before the Supreme Court in Maine. The defendants conv., ed to the plaintiffs "four clapboard machines and two shingle machines, in Dwight and Stone's building, in Livermore, on Androscoggin river; and likewise the patent right for Livermore and Jay, all that is east of the Androscoggin river, and the town of Dixfield; we sell all the above machinery, and right for the above towns, to make, use and vend to others to use, during the term of the patent, which is fourteen years from September 3, 1813." It was contended that only one patent right was intended to be conveyed; to be applied, so far as it was applicable, to both the kinds of machine sold. But it was held, that this was a conveyance not only of the clapboard and shingle machines in Stone's building, and the right to use them, but also of the patent right to construct and use machines of both descriptions within the territory described in the conveyance.9

<sup>&</sup>lt;sup>8</sup> Morrell v. Worthington, 14 Mass. R. 389.

<sup>9</sup> Judkins v. Earl, 7 Greenl. 9.

Where the patentee took a lease of a shop in which was erected a machine patented by himself, with an agreement in the lease to deliver up the premises, including the machine, at the end of the term, in good condition to the lessor, Mr. Justice Washington ruled that this was the consent of the patentee in writing that the lessor should use the machine, himself, or by his servants, or let it to others to be used.10

The act of Congress contains no provision similar to that inserted in the English patents, forbidding the assignment to a greater number than five persons. This limitation in English letters-patent is inserted to prevent the formation of companies, in contravention of the bubble act.

The assignment of rights in a patent that turns out to be void, presents the question whether the assignor can, in such case, compel payment of the price; and, in the second place, whether the assignee, on discovery of the patent being void, shall recover back the price, or any part of it, previously paid by him.

Where the sale is attended with fraud on the part of the assignor, the case is plain; if he sell a right in a patent which he knew to be void, he cannot recover the price, if not paid, and if paid, he is liable to refund it.

<sup>&</sup>lt;sup>10</sup> Reutgen v. Kanowrs and Grant, 1 Wash. C. C. R. 168.