## REDUCING AN INVENTION TO PRACTICE.

There is one stage in the history of an invention to which the law attaches especial significance. It is when the author has made such progress in perfecting it as to acquire a right to a patent, of which no one who comes after him can deprive him, unless he forfeits it by his negligence. He has not only an indefeasible claim to the patent, but should any other person obtain one, it will be utterly void. When he has so far completed his invention, he is commonly said to have reduced it to practice. By this is meant something more than a mere embodiment of it in a visible form. What is implied in the phrase is, however, far from being well settled. A careful study of the judicial decisions leaves it to some extent in obscurity and doubt. The following pages will be devoted to an examination of them, in order to see how far they have determined it.

A brief examination of the English system will be of material service in this undertaking. As was remarked by Judge Story, in *Pennock v. Dialogue*, 2 Peters 1: "Many of the provisions of our Patent Act are derived from the principles and practice which have prevailed in the construction of that of England." "The construction of it adopted by the English courts, and the principles and practice which have long regulated the grants of their patents, as they must have been known, and are tacitly referred to in some of the provisions of our own statute, afford materials to illustrate it.", p. 18.

By the statute, 21 Jac. I. c. 83, commonly called the Statute of Monopolies, all exclusive privileges of the character thus designated, both those already existing, and those which should be afterward granted, were abolished and declared utterly void, with a single exception. Patents for invention were saved from the operation of the act under certain restrictions embraced in the 5th and 6th sections. As the latter embodies the only conditions upon which such patents can now be sustained, it has become customary to speak of the law on this subject as if it were founded on the statute, although it contains an express declaration that the grants derive all their force from the common law. The clause in the 6th section, which contains the restrictions in force at this day, excepts from the condemnation pronounced by the provisions of the act all patents "hereafter to be made of the sole working or making of any manner of new manufactures which others at the time of making such letters patent and

grants shall not use." It is to this single clause that the British courts have been accustomed to look in considering the novelty of litigated inventions, and all their decisions on that point have been made to rest upon the interpretation of

this language.

Two conditions are evidently prescribed by this act, and it has always been held essential that they should be complied with in order to render a patent valid. One is that the patentee should be "the true and first inventor" of what was embraced in his monopoly: It may be observed here that as it had been considered before the passage of the law, that the importer of an invention from abroad, which was "new within the realm," might have a valid patent for it, although he obtained it from others; so it was decided in Edgberry v. Stevens, W. P. C. 35, that he was included within the saving provisions of the statute, and this ruling is still authoritative. It is of more consequence to bear in mind that this condition will not be held to have been broken, although others have made the discovery previous to the patentee, provided he did not obtain his knowledge of it from them, and they have not put it in use, nor received a patent. As was said by Lord LYNDHURST, in Househill Co. v. Neilson, W. P. C. 673: "The first person who discloses that invention to the public is the first inventor." p. 719.

The other requisite to a valid monopoly is that "others did not use" the invention at the time of its being granted. this it has been understood, also, that the supposed discovery has not already come to the knowledge of the community. The reason assigned for this is that the patent constitutes a contract between the patentee and the crown, the consideration of which on the one part is the exclusive privilege conferred on the grantee, and, on the other, the disclosure of a new art or manufacture to the people. If the art or manufacture thus disclosed is already known, and not new, as alleged, there is a failure of the consideration upon which the grant was made, and it is therefore held to be void, as all royal grants are when the representations upon which they were obtained prove to be unfounded. If the invention has been described in any published work before the date of the patent, it is void. This will be the result, also, if it had been in public use. The law to this effect was settled before the stat. 21 Jac. 1, was enacted, and has ever since been recognized. The condition has been incorporated into the patents which contain a clause rendering them void if what is embraced in them "is not a new invention as to the public use and exercise thereof." This clause has been embodied in the grant because it expresses an anciently established condition upon which all monopolies depend. No person ever interpolated such a condition without authority into a royal grant.

A conjecture has been thrown out whether it would not be a sufficient objection to a patent to show that a machine like that embraced in it had been constructed and exposed to observation before it was issued. (W. P. C. 719, note.) On going through all the English cases, however, not one can be found in which such an objection has been sustained where the previously-constructed apparatus had not been employed in actual work. The nearest approach which has been made to a discussion of the subject was in Lewis v. Marking, 1 W. P. C. 493. It there appeared that a machine operating upon the same principle as the plaintiff's had been brought over from America, and had been seen by three or four persons before the date of his patent. No exceptions were taken to the evidence on the ground that it had been kept secret, though it was said that if the plaintiff had seen it, or obtained a knowledge of the invention from it, it would have been fatal to his But Baron PARKE made this remark: "There is no case in which a patentee has been deprived of the benefit of his invention, because another also had invented it, unless he had also brought it into use." In the dearth of any decision to the contrary, Baron Parke's remark may be considered as embodying the English law on this point.

That the use must be in public is settled beyond all dispute. It was resolved as early as 1766, in Dolland's Case, W. P. C. 43; 2 H. B. 470; Dav. Pat. Cas. 172. It was shown by the defense that previous to the plaintiff's originating the optical instrument for which he had his patent, another person had constructed one like it, and had used it. "But it was holden that as Dr. Hall had confined it to his closet, and the public were not acquainted with it, Dolland was to be considered the first inventor." The question was fully discussed also in Carpenter v. Smith, W. P. C. 530; 5 M. and W. 300, in which it was shown that a lock like that in controversy had been placed upon a gate in a public way, where it could be seen by every passenger. Upon a hearing before the full bench, the court held that this was such a use in public as must debar any one from ever after maintaining a patent for it. At the same time they made the distinction which has always been recognized, that there should be a use in public, but not necessarily a use by the public, to give it The law established in these cases has never such an effect. been assailed, but has been uniformly adhered to in every subsequent discussion of the subject.

Where the plea is that the patentee is not the true and first inventor, and evidence is given of the invention having been practiced before it was originated by him, it may become material to show that the practice of it was never discontinued. If after having been in operation for a time it was given up and relinquished, the presumption would be that it had proved incomplete, and was therefore no bar to the patent, It is a great mistake, however, to suppose, as it seems to have been on some occasions, that the primary object of showing that an invention had or had not been in continued public use before the patent was obtained, is to establish, or disprove the completeness of what is alleged to have been a previous embodiment of the invention; or to suppose that the publicity of such previous use has any bearing upon the The claims of the patentee to be the prior inventor are defeated as effectually by evidence that the former author of the improvement continued to use it in private as in public. And even when the question whether the patentee is the first inventor is not under consideration, it is still incumbent on him to satisfy the triers that his discovery was not in public use before he obtained his grant. Accordingly, in Cornish v. Keene, 1 W. P. C. 512, the following language was resorted to by the court, when speaking of what was claimed to have been a previous embodiment of the plaintiff's idea: "If it was known at all to the world publicly, and practiced openly, so that any other person might have the means of acquiring a knowledge of it as well as this person who obtained the patent, then the letters patent are void." tion may have been raised in this case whether the previous employment of the device was not experimental; and the evidence of its having been employed may have been supposed to bear upon that question. But the above extract makes it plain that the evidence of its having been in public use was introduced for an entirely different purpose—that of showing that the alleged invention did not come within the second condition prescribed by the Statute of Monopolies. And there is not the least intimation throughout the report that the question whether the former experiment was a completed one was affected in the slightest degree by the publicity with which it was carried on after having been once insti-

Another case which has been cited on this point is that of Jones v. Pierce, 1 W. P. C. 122, in which it would seem that what was alleged to be an old embodiment of the invention was also held to have been a mere experiment. (See Lord Abinger's remark in Carpenter v. Smith, W. P. C. 530.) If

the utterances of the learned judge who presided are correctly set forth in the report, he was evidently somewhat confused as to the different purposes for which such a prior emdodiment might be shown, and did not distinguish between them. remarks are hardly entitled to any great weight in themselves, therefore, and they should never have been cited as an authority on this subject, after the emphatic condemnation pronounced upon his rulings by all the judges who expressed their opinions before the House of Lords in the case of *House*hill Co. v. Neilson, W. P. C. 673. The following extract from that of Lord Brougham sufficiently exhibits their sentiments: "But suppose it" (the previous invention) " was complete, and suppose it is admitted not to have been a trial, then it is one of the greatest errors that can be committed in point of law, to say that with respect to such an invention as that, it signifies one rush whether it was completely abandoned or not, or whether it was continued to be used down to the very date of the patent. Provided it was invented and publicly used at the time, twenty or thirty years ago, in this case forty years ago, it is perfectly immaterial—not immaterial to the second question, the second condition, namely, whether it was used or not at the time of the granting of the patent, but totally immaterial to the other question, which is equally necessary to be ascertained in the inventor's favor, whether or not he was the true and first inventor." p. 713. from this, it is true, that where it is attempted to be shown that the invention was made by some one else before the patentee, and was embodied in a working apparatus, proof that the use of it was continued, or had been abandoned, may become pertinent, as showing it was a perfected discovery on the one hand, or an unsuccessful experiment on the other. We learn just as distinctly that independently of the issue whether the patentee is the first inventor, and where there is no question whether such previous apparatus was perfect or not, it is essential for another purpose to determine whether such apparatus was or was not in public use; that it is indispensable that it should have been not only in use, but in public use, in order to make it available as a defense. And there is not even an intimation in Jones v. Pierce, far less in Househill Co. v. Neilson, that the publicity of the use is considered to have any bearing upon the inquiry whether such previous apparatus was a perfect and completed discovery.

Where it appears that a patentee has manufactured by a secret process, and sold the product before obtaining his patent, that will be pronounced a use in public. But no principle of law is better settled in England than this, that in order

to avoid a patent on the ground that the invention was in use by others, when it was granted, it must appear that the use was in public. It is only by adhering strictly to this requirement that the public have an assurance that they shall become possessed of the knowledge of the new art, and be rendered certain of sharing the benefits of it.

The views of the profession in this country are by no means so harmonious on this subject. Even the decisions of the courts, on which we must chiefly rely, cannot always be reconciled. One principle may be considered as tolerably well settled, although in conflict with sentiments which have had an extensive prevalence. That principle may be thus expressed:

I. In order to constitute a reduction to practice, the invention must have been embodied in a working machine, capable of being used for business purposes, or if not capable of

that, in something equivalent.

This was most emphatically asserted by Judge Sprague, in Howe v. Underwood, 1 Fish. 160, in which he held this language: "This is important to be understood, because the idea has been carried all along, that if a prior inventor has gone to a certain extent, although he fall short of making a complete machine, practically useful, those who come after have no right to secure to themselves the advantage of the invention. This is not law." p. 166. The question whether the previous invention was an abandoned experiment was also raised in that case, but the passage here quoted was announced as a maxim entirely independent of that consideration. The same learned judge had previously expressed his opinion, in Many v. Sizer, I Fish. 17, in this manner: "Now experiment alone is not sufficient to constitute priority of invention. The article must be completed for public use, and the result must be known, although it is not necessary that it should be actually used by the public." p. 20. He evidently has in mind, in this last clause, the distinction constantly observed between a use in public, and, what has always been regarded as unimportant, a use by the To the same effect as these two decisions are the observations of Judge Clifford, in Seymour v. Osborne, 11 Wall. 516: "He is the first inventor in the sense of the patent law, and entitled to a patent for his invention, who first perfected and adapted the same to use; and it is well settled that, until the invention is so perfected and adapted to use, it is not patentable under the patent law." p. 552. In Pitts v. Wemple, 2 Fish. 10, also it was said by DRUMMOND, J. of the machine which was alleged to have anticipated the patentee's: Vol. XX.-40.