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A BRIEF SURVEY OF THE FIXED LAW OF PATENTS¹

INTRODUCTORY. — This chapter is a bird's-eye view of the main body of the work. It takes up, in order, the main titles and aims to state the general conclusions which are evidenced by the collocation of appellate rulings. Its value lies in affording a comparison of views. The user of the book may examine a question in the light of the quotations from the law. He may draw his own conclusions and then compare them with those of the author. Such a comparison will be helpful whether the conclusion of the one tallies with that of the other or not. What is sought is the true vision — to extricate ourselves from the inert mass of decision and digest and get to higher ground. The aim of this chapter is to enable the practitioner — not the patent specialist alone, but the every-day lawyer, to gather up the living forces of the law and apply them to the solution of immediate problems.

The principles of the patent law are not so difficult or recondite as they are commonly regarded. The common hesitation in approaching a question of patent law is a traditional fear rather than a substantial reality. This book would fail of a main purpose if it did not enable the lawyer in general practice to meet and effectually dispose of the ordinary questions arising in the realm of patents.

This survey should serve another purpose: It should make evident the fact that the patent law of today is the result of a natural, progressive development along broad, sane lines; that it is, in the main, natural, logical, and therefore simple. It should make it evident that the great principles are fixed; and being fixed, that Congress should be slow, very slow, in disturbing the structure by tampering with the statutory foundation upon which it is builded.

ABANDONMENT, §§ 1-20.

It is to be observed at the outset that a patent creates nothing that did not before exist. The patent secures to the inventor, for

¹ The references to cases and sections in this chapter are *inclusive* of the Appendix Chapter, which has section numbering identical with the body of the work.

a definite period, the exclusive right to enjoy what has been created in his own mind, that which already exists; it secures to the public a full disclosure of that which already exists. The common law recognizes no quality of property in such a creation, and consequently there could be no abandonment of that which had no existence as property. The Constitution and the statutes give to invention the character of an inchoate right which the inventor may, by compliance with the statutes, transform into a substantial property right. It follows, then, that abandonment must reside in the acts of the inventor by which he has deprived himself of the right to establish or enjoy the monopoly which he might have secured.

Since abandonment is a forfeiture which places a right beyond possible recall, and since courts do not favor forfeitures, the evidence must be clear and convincing beyond doubt. An invention may be abandoned either before or after application for patent, or even after the patent issues; but there is a wide difference between abandonment of an invention and abandonment of an application. The latter does not necessarily constitute abandonment of the invention at all. An application may be abandoned or forfeited, and renewed repeatedly, so long as the applicant remains within the time and terms of the statute.

While abandonment may occur either in the active or passive voice, it is rare that the evidence shows a positive act. Usually it is a case of sleeping on one's rights or of unconscionable delay under cover of experimental use; and occasionally, just after the close of the eleventh hour, the inventor essays to recover a monopoly in a thing which his foresight was not clear enough to appreciate and which was revealed to him only by the sagacity of others. An inventor may not sit with folded hands to let others prove the utility of his invention; nor may he, under cover of experimental use, prolong the life of his monopoly. On the other hand, the courts are gentle with the struggling inventor who is acting in good faith; and they give wide margin for experimental use (see *Elizabeth v. American*, 97 U. S. 126; § 414) where the invention requires the test of time or use to demonstrate its utility.

It has been said repeatedly, as stated above, that abandonment may occur either before or after application; but it must be borne in mind that the statute makes a distinction between public use and abandonment (Sec. 4886). While it is true that public use has been regarded as constructive abandonment since the act of 1836, *National v. American*, 176 Fed. 79, § 2, it is also true that, as abandonment is purely constructive or presumptive under the statute,

and has nothing to do with the question of intent, *Western Glass v. Schmertz*, 185 Fed. 788, § 2, it is a question of law, and not a question of fact, *Corrington v. Westinghouse*, 178 Fed. 711, § 2. Public use for two years is an absolute bar which cannot be excused and which operates without reference to the intent of the inventor or any construction of his conduct. It is not uncommon for the courts to use the term abandonment where the condition is one of public use for more than two years.

Abandonment by failure to claim or by amendment of application and acquiescence in the ruling of the Patent Office in restricting the scope of a claim is true abandonment (§§ 199-215); and here the inventor is often deprived of a substantial right by the conduct of his solicitor in following the line of least resistance in the prosecution of an application.

ABATEMENT, §§ 21-23.

While it is true that a sole plaintiff or complainant, suing in his own right, having disposed of his entire interest in the patent and controversy is unable to further prosecute the cause, it is equally true that, where there is a successor capable of assuming the burden, and who promptly takes steps so to do, the action does not necessarily abate. The question is one of continuity rather than personality; and the courts are little disposed to hang the fate of a cause upon so uncertain an event as the life of a person, real or artificial.

ACTIONS, §§ 24-27.

Actions for infringement are separately considered under infringement, injunction, defenses and pleading. (§§ 447, 535, 308, and 789). Qui tam actions or actions for false marking need not be considered.

Actions to compel issue of a patent lie under Sec. 4915; and the action must be brought within the jurisdiction including the official residence of the Commissioner of Patents. In such case the court will pass upon the entire question of patentability and right to a patent; and the mandate of the court when filed in the Patent Office, unless stayed by appeal, becomes binding upon the Commissioner. Since appeal lies to the Court of Appeals, D. C., and since such appeal does not involve a patent right, it is not appealable to the Supreme Court. *Dunham v. Seymour*, 161 U. S. 235, § 143. Such an action may grow out of the ordinary rejection of an application, or out of a decision in interference, or out of the issue of a patent to the wrong person. Three important rules have been established in *Greenwood v. Dover*, 194 Fed. 91, § 25:

1. That an action to compel issue is an original proceeding and is in no sense an appeal from the Department, or from the Court of Appeals, D. C.

2. That the complainant may carry his date of invention back of that of the Patent Office proceeding and that in evidence before the Court of Appeals, D. C.

3. That to overcome the decision of the Patent Office as affirmed by the Court of Appeals, D. C., the complainant must introduce evidence which will overcome the presumption of priority of the decision of that court, and more.

Actions to cancel letters patent can be brought only by the Government. A grant once issued by the Commissioner can not be recalled; nor can a patent be cancelled in a collateral proceeding. The Bell Telephone Case, 167 U. S. 224, clearly established the conditions under which such an action will lie.

Actions under Sec. 4918 for delimiting the rights under issued patents having conflicting or overlapping claims are considered under § 587, interfering patents.

ADJUDICATIONS, §§ 28-37.

It would seem that a prior adjudication should be conclusive between parties and privies to the suit; but the possibility of presenting new defenses, under cover of newly-discovered evidence, and the restrictions laid upon the question of privity (§ 386), render a prior adjudication devoid of true finality in most cases.

The utter chaos into which we have fallen with reference to the finality of a prior adjudication as determining the status of a patent is well illustrated by *Consolidated v. Diamond*, 157 Fed. 677, and the other cases involving the Grant patent. This patent has been held valid in the Southern District of New York, the Southern District of Ohio, the Northern District of Georgia, and by the Circuit Court of Appeals of France. The Circuit Court of Appeals for the Sixth Circuit held the patent void for want of invention. Squarely in the face of the last-named decision the Circuit Court of Appeals for the Second Circuit held the patent valid. Here we have the case of a grant of the Government held void in certain parts of the United States, held valid in other parts, and thereby under a cloud throughout the rest of the land. And no right of appeal lies. That the framers of the Constitution and the authors of the patent statutes never contemplated such a condition is evident. The utter failure of comity between our circuit courts of appeals presents a situation, relatively speaking, as repugnant to the spirit of the Constitution as the secession of a state from the

Union. But with the precedent of the certification of this case to the Supreme Court and its final decision (220 U. S. 428) and the plain provision now existing for such certification (Jud. Code, Sec. 239), this evil should disappear.

And the decision in *Kessler v. Eldred*, 206 U. S. 285, is a step which does little more than add confusion to uncertainty. In that case Eldred, the owner of a patent, sued Kessler, a manufacturer of electric cigar lighters, in the district of Indiana. The court found non-infringement and dismissed the bill. Subsequently Eldred sued Kirkland, another manufacturer of similar cigar lighters, in the Western District of New York, was defeated at circuit, but prevailed in the Circuit Court of Appeals. Eldred next sued Breitweiser, a user of Kessler lighters, in the same district (W. D. N. Y.). While this last suit was pending, Kessler filed a bill in the Northern District of Illinois against Eldred to enjoin him from prosecuting any suit against him for alleged infringement of the patent by purchase, use or sale of any cigar lighter manufactured by Kessler and identical with the lighter in evidence before the court in the first suit. The Supreme Court held that the original judgment conclusively settled the right of Kessler to manufacture and sell his manufactures free from all interference from Eldred by virtue of the patent there adjudicated, and granted the relief prayed for. Here, then, is the situation, in part at least: If one buys a cigar lighter from Kessler in Illinois or anywhere else he may use it anywhere, even in the Second Circuit where the patent has been held valid. If one buys that cigar lighter from any other maker than Kessler, he may use it in the Seventh Circuit and not infringe; but if he brings it into the Second Circuit and uses it he at once infringes. If one makes such a lighter in the Second Circuit he infringes; but he may carry it into the Seventh Circuit and use it freely. If a user of such cigar lighters were sued in the Second Circuit by Eldred for infringement of his patent and an injunction asked, the court would have to exclude from its restriction (as was done in the case of *Consolidated v. Diamond*) all lighters made by Kessler. What might happen in any one of the other seven circuits one may only surmise. With all respect for the Supreme Court, the author submits that the mark was entirely missed in the failure of that court to recognize that this unspeakable chaos has its origin in the utter repugnancy to common rights of that portion of the act which closes the right of appeal to the Supreme Court. The Circuit Court of Appeals has recognized the great uncertainty of this ruling (*Hurd v. Seim*, 191 Fed. 832, 835) and has indicated that it should be further reviewed by the Supreme Court.

However, there are certain holdings co-related to adjudications which are more harmonious. These are considered under comity, § 250, and *res judicata*, § 893.

ADMINISTRATOR, EXECUTOR, OR COMMITTEE OF AN INSANE INVENTOR, §§ 38-41.

Prior to the amendment to Sec. 4896 on May 23, 1908, there was no provision for application by the legal representative of an insane person. Even as thus amended the statute does not cover the case of an inventor living and sane, but incapacitated for making application; and since the two-year limit of public use is absolute, rigid, a case might well arise where an application would be barred by two years public use while the inventor was incapacitated by a passing illness.

A license, personal in its nature, does not pass to the representatives of a deceased licensee; but an assignment or license, alienable during the life of the holder, does so pass; and an executor or administrator entrusted with an interest in a patent upon which the deceased might have brought suit, may sue for infringement.

AGGREGATION, §§ 42-51.

The distinction between an aggregation and a true combination is not always clear. The main test lies in examination of the result — the function performed. If that result is the *sum* of the several actions of the elements, it is an aggregation; if it is the *product* of those actions — if the action of one element so modifies the action of another that the resultant action differs from the sum of the separate actions — it is a true combination. Of the cases quoted under this title the most interesting and instructive are *Dunbar v. Eastern Elevating Co.* and *Goss v. Scott* (§§ 48 and 45). In the *Dunbar* case, an elevator with a fixed leg for entering the hold of a vessel was old. A movable elevator with a leg capable of entering the hold of a vessel was old. *Dunbar* took an elevator of the stationary type and mounted a movable leg on a track in front of the stationary elevator, so that when a vessel came alongside the elevator and the fixed leg was entered at one hatch, the movable leg could be moved to enter another hatch at whatever distance from the former, and thus the cargo could be unloaded from two points into a common elevator. That the invention was of large value and was licensed generally no one questioned: but the Circuit Court of Appeals for the Second Circuit reversed the court below without hesitation on the ground that there was no modification of function, the one by the other, and that the result

was aggregation and mere mechanical skill. The printing press case is especially interesting because there we find the court holding one patent valid and another patent void in the same suit on the ground that the one covered a true combination while the other was for a mere aggregation.

There are patents covering so-called "systems," such as systems of electrical operation or control, which present serious problems in aggregation. Many of these patents show a fine quality of mechanical and engineering skill, but are destitute of that quality which characterizes true invention. The holding of the Second Circuit in *Western v. Rochester*, 145 Fed. 41 (§ 698) is indicative of the trend of future decisions in such cases.

Of course the Rubber Tip Pencil Case (*Reckendorfer v. Faber*, 92 U. S. 347) is standard authority on this question as related to articles of manufacture; but the writer has always regarded that case as involving mechanical skill, pure and simple. It did not rise, in his opinion, even to the dignity of a clever aggregation.

AMENDMENT, §§ 52-57.

In view of the remarks made in § 53, only brief comment need be made here. The underlying principle governing the question of broadening the scope of a patent by amendment to the body of the specification is this: If the original description disclosed the subject-matter of the amendment, then the amendment, if justified by the state of the art, is proper. If, on the other hand, the original description did not so disclose the subject-matter of the amendment, there is no foundation for the amendment. The statute makes no provision for the filing of a supplemental oath to justify the introduction of new matter, although the Supreme Court had inferentially approved of it, *Steward v. American*, 215 U. S. 161, § 780. The Patent Office Rules do make such provision. Whether such practice is justifiable or not the appellate courts have not yet determined.

The most serious problems are those where the applicant has injected into the specification matters of improvements, afterthoughts, and statements to broaden the scope of the patent. When such amendments are made after long delay and after the accruing of intervening rights, as in the case of *Mayo v. Jenckes*, 133 Fed. 527 (§ 54) they are unwarranted. These common attempts to broaden the patent consist both in amendment to the description and to the claims. While the applicant may always amend to make his description and his claim as broad as his disclosure, the grant may never go beyond that point; for the moment it does, the applicant exceeds the statute, which requires, as a condition

of the grant, a disclosure of the exact monopoly sought, in such full, clear and exact terms as will enable a person skilled in the art to make and use the same. This question arises and is considered more fully under the title of claims — construction, §§ 188–230.

ANTICIPATION, §§ 58–108.

The grant of a patent is prima facie evidence of novelty, and conversely, that it is not anticipated. The weight of this presumption is not great. It may be re-inforced somewhat by evidence of large utility and use, but nevertheless the judicial mind approaches this question with little predilection in favor of the patent. And so it should be; for both the patentee and the public are entitled to an adjudication, which shall be exhaustive of the state of the art and broadly conclusive of the questions in controversy. As has been so well said by the First Circuit in *Millard v. Chase*, 108 Fed. 399, (§ 681), it is the duty of the court, unhampered by the framing of the issues by the parties, to pass upon the scope and validity of the claims in the interest of the public.

Since no general test of anticipation exists, or can exist, we must content ourselves with aids like the following:

1. As an invention in order to receive the protection of the law must be so described as to enable one, without experiment, assistance or advice to make and use the same, so an alleged anticipation must disclose the invention so clearly that it may be made or used by those skilled in the art without resort to the patent under attack for necessary information.

2. Anticipation may not be read out of the patent in question and into the alleged anticipation. It is easy to do so after the fact (see § 693).

3. Anticipation cannot be made out by finding one element here, and one there; nor can it be made out by the ingenious elucidation of doubtful and un contemplated functions of an old device by expert testimony.

4. The analogousness of an anticipation is “proportioned inversely to the distance from which it is brought.”

5. The “infringement-if-later” rule is not of universal application. Infringement is not the unqualified antithesis of anticipation.

An abandoned experiment can never anticipate. So long as it is an experiment it is not an invention. If it is reduced to practice, made operative, it is no longer an experiment. Experimental use is quite a different thing. An abandoned device to be an anticipation must disclose the idea of means to such a degree that nothing more than ordinary mechanical skill is necessary to make it per-

form the required function. A mere conception, however complete and exact, is not enough. On the other hand, it is immaterial that the anticipating device, so long as it was complete and operative, never was used practically. But it happens not infrequently that an alleged anticipation is brought out of a scrap-heap, attic, or store-room and clothed with the dignity of perfect anticipation. Such devices must be viewed with a conservatism commensurate with the enthusiasm or complacency with which they are produced. Nevertheless, if the anticipation is evident, the non-use cannot discredit the showing.

Anticipation, once fairly established, the burden of proof shifts to the complainant, and in addition to this burden is the obligation to establish invention anterior to the anticipating exhibit with no less certainty than is required to establish anticipation.

Combining old elements is a favorite expedient of the expert. He dissects the patent in suit to break up and destroy its entirety. Having done this, it is ordinarily easy to find one element or sub-combination in one patent, another in another, and so on. The danger in such an attack lies not so much in the building-up of combinations from old devices and patents as in the clever and misleading dissection of the patent in suit which reduces it to a mere aggregation, where "anticipation on the installment plan" may be applied with much show of sincerity.

A more complete and condensed statement of the general rule upon evidence of anticipation than that in *Coffin v. Ogden*, 85 U. S. 120, (§ 71), is not to be found. Nor can anything be added to the statement of Judge Coxe in *American v. Wagner*, 151 Fed. 576, (§ 72), upon the evidential value of models. Expert evidence of anticipation, like expert evidence in general, divides under two heads: First, that class which elucidates the constructions and enables the court the more readily to form a correct judgment. Second, that class of evidence which, concluding with a jurat, elucidates nothing, and having settled the law and the fact, leaves nothing for the court to decide.

Parol evidence of anticipation must be certain, clear, and free from suspicion. Since the *Barbed Wire Case*, 143 U. S. 275, the courts have been properly suspicious of oral proofs of anticipation — suspicious of fading memory and conscious or unconscious bias. Yet there are cases, like that of *National v. Stolts*, 157 Fed. 392, (§ 74), where parol evidence alone is sufficient to defeat a patent on the ground of anticipation. Whether the proof be in the form of a tangible device, a prior patent, or the oral testimony of witnesses, it must be sufficient to carry the question clear of doubt.

A patent is a substantial right, and the evidence to destroy it must be, in its way, no less substantial.

Foreign use alone does not anticipate. It is only when such use is brought to this country in the form of definite knowledge prior to the date of the domestic invention — only when it becomes “known” in the sense required by Sec. 4886 — that it can operate as an anticipation. Mere knowledge of the fact that a certain thing is done abroad is not enough.

A patent or publication in a foreign country, in order to become an anticipation, must be a full and clear disclosure which will enable one to practise the invention of the patent in suit without its use as a side-light. The loose methods which obtain in many foreign countries as to the drafting of specifications and claims render it necessary to view such disclosures with much suspicion. Loose and general statements may be twisted into seeming anticipation.

An interesting question of carrying the date of invention back of a foreign patent is raised in *Welsbach v. American*, 98 Fed. 613, (§ 82).

As above stated, the “infringe-if-later” rule is not of universal application. It rarely happens that the alleged anticipation is a Chinese copy of the device of the patent under fire. Questions of equivalency, identity, diversity, transposition of parts, and many other questions are usually present to complicate the examination.

The rule as to anticipation by a prior inoperative device is this: If the inoperativeness is a mere matter of lack of mechanical development, the essence of the invention being clearly present, such defect will not prevent anticipation; but if the inoperativeness resides in an inherent defect and lack of elements in necessary combinative relation, then the anticipation fails.

Since every inventor is charged with knowledge of the prior art, so a witness claiming knowledge which will anticipate is charged with that exactness of knowledge which enables him, wholly independently of the patent in suit, to disclose the invention in operative completeness. Anything short of this is insufficient. Mere knowledge of the scientific principles involved will not answer; the knowledge must include the means essential to put them to use. Nor will knowledge of a similar device in another art performing a different function do. The knowledge must match up with the vital features of the invention, else it fails.

Anticipation by a mere paper patent is a subject upon which the circuit courts of appeals are not in perfect accord. A reading of the cases under §§ 92–99 will show the different leanings. Neces-

sarily, a clear showing, whether the patent be paper or otherwise, must be anticipation; but when the paper patent must be construed, explained, and made to fit the case, it clearly has not the same weight as a patent which has gone into use and demonstrated its practical utility. And this, too, is as it should be; for when we must rest anticipation partly upon a prior patent and partly upon the construction we must place upon it, we have the right to insist that our construction shall rest upon a substantial thing, and not upon something that has a doubtful standing in the realm of realities.

The earlier idea that a process cannot be anticipated by a machine which discloses the process is doubtful, *Johnson v. Chisholm*, 115 Fed. 123; *Model Bottling Mach. v. Anheuser-Busch*, 190 Fed. 573, § 100.

As a single use for more than two years is an absolute bar to a patent, so a single prior use is sufficient to anticipate. Neither number of uses nor number of persons knowing to such use matters. A single use by a single person, if duly proved, anticipates. But a mere accidental use, or the fact that the prior device might, in the light of the patent in suit, have been put to the use in question, is not anticipation.

Finally, the question of a doubtful anticipation may be resolved, in many cases, from surrounding circumstances. A well organized showing of anticipation may be so utterly repugnant to ordinary human conduct and condition as to discredit itself. On the other hand, while it may be impossible to find absolute, item for item anticipation in the prior art, it may be so evident that the inventor was nothing more than a borrower from prior or analogous arts that his invention merits scant respect. Generally speaking, anticipation is a problem demanding a careful analysis of the subject-matter, a careful balancing of the proofs adduced, and the exercise of a sound common sense which recognizes the human element and the personal equation.

APPEALS, §§ 109-144.

Only such matters relating to appeals are considered in this work as relate particularly to patent causes. There are excellent general works on the subject, and anything more than a very brief review of the rules peculiar to patents would be out of place.

Appeals from orders granting injunctions are so intimately connected with the subject of injunctions that they are preferably there considered. (§§ 535-545).

While the Circuit Court of Appeals Act cut off appeal to the Supreme Court in patent causes, except appeals from the Court of

Appeals, D. C., and while the Judicial Code repealed § 699, R. S., thus cutting off appeals from the Court of Appeals, D. C., and thus raised that tribunal to the position it deserved — on a par with the nine circuit courts of appeals — a question of jurisdiction is appealable to the Supreme Court from any of these courts.

Assignments of error are too often based upon the opinion of the court. This is bad practice. The assignments should be directed to that which the court decreed or refused to decree as raised by the pleadings. A general assignment would seem to be good; and the appellate court may, of its own motion, raise a question not assigned, when an error by the court below is evident. The assignments should raise the issues on appeal in an orderly manner and without prolixity; and the brief and argument should be directed thereto. Where an appellant sets forth a number of assignments and fails to refer in any manner, either in his brief or upon the argument, to certain of his counts, such counts will be assumed to have been abandoned. When a multitude of unnecessary assignments is made, the court will not consider them seriatim.

Certification to the Supreme Court must be upon a definite, stated proposition of law upon which the court specifically asks instruction.

A cross-appeal from a decree holding certain claims valid and infringed and certain other claims void or not infringed cannot be filed by the complainant until final hearing.

Appeals in law actions are strictly limited to a review of questions of law raised by exceptions regularly taken. Questions of fact will not be considered; and this holds when a jury has been waived.

ARBITRATION, § 145.

There is no statutory provision for trial by arbitration, and but one ruling of the appellate courts strictly relating thereto. It would seem that, as parties are generally bound by stipulations of counsel and as a stipulated record on appeal is good, *In re Grove*, 180 Fed. 62, § 136, a stipulation, regularly made upon the record, to try out an infringement cause before an arbitrator should give his decision substantially the same force and effect as that of a judge sitting in circuit.

ART, §§ 146-148.

As stated in § 147, the term "art" has had a beneficent use in the patent law. Nothing is to be added to what is said under that section except to raise the following question: If the Supreme

Court held Bell's telephone invention to be an "art" and capable of the broad construction given it (Telephone Cases, 126 U. S. 1, § 148), why should that court hold Westinghouse's air-brake invention not to be an "art" and patentable only as a mechanical improvement? (Westinghouse *v.* Boyden, 170 U. S. 537, § 686).

ASSIGNMENT, §§ 149-176.

The patent is an entirety and can be subdivided only as authorized by law. Joint owners are, unless the assignment specifically provides to the contrary, tenants in common. The owner of the smallest fractional part holds, so far as the enjoyment of the monopoly is concerned, as much as the holder of all the rest. No accounting can be had between common tenants. A patent cannot be divided by claims. A title interest in a patent is either, —

1. The whole patent,
2. An undivided share of that exclusive right, or,
3. An exclusive territorial right.

The first and third holders may sue alone. The second must join co-owners. Anything short of these three is a mere license. *Waterman v. Mackenzie*, 138 U. S. 252, § 150.

An invention is assignable either before or after patent. An assignment of an application is recordable in the Patent Office, but an assignment of future inventions is not. An assignment may contain conditions and reservations; and, when recorded, such conditions and reservations are notice to a subsequent purchaser either when set out in the assignment or referred to as contained in another and unrecorded writing. An action to compel assignment will lie, and an interest in a patent may be reached by a creditor's bill. Under Sec. 5046 a trustee in bankruptcy acquires title to a patent interest. A copartnership or corporation may hold title to a patent; but the assignment of an interest merely for the benefit of the copartnership terminates with the copartnership. An assignment by a corporation need not be under seal.

The Supreme Court has settled a question long dubious in holding that a state court may pass upon a question of ownership and compel an assignment, even though the complaint asks for injunctive relief, *New Marshall Engine v. Marshall*, 223 U. S. 473, § 151. And the decision in *Nat. Wire Bound Box v. Healy*, 189 Fed. 49, § 151, is a wise application of the broad principles of equity compelling assignment to preserve the patent monopoly in a case of warring factions.

But by far the most significant ruling of recent years is that of the Supreme Court in *Henry v. Dick*, 224 U. S. 1, § 157, which holds

clearly that the physical property and the monopoly property in a patented thing are distinctly separable, and that the one may be sold without the other.

The evidential value of a recorded assignment underwent a severe shock in the decision of *Mayor v. American*, 60 Fed. 1016, (§ 158). The Second Circuit therein reversed the rule in *Brooks v. Jenkins*, 3 McLean, 432, which was established in 1844, and which had been generally followed as establishing an assignment as primary evidence and prima facie proof of the execution and genuineness of the original document. In *Standard v. Crane*, 76 Fed. 767 (§ 158) the Seventh Circuit disapproved the holding of the Second Circuit and reaffirmed the rule of *Brooks v. Jenkins*. The amendment of Mar. 3, 1897, to Sec. 4898 appears to have met this situation of conflict; at least it shifts the burden to the party questioning the validity of an assignment duly verified as therein provided.

A bare license is unassignable, and does not pass to legal representatives. A license may be parol or may arise by implication.

A territorial right, unless specifically restricted, gives the owner the right to sell the product made under the patent outside the territory to which his manufacture is restricted.

As to notice, the recording of an assignment has the effect, in most cases, intended by Congress; but a full reading of *Waterman v. Mackenzie*, 138 U. S. 252; *Waterman v. Shipman*, 55 Fed. 982; and *National v. New Columbus*, 129 Fed. 114, are commended to put one on his guard.

ATTORNEYS, §§ 177-181.

Possibly quite enough has been said on this subject under § 140. The applicant is bound by the acts and omissions of his solicitor; and while he is not bound by his arguments, he is prejudiced thereby if they partake of the nature of admissions. Most of us have, at some time, had the disagreeable duty of informing a client that he has no claim which would enable him to prosecute an infringement of the invention he had actually made and which he supposed was protected by the claims of his patent.

BANKRUPTCY, §§ 182-183.

There have been no appellate holdings under the present bankrupt act, and no discussion of the rulings upon the former act is necessary.

CLAIMS, §§ 184-248.

The claim marks the boundary of the close of the patent. It not only marks the line between the new and the old, but it marks the advance as well. Not only must the claim indicate where the progress begins, but it must disclose the limit of the advance made, else the patentee might close the door to future progress. *Duff v. Forgie*, 59 Fed. 772, § 204.

It is about the claim that the conflict centers, from its filing in the Patent Office to the final decree of the appellate court. This is necessarily so because the claim, though it may be likened to the description in a deed which marks the bounds of a parcel of land, deals not with a tangible thing, but with an idea of means — a mental product. The inexactness of mind and language always leaves the claim what it is — merely an approximation, more or less remote, to an exact disclosure of what a certain mind has accomplished.

It is a reasonable rule of construction that the claim should be as broad as the invention. *Wagner v. Wycoff*, 151 Fed. 585, § 222. But it does not follow in the least that, when the claim is clear, unmistakable and definitive of something less than the description and drawings show, it can be expanded to become co-extensive therewith. It is only when the claim clearly indicates such an intended construction and intent on the part of the patentee, together with clear proof of the generic importance of the invention, that the courts are in the least disposed to vary the rule that the claim may be restricted, but not broadened, by reference to the description.

While it is a general rule that greater liberality of construction is applied to a generic claim than to an improvement claim (§ 197), there are exceptions. There are those improvements which are in a very proper sense generic, improvements which, in the long line of attempts, cancel prior failures and accomplish a long-sought end. An invention may be broad and generic — advancing a broad forefront; or it may be narrow and yet generic — going far but not wide in the art. Bell's discovery was broad and generic; but it was the improved transmitter which made long distance telephony possible.

A claim may be limited by the active or passive act of the applicant. He may fail to claim, or he may — perhaps even in his attempt to claim broadly — employ terms of limitation. (§ 229). It is a common error to suppose that the use of such expressions as "means" for doing this or that broadens the claim. Such is not the case; for we must first translate the "means" into the

specific element or combination disclosed in the specification or drawing, and then, and then only, if it be permissible, apply the doctrine of equivalents. But by far the most common form of limitation is by amendment of the claim. Limitations imposed by the Patent Office and submitted to by the applicant, broadly speaking, are conclusive. (§ 207). But it must not be assumed that all amendments are limitations. (§ 208). An amendment may define or specify the more clearly and yet not limit. More than this, an amendment may broaden the claim; and an amendment may so broaden the claim as to have much the same effect as broadening the claim by reissue. (§ 199).

The claim must be construed in view of the prior art, (§ 224), and it is chiefly this factor which determines the spirit in which the rules of construction shall be applied. And the construction of the claim in the light of the description and drawings and of the prior art has been a source of great confusion, notwithstanding the repeated plain statements of the courts. As the Supreme Court has said, "some persons seem to suppose that a claim in a patent is like a nose of wax which may be turned and twisted in any direction, by merely referring to the specification so as to make it include something more than or something different from, what its words express." *White v. Dunbar*, 119 U. S. 47, § 223. Now the reason for this confusion lies, apparently, in our failure to perceive that, while the claim may not be twisted like a wax nose, the rules for construction of the claim *may be*. When the court has made up its mind, in view of the disclosure of the patent and the prior art, that a claim should be sustained — when the court has applied judicial acumen and common sense to the problem — it has little difficulty in making the rules of construction soften and yield. And when, in like manner, it is evident that the claim should be defeated, the "nose of wax" character of the rules readily adapts itself to the occasion. And it is not in the wise bending of these rules that injustice is done; but rather, in those rare cases where the court has forgotten, for the moment, the paramountcy of its own promptings and followed a hard-and-fast rule of construction.

Reading in elements, when such course does not broaden the claim or serve to save it from palpable invalidity, may be justifiable, although the general rule is to the contrary. (§ 220). Omitting elements to broaden a claim is never justifiable, (§ 218); except in the case of a generic claim, and then only when such course does no violence to the plain disclosure of the patent and omits no element definitely specified by the patentee as marking one of the limits of his invention.

A condition frequently encountered is that where, if the claim be given the construction and scope to establish infringement, it must be held void for anticipation (§ 216); and the tendency is generally to apply the "valeat quam pereat" rule (§ 228) to save the patent by finding non-infringement. Here it is believed the duty of the court should be to thus apply the rule where the patent discloses substantial utility; but to refuse to apply that rule when the patent is indubitably trivial, and thus protect the public against an apparent but unwarranted monopoly.

A discussion of this title might be extended almost indefinitely. It might be carried into the domain of equivalency, infringement and invention. It is enough to conclude by referring to the opinion in *Reece v. Globe*, 61 Fed. 958, quoted in extenso under § 222, as clearer and more comprehensive than anything that could be written here.

COMITY, §§ 250-257.

As stated by the Supreme Court, "comity is not a rule of law, but one of practice, convenience, and expediency." (§ 250). This subject has already received attention under the title adjudication.

Between circuit and circuit the rule may well obtain, when the patent and proofs are the same. Naturally a circuit court of appeals is in no sense called upon to follow the decision of a judge sitting in circuit on the ground of comity. Between circuit courts of appeals, if any conclusion may be drawn, it is that stated in *Imperial v. Crown*, 139 Fed. 312, § 253, that an appellate court, in justice to the parties, will make an independent examination of the case, and will, if it can without violence to its own judgment, follow the decision of another appellate tribunal of like jurisdiction. But if the court finds a substantial ground of difference of opinion, it will not hesitate to disregard the question of comity. The Supreme Court, never controlled by the decision of another tribunal, will, however, accord due weight to the decisions of courts of appeals. In general, the gravity of comity increases with the number and concordance of prior holdings. (§ 256).

COMMISSIONER OF PATENTS, § 258.

The acts of the Commissioner of Patents are presumably right, but they are never conclusive (except where some form of estoppel makes them so as between the parties) as to a question of novelty, utility, or prior use. (§ 261). It is not within his power to recall a patent grant once issued. *McCormick v. Aultman*, 169 U. S.

606, § 26. Nor can he limit the scope of a patent by formulating an interference claim. *Reed v. Smith*, 123 Fed. 878, § 208.

COMPOSITION OF MATTER, §§ 264-266.

Both a composition of matter and an article of manufacture are specified as patentable subject-matter in Sec. 4886; and there is a distinct difference between the two. In the one, the patentable quality resides in the novel combination of ingredients; in the other, the novelty of the article itself. The validity of a patent upon a composition of matter depends upon the disclosure of the elements in novel combination (§ 266), while the article of manufacture depends upon the inherent characteristics of the article itself. (§ 775).

CONGRESS, §§ 267-268.

Nothing need be added to what is said in §§ 267-8.

CONTEMPT, § 269.

This subject is considered under §§ 536, 577.

COPARTNERSHIP, § 270.

As has been seen, (§ 155), an assignment to a copartnership for the use of the copartnership terminates therewith. A copartner holding no interest in the patent cannot sue for infringement. The question of acquisition of an equitable interest in a patent used in the firm business is one which can be determined only in the light of the articles of agreement between the parties and the conditions of acquisition and use of the patent itself.

CORPORATIONS, § 271.

Matters relating to infringement and injunction, as affecting corporations are considered under §§ 479-82 and 547. For matters of assignment see § 156. Dissolution and merger of a corporation pending suit does not work abatement. (§ 21). A license arising by implication is unassignable and expires with the corporation.

COSTS, §§ 272-277.

While the patent statute specifically provides for the recovery of costs, the courts follow the general rules of practice in apportionment and taxation. A mere question of costs cannot be made the subject of appeal.

The provisions as to disclaimer in Secs. 973 and 4922, R. S.

apply not only to cases strictly within the rule, but the courts in their discretion have extended the rule to the point where, if on appeal a complainant succeeds in part and part of the claims sued on are held void for want of novelty, costs will be divided. In like manner, if a complainant refuses to declare the claims alleged to be infringed and on appeal abandons all but certain of such claims, he will not recover costs. (§ 277). But where suit is brought for infringement of a process and the machine for carrying out the process, and the process patent is held good, but the machine patent bad, costs will not be denied. (§ 277). When a defendant escapes on an issue not pleaded, the complainant will recover costs below, but neither party will recover costs of appeal. (§ 277). Corporation officers improperly joined as defendants may recover costs in both courts.

The courts are very properly exercising discretionary powers in denying costs in cases where the record has been unduly padded or extended by the party otherwise entitled to costs.

DAMAGES, §§ 278-299.

As stated in § 279, the terms "damages" and "profits" are often confused. We have damages in equity and we have defendant's profits as a measure of damages in actions at law. Likewise there is confusion between the rules of evidence relating to damages and rules establishing the measure of damages.

What is the measure of damages? The Supreme Court tells us that "there cannot, in the nature of things, be any one rule of damages which will equally apply to all cases. The mode of ascertaining actual damages must necessarily depend upon the peculiar nature of the monopoly granted." *Seymour v. McCormick*, 16 How. 480, § 290. Again, "the profit made by the defendant and that lost by the plaintiff are among the elements which the jury may consider." *Philip v. Nock*, 84 U. S. 460, § 290. Again, "where profits are the proper measure, it is the profits which the infringer makes." *Burdell v. Denig*, 92 U. S. 716, § 290. Again, "established license fees are the best measure of damages that can be used." *Clark v. Wooster*, 119 U. S. 322, § 292. Again, "evidence of an established royalty will undoubtedly furnish the true measure of damages." *Birdsell v. Coolidge*, 93 U. S. 64, § 294. Again, "the verdict of the jury must be for the actual damages sustained." *Birdsell v. Coolidge* again under § 285. Should we turn to the subject of profits (§§ 837-842) we would find the same seeming confusion, both of terms and of what constitutes a measure of damages or standard for computing profits. But these quotations

are not given to show conflicting rules, but to impress the statement first quoted that "*there cannot, in the nature of things, be any one rule of damages which will equally apply to all cases.*" There are cases where the measure is the defendant's gains; there are cases where the measure is the plaintiff's losses; there are cases where both may enter in; there are cases where a license fee is the criterion; there are cases where an established royalty is the measure; there are cases where the measure is the entire profit of a defendant's business; there are cases where it is only a small fraction of that profit; there are cases where the full damages are but nominal; and there are cases where the damages are substantial, but absolutely impossible of computation under any existing rule. It would be a person of great hardihood and small experience who would undertake to formulate a universal, fixed, invariable rule of damages.

Actual damages must be actually proved and not left to speculation (§ 280, 295). While there are two or three cases which would seem to imply that some discretion and latitude might be left to the jury, these have not been generally followed. It may not be that the evidence must put an exact multiplicand and multiplier into the hands of the jury; but it certainly must be that the evidence shall enable the jury to determine, without guesswork or speculation, these two factors. *Kude v. Westcott*, 130 U. S. 152, § 295. Where damages are to be recovered in equity it would seem that greater latitude of proof might be admissible before a master. *Mast v. Superior*, 154 Fed. 45, § 286. But that case also teaches that even the court may not disregard the canons and arbitrarily determine the damages.

Increasing the damages under the statute is a discretionary power of the court, and will not ordinarily be disturbed on appeal. The grounds for the exercise of that power are the conduct of the defendant — wilful or improvident. There is no appellate rule justifying an increase of damages on the ground of inadequacy of reward under the proofs in the absence of a contributing act of the defendant.

Damages become liquidated only upon the day of the verdict or the coming in of the master's report. It follows that interest can be added only from that day.

The difference between damages at law and in equity is stated in *Coupe v. Royer*, 155 U. S. 565, § 285. And since a court of equity will not assume jurisdiction solely for the assessment of damages or ascertainment of profits (§ 371), it would seem, in view of *Brown v. Lanyon*, 148 Fed. 838, § 285, that the statement above made

that cases may arise where damages are evident but unmeasurable under the rules is justified.

It is evident that where an established license or royalty measure exists damages may be ascertained; but in cases where no such measure exists resort must be had to

1. Plaintiff's actual damages in terms of,
 - a. Losses of sales which he would otherwise have made,
 - b. Losses by reduction of prices due directly to the unlawful competition, or,
2. Gains of defendant measured in terms of,
 - a. Gains directly traceable to the infringement, or,
 - b. Savings made by the use of the infringing subject-matter over what he might have saved by the use of other means open to his use outside the realm of patent protection, or,
3. Possibly a combination of some of these conditions.

In each of these cases the evidence must reach home without question. If loss of sales, it must be certain that they would have come to the plaintiff and no one else but for the diversion by the defendant. If reduction of price, it must appear that the infringement was the proximate and sole cause. If gains, they must stand separated from other contributing factors. If savings, the comparison between the economy of the invention of the patent and common and free means must be free from all speculation or estimation.

Mitigations and deductions are to be made with the same exactitude as the proofs of damages. They need not be catalogued here; but if the same general principles are applied that are well known in the business world in charging the account of a department with proper items of costs and expenses, proper deductions may be ascertained.

In the proofs, the burden is upon the plaintiff or complainant except as to deductions and mitigations. The main features have been indicated. We now come to the subject of segregation. The rule of *Garretson v. Clark*, 111 U. S. 120, as reduced to its final terms in *Westinghouse v. N. Y.*, 140 Fed. 545, § 845, is this:

1. If damages are sought on only a part of the machine or device, "the patentee must in every case give evidence tending to separate or apportion the defendant's profits and the patentee's damages between the patented features and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative."

2. If damages are sought on the whole machine, "he must show by equally reliable and satisfactory evidence that the profits and

damages are to be calculated on the whole machine, for the reason that the entire value of the whole machine as a marketable article is properly and legally attributable to the patented feature."

Taking this rule as construed in the Westinghouse case, we have, as a practical consequence, —

1. That small number of cases where the profits may be entirely and unerringly attributed to the infringement, and to nothing else.

2. That small number of cases where perfect segregation is possible.

3. The great majority of cases where the profit is clearly due in part, and in part only, to the patented subject-matter, and where segregation is an utter impossibility.

With the refinements of this rule, as stated under § 279, the point had been reached where recovery of substantial damages or profits was impossible in the class of cases in the third group above mentioned. The decision of the Supreme Court in *Westinghouse v. Wagner*, quoted in extenso under § 845, sets the proper limit to this rule, and makes it subject to the broader rule of *onus probandi*. After the plaintiff or complainant has proved (1) that there are substantial profits or damages attributable to the patented improvement, (2) that they have been confused and mixed by the defendant, and (3) that segregation by plaintiff or complainant cannot be made with definiteness, — then the burden shifts to the defendant, as it should.

DEFENSES, §§ 306-322.

Since the statute makes distinct and separate provision for defenses in patent causes, the subject is treated separately from pleading and practice. The subject of notice under the statute is, however, included with pleading under § 795.

The five defenses which the statute provides and which may be pleaded with the proper notice, are all affirmative defenses which attack the patent as an entirety, and which, if proved, render the patent to all intents and purposes void and of no effect so far as the claims sued on are concerned in the circuit in which such verdict or decree is made final on appeal. It is not a repeal of the grant, nor can the grant be cancelled in a collateral proceeding under any circumstances; but when a patent has been held void as to all of its claims by an appellate court on any one of the statutory grounds that may be pleaded, the grant, for that jurisdiction at least, is silenced. And since the establishment of any one

of these five defenses is so far-reaching, it follows that the pleading and proofs must have that inerrancy which is necessary to warrant a court in declaring null and void that which has been done by a department of the Government in the performance of the duty to it charged by law.

Since defenses are essentially a part of the subject of pleading and practice so ably treated by the text-books, the following brief comment on the few general defenses which have been passed upon by the appellate courts is sufficient.

Those defenses which attack the grant — such as unwarranted acts of the Commissioner, defective grant or specification, invalidity of reissue and non-patentability — must be pleaded with the same certainty, and where necessary to enable the plaintiff or complainant to meet the special matters alleged as best he may, with like notice as a defense under the statute. Defenses of license or *res judicata* may be raised by plea or answer. The defense of non-infringement is by way of excuse; but when the defendant raises this defense and attempts to justify his acts under a subsequent patent, he is on thin ice. *Buser v. Novelty*, 151 Fed. 478, § 312. The defense of non-utility, in like manner, is beset with danger; for one may not justify an act in one breath and deny its commission in the next.

DEMURRER, §§ 323-327.

A demurrer which attacks the validity of a patent on its face is a proper pleading where the invalidity of the patent is evident. But such a demurrer will be sustained only when it is clear that no evidence could be adduced which could possibly overcome the fatal defects visible to the naked eye. It is to be noted, however, that there is a tendency to extend the range of judicial notice in deciding upon a demurrer of this character. It is believed that this tendency, while it has the merit of hastening determination and saving expense of litigation, is one fraught with danger. Knowledge is never exact; memory is treacherous; and often we discover a supposition upon which we have traveled half a lifetime to be founded in error. It is only when this judicial prerogative concerns itself with the plainest of propositions that it is within the limits set by experience.

Demurrers and other special pleadings are abolished by the new Supreme Court Equity Rules.

DESIGNS, §§ 328-337.

Between the opinion in *Gorham v. White*, 81 U. S. 511, and that in *Smith v. Whitman*, 148 U. S. 674 — the latter modifying

the former — we may approach the essential characteristics of a patentable design. It is clear that the foundation of a patentable design must be something more than mere mechanical skill, something more than artistic arrangement. It must be a distinct product of the brain, as much as the invention of a machine, though not from the same corner of the brain. It has been said that the test of infringement is whether the design in question would, to the eye of the ordinary observer, appear to be the same as the design of the patent. Such a rule is proper in the case of a trademark; but it is referred to here as showing how the courts have, at times, wholly missed the mark in the consideration of the essentials of a true design. A true design appeals to something more than the eye in the ordinary sense of that term. It appeals through the eye to the artistic consciousness — not by any particular feature, contour or configuration, or even a collocation of elements, as in the case of a trademark — and awakens a response in the mind of the person possessed of a sense of art. If it falls short of this, if to the person with this sense it is merely peculiar or ornamental, it is not the creation by one mind of that which awakens a response in the mind of another, which constitutes true design invention. It follows, necessarily, that so-called “mechanical” designs are not patentable, and that one may not reinforce a mere trademark by patenting it as a design.

The penalty provision of the amendment of Feb. 4, 1887, is narrowly limited by the clause “knowing that the same has been so applied.” This seemingly limits the penalty to willful manufacturer or copyist; and excuses the innocent purchaser or dealer. *Gimble v. Hogg*, 97 Fed. 791, § 336. And it also appears from the decision in that case that the notice necessary to charge a person with the penalty must be something more than the ordinary notice of marking the design patented.

DISCLAIMER, §§ 339-345.

The distinction between a disclaimer and a reissue is, broadly speaking, that the one limits and the other corrects. The object of a disclaimer is to enable a patentee who, through inadvertence, accident or mistake, has claimed more than he should, to avoid having his patent fall under the statutory defenses. We need not consider the effect of the failure to disclaim before suit, since that question has arisen under the title of costs. (§ 274). It is evident that the patentee, in a case where the necessity of a disclaimer is not evident on the face of the patent in view of the prior art, may await the decision of an appellate tribunal. *Gage v. Herring*,

107 U. S. 640, and *Thompson v. Bushnell*, 96 Fed. 238, both under § 340. But while the courts give the patentee the benefit of every doubt as to the necessity of disclaiming, they look with little patience upon him who seeks to use this provision, especially designed for his protection, as a means for broadening or extending the scope of his claim. *Hailes v. Albany*, 123 U. S. 582, § 344.

The rule requiring disclaimer before decree in case one claim is held valid and another void is followed in some circuits and repudiated in others (see § 344). This must remain an unsettled question until pronounced upon by the Supreme Court.

DISCOVERY, §§ 346-347.

The two quotations under this title should be contrasted with the majority opinion in *Westinghouse v. Boyden*, 170 U. S. 537, § 686, especially the following:

“For such discoveries and such inventions the law has given the discoverer and the inventor the right to a patent as a discoverer for the useful art, process, method of doing a thing he has found, and as inventor for the means he has devised to make his discovery one of actual value. Other inventors may compete with him for ways of giving effect to the discovery, but the new art he has found will belong to him and those claiming under him during the life of his patent.” — *Telephone Cases*.

“To say that the patentee of a pioneer invention for a new mechanism is entitled to every mechanical device which produces the same result is to hold in other language, that he is entitled to a patent for his function.” — *Westinghouse Case*.

While these statements are, theoretically, perfectly reconcilable, the applications made in these two cases are in absolute contradiction. Bell did not patent the undulatory theory of sound; neither did Westinghouse patent the discovery in pneumatics which made his invention possible. Both patented means for utilizing their discoveries.

This is not the first time the writer has criticized the Westinghouse decision, nor will this be the last; for while he is not and never has been in any way concerned with the event of that controversy, he agrees with the four dissenting Supreme Court justices and many of our ablest patent lawyers in regarding it as contrary to the spirit and trend of other decisions, as depriving great genius of its just reward, and as putting a premium upon that sort of thievery that comes to the front and brazenly makes its claim under an improvement patent nearly every time a great inventor has explored far and added a large domain to the known and useful in life.

In some degree, at least, the Westinghouse decision has been modified, and the criticisms above have been justified since they were written, by the Expanded Metal Case (*Expanded v. Bradford*, 214 U. S. 366, § 817). A discovery may be a "happy thought," as in the Expanded Metal Case, or it may be a pure accident, *Byerly v. Sun*, 184 Fed. 455, § 347.

DIVISIONAL PATENTING, §§ 348-355.

The underlying principles of this subject came up for consideration and statement before Judge Taft in *Thomson-Houston v. Ohio*, 80 Fed. 712, § 350. Notwithstanding the fact that, in another circuit, another brilliant mind has differed therefrom, it will be assumed, as a very safe position, that the law laid down by Judge Taft will not be disturbed. It is sufficient to refer to that opinion for all that it covers. It is clear that one application for a patent may be a continuation of a former application, *Model Bottling Mach. v. Anheuser-Busch*, 190 Fed. 573, § 351, and that the dates of filing of several co-pending applications ripening into patents cannot be used one against another to anticipate, *Century Electric v. Westinghouse*, 191 Fed. 350, §§ 349, 354.

There are cases, like some of those under §§ 352 and 355, where it is evident that the aim of the patentee has been to extend or strengthen his monopoly without additional or further invention. Now, these are not really cases of divisional patenting at all, but attempts at justification of double patenting under guise of divisional patenting. The moment this situation is perceived it is easy to apply the proper rules — the rules of double patenting — without any strain upon the rules of divisional patenting.

DOUBLE PATENTING, §§ 356-361.

A deal of unnecessary discussion has occurred under this title. When the Supreme Court said in *Suffolk v. Hayden*, 70 U. S. 315, that if two patents be granted for the same invention the latter is void, there was nothing more to say. The court did not say that the rule applied only to patents to different applicants or that it did not apply to two patents to the same applicant. But inasmuch as it was not clearly understood as applying to cases of two patents for the same invention to the same applicant, the court repeated and specified and particularized the rule in *James v. Campbell*, 104 U. S. 356; *McCreary v. Penna.* 143 U. S. 459; and in the *Barbed Wire Case*, 143 U. S. 275, (all under § 356) until it would seem that so simple, self-evident, and so unavoidable a rule should have percolated down through the intellects of our profession.

But, alas, it has not so done; and to this day our courts are obliged to tell us the old, old story every time we come into court with a patent which has been taken out to strengthen the redoubt of a former patent to the same inventor. The writer speaks feelingly and from experience upon this subject.

But it is not always clear which of two patents is the senior. It has been held that, where there is no other guide, the priority of numbering must control. *Crown v. Standard*, 136 Fed. 841, § 359. But in *Electric v. Brush*, 52 Fed. 130, § 361, it was held that the complainant might elect between the two. It would seem — although it has not been so held — that, since a disclaimer in the earlier patent made by the inventor cannot make the later patent good, by parity of reasoning of two patents of the same date to the same inventor the Government issuing both grants should be barred from disclaiming the grant to the patentee of the broader of the two patents.

DRAWINGS, §§ 362-363.

Only one remark need be made in connection with the appellate rulings on this subject. Not only is it unnecessary that the drawings should be working drawings, but it is not even necessary that they should be pictorial of the apparatus of the patent. Drawings speak a universal language. The American engineer reads a Japanese drawing with no knowledge of the language or even the reference characters employed, and vice versa. Symbolism has become to a large degree universal and uniform, especially so in electrical engineering. It is enough if the drawing contributes its part and agrees with the description in disclosing the invention to one skilled in the art.

EMPLOYER AND EMPLOYEE, §§ 364-369.

If the rule of *Agawam v. Jordan*, 74 U. S. 583, § 368, that persons employed, as much as employers, are entitled to their own independent inventions, and the further rule of the same case quoted under § 369, that suggestions from another, made during the progress of experiments, in order that they may be sufficient to defeat a patent, * * * must have furnished such information to whom the communication was made that it would have enabled an ordinary mechanic, without the exercise of any ingenuity and special skill on his part to construct and put the improvement in successful operation — if these rules are borne in mind, the ground is cleared materially. The right to patent an invention and the right to its use are two quite separate matters. The suggestion

of the idea of means — the conception which constitutes the act of invention — may originate with either party; and with whichever party this conception originates, provided only it is a completed conception requiring only ordinary mechanical skill to put it in terms of materials, there lies the right to patent. At the same time the right to the title of the patent may have, by agreement or in consequence of the inter-relation of the parties, passed entirely to the other party, or a lesser interest may have been established.

An implied license arising under the various conditions disclosed in § 366 is essential to industrial progress. If the rule were otherwise, if on the one hand employees could control the monopoly of the improvements occurring in the regular course of business, the manufacturer would be stopped in his progress; if, on the other hand, all rights were denied employees, much of the impetus of progress would be lost. The question of an implied license is further considered under § 756, and the general rules established by the circuit courts of appeals and there quoted should be read. Generally speaking, a shop license arising out of employment relations, is personal and non-assignable; but such right may be succeeded to by a corporate successor if the inventor acquiesces therein. *Lane v. Locke*, 150 U. S. 193, § 366. It is clear that a contract which robs an employee of all right to future invention is unconscionable (§ 365); and contracts between employer and employee are not divorced from the governing principles of equity.

EQUITY, §§ 370–372.

Two comparatively recent cases show how a court may or may not apply the principles of equity to the end that strict adherence to case and precedent may not defeat justice or smite the sense of right. In the case of *Nat. Wire Bound Box v. Healy*, 189 Fed. 49, § 371, the Circuit Court of Appeals, passing over the case law by which it might have decided the suit and defeated the monopoly of the patents in question, applied the broad principles of equity to the warring factions — as might be done between warring co-partners — and made each do his share toward restoration of peace and fair dealing, and thus saved an important series of inventions. In the case of *Henry v. Dick*, 224 U. S. 1, § 898, the Supreme Court, by a literal following of case and precedent, and not applying the broad rules of equity, rendered a decision which called forth one of the strongest of dissenting opinions and aroused public criticism nation wide. The record made it plain — and there appeared no effort to deny the fact — that the Dick Company was seeking to

perpetuate its monopoly in an article the patent for which had long since expired, and this it was seeking to do by a hard-and-fast following of the Button Fastener Case. The Supreme Court handed down a perfectly logical case-law decision; and by so doing paved the way for a reactionary statute or ruling at some near day which will demolish the wholesome rule (properly administered) of the Button Fastener Case. This it did when, as I see it, the facts would have justified the court in saying to the Dick Company: "You are not here with clean hands; you have been attempting to extend your expired monopoly by a contract arrangement which, in these circumstances, is unconscionable. You claim to be seeking equity, but you are not doing it. You are attempting to invoke the power of the courts to help you drive out of business a competitor who is making that which you once monopolized but have surrendered to the public upon the expiration of your patent." Such broad and equitable treatment would have been a happy disposition of an ugly question, the dealing-out of justice, and the prevention of recrudescence of a problem which will not remain quiet until satisfactorily settled by judicial decision or statutory enactment.

Upon this subject nothing need be added, except to refer to the specific subjects considered under §§ 717-720.

EQUIVALENTS, §§ 373-380.

Undoubtedly the essentials of an equivalent stated by Robinson and approved in *Duff v. Forgie*, 59 Fed. 772, § 373, are well stated so far as mechanical elements are concerned; but it is doubted if the second essential therein named is applicable at all times to a chemical combination. *Tyler v. Boston*, 74 U. S. 327, § 373. At least this is true: Since the range of equivalency varies directly with the quality or degree of invention, making the doctrine a rule of judgment rather than a final test, it follows that a kindred resiliency exists as to the construction of essentials. Not that the courts will disregard these essentials, but that they will determine their presence or absence in the same spirit the invention is approached.

This doctrine, built up step by step by the courts, is, perhaps, the most beneficent of all rules. It gives the court the power to accord to a generic invention the reward it deserves. It also gives the court the much-needed power to limit minor inventions and improvements to a monopoly commensurate with the small addition made to the sum-total of human knowledge.

As to identity, the rule in *Union v. Murphy*, 97 U. S. 120, § 379, covers the ground as completely as any single definition can. But

the real problem in applying this doctrine, just as in the determination of anticipation or infringement, resides in the lack, in most cases, of an obvious similarity of the elements or lack of absolute identity of function, or, often in the lack of both these conditions. In other words, it is not the application of the doctrine, but the marshalling of the conditions precedent to its application, that renders the problem serious.

ESTOPPEL, §§ 381-387.

The general principles of estoppel are not peculiar in patent cases. Such principles as that the estoppel must be definite, mutual, and definitely proved are all well known. An interference adjudication, in the absence of privity, does not operate as an estoppel. A vendor-patentee and a licensee are both estopped to deny the validity of a patent; but to what extent either may limit the scope of the patent by showing the prior art is a delicate, and as believed, an unsettled question. *Smith v. Ridgley*, 103 Fed. 875, § 384; *Elgin v. Creamery*, 80 Fed. 293, § 385.

A former licensee may, after the expiration of the license, act as a stranger toward the patent. *Stimpson v. Stimpson*, 104 Fed. 983, § 385. As has been remarked under adjudications, the rule of privity is so strict that the conclusiveness upon a real party behind a prior litigation is often hard to establish, since, in such a case, it is difficult, if not impossible, to establish mutuality. Since an estoppel bears some of the characteristics of a forfeiture, it is not looked upon with favor.

EVIDENCE, §§ 388-411.

Of course, the patent itself is *prima facie* evidence of the existence of the monopoly, and that it was created in due form of law; but it must never be assumed that this fact, nor the fact of large utility, nor long acquiescence, nor a long and vigorous ordeal in the Patent Office, counts for anything to speak of in the face of a substantial attack by a defendant.

While the defense of anticipation must be made with the statutory notice, the practice of extending the privilege of showing the state of the prior art without notice (cases under § 389) render it possible to make a substantial defense by so limiting the patent as to defeat the charge of infringement in many cases.

As stated under the title anticipation, the evidence to show invalidity by prior patent, publication, or use must be indubitable. The common practice of putting in evidence under regular notice

a great array of prior patents is not without danger. *Forsyth v. Garlock*, 142 Fed. 461, § 390. The better practice is to introduce only those of distinctly anticipatory character under notice, and introduce separately such as are purely concerned with the prior art. The plaintiff or complainant may rebut, but the defendant may, in the discretion of the court, be denied surrebuttal on a question of anticipation. *St. Paul v. Starling*, 140 U. S. 184, § 392.

The method of taking depositions, either in law actions or in equity, must follow Federal law and practice. §§ 395, 401. The evidential value of an assignment duly recorded has been reviewed under assignment, § 158. The cases of *Elevator v. Crane*, 76 Fed. 767, and *Mayor v. American*, 60 Fed. 1016 under that title should be read in connection with *Paine v. Trask*, 56 Fed. 233, under § 396.

The rule as to exhibits in *Overweight v. Improved*, 94 Fed. 155, § 397, is certainly one to be exercised with great care. In this age of specialization, complexity and refinement in engineering the court would be assuming a great burden and a large risk in many cases should it follow this rule, take to itself the province of the expert, and give to an exhibit a value in evidence perhaps unwarranted under proper explanation and interpretation. And this leads to a remark concerning expert evidence. The function of the expert is to give evidence which will enable the court to determine matters of law and fact, (*Norton v. Jensen*, 49 Fed. 859, § 398,) and not to usurp the functions of counsel or court; (*Osgood v. Metropolitan*, 75 Fed. 670, § 398) and the too common idea that the value of expert evidence lies in a count of noses deserves the reprimand to be found in *American v. Cleveland*, 158 Fed. 978, § 398.

In concluding this subject the writer wishes to repeat the advice he received when a student and which has been of great value: "Remember that every great law-suit turns upon a single issue. Find the pivot and direct all your energy to swing the case your way upon it. Do not be led away; direct your evidence and your argument to the pivotal point." These were the words, as nearly as they can be recalled after the lapse of nearly forty years, of one of our greatest patent lawyers, one of our great judges, and the greatest scholar of the law I have ever known — Judge Henry R. Selden.

EXPERIMENT, §§ 412-417.

Absolutely nothing need be added to the quotation from *Eastman v. Mayor*, 134 Fed. 844, given under § 412.

FOREIGN PATENT, §§ 419-424.

This entire subject, confused as it has been rendered by the bungling statements of the act of 1870 and later by the hardly more lucid amendment of 1897, and finally utterly changed in aspect by the act of 1903, has, fortunately, been simplified and largely set at rest by the decision of the Second Circuit in *Welsbach v. Apollo*, 96 Fed. 322, § 420, and the First Circuit in *Sawyer v. Carpenter*, 143 Fed. 976, § 420. The *Welsbach* case seems to close the controversy over the old law; the *Sawyer* case seems to mark the line between the old and the new. To these pronouncements nothing need be added except to refer to the decision in *Heap v. Tremont*, 82 Fed. 449, quoted under § 424, and the remarkable decision of *Hennebique v. Myers*, 172 Fed. 869, § 421, where each of the three judges wrote an opinion, no two of which are in agreement.

FRAUD, § 425.

The less said upon this subject the better. Experience teaches that those cases where fraud can be proved are few and trivial; that those cases, few but not trivial, fail in the proofs.

FUNCTION, §§ 426-427.

It is clear that a function cannot be claimed; but as said in *Continental v. Eastern* (§ 427) the distinction between a practically operative mechanism and its function is difficult to define. Here is the field of contention. Once determined to be functional or non-functional the claim is readily disposed of; but a reading of all the cases leave court and counsel without criteria for determining whether a claim is or is not functional. The signal instance to illustrate this point is, of course, *Westinghouse v. Boyden*, 170 U. S. 537, § 686.

IMPROVEMENT, §§ 430-444.

An improvement is one of the patentable classes provided by the statute. (Sec. 4886). Except for the particular meaning given this term, it might be said that any invention not a broad or basic discovery would be an improvement; but such is not the meaning commonly given the term. The courts generally use it as denoting an invention which marks an advance in a known art. It may be great or small — in fact, an improvement may be truly generic, revolutionary in an art, and entitled to a range of equivalency substantially as great as a generic invention. *Chicago v. Miller*, 133 Fed. 541, § 435; *Columbia v. Kokomo*, 143 Fed. 116,

§ 435; *Wagner v. Wycoff*, 151 Fed. 585, § 435. So it is evident no strict definition of an improvement may be given, although the statement in *McCormick v. Talcott*, 61 U. S. 402, § 434 defines an ordinary narrow improvement.

A mere carrying forward, a mere perfecting in a mechanical sense, or mere improvement in the product do not constitute patentable improvement. To be patentable there must be the exercise of the inventive faculty which lifts it above mechanical skill. A reasonably good distinction is drawn in *Thomson-Houston v. Lorain*, 117 Fed. 249, § 437. As will be seen, when we come to the tests of invention, utility and use go far in determining a doubtful case. Indeed, utility may save an improvement from falling over the line of mechanical skill; and the range of equivalency which will be accorded an improvement patent is often best determinable by the part the patent has had in the useful arts. This subject recurs with those of invention and infringement, and is one of large importance. Reference to those titles should be had.

INFRINGEMENT, §§ 445-532.

No general definition, no general rule, no general test of infringement exists. The number of issued patents has passed the million mark. Each patent has afforded opportunity for a condition of infringement in some sense differing from that of every other patent. Each patent is supposed to disclose a novel combination or creation, and every infringement suit is a new problem. While the various rules and tests are of large value in the interpretation and decision, it is only when one follows the methods of such master minds as have been able to rise above fitting the facts to a rule, mastered the facts, decided the question in the quiet of their own consciences, and then, perhaps, found a rule to ornament their wisdom, that justice is done. In taking a general view of the many rulings on this subject they will be regarded as guides, rather than fixed rules, and will be taken up in much the same order in which they are presented in the body of the work.

An addition to a combination, construction or process avoids infringement only when such addition destroys the unity of the invention and makes it something else. So with mere change of form, impairing or increasing efficiency, or change of location or other modification which does not destroy the essence of the invention does not avoid infringement. But ever since *O'Reilly v. Morse*, 15 How. 62, § 459, it has been clear that, where form is the essence of invention, change of form does avoid infringement. Change of the number of parts or substitution of one material

for another are subject to the same rule. The rule as to combinations is well stated in *U. S. v. Berdan*, 156 U. S. 552, § 464. A combination, to be patentable, must possess the qualities of interaction which effect a new or different result from that of any element or the summation of the separate results of all the elements — else it is a mere aggregation. It is only when (1) something is added which changes the action and function of the combination; or (2) when something is omitted which produces such change; or (3) when some element is substituted which cannot be held an equivalent for that which was omitted, that infringement is avoided. And here, of course, we are bound by the limits the patentee has set in his claim. As said in *Fay v. Cordesman*, 109 U. S. 408, § 466, if the patentee specifies any element as entering into the combination, either directly by the language of the claim or by such a reference to the descriptive part of the specification as carries such elements into the claim, he makes such element material to the combination, and the court cannot declare it to be immaterial. But in applying this rule, we have no right to forget the rule of equivalency and of interpretation, as was done in *Kinzell v. Littrell*, 67 Fed. 926, § 473, and declare unqualifiedly that “it is immaterial that the elements claimed in the patent of plaintiff and omitted in defendant’s device are not of the essence of the real invention.” The rule of equivalency as applied to combinations has been said to be construed most strongly against him who alleges infringement. *Erie v. American*, 70 Fed. 58, § 468; but this is in contradiction of the Supreme Court rule in *Gill v. Wells*, 89 U. S. 1, § 468, and of nearly every other case quoted under that section. The distinction between claims for combinations and claims not strictly so regarded is generally academic and artificial rather than real in most cases; and if we were to have one rule for combinations and another for the few claims that have not that characteristic, we should add confusion to no purpose.

Before passing to the next subject in order, a word should be added concerning assignments. As between the assignor and assignee of a territorial right the rules of *Keeler v. Standard*, 157 U. S. 659, § 450; *Hobbie v. Jennison*, 149 U. S. 355, § 512, and *Simpson v. Wilson*, 4 How. 709, § 175, permit the sale of articles outside the territory assigned and vice versa. The effect of these rules can be avoided between the parties only by specific agreement, and as to third parties limitation may be imposed only by bringing such party within the terms of such limitation by some such restriction as that of *Heaton v. Eureka*, 77 Fed. 288, as construed and approved in *Henry v. Dick*, 224 U. S. 1, § 898 and *National v.*

Schlegel, 126 Fed. 733, § 899. The general principles of estoppel apply alike to inventor-assignor and assignee. It does not lie in the mouth of an inventor to attack that which he has assigned, though he is not estopped from denial of infringement. So with the assignee holding a title or interest under the patent. A licensee may not use his privilege to make and store up large quantities of articles, terminate the license, and then market the articles so made and escape infringement. *Pelzer v. Binghamton*, 95 Fed. 823, § 510.

The general rules of contributory infringement have been mainly settled by Judge Taft in *Thomson-Houston v. Ohio*, 80 Fed. 712, § 477. In this review of general principles, to do otherwise than to call attention to the wide divergency of opinion between *Cortelyou v. Johnson*, 145 Fed. 933 and *Henry v. Dick*, 224 U. S. 1 (both under § 477), and to invite a comparison between the *Dick Case* and *Leeds v. Victor*, 213 U. S. 325, § 474, is unnecessary. Courts and attorneys alike differ upon this question. With the belief that it is as yet to be finally settled, I make no further comment.

Corporations as infringers are subject to the same rules as natural persons. The rule as to personal liability of an officer or director appears to have undergone a change. The old tortfeasor rule of such cases as *Graham v. Earle*, 92 Fed. 155, § 481, and *National v. Leland*, 94 Fed. 502, § 481, seems to have been largely abandoned. *Western v. North*, 135 Fed. 79, § 481, *Cazier v. Mackie-Lovejoy*, 138 Fed. 654, § 481, and *Scott v. Fisher*, 145 Fed. 915, § 481. And it would seem a sound rule that an officer of a joint-stock company is not personally liable for the acts of infringement of the company. *National v. Stolts*, 135 Fed. 534, § 480. But it is believed that, as the general tendency is and must continue to be to look beneath the device and shield of corporate fiction and reach the individual wrongdoer, the vigorous statement in *Weston v. Empire*, 177 Fed. 1007, § 481, is significant of future trend.

Division or union of elements, and in the case of additions or subtractions which do not destroy the unity of the invention, does not avoid infringement; but there are cases, such as stated in *Dunlap v. Willbrandt*, 151 Fed. 223, § 485, where division or union would destroy the law of the structure or go beyond the limits set by the inventor in his claim.

The question of infringement is one of fact. The questions of construction which precede it are of law. The evidence, therefore, may bear upon either proposition. The conduct of the defendant may have some weight, but it can never be controlling (§ 487);

and it is never enough to shift the burden of proof. Evidence of identity of function is very persuasive, but until reinforced by a construction of the elements of the claim and those of the alleged infringement to establish ground for identity it cannot be conclusive. In short, the evidence of infringement must be specific and cannot be inferred. *Imhauser v. Buerk*, 101 U. S. 647, § 494. Once established, a single act is sufficient. *Hutter v. De Q. Bottle*, 128 Fed. 283, § 494; but proof of threatened acts is insufficient. *Gray v. Grinberg*, 159 Fed. 138, § 494. Collateral matters, such as utility (§ 495) or co-pendency of applications in the Patent Office without interference (*Mann v. Hoffmann*, 104 Fed. 245, § 496) or the issue of a patent to the defendant (*Hardison v. Brinkman*, 156 Fed. 962, § 496) may have some corroborative effect, but they are not dynamic. Quite as important as these rules are those which guide in the construction of the claim and of the infringement complained of. These have arisen under anticipation, §§ 71-77; claims, §§ 188-230; evidence, §§ 389-393 and 401-411; and will also arise under invention, §§ 620-638, and in cases of reissue under §§ 871-879.

The moment a generic invention makes its impress upon the industrial world, a swarm of parasites is hatched, and they begin their attack. It is to screen the real public benefactor, in some small degree, from the onslaught of these insects that such rules as that of *McCormick v. Aultman*, 69 Fed. 371, § 497, are designed. And it is proper that a generic patent should not be subject to the presumptions against its infringement which attach to lesser and mere improvement patents, *Century Electric v. Westinghouse*, 191 Fed. 350, § 497.

While the Government may not be subjected to the ordinary processes of infringement prosecution, it may be reached through the Court of Claims, and compensation awarded, even if the prohibition of injunction does not lie. (§ 498). By the act of June 25, 1910, the Court of Claims was given jurisdiction of infringement suits against the Government, and the Government given the same right of defense as an individual infringer (see § 428). And the scope of this enactment has been passed upon by the Supreme Court, *Crozier v. Krupp*, 224 U. S. 290, § 498.

The question of identity has been summed up in a single sentence: "There must in the ordinary patent be identity of means and identity of operation as well." *American v. Cimiotti*, 123 Fed. 869, § 502. And the rule in *Thomson v. Western*, 72 Fed. 530, § 503, is sound as well as clever.

The subject of infringement by importation or exportation is

comprised in a few cases, and the rules cited under § 505 are comprehensive.

There may be infringement by an improvement or of an improvement. This was settled as long ago as *Evans v. Eaton*, 7 Wheat. 356, § 506. In the case of infringement by an improvement there generally arises the question of the scope of the prior patent and the application of the doctrine of equivalents. When the alleged infringement is of an improvement, we may have both the question of equivalency as respects the prior patent and that of limitation of the improvement patent by the prior art, including the prior patent. Where the case is of improvement against improvement the rule well stated in *Ries v. Barth*, 136 Fed. 850, § 507, that the presumption is that each is an independent improver in a common, open field, will go far in simplifying the issues.

In the earlier days, when an infringer was regarded as a tortfeasor with instincts not far removed from the criminal, the question of intent had much significance — silent if not otherwise. With the passing of time the infringer has lost somewhat the garb of a brigand, is held up to a higher standard of knowledge and business conduct, is presumed to know the law better than ever before, is presumed to know the state of the art and the existing patents relating to his business, and is neither coddled nor punished along moral lines. (§ 508).

The grant of a right under a patent must carry enough with it to insure the enjoyment of the grant. If one buys the right to use a machine that he may reap benefit from selling the product, the grantor may not stop him because he holds a patent upon the product; but the reverse condition would not follow. If a person buys the right to use or sell a product or article of manufacture and does not secure the right to use the process or machine, he cannot justify his lack of foresight by infringing the process or machine. Here, again, the doctrine of *Henry v. Dick*, 224 U. S. 1, § 510, which clearly establishes possible divorcement between property right in a machine and property right in the monopoly covering the machine, seems a contravention of substantive law.

The infringement of a process is subject to the same rules as a machine, so far as they may be applied — such as the omission or addition of an element or the use of an equivalent. But it is evident that, as a process consists, in most cases, of a series of steps or a series of chemical actions or material modifications which cannot be observed or compared by the eye of the court; and since also the function or result itself is, often, not distinguishable by

the naked eye, the ordinary tests of mechanical identity of elements or function cannot be applied. It follows that, in such cases, the evidence must be largely that of experts and persons skilled in the art. *Matheson v. Campbell*, 78 Fed. 910, § 519. And it is due to this obscurity that the rule of equivalents is somewhat modified. As was said in *Tyler v. Boston*, 74 U. S. 327, § 373, "the term equivalent, when speaking of machines, has a certain definite meaning, but when used in regard to chemical action of such fluids as can be discovered only by experiment, *it only means equally as good.*" Here the test as expressed by the words in italics passes over from an independent comparison of the elements to a comparison of results. But it must not be assumed that this test applies to those process cases where analysis is plain and free from empiricism.

The use or sale of a product, the production of which involved the infringement of a machine or process, when the product itself is not patented as an article of manufacture, is not infringement. *Welsbach v. Union*, 101 Fed. 131, § 521.

In *Stimpson v. Railroad*, 4 How. 380, § 522, the rule was laid down that an infringement cannot be sued for which took place prior to the surrender of the original patent. At that time the rule was that a surrender for the purpose of obtaining a reissue extinguished all rights which existed under the original grant. *Moffat v. Garr*, 66 U. S. 273, § 887. But in *Peck v. Collins*, 103 U. S. 660, § 887, the question whether a surrender under the act of 1870 extinguished all rights was raised but not answered. The court went a step farther in *Allen v. Culp*, 166 U. S. 501, § 887, and in *McCormick v. Aultman*, 169 U. S. 606, § 887, answering the question certified by the Circuit Court of Appeals in *McCormick v. Aultman*, 69 Fed. 371, § 887, held distinctly that when a reissue was sought and refused as to certain claims, on the return of the original patent such claims were not thereby rendered void. Now, taking this change of holding, what is its effect as to infringement occurring prior to surrender and reissue? It is thought that there is no appellate determination of this question.

What constitutes infringement by carrying repairs to the point of reconstruction is well illustrated in *Goodyear v. Jackson*, 112 Fed. 146, § 524. The ultimate test is whether the act is a rehabilitation or a re-creation of the idea of means. *Wilson v. Simpson*, 9 How. 109, § 524. In the case of the bale tie of *American v. Simmons*, 106 U. S. 89, § 524, or the knitting needle of the *Goodyear* case, the infringement is evident. So it would be in a case like *Pacific v. Alaska*, 100 Fed. 462, § 523, where nothing of the old

machine remained but the legs. But between these lies debatable ground, like that of *Morrin v. White*, 143 Fed. 529, § 523. There it would seem clear that the replacement of a single tube of the battery would be legitimate repair; but as the essence of the invention resided in the emplacement of the entire battery of tubes, then a replacement of the entire battery would be a re-creation, and therefore infringement. Such a case illustrates how narrow the margin between legitimate repair and infringement may be.

The tests of infringement naturally run parallel with the rules of evidence of infringement. The anticipation test — “that which infringes if later anticipates it earlier,” and vice versa, which has been considered at length under anticipation, is a test, not a final test by any means, but yet one which has its proper uses. The most general and practical test is to compare the two devices in connection with a comparison of results produced. *Cimiotti v. American*, 198 U. S. 399, § 526. The test of interchangeability, where element for element may be substituted, is wellnigh conclusive; but such substitution is not ordinarily obvious or easy. Where the plain rules of equivalency may be employed to assist in such substitution the rule is applicable. As utility may turn the scale in a doubtful case of invention, so it may, if great care is exercised, illuminate the question of infringement. But it must be remembered, as said in *Winans v. Denmead*, 15 How. 330, § 530, that success of complainant and defendant, the one compared with the other, is no test of the question of infringement.

Defenses to the charge of infringement have been, in some measure, considered under infringement §§ 308-322. Nothing further need be added, since the circumstances surrounding each case must determine the character and course to be taken.

INJUNCTIONS, §§ 533-579.

Injunctions in patent causes are not marked by departure from general rules. The statute gives the “power to grant injunctions according to the course and principles of courts of equity,” (R. S. 4921) and specifies no further. The same distinction exists between preliminary or provisional injunctions and final or perpetual injunctions as in other fields of equitable jurisdiction. But this distinction — this definite line of separation — is too often lost sight of; for while a final and perpetual injunction is, when the complainant has shown his right under a living patent to equitable relief on final hearing, a matter of right, a preliminary or provisional injunction is never a matter of course but *always* a matter of judicial discretion. Comity may have its weight; a prior ad-

judication may have much more weight; but a court entrusted with this most powerful of all legal engines is never deprived of the safeguard of discretion in its use until a higher tribunal has taken jurisdiction and with it the responsibility attached.

To entitle a complainant to an injunction pendente lite, at least three features must be present.

1. The title to the patent and right to sue must be clear.
2. The infringement alleged must be clear.
3. Something more than the mere prima facie of the grant must be shown.

To these some might add irreparable injury and insufficient remedy at law; but it is thought that the decision of the Supreme Court in *Continental v. Eastern*, 210 U. S. 405, § 574, by implication, will render any positive showing, beyond the averment of the bill, unnecessary.

It is evident that the title must be clear, and that if it is doubtful by reason of some right claimed by defendant (§ 569), or is assailed and put in doubt (§ 571), the relief will be withheld.

It is also evident that, upon an ex parte showing, the court will not attempt to solve the question of infringement in the face of conflicting proofs (§ 564).

Those showings constituting "something more" than the prima facie of the patent which are essential are either public acquiescence, prior adjudication, or some existent condition which is the fair equivalent of one or the other of these two. It is not possible to define that condition which constitutes or fails to constitute acquiescence with absolute universality of application, as will be evident from reading the cases under §§ 554 and 563; but it is clear that the acquiescence must be common and public, and due to the existence of the patent, and not to extraneous causes. The mere fact that the public has not attempted to make, use or sell the thing patented is not enough; the forbearance to do so must appear to be due to the patent in question. *Blount v. Société*, 53 Fed. 99, § 554; *Hall v. General*, 153 Fed. 907, § 563.

Stronger than acquiescence is clear proof of the establishment of the patent and right to injunctive relief by prior adjudication. A very conservative statement of the rule is that of *Wilson v. Consolidated*, 88 Fed. 286, § 561. But again it must be observed that sound discretion controls even in these circumstances. *Sprague v. Nassau*, 95 Fed. 821, § 570; *Hatch v. Electric*, 100 Fed. 975, § 570. A clear summary of the general principles is given in *Electric v. Edison*, 61 Fed. 834, § 561.

There are cases where injunction pendente lite is clearly necessary

to preserve the status quo, where none of the ordinary considerations is the moving cause. But these are the peculiar conditions of a case which cannot be previsioned by any rule. In the case of *Hall v. General*, 153 Fed. 907, § 567, and quoted fully under that section, are the main conditions which preclude the granting of a preliminary injunction. It does not follow that all these six points must have been negatived to establish the complainant's right to the order asked, but it is clear that any one of several of these points would have been sufficient to warrant denial of the relief sought.

It is clear that non-use by complainant of the patent sued on is not a reason for refusing a preliminary injunction. *Continental v. Eastern*, 210 U. S. 405, § 574. Expiration of the patent of course prohibits the granting and ends the life of an injunction granted. (§ 550.) A bond in lieu of injunction is within the discretion of the court (§ 546); and the conduct of the defendant has its weight (§ 555). Ordinarily the positing of laches as a reason for denying injunctive relief is a doubtful proceeding; for excusing one's own act on the ground of remissness of another does not appeal to a court of equity. Punishment for the violation of an injunction is adequately reviewed in *Bullock v. Westinghouse*, 129 Fed. 105, and *Christensen v. Westinghouse*, 135 Fed. 774, quoted extensively under §§ 577 and 578.

Coming now to the subject of appeals from injunction orders, it is first to be noted that we are no longer in doubt about what is appealable. By Sec. 129, Judicial Code, an injunction order "granted, continued, refused, or dissolved" is appealable.

Without going into details, the following propositions seem settled by the various decisions cited under §§ 535-545:

1. The appellate court will go no further than to determine whether sound discretion has been exercised.

2. If, in the determination of this question, the entire record must be reviewed, and if the proofs are adequate, the appellate court will make final disposition of the case.

3. That such appeal does not stay other proceedings unless so ordered.

4. That neither comity nor prior adjudication will prevent an appellate court from acting upon its own independent judgment based upon its own investigation of the facts.

Appeals from contempt orders are permissible only as now prescribed by the Supreme Court in *In re Christensen*, 194 U. S. 458, § 538.

In conclusion it may be observed that, while the restrictions now

put upon the Mop Case rule by the Supreme Court render possible the recovery of substantial damages and profits in a large number of cases heretofore practically deprived of such right, still relief by injunction is the main and most effective protection to a patent. The rules, now so well established, will be applied with greater wisdom and uniformity than in the past.

INTERFERENCES, §§ 580-585.

Upon this subject nothing need be added to § 581, except to call attention to the cases of *Morgan v. Daniels*, 153 U. S. 120, and *Electric v. Carborundum*, 102 Fed. 618, both quoted from under § 584. Seemingly, these cases should set at rest the question of supposed conclusiveness of an interference proceeding.

INTERFERING PATENTS, §§ 586-587.

In view of the decision of *Palmer v. Lozier*, 90 Fed. 732, § 587, patentees will be slow to invoke relief under 4918 R. S.; since it is now quite possible that the parties, each coming into court with a patent, may both leave that court empty handed.

INVENTION, §§ 588-702.

Under this title an entire volume might be written; but such a course is not in keeping with the aim of this book. The subject is too large to gather up and treat in perspective. Consequently, the following course will be pursued: The main divisions will be taken up in the order of the text, each division constituting a paragraph with the title and section numbers in heavy faced type.

Abandonment, § 590. The subject of abandonment has been reviewed under that general title (§§ 1-20). As here employed, it relates to re-invention and abandoned experiments. It is at once evident that an abandoned experiment cannot operate as a bar to an invention, since it is both an abandoned thing and a thing that never was patentable, else it would not have been an experiment merely. The re-invention of a thing which has never materialized sufficiently to constitute anticipation is as much entitled to protection by patent as if the original invention and abandonment had never occurred. But if the re-invention follows an abandonment which was preceded by a disclosure of the invention to the public, such re-invention or discovery cannot recall that which has become public property and make it the subject of a patent.

Adaptation, §§ 591-593. In reading the quotations under these

sections one notes the recurrence of the qualifying word "mere," such as "mere" arrangement or grouping, "mere" strengthening or increasing weight is not invention. Such is the qualification of the rule. Whether any act of adaptation has ever risen above that qualifying word we need not speculate. It is enough that it might, and the courts can frame no rule which will bar to an inventor a right which the statute gives him. These remarks apply to §§ 652 and 665 under mechanical skill, and to § 707.

Aggregation, §§ 594-597. This subject has been fully considered under §§ 42-51.

Beneficial use and scope, § 598. The underlying principle here may be illustrated by *Wells v. Curtis*, 66 Fed. 318. In that case Judge Severens was entirely right in saying that "an afterthought perceived from subsequent experience or scientific inspection or analysis" and the application of the means disclosed to perform the un contemplated function did not involve invention. But let us suppose that such "experience," or "inspection and analysis," had resulted, from the exigencies of the case, in some modification of the means. A single step thus taken goes beyond the scope of the patent. Why? Because there would have been a *change in the combination* effecting the result. This is the test. As we must look both to means and result to establish identity, so we can say the performance of an un contemplated function is a beneficial use belonging to the patentee *only* when, upon investigation, we find the means employed present, item for item, and unmodified in their combinative relation, *Diamond Rubber v. Consolidated*, 220 U. S. 428, § 598.

Carrying forward, § 599. The rule here is evident; but in *Bullock v. General*, 149 Fed. 409, the limit is well noted. In the ordinary course of manufacture, improvements are made in numbers beyond counting; but now and then comes a time when the advance along a certain line slows down and almost stops. At that point someone takes a step — often a small one, but one which turns the halt into progress again. This may be true invention, and yet have the appearance of mere carrying forward. Mere carrying forward is but another name for mechanical skill (§ 654). Invention intervenes only when another sort of mental faculty has come into play; and to decide whether such an event has transpired is often one of the most difficult of problems.

Change of form, §§ 600-602. Taking the rule of *Evans v. Eaton*, 7 Wheat. 356, § 600, and that of *Winans v. Denmead*, 15 How. 330, § 602, we have this statement: A change of form without change of principle is not patentable; but when form is the essence

of the invention, it may be patentable. As the Supreme Court said in *Diamond Rubber v. Consolidated*, 220 U. S. 428, § 602:

But the law has other tests of invention than subtle conjectures of what might have been and yet was not. It regards a change as evidence of novelty, the acceptance and utility of change, even as demonstration.

The same rule is applied in mechanical skill, § 655.

Combinations, §§ 603-612. The essence of a true combination lies in the coaction of the elements. As elsewhere said, in an aggregation we have merely the *sum* of the functions; in a true combination the *product* of the elemental functions. This statement is open to the criticism that the result of a true combination is not a multiplication of things, but a modification of elemental functions. True, but the comparison is helpful. It is not necessary that the actions should be synchronous. *International v. Dey*, 142 Fed. 736, § 603. But the combination, broadly viewed, must be an entirety. The four limitations which must be put upon a combination are well summarized in *Gill v. Wells*, 89 U. S. 1, § 605. The result may be old if the combination is novel; and the fact that the elements are all old does not negative the novelty of the combination. *Columbus v. Robbins*, 64 Fed. 384, § 608. When both combination and result are old invention is wanting. It will be presumed that the elements of a combination claim are old unless specifically claimed. A claim for a sub-combination is good, *Parks v. Booth*, 102 U. S. 96, § 611; but the disclosure of the patent must be sufficient to comply with the statutory requirement. *Thomson-Houston v. Black River*, 135 Fed. 759, § 611.

Date of completion, § 613. While in the absence of other proof, the date of application for patent will be taken as the date of invention, the date may be carried back to the date of actual invention. The exact location of this point is often difficult, but as a general proposition it may be stated that the date of invention has arrived when the inventor is able to so disclose the product of his thought that another might, from such disclosure, put the idea of means into use. But there are cases where the question of completion as determining priority between two rival applicants or patentees is difficult. Judge Holt, in *Automatic v. Pneumatic*, 166 Fed. 288, § 860, has attempted a complete review of this phase of the subject. Certainly the effort is elaborate and labored, but, in my opinion, some of his conclusions, if not unwarranted, are subject to material modification. This subject will recur under reduction to practice, §§ 860-867.

Definitions, § 614. One will find a long, and perhaps the best, study of this problem by Justice Brown in *McClain v. Ortmyer*, 141 U. S. 419. A most interesting view is that of Judge Grosscup in *Brown v. Crane*, 133 Fed. 235, quoted under this section. Modern psychology finds absorbing interest in the study of such phenomena, but so far as is known, these investigations have not served to aid us in the practical application of tests in the form of evidence. However, since the test of any alleged truth lies in subjecting the facts to our inner consciousness, we recognize invention, not by a fixed definition, but by the pronouncement of our own minds.

Dividing or uniting parts, § 615. This subject has been substantially covered under § 591. The case of *Standard v. Caster*, 113 Fed. 162, § 615, presents an interesting problem. It is believed that that case presents a close question.

Double or analogous use, §§ 616-618. Undoubtedly *Potts v. Creager*, 155 U. S. 597, quoted extensively under § 671, is the ruling case upon this subject. The distinction between double use and analogous use is not always clear. A double use is rarely, if ever, patentable, while in a so-called analogous use the analogy may be so remote as to involve invention. A clear case of double use is that of *Jones v. Cyphers*, 126 Fed. 753, § 616. Cases at the other extreme are those quoted under § 618. In view of such holdings as *Voightman v. Perkinson*, 138 Fed. 56, § 616, it is evident that the rule of *Potts v. Creager* will be applied with strenuousness in most cases involving analogous use.

Evidence of, §§ 620-638. In the case of *Westinghouse v. Stanley*, 133 Fed. 167, § 620, we have one type of acquiescence which is evidence of invention; in *Wolff v. Dupont*, 134 Fed. 862, § 620, we have quite another. In the former case there was the acquiescence of those engaged in the particular art where competition and struggle for improvement was very sharp; in the latter case the condition is much less forceful. The acquiescence in the Tesla inventions involved the strongest temptations, and the greater the temptation the stronger the evidence of acquiescence. It is believed that attempted evasion of a patent, where the evidence of such attempt is clear and the infringement is obvious, should be regarded as strong evidence of invention; but it is also believed that this rule should be given little, if any, weight when the competition of business leads one manufacturer to crowd close upon the line of the monopoly of another. In other words, the intent should govern. The rule is particularly adapted to the industrial parasite, not to a legitimate competitor. The extent to which commercial success may be employed to evidence invention de-

depends upon the circumstances of each case. It cannot be relied upon, but it is often most persuasive. *Krementz v. Cottle*, 148 U. S. 556, § 622. The unfixeness of this rule is illustrated in *Westinghouse v. Union*, 117 Fed. 495, § 622, where the court said:

“If there is any doubt upon the question of patentability, the practical and commercial results of the improvement must resolve such doubt in its favor.” (p. 498).

“Its confessed commercial success, therefore, cannot be accepted as evidence of invention.” (p. 501).

Clearly, these remarks could hardly be made with regard to the same patent, but they were made with regard to two patents in the same case. And the rule is the same as to efficiency. *National v. Hedden*, 148 U. S. 482, § 624; and also as to extensive use. *Smith v. Goodyear*, 93 U. S. 486, § 626. But, on the other hand, if commercial success, efficiency or extensive use may be evidence of invention, what shall be said of a patent that has lain dormant for years, and when suit for infringement is brought upon it, the defendant urges the converse of this rule? Suppose counsel says, “The question of invention is a doubtful or debatable one. If this patent had immediately shown large efficiency and had met with great commercial success, then the rules would apply and tip the scales in favor of the patent; but here is a case where the sign before the patent has been changed from plus to minus. Is not its failure as persuasive of want of invention as success might have been of invention?” While the statement in *Campbell v. Duplex*, 101 Fed. 282, § 637, so far as is known, is the nearest approach to a justification of this proposition, it is believed that it is an argument not without force. Obvious demand may have its weight, as stated in *Commercial v. Fairbank*, 125 Fed. 4, § 628; but *Fay v. Mason*, 127 Fed. 325, § 628, places a distinct limitation upon the rule, which, apparently, is this: If the obvious demand is at once and easily met, it is without force; but if the obvious demand is one met only with difficulty, there is evidence of invention. Since *Reckendorfer v. Faber*, 92 U. S. 347, § 629, the prima facie of a patent has stood for very little; and since *Palmer v. Corning*, 156 U. S. 343, § 629, its evidential value has become microscopic. Nor is the presumption of the grant reinforced by what occurred in the Patent Office. *Canda v. Michigan*, 124 Fed. 486, § 630; *American v. Sample*, 130 Fed. 144, § 630; *Imperial v. Crown*, 139 Fed. 312, § 630. But the effect of prior attempts and failures and turning failure into success is quite otherwise.

With the rule finally and well stated in *Carnegie v. Cambia*, 185 U. S. 403, § 631, we have at least one rule of evidence of invention which, when it can be applied, is not so open to qualification or diminution as to render it of little force. There is the simplicity of greatness and there is the simplicity of triviality. The one is clear evidence of invention; the other suggests mechanical skill. And here we may mark the distinction between patentees of inventions and inventors of patents. While use of the device of a patent by a defendant fairly establishes its utility, such utility by no means establishes patentable novelty. As a matter of fact, the statement that evidence of utility cannot be made to control the language of the statute which limits the benefit of the patent law to things which are new as well as useful is conclusive upon this point, and leaves utility as evidence of invention where it should be—in the same category with commercial success and large use. *Grant v. Walter*, 148 U. S. 547, § 636. And the recent decisions of the Supreme Court in *Expanded v. Bradford*, 214 U. S. 366, § 631, and *Diamond Rubber v. Consolidated*, 220 U. S. 428, §§ 625, 626 and 634, have done no more than sharpen and clarify the rules long since applied.

Force of nature, § 639. A force of nature is not patentable, nor may anyone so claim the utilization of such a force as to practically exclude another from employing it with other means. The Morse telegraph case at the beginning and the Cameron septic tank at the close of the series of cases upon this subject fitly begin and conclude a most uniform line of rulings.

Generic invention, §§ 640–643. One may choose his definition of a generic or “pioneer” invention from the many given under §§ 640–643. The statement in *Westinghouse v. Boyden*, 170 U. S. 537, § 641, that the word “pioneer” is “commonly understood to denote a patent covering a function never before performed” is open to serious criticism. In the first place it is altogether questionable whether that is the common understanding of the term. In the second place, it is of doubtful exclusiveness. For example, the “function” of the Edison lamp (*Incandescent Lamp Case*, 159 U. S. 465,) had been performed before, but the Edison incandescent lamp patent was a pioneer in the estimation of most people. If we now compare Edison’s lamp patent with his film patent (*Edison v. American*, 114 Fed. 926, § 640) we have the distinction between a generic and specific invention clearly before us. The definition of a generic process in *Mitchell v. Tilghman*, 86 U. S. 287, § 641, is beyond all criticism; and the statement in the dissenting opinion of Mr. Justice Shiras in *Westinghouse v. Boyden*

(under § 644) that "a pioneer patent does not shut but opens the door for subsequent invention" is a verity. Men like Bell, Westinghouse, Cowles, Acheson, have each opened up great fields for invention. Giving to such as these protection commensurate with their genius — making improvements tributary to them — has in no wise retarded progress; but on the contrary, has given them opportunity to secure the co-operation of large capital to carry the fruits of their labors into common use. And there is need at this time for laying emphasis upon this statement of Justice Shiras. In the effort to suppress noxious monopoly there is a tendency, such as that from which the learned Justice dissents, to repress the monopoly of a generic invention. While the reward which the world bestows without patent upon a Franklin or a Crookes or a Koch or a Mendelieff or a Kelvin may be quite enough for these great benefactors, in order to encourage the leaders of our industries to invest their energies and their fortunes in bringing the benefit of great inventions to the people at large, the legitimate monopoly of the patent must be safeguarded. A striking example lies in a comparison of Bell and Cowles. Had the same recognition been accorded Cowles — a recognition finally awarded, but too late — that was given Bell, the industrial development of electrolytic synthesis would not have been delayed a decade, but on the contrary, the recognition of the monopoly of the field would have opened the way for capital and improvement alike, and both inventor and nation would have been the richer.

Immoral object, § 645. The decisions quoted under § 645 as to immoral use open a vista of large interest. The *Animarium* case properly withholds the implied sanction of a patent to an invention which may be, in the broader sense of the term, "immoral," i. e., lacking in truth of disclosure, or, affirmatively disclosing that which is untrue or pernicious. The slot machine case presents quite another problem. If the decision in this case is compared with the recent rulings of the Supreme Court as to the powers of the states to regulate the enjoyment of patent rights (*Wilbur v. Virginia*, 103 U. S. 344; *Allen v. Riley*, 203 U. S. 347; and *Woods v. Carroll*, 203 U. S. 358, all under § 920), it would seem that the decision in the slot machine case goes sufficiently far to protect the public through Federal intervention, leaving the states, under these Supreme Court holdings, the power to legislate for the specific protection of their inhabitants.

Improvement, §§ 646-8. This subject has been considered in connection with §§ 430-444, under the general title of improvement. It is enough to add here that it is thought that there has been no

better comment upon that which characterizes patentable improvement than the statement in *American v. Universal*, 151 Fed. 591, quoted under § 648. It is he who strikes out upon a new line or he who breaks through the barrier that invents — not he who adapts and adopts and adjusts. The distance traveled may be long or short; but so long as it goes through or around and arrives where either (1) no one had arrived before (a generic invention); or (2) arrived by a new route (a specific improvement) it is invention.

Manufacture, § 649. This subject will be fully considered in connection with §§ 772–775. As bearing directly upon the subject of invention the quotations from *Kilbourn v. Bingham*, 50 Fed. 697 and *Cerealine v. Bates*, 101 Fed. 272, under § 649, should be compared. While it is true that each case presents its own problems, to say that “there is no clear line of demarkation between what may be called a new article of commerce, not patentable though useful, and new articles of manufacture patentable as such,” is wide of the fact. The line of demarcation is absolutely clear. *Risdon v. Medart*, 158 U. S. 68, § 649. It is never otherwise than that the inherent novelty must be of the article itself; never in its elements, else it is a process; not in the mechanical means by which it is produced, else it is a case of mechanical invention. Either of these may or may not be patentable. Undoubtedly what the court had in mind in the cereal case was that it is generally difficult to determine upon which side of the fixed line of demarcation the invention in question falls.

Mathematical formula, § 650. The one case cited under this section raises, not the question of patentability of mathematical or other formulæ, but whether a claim expressed in such terms is good. Formulæ and symbolism have long been used in the description and drawings, often with greater lucidity than could be attained in any other way; but when it comes to delimiting the invention by the claim, that is quite another matter. This rule has been successfully invoked, at least once, in securing a similar claim in the Patent Office; but it is thought it should be permitted only when the meaning of the formula employed has a definite and clearly understood meaning and only when the ordinary expressions fail of the purpose.

Means, § 651. The Supreme Court has repeatedly held that an invention must consist of a new and useful means of obtaining the end sought. But when that court came to consider the case of *National v. Boston*, 156 U. S. 502, § 650, the rule received considerable stretching to make it cover the case of an old device to a remotely analogous use, and held, “in that case it is the idea of

means, though old, that is patentable, and not the end attained." This is but shifting the difficulty to another point and saying that novelty is not an essential to patentable invention. Had the court said that the idea of means resided, not in the old device nor in the new use, but in the concept that the old device could be put to the new use, the attenuation of the rule might be evident, but less distortion would have occurred. How shall we apply this rule to an article of manufacture? The answer is not at hand.

Mechanical skill, §§ 652-666. If we had defined patentable invention and patentable improvement, we should have, by exclusion, defined mechanical skill. But we have not, nor can it be done. The utmost that can be done in any of these cases is to marshal the tests and criteria which aid in determining the question in each case. Under this sub-title of mechanical skill it is shown that adaptation, aggregation, carrying forward, change of form, uniting or dividing parts, increasing efficiency, adapting an old device to an analogous use or to a new use where the change is trivial, or using old elements to produce an old result without recombination, or making an article portable, or merely giving it strength — all these are mechanical skill. And yet we may not say that none of these acts, per se, may involve invention. As was said in *Krementz v. Cottle*, 148 U. S. 556, § 656, "it is not easy to draw the line that separates the ordinary skill of a mechanic versed in his art from the exercise of patentable invention." And this leads directly to a consideration of what range of knowledge or skill shall be imputed to "a mechanic versed in his art." In *Brown v. King*, 107 Fed. 498, § 657, a rule is laid down which is believed to proceed upon a wrong principle, and which illustrates the point in question. Clearly the invention in that case was not one which could have been produced by "the ordinary skill of a mechanic versed in his art." But the inventor chanced to be an engineer of large ability who went about the problem with the directness and certainty which comes of education and training, and produced the desired device. Now, is the question of invention to be decided by a measurement of the education and engineering skill of the *inventor*, or by the skill of "a mechanic versed in his art?" In the case under consideration the court took the inventor as the measure. Is this permissible? Or, taken the other way, must we say that in a given art the skill of a mechanic used as a standard must be commensurate with the highest skill evinced by some individual in the art? It is perfectly clear that, in a difficult and complex art — such, for example, as communication by means of electricity — the "mechanic versed in his art"

is not the lineman who climbs poles or the machinist who makes parts of the apparatus; but must this mechanic be an Edison, or a Bell, or a Marconi? To state the proposition is to show its absurdity. We may, therefore, lay down the following negative rules as to what constitutes the status of mechanical skill:

1. It cannot be measured in terms of the skill of the inventor to whom the patent issued.

2. It cannot be measured in terms of the highest genius in the art.

3. It cannot be measured in terms of the ordinary workman in the art.

And on the positive side it may be stated that mechanical skill must vary directly with the general advance of the art, and to some degree with the progress in general education. The education of to-day makes mechanical skill of what might have been inventive genius fifty years ago, *Duncan v. Cincinnati*, 171 Fed. 657, § 656. But as education has narrowed the in-field of invention, it has extended the out-field; and it will not do to apply limitations based upon engineering training to close the door of invention to genius merely because it happens to be trained genius.

Novelty, §§ 667-9. Are novelty and patentability convertible terms? Clearly not. While novelty is an essential to patentability, mere novelty is not enough; novelty plus the other factors which the statute prescribes constitutes patentability. Under § 667 will be found the laborious efforts of the courts to define and distinguish novelty. If one thinks that the courts must, in all these years, have arrived at some general statement or doctrine which may be crystallized into a general statement, let him read those cases and attempt it. It is, after all, but another instance of the fact that no man may write down and classify the activity of the human mind. As has been seen, the line between invention and mechanical skill is a shifting one. So is the line which separates patentable novelty from everything else. The statute makes novelty and utility the main qualifications of the right to patent. Of these utility cuts but small figure in the mass of decisions, except as evidencing novelty. Absence of novelty is the chief of the affirmative defenses. To the solution of the question are brought most of the rules and tests of the entire field of the patent law, even including some of the rules and tests of infringement. Novelty is a condition. It is indefinable, shifting and varying with each case. It is something to be decided — whether present or absent — by a jury or by the court exercising the functions of a jury. The statute makes the wise provision that in the trial of an equity cause, the court may in

its judgment empanel a jury to decide this question of fact. It is from failure to regard the subject of novelty — the mistake of treating it as a yardstick by which invention is to be measured — that so many decisions have been astray and reversed on appeal.

Old device, new use, §§ 670--73. A writer with any perception of his sphere of activity would not contemplate a discussion of this subject. He would merely refer to *Potts v. Creager*, 155 U. S. 597, § 671, and state that nothing more was to be said.

Old elements, new result, § 674; Old elements, old result, § 675. The employment of an old combination or process to effect a new result, as stated in *Potts v. Creager, supra*, depends upon the question of analogousness as to its patentability. But the fact that the elements of the combination are old in themselves, when the result is new, does not affect the question of invention. In fact, most combinations fall under this class. With old elements and an old result the question of invention depends upon whether the combination of the elements was old.

Old process, new use, §§ 676-8. And the same rules apply to processes. The rules of *Potts v. Creager*, 155 U. S. 597, § 671 and *Penna. v. Locomotive*, 110 U. S. 490, § 676, apply with equal force to processes and machines.

Omitting element, § 678. Subject to the qualification stated by the Supreme Court quoted under this section, just as omitting an element avoids infringement (§ 456) so it may involve invention. And it may be said also that he who performs a given function with the omission of an element formerly essential, without the addition of another element to take its place, may entitle himself to a broader claim than that of the former combination, although he may not draw to himself the quality of a pioneer and dominate the prior combination.

Patentability, §§ 679-684. A very substantial and useful volume has been written upon this subject alone. As to what constitutes patentability, no better expressions are to be had than the quotations under § 679 from *Atlantic v. Brady*, 107 U. S. 192, and *Thompson v. Boisselier*, 114 U. S. 1. How far the copendency of application or subsequent issue of a patent to another may evidence patentable difference is a question which, notwithstanding the decision in *Kokomo v. Kitselman*, 189 U. S. 6, and *Ransome v. Hyatt*, 69 Fed. 148, § 680, is an open question. The day upon which this paragraph was written the writer was shown two patents, upwards of eight years apart in issue, covering a composition of matter simply identical. Now, it is all very well to regard the subsequent issue of such a patent as a *presumption*, micro-

scopic as it may be; but the moment we dignify it as *evidence* it fails to square with the experience of any patent lawyer.

The position taken by the courts in *Millard v. Chase*, 108 Fed. 399, and *Hurlbut v. U. S. Mailing*, 124 Fed. 66, § 681, is absolutely sound. Too long have the courts followed the line of least resistance in regard to patents of evident invalidity. It may satisfy the demands of the case at bar to construe a patent, confessedly invalid for want of invention, so narrowly as to render infringement impossible; but the courts owe a duty to the public — to the industries of the country — as was clearly indicated in *Atlantic v. Brady*, 107 U. S. 192, under § 679 — to wipe out at every opportunity those patents which make no contribution whatever to human knowledge, but stand in the way of legitimate progress.

As to the patentability of a mental conception, undoubtedly the rule in *Forgie v. Oil Co.* 58 Fed. 871, § 682, is sound; but what shall be said of *Bradford v. Expanded*, 146 Fed. 984, § 682? Is one to be barred from patenting an article of manufacture because he has also invented patentable means for producing that article? This question was asked in the first edition of this work. The answer is to be found in *Expanded v. Bradford*, 214 U. S. 366, § 817, since decided. This question is merely raised, not answered. It is true, as has been said in *LeRoy v. Tatham*, 14 How. 156, § 683, that a principle, scientific or otherwise, is not patentable. It is the means for utilizing such a principle that is the subject-matter of a patent. An architectural design is not patentable. *Jacobs v. Baker*, 74 U. S. 295, § 684. The test here is evident: Novelty of design is not novelty of means employed. If such a design embraced novel mechanical means, it would be those means, not the design, that would be patentable.

Process, §§ 685–688. This subject will be more fully considered under the general title process, §§ 814–822. Perhaps enough has been said regarding the decision in *Westinghouse v. Boyden*, 270 U. S. 537, § 686. But the writer is under the profound conviction that the rule of that case marks a halt in the progress hitherto due to the protection of basic invention. Inventors and manufacturers alike, knowing this rule, are endeavoring to overcome its effect by the patenting of not only all detail improvements, but every possible modification that can be thought of. This is resulting in the issuance of a vast number of patents not used — not expected ever to be used — simply to close the door as best it may be done in the absence of the right to a claim for a mechanical process. Here it must be noted that this statement was made before the decision of *Expanded v. Bradford*, 214 U. S. 366, § 817.

Property of matter, § 689. Not the property of matter discovered, but the invention of a practical application of it, is patentable.

Result or function, § 690. To hold a function or result patentable would be subversive of the entire patent system. This subject has been previously considered under §§ 426-427. One remark should be added here. It is a common error to suppose that a "whereby clause" (that is, a clause following the statement of the combination of the claim stating, whereby this and that operate so and so to accomplish this certain thing — the function of the device) in some way makes the claim broader, or in some way makes the function performed a part of the claim. Recalling the rule that a function is not patentable at once shows the uselessness of such appendages to claims.

Scientific principles or laws, § 691. This subject has been generally considered under patentability §§ 682, 683.

Simplicity, §§ 692-693. This subject also has been reviewed under evidence, § 632, but the matter of ex post facto judgment (§ 693) should not be overlooked. The rule now clearly laid down in *Carnegie v. Cambia*, 185 U. S. 403, § 693, should set this matter at rest.

Simplification, § 694. This, like the question of simplicity of invention, depends upon whether it is a case of triviality or a stroke of genius.

Substitution, §§ 695-697. The long list of Supreme Court decisions leaves no question as to the non-patentability of mere substitution of one material for another. But *Edison v. U. S.*, 52 Fed. 300, § 697, is typical of a case where substitution of material is clearly patentable. In that case not only was the carbon filament unknown, but its use so enlarged the old function as to take the vacuum lamp from the laboratory and make it an article of great usefulness. The test of patentability would, seemingly, depend upon both the novelty of the element substituted and the improved result; or, as in the case of *Rainear v. Western*, 159 Fed. 431, § 697, upon the novel substitution of a known element to effect an improved result.

Systems and arrangements, § 698. This subject has been adverted to under aggregation, §§ 42-51. In the note under *Library Bureau v. Macey*, 148 Fed. 380, § 698, is indicated that which may save a patent covering a "system;" but as there stated, it is the novel means employed — not the system or arrangement — that constitutes the patentable feature of the invention. So it may be with the numberless electrical systems patented. In many of them are

novel devices and combinations. The "system" claim comes near being functional in character, since it is the product of the employment of these devices which may be novel in connection with arrangements of wiring necessary to their conjoint or successive operation; but like the Library Bureau case, the invention resides in the devices which make the arrangement possible, rather than in the arrangement itself.

Tests of, §§ 699-700; Transposition of parts, § 701. These subjects have been considered under evidence and adaptation, respectively.

Utility, § 702. The decision in *Rickard v. DuBois*, 103 Fed. 868, § 702, is most suggestive. It raises the question, how many other patents are there which might come under this ruling? We are told there is a novel attachment for a loom to make "bargain" goods, i. e., goods with slight blemishes or defects which the loom would not make were it not interfered with. This may or may not be a harmless deception for the benefit of the "bargain hunter," but would such a device be patentably useful under the statute? From time to time the Patent Office rejects applications which would, if matured into patents, be subversive of good morals, on the ground of lack of statutory utility. Consider also the slot machine case under § 645. With the continually quickening moral sense of the public, the line will be drawn more sharply; and those inventions which distinctly and chiefly find their uses in practices brought under public condemnation will find scant favor with the courts.

INVENTOR, § 703.

Nothing need be added to the statement of the text.

JOINT INVENTIONS, § 704.

The general statement under this section is quite full. While not common, instances of joint patenting do occur, such as that in *Standard v. Computing*, 126 Fed. 639, or *De Laval v. Vermont*, 135 Fed. 772, where, through ignorance, the applicants supposed that the right to make joint application depended upon joint ownership.

JUDICIAL NOTICE, §§ 705-712.

The courts will take judicial notice of matters relating to novelty and patentability, and may refer to common sources of general information to refresh the recollection. They will also, to some extent, take judicial notice of the prior art. *Beer v. Walbridge*, 100 Fed. 465, § 709, and will decide matters in view of such knowl-

edge whether pleaded or not. *Slawson v. Grand*, 107 U. S. 649, § 708. In like manner public use may be the subject of judicial notice; and to inform itself on matters of patentability in general the court will be at liberty to refer to its own records for anything therein contained. *Rumford v. Hygienic*, 159 Fed. 436, § 711.

JURISDICTION, §§ 713-725.

The district courts have original jurisdiction of all cases of infringement, excepting that actions of that nature against the Government arise in the Court of Claims, which is now definitely provided for under the act of June 25, 1910 (see § 428). Appellate jurisdiction originally resided in the Supreme Court, but since the establishment of the circuit courts of appeals they have appellate and final jurisdiction of all actions of this nature, excepting only a question of jurisdiction of a Federal court, which lies to the Supreme Court. Of course a case may be certified to the Supreme Court, but this is outside the question of general jurisdiction. A controversy involving a patent, when the moving cause is a contract, is not, as such, one which is under the jurisdiction given by the patent statute. The distinction is well stated in *Victor v. The Fair*, 123 Fed. 424, § 714. The general rule as to equity jurisdiction is stated in the quotation under § 718 from *Root v. Railway*, 105 U. S. 189. When a court of equity has once acquired jurisdiction, its powers will be co-extensive with the necessity of dispensing full justice; as, for example, if matters of contract are incidental, they will be decided; and if jurisdiction were acquired through other conditions than those arising from infringement, and infringement were incidental in the case, the court would proceed to a full determination of the issues. Primarily, a court of equity takes jurisdiction in order to apply the remedies peculiar to equity, and will not take jurisdiction when the remedy at law is adequate. *Keys v. Eureka*, 158 U. S. 150, § 721, or merely for the purpose of assessing damages or profits. *Truman v. Holmes*, 87 Fed. 742, § 719. Generally speaking, an equitable title is insufficient to enable a person to sue for infringement. *Milwaukee v. Brunswick-Balke*, 126 Fed. 171, § 926. But it would appear that conditions might arise where an equitable interest might be sufficient. *Hayward v. Andrews*, 106 U. S. 672, § 720. While it is the general rule that jurisdiction will not be taken on the showing of any interest less than one of the three mentioned in *Waterman v. Mackenzie*, 138 U. S. 252, § 150, if the infringement is committed by the assignor against his assignee holding a license interest, such licensee may sue. *Littlefield v. Perry*, 88 U. S. 205, § 722. But a plea of license

cannot defeat jurisdiction. The question of residence as affecting jurisdiction remains unchanged in Secs. 24 and 48 of the Judicial Code, the latter section being a re-enactment of the act of Mar. 3, 1897, the provisions of which were additions to the existing law. *Westinghouse v. Great Northern*, 88 Fed. 258, § 723. It is unnecessary to enter into the subject of jurisdiction of state courts further than to remark that it is a general principle that if such court has acquired jurisdiction upon proper grounds it may, collateral to the main issue, enquire into the scope and validity of the patent, even where the complaint prays injunctive relief, *New Marshall Engine v. Marshall*, 223 U. S. 473, § 714; and that while one may not ignore an existing contract and sue for infringement, *Am. Graphophone v. Victor*, 188 Fed. 428, § 714, still where two causes of action exist, one cognizable by a state court and the other by a Federal court, the complainant may elect between the two remedies, *Henry v. Dick*, 224 U. S. 1, §§ 714, 718.

LACHES, §§ 726-732.

Since both laches and excuse for laches are negative in character, they do not appeal strongly to the courts. Laches may amount to abandonment as indicated in § 726. Delay in bringing suit to be effective must be very clear. When a patentee is making bona fide effort to protect his monopoly, he is not called upon to sue all infringers. *Edison v. Sawyer-Man*, 53 Fed. 592, § 729. But a patentee may not use his grant as a trap to catch game. *Hohorst v. Hamburg-American*, 91 Fed. 655, § 728. Whether poverty is an excuse for laches compare *Woodbury v. Keith*, 101 U. S. 479 with *Leggett v. Avery*, 149 U. S. 287, § 729. Contradictory as these rulings appear, it is thought no hard and fast rule may be laid down. Poverty is a relative term, and it must be viewed along with surrounding circumstances and conditions, as was done in *McNeely v. Williams*, 96 Fed. 978, § 727. The subject of laches as affecting injunction pendente lite arises under § 568.

LAW ACTIONS, §§ 733-737.

Conditions which warrant the bringing of an action at law for infringement are such as to render the proceeding rare. The special rules affecting such cases are few. It is now well settled that the court has power to direct a verdict when it is evident and clear that the plaintiff cannot recover; but it is to be observed that this is a ruling of law that recovery cannot be had, rather than the usurpation of the function of a jury in deciding a question of fact. It is the duty of the court, in instructing the jury, to define the scope of the invention in accordance with the claim. *Holmes*

v. Truman, 67 Fed. 542, § 736. And it is not proper to instruct as to abstract, recondite or hypothetical matters, or to read from the opinion of another judge upon the patent in suit. (§ 736). The subject of damages has already been considered. (§§ 280-299). Aside from the rules here noted and those relating to damages and to the statutory notice of evidence of anticipation (§ 795), the trial of a law action for infringement proceeds upon general and well-established lines. Some matters as to pleading arise under §§ 789-807.

LETTERS PATENT, §§ 738-748.

It has become customary to speak of a patent as a monopoly. This is not strictly correct, for a patent is, at most, but a limited monopoly, *U. S. v. Bell*, 128 U. S. 315, § 745; and the use of the term "monopoly" tends to bring the grant into ill-repute, owing to the general aversion to monopoly in trade and industry. A patent is more nearly a contract as stated in *Krupp v. Midvale*, 191 Fed. 588, § 741. A better statement has not been made than that in *Seymour v. Osborne*, 78 U. S. 516, § 745, which makes the patent neither a contract nor a monopoly, but a particular form of grant sanctioned by the Constitution for the specific purpose of promoting the useful arts. It is true, indeed, that a series of patents may afford the basis of an odious monopoly, *National v. Hench*, 83 Fed. 36, § 744; but any attempt to classify a patent monopoly as coming under any general anti-trust act must prove abortive (*Bement v. National*, 186 U. S. 70, § 744; *Rubber Tire v. Milwaukee*, 154, Fed. 358, § 744; *Virtue v. Creamery*, 179 Fed. 115, § 744) until specific legislation is had to reach cases of unconscionable monopoly cloaking themselves under legitimate patent monopoly for evil purposes. That specific legislation to reach such cases is sorely needed no one can question.

The property right in letters patent differs little from that of other incorporeal personalty. There is no obligation arising from the grant for the owner to make use of his invention, or, in the event of his failure so to do, any suggestion of abandonment of his right, *Heaton v. Eureka*, 77 Fed. 288, § 746. But it must be remembered that the award of a preliminary injunction lies in the sound discretion of the court (§ 543), and it is believed that a cold-storage patent has the moral factor against it. In fact, one cannot read the appellate decision in the *Selden Case* (184 Fed. 893) without feeling that the moral factor growing out of the delay and supineness of the inventor had its influence with the court, in spite of the assertions of the perfect legality of his course. While it is now the law

that a patent has all of the immunities given it by the Harrow Case (§ 744, supra) and the Dick Case (§ 898), it seems probable that these immunities will be circumscribed either by statutory enactment or by change of judicial view.

A defect in a grant may be fatal or not, according to the nature of the defect. In *Marsh v. Nichols*, 128 U. S. 605, § 742, the defect was the absence of the signature of the Assistant Secretary of the Interior, which arose purely by accident, and was fatal. In *Western v. North*, 135 Fed. 79, § 748, the defect was delay or irregularity of the Patent Office, and was held not sufficient to defeat the grant. With the more reasonable view of patents as contracts, rather than pure monopolies, it is doubtful if so drastic a holding as that of *Marsh v. Nichols* would now prevail.

LICENSE, §§ 749-764.

An ordinary license is neither assignable nor transmissible. *Haffcke v. Clark*, 50 Fed. 531, § 762. But it may be so continued, of course, by specific terms in the contract, or by conduct or implication. *Lane v. Locke*, 150 U. S. 193, § 751. It would seem that the Supreme Court has established a special rule regarding Government employees. *McAleer v. U. S.*, 150 U. S. 424, § 756. The construction of a contract of license follows the general rules of construction of written instruments. *Standard v. Leslie*, 78 Fed. 325, § 753. The covenants are mutually binding, and such a covenant as agreeing to defend the patent for the protection of the licensee is good. *U. S. Cons. v. Griffin*, 126 Fed. 364, § 753. The rules of estoppel apply between licensor and licensee, but an estoppel does not arise to prevent a licensee from showing the prior art to define the limits of his obligation. *American v. Helmstetter*, 142 Fed. 978, § 754. A licensee may forfeit his rights, and if he does, by failure to pay license fees under the contract, he cannot regain his right by tender of the fees due. *Platt v. Fire Extinguisher*, 59 Fed. 897, § 755. A license may arise by implication, or may be made by parol, and, of course, the statutory license arises in favor of a device built with consent before patent application (R. S. 4899). A rather close question of shop license arose in *Barber v. National*, 129 Fed. 370, § 756. It is thought that case marks the limit of right of an employer. There are cases where the secured right to one device will carry with it, by implication and by the rule that the grantor is in duty bound to make enjoyment of the grant possible, the right to use another patented device. The trolley switch case (*Thomson-Houston v. Illinois*, 152 Fed. 631, § 756) is in point. There the complainant consented to the

installation of the apparatus, including its patented switch, necessary to the use of the electric locomotives sold to defendant. Subsequently complainant bought other locomotives to use in connection with the former from another maker, and used them in connection with the same switch installation. It was held that the license which went, by implication, with the sale of the locomotives of complainant's make entitled the defendant to use the switches in connection with the other locomotives. While this holding might, at first glance, seem extreme, it is evident that, in such cases, the line must be drawn somewhere; and since it was within the power of that complainant to have specifically limited the use of its switches to that in conjunction with its locomotives, so long as that was not done, the rule seems just. But the rule in *Edison v. Peninsular*, 101 Fed. 831, § 756, is questionable. Unless the contract otherwise provides, payment of royalties ceases with the life of the patent; and it is fair to presume that if the patent expires prior to its full limit by reason of the expiration of a foreign patent under the former rule, payment of royalties would then cease. The right to royalties depends upon what is claimed, not what is described in the patent. *Western v. Robertson*, 142 Fed. 471, § 671. And where the license was made before patent and covers more than materializes in the claim, the licensee is not bound to royalties upon that which is found unpatentable. *Eclipse v. Farrow*, 199 U. S. 581, § 760. The rule that the sale of a patented article by the assignee of a territorial right within his territory sets the article free from all territorial restrictions is fundamental. *Hobbie v. Jennison*, 149 U. S. 355, § 763. Any restriction of this rule would have to be the subject of a contract. *Keeler v. Standard*, 157 U. S. 659, § 763. The invalidity of a patent cannot be set up by a licensee as an excuse for nonperformance under his license until such fact has been established as a matter of law. *Holmes v. M. McGill*, 108 Fed. 238, § 764. A co-owner of a patent may license without the consent of the common tenant with him. *Paulus v. Buck*, 129 Fed. 594, § 764. The means for preventing this, and many other complications, is to make the co-owners tenants by the entirety — a course which is often desirable.

LICENSOR AND LICENSEE, §§ 765-767.

This subject has been generally treated above.

MACHINE, §§ 768-769.

To what has been said under § 768 nothing need be added. The question of the right to repair a purchased patented machine has been fully considered under §§ 523-524.

MACHINE AND PROCESS, § 770.

It is clear that the machine may be new and the process old, or the machine may be old and the process new, or both may be new. A difficulty sometimes arises in determining whether the patentable novelty resides in the machine or in the steps of the process wherein the machine is a material part. In such a case we must go back to the fundamental principles and determine whether that which is new arises from the interaction of the elements of the machine, modifying the function of each and thus affecting the result, or whether novelty resides in the action (result) of the machine combined with some other step in the process.

MACHINE AND PRODUCT, § 771.

So also a machine and its product may be either or both novel. But novelty of the machine does not make the result patentable. The result or product, as an article of manufacture, must possess inherent novelty independent of the machine which creates it. A patent may or may not cover both the machine and the manufacture; where it does not, he who buys the machine attains the right to the manufacture, although it may be separately patented. But the reverse would not hold — a right to use or sell the article of manufacture would not carry the right to the separately patented machine.

MANUFACTURE, §§ 772-775 (see § 649).

What has been said under § 772 as to the looseness in use of the term "manufacture" is re-emphasized. The statute makes it one of the patentable classes of invention. Why was this done? Clearly because there is a class of inventions of economic value which cannot be defined, measured, or tested in terms of an art, machine, or composition of matter. A patentable art consists in genius brought to bear upon matter and the laws of matter to effect a given result; so with a process. A machine consists in imposing upon mechanical elements the mind of the inventor, working in harmony with the laws of mechanics to effect a result. The production of a new article of manufacture may involve these inventive acts or it may not; and the novelty of the article cannot be determined by the criteria commonly applied to these classes of patentable invention. The novelty must inhere in the article itself. For example, the man who first produced soap, say, by combining animal fat and lye from wood ashes, produced a new article of manufacture — soap. The test here would be whether soap had ever existed before. Soap bark had existed before,

but soap bark, in composition and efficiency, differs materially from soap; moreover, it is in no sense an article of manufacture. But suppose that, subsequent to the fat-and-lye soap, another invented a soap made from a vegetable oil and soda. His process might differ materially, and as such be patentable; but soap as an article of manufacture had been discovered. In that case the slimy, unrefined article — soft soap — would be a perfect anticipation of the cake of translucent, mild and largely different toilet article now in use. The inherent quality is the same in both. Thus it is that an article of manufacture may be new and highly useful from a commercial point of view, and yet be very old and wholly unpatentable from the viewpoint of the statute. *Union v. Van Deusen*, 90 U. S. 530, § 775. Now, if this reasoning is sound, it must follow that the broad statement that the test of novelty must be the same in the case of a machine (*Campbell v. Bayley*, 63 Fed. 463, § 774) cannot be accepted. Suppose we take another comparison: Carborundum is produced by an electrolytic process. Carbide is made by an electrolytic process more or less analogous. The one yields an abrasive, the other a gas. Now, by tests which we should apply to a machine or process there might be identity sufficient to warrant anticipation or infringement; but would one venture to say that, as an article of manufacture, a carborundum grinder was identical with a charge of carbide in an acetylene gas generator? It has seemed that, in view of the somewhat confused statements of the courts, there is necessity of going back to such elemental propositions to set right the lines of reasoning regarding manufactures.

MARKING "PATENTED" §§ 776-777.

Failure to comply with the requirement of the statute does not affect the grant, but does affect the right to recover damages or profits. When failure to mark is raised by the pleadings and the complainant or plaintiff fails to make proof of compliance with the statute, damages and profits are barred. All this is clear; beyond is doubt. While it is too late to raise this question for the first time on appeal, may it not be raised by the proofs and made an issue without pleading? Again, suppose that, while the article has not been marked, the infringer has been in full knowledge of the patent, has openly and defiantly infringed, remains silent and raises the question for the first time after final hearing. Such has been held a bar to profits in a circuit court. This is clearly a subject which needs further pronouncement by the appellate courts, but not along the narrow and reactionary line of the Circuit

Court of Appeals for the Second Circuit, *Crier v. Innes*, 170 Fed. 324; *Lichtenstein v. Phipps*, 168 Fed. 578, § 777.

The law governing false marking and *qui tam* actions under § 4901, R. S., is stated in *London v. Dunbar*, 179 Fed. 506, § 777.

MORTGAGE, § 778.

A mortgage on a patent is recordable in the Patent Office under § 4898, R. S., and since a patent is incorporeal property, the recording of the patent is constructive delivery. Legal proceedings growing out of a mortgage, in the absence of any charge of infringement, are cognizable by state courts.

OATH, §§ 779-780.

The occasions wherein the oath becomes insufficient to support a patent are most frequently those where the specification or claim has been unduly expanded by amendment or reissue. This has been referred to under §§ 52-57. It is evident that if the disclosure of the application as filed was insufficient, the proper course is to file a supplemental oath which states both inventorship and the fact that the supplemental matter of the amendment was part of the original invention. *American Lava v. Steward*, 155 Fed. 731, § 780. But where the application has been unduly delayed and intervening rights have accrued, the rule analogous to that of reissues will apply. *Mayo v. Jenckes*, 133 Fed. 527, § 54.

OPERATIVENESS, §§ 781-782.

The patent itself is strong presumptive evidence of operativeness; infringement by a defendant is practically conclusive. Want of operativeness is most frequently charged against a generic patent which merely opens up a new field. In such case a complete or commercial disclosure is not to be insisted upon — certainly not to the same degree as in a minor improvement. Since mechanical skill varies both with time and circumstance, that which constitutes a disclosure sufficient to enable one skilled in the art to make and use must also vary. No hard and fast rule is possible.

PATENT OFFICE, §§ 783-787.

The Supreme Court in *Steinmetz v. Allen*, 192 U. S. 543, here extensively quoted, and the Second Circuit decision in *Benjamin v. Dale*, 158 Fed. 617, § 348, should serve to correct the rare acts of the Office open to objection. When any conflict arises between a rule or act of the Office and a statute, the statute must, of course, prevail. So in the case of any conflict of opinion between the Office

and a court. The statement in *Boyden v. Westinghouse*, 70 Fed. 816, § 785, that the Office employs the best engineering experts it can secure, and that therefore the action of such examiners is equivalent to the testimony of the highest experts, is a non sequitur for at least two reasons. First, it is a notorious fact that an examiner cannot give the time and study to a case that the expert does. Second, the expert is subjected to a rigid cross-examination; and the decision of the examiner is at most only on a par with the ex parte statements of an expert, as in the case of an affidavit on motion for a preliminary injunction; and to such statements, as has been seen, the courts never give overmuch weight.

PLEADING AND PRACTICE, §§ 788-802.

As stated in the preface, this work does not deal with pleading, practice, or procedure, except in so far as relates to matters peculiar to patent causes. Consequently no general review of the special rules quoted under this title will be attempted.

PRIORITY, §§ 808-812.

This subject is clearly related to that of anticipation, §§ 58-108, and reduction to practice, §§ 860-867. Where the question has arisen and been adjudicated between the same parties in the Patent Office, such adjudication, in the absence of a most persuasive moving consideration not there raised, is conclusive. Aside from this matter, the general principles of reduction to practice are reviewed in connection with the sections above mentioned.

PROCESS, §§ 813-822.

A process is generally distinguished from a machine in that it consists of a series of steps, as stated in *Cochrane v. Deener*, 94 U. S. 780, § 815; and the claim should be expressed in terms of the steps and not in terms of a machine employed. The rule of equivalents in processes is that stated in *Tyler v. Boston*, 74 U. S. 327, § 373 — that an equivalent means only equally good. As elsewhere stated, the elements or steps may be separately old, yet patentable in the combination of steps of the process. This is well illustrated in *Lowther v. Hamilton*, 124 U. S. 1, § 819. Process and product claims may be had in the same patent, but they must be separate claims. The product cannot be claimed in terms of the process, since it might be produced by another process. *Goodyear v. Davis*, 102 U. S. 122, § 821. Under the rule of *Westinghouse v. Boyden*, 170 U. S. 537, § 817, a mechanical process was held non-

patentable. But that opinion, at variance with previous law and, as it always seemed to me, illogical, was not to remain the law; and in *Expanded v. Bradford*, 214 U. S. 366, § 817, after reviewing the history of this question, Justice Day lays down the law which may be summarized thus: The invention or discovery of a process or method involving mechanical operations and producing a new and useful result, may, if independent of particular mechanism for producing it, be within the protection of the Federal statute.

PRODUCT, §§ 823-824.

It was remarked in the discussion of a manufacture (§§ 772-775) that, for example, he who first invented soap as an article of manufacture would not be anticipated by a somewhat similar natural article — soap bark. If we compare that statement with that in *Cochrane v. Badische*, 111 U. S. 293, § 823, there is apparent conflict. But there is no real conflict. In the alizarine case its commercial equivalent had been previously 'extracted from the madder root, but did not per se exist as a natural substance. In order to produce the article from the vegetable certain artificial means were necessary. Those means had been employed, and it already existed as an article of manufacture; and producing it by another process and by the employment of other materials did not confer patentability.

PROFITS, §§ 825-847.

The right to an accounting in equity is incident to the right to an injunction. The statute provides that the court may assess or cause to be assessed the amount to which the complainant is entitled. The assessment, when made by a master in chancery, is subject to review and revision by the court; but the court will not arbitrarily change the amount found or disregard the facts found by the master. The appellate court may, if the facts are clear and sufficient, revise the figures of the master conformable to the facts, without sending the report back. The two subjects, profits and damages, are so related and the rules so interwoven that the one cannot be studied separately from the other. Many matters bearing upon the subject in hand will be found under damages, §§ 278-299.

In *Rubber Co. v. Goodyear*, 76 U. S. 788, § 273, profits are defined as the gain made upon any business or investment, where both receipts and payments are taken into the account. If the discovery of the receipts and payments were easy, and the mere computation of the difference all there were to be done, the problem

of profits would be without incident. But such is never the case; for even in the simplest of accountings some problem is certain to arise. Nor does the "fruits of advantage" rule of *Coupe v. Royer*, 155 U. S. 565, § 837, do more than indicate that the profits may be either gains in the ordinary sense of that term, or savings, or both. The trustee ex maleficio rule of *Wales v. Waterbury*, 101 Fed. 126, § 841, which was rendered nugatory by *Westinghouse v. New York*, 140 Fed. 545, and now restored to its rightful place by *Westinghouse v. Wagner*, 225 U. S. 604, § 845, applies to all those cases where segregation has been rendered difficult, if not impossible, by the conduct of the defendant in mixing or concealing his gains. The dissenting opinion of Judge Sanborn in *Westinghouse v. Wagner*, 173 Fed. 361, § 845, which is made good law by the Supreme Court reversal of that case, is commended as a masterly statement of the law. As has been shown in connection with damages, the entire problem begins with segregation, and the inquiry is this: Does the nature of the invention and the incident of its infringement bring it under the first or second portion of the rule of *Garretson v. Clark*, 111 U. S. 120, § 845? If it comes under the first portion, before any of the ordinary computations of profits by way of receipts and expenses may be had, complete segregation must be made. If under the second portion of that rule, before the regular computation can be entertained, the proofs must show indubitably that the entire profits of the manufacture, use or sale were due to the patented feature. Thus before any accounting may begin, in the proper sense of the term, the rule of *Garretson v. Clark* must be fully satisfied. If, now, this has been done, the master may proceed, keeping in mind the general rule that his report is merely advisory to the court. *Boesch v. Gräf*, 133 U. S. 697, § 836. If the condition is one where the measure is the entire profits, the rule of *Elizabeth v. American*, 97 U. S. 126, § 838 and *Rubber Co. v. Goodyear*, 76 U. S. 788, § 839, apply. If it is a question of savings, the rule of *Hohorst v. Hamburg-American*, 91 Fed. 655, § 840, is to be followed. But the problem of savings may be as difficult as in *Doten v. City of Boston*, 138 Fed. 406, § 837, where any statement of savings in dollars and cents based upon tangible considerations is wholly impossible. How far one may go in making a general estimate, as was done in that case, is a matter of conjecture. Attempts have been made to show profits by analogy — by what others have done — but this is not permissible. *Robbins v. Illinois*, 81 Fed. 957, § 842. So far the burden has been upon complainant. If he has failed to segregate, recovery is impossible, unless he has shown right to the entire profits, or has shown, as provided in the

Westinghouse case, *supra*, (1) the presence of substantial gains by the defendant, (2) confusion, (3) impossibility of segregation by complainant. Of course, if the complainant can trace a loss (damage) back as a diversion by defendant, he may recover that item, not as damages, but as a profit made by the defendant. The burden now shifts to the defendant — provided only that the complainant has shown the obvious deductions to be made — and it becomes the duty of the defendant, if he can, to reduce the amount by direct deduction of the amount of profits or by deductions in terms of expenses. But he may not submit as an item general expenses, or losses, or “manufacturer’s profits” (§§ 828-830). He may show actual items of cost, including ordinary salaries and commissions, but not managerial or proprietary salaries. An accounting is a post mortem. As to most matters of affirmative proof the defendant is defunct, and the master as coroner finds sealed lips as to those things he most needs to know. Even those who perform the autopsy will disagree. Nor is this the end of the trouble; for when the affirmative evidence is all in, the corpse revives sufficiently to deny so much as he is able, and re-expires.

PROTESTS, § 848.

As stated under § 848, there is no statutory provision for filing protests, or opposition to any issued patent; nor is there any method of testing or proving the validity, scope, or strength of any patent short of abiding possible infringement suit, and the long, expensive process that involves. To my mind, here is the weakest point in our patent system; for it leaves the patentee in uncertainty and makes patents, in many cases, a menace to industry. Space does not permit more than this remark upon this serious and growing evil.

PUBLIC USE, §§ 849-858.

The question of public use is not one of intent; it is a question of fact. It is not a thing to be mitigated or excused. The statute is absolute. Within the two-year limit full freedom exists. An application filed a moment inside the limit is as much on time as if filed on the day of invention. A moment later and the inchoate right is lost beyond all recall; and taking a narrow chance — postponing filing to prolong the life of the patent — has defeated many a patent. Such being the case, it is but just that the burden of proving public use is upon the defendant, and every question of doubt is to be resolved against such an allegation. As to what constitutes experiment, as was said under the title, experiment,

§ 412, there is nothing to be added to the decision in *Eastman v. Mayor*, 134 Fed. 844, there quoted extensively. Foreign use, unless resulting in patent or publication, does not anticipate, and in such case the date of use is that of the patent or publication — not the antecedent, actual use. Since *Egbert v. Lippmann*, 104 U. S. 333, § 854, the word “public” has had a meaning all its own when used to modify the word “use.” When Romeo invents a corset steel and Juliet wears it next her heart, and that is public use, it is little wonder that an invention hidden within the confines of a fire and burglar proof safe is public use. *Hall v. Macneal*, 107 U. S. 90, § 854. The question does not turn upon the number of uses or upon the number of persons concerned in the use; although, if any doubt exists, numbers may be more or less persuasive. Whether a single sale would, in all cases, amount to public use seems to be questioned in *Swain v. Holyoke*, 109 Fed. 154, but its sufficiency is affirmed in *National v. American*, 178 Fed. 79, § 856.

PUBLIC USE PROCEEDINGS, § 859.

Nothing need be added to the statement under this title, except to remark that this proceeding should be combined with protest proceedings (§ 848), and made an effective measure.

REDUCTION TO PRACTICE, §§ 860-867.

Diligence is of importance when the question of priority, the question of competition for the right, arises. As to what constitutes reduction to practice, it is clear when we compare the earlier decisions, such as *Seymour v. Osborne*, 78 U. S. 516, § 862, with the *Telephone Cases*, 126 U. S. 1, § 865, that the rule has changed materially; and still later, in the *Barbed Wire Case*, 143 U. S. 275, § 864, we reach the final test, the “last step rule.” It is evident that a literal following of the earlier rule, the actual construction in material form, would render void many patents. It would have defeated Bell’s patent, very likely. The time when an invention must be reduced to practice by putting the idea into wood and iron is past. In the early days that course was largely necessary, just as the filing of a model was often necessary to the understanding of an invention. Clearly, then, it may be said that reduction to practice is no longer a matter of construction, building, trial, but the disclosure of the idea by any means — device, drawing, or verbal description — which will enable one skilled in the art to make and use the same. This test may render a sketch sufficient; it may render an experimental machine insufficient; for if the

idea of means, operative means, is disclosed, there is the invention; and any number of models or experimental machines — such as there were in the Telephone Case and in the Barbed Wire Case — if they fail to disclose the idea so that another may practise the alleged invention, — cannot lay the foundation for a patent. But where there is conflict and contest for priority, finer distinctions must be made and other tests resorted to. Judge Holt, in *Automatic v. Pneumatic*, 166 Fed. 288, § 860, has undertaken to codify the law on this subject, and, as previously noted, with questionable success. That opinion, however, is valuable for its collection of and comment upon most of the leading authorities.

REHEARINGS, § 868.

This subject is one of practice, and is not entered upon in this work.

REISSUES, §§ 869–889.

No single subject of the patent law has given rise to so much appellate ruling as the subject of reissues. The causes may have been, in many cases, as stated in *Crown v. Aluminum*, 108 Fed. 845, § 871, the greedy acts of unscrupulous persons and adventurers; but it is thought a more potent influence has existed in the attempts on the part of patentees to make their patents cover what they honestly believed to be their own inventions, but which, in point of fact, were not. The inventor is apt to have an unduly large idea of the child of his brain; the manufacturer an unduly large idea of his monopoly; and when either perceives others stepping beyond him in his own particular art, he fancies it to be a trespass upon what he honestly regards as his own close. It is only when we take such a charitable view of the seeming overreaching by reissue that it can be viewed with patience in many cases. The main, broad rules of reissue are to be found in three cases: *Miller v. Brass Co.* 104 U. S. 350, § 883; *Topliff v. Topliff*, 145 U. S. 156, § 883; *McCormick v. Aultman*, 169 U. S. 606, § 887. These rules are as follows:

1. That the reissue cannot cover another invention than that of the original.

2. That the reissue cannot cover what was described but not claimed after long delay and not even after brief delay if intervening rights have accrued.

3. That while a reissue claim may be enlarged, it can be done only when actual mistake has occurred, and then only without delay.

4. That in reissues for enlarging the scope of a patent, the rule of laches should be rigidly applied.

5. That the general purpose of the statute providing for reissues was to correct mistakes and errors, and not to enable the inventor, from time to time, to extend his monopoly so as to cover progress by others in his art.

6. That due diligence must be exercised in discovering the mistake in the original, and that, if it be sought for the purpose of enlarging the claim, the lapse of two years will ordinarily, though not always, be treated as evidence of abandonment of the new matter.

7. That the question whether the application was made within a reasonable time is, in most, if not all such cases, a question of law for the court.

8. That the court will not review the decision of the Commissioner upon the question of inadvertence, accident, or mistake, unless the matter is manifest from the record.

9. That the specification may be modified so as to make it more conformable to the exact right of the patentee, but the invention must be the same.

10. That if the patentee abandons his application for a reissue, he is entitled to a return of his original patent precisely as it stood when such application was made.

11. The tendency in the Seventh Circuit, and in some other circuit, perhaps, is to enforce these rules with so great rigor that any enlargement of a claim is practically barred, *McDowell v. Ideal*, 187 Fed. 814; *Moneyweight v. Toledo*, 187 Fed. 826, § 871.

While there are minor rules which might be stated, these are the main ones; and it is not necessary in this brief review to go further.

REOPENING CASE, §§ 890-892.

This is a question of practice which lies chiefly without this review. The general rule of *Bresnahan v. Tripp*, 99 Fed. 280, § 891, is that the new evidence must be so cogent and persuasive as to convince the court that if it had been presented, it would have resulted in a different decision; and this new evidence must be something more than cumulative; and must be newly discovered evidence, and not merely newly discovered materiality of old evidence. *Lafferty v. Acme*, 143 Fed. 321, § 991. And a case will not be reopened merely to enable a complainant to prove damages. *Baker v. Crane*, 138 Fed. 60, § 892.

RES JUDICATA, §§ 893-896.

This subject has arisen in connection with adjudication, §§ 28-37, and comity, §§ 250-257. The first and main inquiry is whether the issues were the same and the estoppel mutual. With these present, a position wellnigh impregnable is established. But lacking either of these, the courts are disposed to decide the case on its merits. A Patent Office decision is *res judicata* on a question of priority between the same parties when the contrary conclusion is not established by thoroughly convincing additional proof. *Ecaubert v. Appleton*, 67 Fed. 917, § 895.

ROYALTIES, § 897.

For a masterful, complete review of the subject of royalties, a reading of Judge Putnam's opinion in *Western Union v. Am. Bell*, 125 Fed. 342, § 897, is sufficient. It was said, with regard to licensees, §§ 749-764, that *Eclipse v. Farrow*, 199 U. S. 581, held that where the license was made before patent and the subject-matter failed, in part, to materialize in a claim, the licensee need not pay royalties upon the device found to be old. Under this title (§ 897) a quotation from the same case seems to hold to the contrary. But it will be seen that the defendant saw fit to retain the license contract after the claim had failed: and so electing, he could not escape its terms.

SECRET PROCESS OR MACHINE, § 898.

This subject arises in connection with unpatented inventions, §§ 930-935.

SALE OF PATENTED ARTICLE, § 899.

The extended quotation from *Heaton v. Eureka*, 77 Fed. 288, and that from *Henry v. Dick*, 224 U. S. 1, under this section need no further comment in view of what has been said under the title *Equity*, §§ 370-372.

SPECIFICATION, §§ 900-919.

As said in § 901, the term "specification" has been loosely used. In reading the decisions of early times, one finds it embracing description, claims, and even drawings — all that the patentee contributes to the grant; but most commonly to the description and claims. As employed here, it will be used in the present sense — as meaning the description only. The ancient rule was that the specification (description and claim) should clearly indicate both the new and the old, and distinguish them. Fancy that rule in force now! Consider what would be involved, say, in patenting a new

type-bar on a writing machine, if the patentee had to describe all else in the machine and disclaim all else save the type-bar. The present rule is that of *Carnegie v. Cambia*, 185 U. S. 403, § 903, which is, briefly, that the specification is addressed to those skilled in the art to which it pertains, and is sufficient if it may be understood by such skilled persons — assuming as a matter of course that such skilled persons are familiar with all that has gone before.

Mere verbosity or unskilled statement are not fatal defects; but verbosity may suggest triviality. *Lyons v. Drucker*, 106 Fed. 416, § 903. But where the defects are glaring and the patentee has had opportunity to correct the same by reissue, the courts will not look with favor upon such a patent. *Matheson v. Campbell*, 76 Fed. 910, § 904. In a basic patent less detail will be required. *Electric v. Pittsburg*, 125 Fed. 926, § 905. But where the invention is a narrow improvement, dependent for its novelty upon location, size, form, or any detail of construction, greater definiteness of specification is required. *American v. Steward*, 155 Fed. 731, § 904. The recital of equivalents, or statements disclaiming limitation to the specific construction or means shown and described neither add to nor detract from the patent. The function need not be described; nor need the beneficial uses be all known to the inventor. It is enough if he has fully described the means. A patent for a process should be definitive as to matters of elements, steps, and result. *Cochrane v. Badische*, 111 U. S. 293, § 914; but the statement quoted under § 914 from *Electric v. Carborundum*, 102 Fed. 618, is believed to be open to serious criticism if it be taken as a general proposition. Frequently the inventor (and his solicitor) is lacking in scientific knowledge, and in some cases an entirely false idea has possessed the mind of the patentee. These matter not so long as the real invention is described. The ideal specification (which has not yet been written) should, in the opinion of the writer, accomplish the following:

1. It should describe the essential elements which enter into the combination.

2. It should clearly indicate their co-action and operation.

3. It should do precisely what the claim should not — give a functional statement of the invention.

4. It should be simple in terms. The best expert, either in drawing a specification or in testifying for the benefit of the court, is simple, direct, and avoids so far as is possible technical terms.

5. It should avoid all laudation and all attempts to declare the basic character of the invention.

6. It should have a single aim: the disclosure of the invention to enable others skilled in the art to make and use the same. The specification is for the benefit of the public; the claim for the benefit of the patentee.

STATE STATUTES AND REGULATIONS AFFECTING PATENT RIGHTS, § 920.

The fact that a patent happens to be a form of personalty protected by Federal law does not exempt it from the common rules governing personal property. If we go back to the fundamental proposition, that the Federal grant creates nothing that did not before exist, but gives to the patentee the right to protect what he has created and provides a forum therefor, the entire proposition becomes simple. A state may not confiscate, by taxation or otherwise, or limit the plain rights of the grant; but the police power of the state may be exercised in the protection of its citizens, and the seal of the Patent Office no more exempts the holder thereof from the exercise of that power than does an internal revenue stamp issued by the Federal Government exempt the person owning the property to which it is attached.

STATUTE OF LIMITATIONS, § 921.

The amendment of Jan. 1, 1898, to Sec. 4921 renders the decisions cited under this title of little moment.

STATUTES RELATING TO PATENTS — THE PATENT STATUTE, §§ 922-923.

With the exception of Sec. 4887, relating to the effect of a foreign patent (discussed under §§ 419-424), the patent statutes, as established by the various acts of 1870-1-2, have remained without considerable change. The Federal Judicial Code, in effect Jan. 1, 1912, affects the patent law only as it gives original jurisdiction to the district courts and elevates the Court of Appeals, D. C. to its proper place beside the nine circuit courts of appeals. The meaning and construction of the various provisions are found only as they are scattered through the decisions of the appellate courts. The Supreme Court has construed these by the same rules of construction that it has applied to other statutes; and has held (*Andrews v. Hovey*, 124 U. S. 694) that a patent statute cannot be judicially settled until passed upon by that court. Since it is the practice of the circuit courts of appeals to certify unsettled questions of law to the Supreme Court, and since the Judicial Code makes definite provision therefor, it is the reasonable inference that, in the event

of a serious and controverted question of statutory interpretation arising, the rule of *Andrews v. Hovey* would be regarded as good and sufficient reason for certifying such a question to the Supreme Court, and also that conflict of decision between different circuits will be materially lessened. The analysis of the patent statute, containing the Patent Office annotations, and the sections of the Judicial Code relating to patents, appended as a separate chapter possesses utility.

THREATS, § 924.

This title needs no comment.

TITLE, §§ 925-927.

The title to a patent and the title to a thing protected by a patent are wholly separate and different things. In the absence of contract provision, the passing of the title to the thing patented frees the thing from the monopoly both in time and place. Only he who holds a legal title to a patent may, alone, sue for infringement; and what constitutes an actionable title is determined by *Waterman v. Mackenzie*, 138 U. S. 252, § 150. It is a wise rule that makes a prima facie record title good as against a collateral attack by an infringer, claiming no title in himself, who attempts to show that the title in complainant is only an equitable title that he may avoid infringement. *Goss v. Scott*, 108 Fed. 253, § 926. But while, under the circumstances of that case, the ruling was unquestionable, it is doubtful if such a rule may be made general. Attention is directed to *Blackledge v. Weir*, 108 Fed. 71, § 927. As elsewhere noted, it is often desirable that joint owners should hold by the entirety. This is a simple matter of assignment. For the peace of business and for the preservation of the monopoly some provision which will prevent the dissipation of the monopoly is desirable. Minor interests may be created by license or shop right. It is a familiar fact that most of the "patent-right frauds" have grown out of the sale of territorial rights — state, county, or township rights. It is a title that rarely is warranted.

UNPATENTED INVENTIONS, §§ 930-935.

An unpatented invention is, under common-law, common property. The constitution and the statute lift it one step higher and give it the character of an inchoate right. In that state it becomes assignable — not as a thing in being, but as an inchoate right. It has been held that a court of chancery cannot decree specific performance to convey property which has no existence. *Kennedy*

v. Hazleton, 128 U. S. 724, § 931. But it is clear that, when such inchoate right is matured into property, such right may be enforced. He who invents and keeps his invention a secret takes his chances under the common-law. By deciding so to do he abandons his inchoate right; and he who learns the secret lawfully has full right to the invention. It is only when the statute is complied with that the inchoate right becomes a patent right, and therefore, property. The several rights which may be secured in an invention before patent under R. S. 4899 are set out in *Wade v. Metcalf*, 129 U. S. 202, § 932. The right of an employer to the unpatented invention of an employee is a shop right only. *Dable v. Flint*, 137 U. S. 41, § 933. The distinction between one holding an invention in an unpatented state with no intent to protect it by patent, and one who is holding such an invention for experiment, perfecting, or merely biding his time within the two-year limit the statute gives him, is obvious. The one is abandonment; the other is not.

WORDS AND PHRASES, §§ 936-938.

As has been elsewhere remarked, it is a mistaken idea of patentees and patent solicitors that they may broaden a claim by the use of the term "means" or "means whereby." Observe the facts: The court must first turn to the specification and drawings and identify the "means" as indicating the specific devices shown and described. If there is any range of equivalency applicable, it can be applied only after the "means" have been translated into the specific elements shown. Manifestly, using such terms, instead of bringing in directly the elements shown, serves no good purpose, but places upon the court an additional burden — that of translation of terms into elements. The words "substantially as described," "substantially as set forth," are words of limitation, limiting the claim to the specific elements described. *Pope v. Gormully*, 144 U. S. 248, § 937. But compare this rule with that of *Hobbs v. Beach*, 180 U. S. 383, § 937. Clearly the latter rule is the one which has been followed generally, and followed in this manner: When the patent is generic and deserving of liberal construction, such words of limitation are given the least significance consistent with their use; where the patent is narrow or trivial, the rule is severely applied. The use of a "whereby clause" is useful in only one way: it may explain the claim by indicating its function. It adds nothing to the claim — nothing whatever — so far as concerns the actual combination.

And yet, in all these matters, it is clear that the courts employ

rules, not for the sake of the rules, but for the sake of justice. It is true of the patent law, perhaps as of no other branch of the law, that we find a rule brought into being and applied to the case in hand — a rule hard and harsh — and presently that rule is construed, mollified, and adapted, that it may still be used, still justice be done. Such has been the wise course of equity.

THE FIXED LAW OF PATENTS

ABANDONMENT.

Statutory provision § 1	Evidence of § 11 (<i>see</i> § 388)
General Rules § 2	Failure to Claim § 12
After Application § 3	Prosecution of Application § 13
Amendment § 4 (<i>see</i> § 52)	Of Interference § 14
Application	Of Renewal Application § 15
Abandonment and renewal § 5	Piracy § 16
Delay § 6	Prior Patent § 17
Constructive § 7	Public Use § 18 (<i>see</i> § 849)
Decision of Commissioner — Not	Subsequent Patent § 19
Final § 8	Miscellaneous Rulings § 20
Division of Application § 9 (<i>see</i> §§	<i>See</i> — <i>Anticipation</i> §§ 60-1-2; <i>Claims</i>
348, 356)	§ 203; <i>Defenses</i> § 316; <i>Evidence</i> §
Experimental Use § 10 (<i>see</i> § 412)	413; <i>Invention</i> § 590; <i>Reissue</i> § 870

§ 1. Statutory Provision.

Any person who has invented * * * unless the same is proved to have been abandoned, may * * * * obtain a patent therefor. R. S. 4886.

* * * Upon failure of the applicant to prosecute the same within one year after any action therein, of which notice shall have been given to the applicant, they shall be regarded as abandoned by the parties thereto. R. S. 4894.

* * * And upon the hearing of renewed applications preferred under this section, abandonment shall be considered as a question of fact. R. S. 4897.

Note: Prior to the amendment to Sec. 4894 on Mar. 3, 1897, the period of time mentioned was two years. In determining whether there is abandonment under the statute, it is therefore necessary to determine whether the patent was issued, or the application was filed before, that amendment went into effect.

The subject of abandonment also arises in connection with *Defenses* and *Invention*.

§ 2. General Rules.

Forfeitures are not favored in law, and the courts are always prompt to seize hold of any circumstances that indicate an election to waive a forfeiture. — *Ins. Co. v. Egglestone*, 96 U. S. 572; 24 L. Ed. 841.

Ins. Co. v. Norton, 96 U. S. 234.

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, where gifts are once made to the public in this way, they become absolute. — *Pennock v. Dialogue*, 2 Pet. 1; 7 L. Ed. 327.

Abandonment may be by express declaration or by conduct equally significant with language, as acquiescence in its use by others or by wilful or

negligent postponement of his claims, or by an attempt to withhold the invention from the public. — *Kendall v. Winsor*, 62 U. S. 322; 16 L. Ed. 165.

An abandonment is a dedication and like any other dedication, it should be clearly proved. It rests upon the intention of the inventor. If he expressly declares, or by his acts clearly shows, his intention to dedicate his invention to the public, a finding of abandonment would be warranted. But such a dedication should not be lightly presumed, because it surrenders a vested right of property. — *Mast v. Dempster*, 82 Fed. 327; 27 C. C. A. 191. But see 177 U. S. 485.

Clear evidence of an intention to dedicate an improvement to the public is indispensable to establish abandonment. The patent in suit and the application upon which it is based are persuasive proof that the inventor never intended to dedicate, and never did dedicate, the improvement they secure to the public. — *Ide v. Trorlicht*, 115 Fed. 137; 53 C. C. A. 341.

Mast v. Dempster, 82 Fed. 327; *Woolen v. Jordan*, 7 Wall. 583; *Adams v. Jones*, Fed. Cas. 57; *Jones v. Sewall*, Fed. Cas. 7495; *McMillin v. Barclay*, Fed. Cas. 8,902; *Pitts v. Edmonds*, Fed. Cas. 11,191.

§ 3. After Application.

An abandonment of an invention to the public may be evinced by the conduct of the inventor at any time, even within the two years named in the law. The effect of the law is, that no such consequence will necessarily follow from the invention being in public use or on sale with the inventor's consent and allowance at any time within two years before his application; but that, if the invention is in public use or on sale prior to that time, it will be conclusive evidence of abandonment, and the patent will be void. — *Elizabeth v. American*, 97 U. S. 126; 24 L. Ed. 1000.

There may be an abandonment of an invention to the public, as well after an application has been rejected or withdrawn, as before any application is made. Such abandonment may be proved either by express declarations of an intention to abandon, or by conduct inconsistent with any other conclusion. — *U. S. v. Whitney*, 118 U. S. 22; 30 L. Ed. 53; 6 S. Ct. 950.

Planing v. Keith, 101 U. S. 479.

There is a material difference between the abandonment of an invention and the abandonment of an application for letters patent thereon, by failure to comply with section 4894, R. S. The first gives the invention to the public, and, once done, the act is irretrievable; but, besides the power conferred upon the Commissioner of Patents to relieve an applicant from an abandonment of his application under the statute, an application which has lapsed, or been rejected or withdrawn, may be renewed or repeated so long, we suppose, as the invention itself has not been abandoned by reason of a two years' public use or otherwise. — *Western v. Sperry*, 58 Fed. 186; 7 C. C. A. 164.

Planing Machine v. Keith, 101 U. S. 479; *Kendall v. Winsor*, 21 How. 322; *Shaw v. Cooper*, 7 Pet. 292; *U. S. v. Whitney*, 118 U. S. 22.

There may be abandonment before application or thereafter. — *Crown v. Aluminum*, 108 Fed. 845; 48 C. C. A. 72.

There is a wide difference between the abandonment of an invention and the abandonment of an application. An abandonment of an application is not necessarily an abandonment of the invention, and after the application has been abandoned a valid patent for the invention may nevertheless be secured upon a new application, provided the invention has not gone into

public use or been upon sale for more than two years prior to the filing of the latter. In cases where the first application has not been abandoned, subsequent applications and amendments constitute a continuance of the original proceeding, and the two years' public use or sale which may avoid the patent must be reckoned from the presentation of the first application, and not from the filing of subsequent applications or amendments. — *Hayes Young v. St. Louis*, 137 Fed. 80; 70 C. C. A. 1.

U. S. v. Am. Bell Tel. Co. 167 U. S. 224; *Colgate v. Western*, Fed. Cas. 2,995; *Miehle v. Read*, 96 O. G. 426; *Thomson-Houston v. Winchester*, 71 Fed. 192; *Godfrey v. Eames*, 1 Wall. 317; *Smith v. Goodyear*, 93 U. S. 486; *Cain v. Park*, 86 O. G. 797; *Ex parte Stewart*, 4 O. G. 665; *Stirling v. St. Louis*, 79 Fed. 80; *Dederick v. Fox*, 56 Fed. 714; *Ligowski v. American*, 34 Fed. 328.

The original application was abandoned for want of prosecution within the statutory period. Applicant attempted to give good and sufficient excuses to secure revival of the application, but failed. He then filed a second application but did not file the statutory oath. *Held*: The unavoidable conclusion is that the first application was abandoned; that the second application was not a continuation of the original solicitation, but the institution of a new and independent proceeding; that the patent is founded on the second application alone; and that the absence of any averment that the invention was not in public use or on sale in this country for more than two years before the latter application was presented to the commissioner is fatal to the cause of action for an infringement of the patent. — *Hayes-Young v. St. Louis*, 137 Fed. 80; 70 C. C. A. 1.

The abandonment of an application destroys the continuity of the solicitation of the patent. After abandonment a subsequent application institutes a new and independent proceeding, and the two years' use or sale which may invalidate the patent issued upon it must be counted from the filing of the later application. — *Hayes-Young v. St. Louis*, 137 Fed. 80; 70 C. C. A. 1.

Bevin v. East Hamilton, Fed. Cas. 1,379; *Lindsay v. Stein*, 10 Fed. 907; *Lay v. Indianapolis*, 120 Fed. 835; *Mowry v. Barber*, Fed. Cas. 9,892; *Marsh v. Sayles*, Fed. Cas. 9,199; *Ex parte Simpson*, Fed. Cas. 12,878; *Carty v. Kellogg*, 73 O. G. 285; *Cain v. Park*, 86 O. G. 797.

§ 4. Amendment.

Pending the application for this patent, he presented an amendment to his specification, whereby he described, and sought to include a construction substantially identical in form and details of construction with that made by the appellants, and the amendment was not allowed. Having acquiesced in that ruling, the patentee cannot be heard to insist that the matter so excluded is nevertheless covered by the patent. — *Wells v. Henderson*, 67 Fed. 930; 15 C. C. A. 84.

§ 5. Application — Abandonment and Renewal.

In our judgment, if a party chose to withdraw his application for a patent, and pay the forfeit, intending at the time of such withdrawal to file a new petition, and he accordingly does so, the two petitions are to be considered as parts of the same transaction, and both as constituting one continuous application, within the meaning of the patent law. — *Godfrey v. Eames*, 68 U. S. 317; 17 L. Ed. 684.

While the application remained before the commissioner, it repelled any inference of abandonment or dedication from the omission to again claim it. — *Suffolk v. Hayden*, 70 U. S. 315; 18 L. Ed. 76.

The renewal application was filed nearly 5 years after the original, and public use had been continuous from the first filing. *Held*: The language of this statute is plain (see 4894), and requires no aid from construction. The Patent Commissioners have always held that the second application cannot be considered a continuation of an abandoned application. — *Lay v. Indianapolis*, 120 Fed. 831; 57 C. C. A. 313.

Ex parte Livingston, 20 O. G. 1746; *Hien v. Pungs*, 68 O. G. 657; *Ex parte Beggs*, 50 O. G. 1130; *Carty v. Kellogg*, 73 O. G. 285; *Lindsay v. Stein*, 10 Fed. 912; *Weir v. Morden*, 21 Fed. 243; *Kittle v. Hall*, 29 Fed. 508; *Walk. Pat. sec. 147*; *Rob. Pat. sec. 580*.

§ 6. Application — Delay of.

Delay requisite for completing an invention or for a test of its value or success does not amount to abandonment. — *Kendall v. Winsor*, 62 U. S. 322; 16 L. Ed. 165.

Undoubtedly, an inventor may abandon his invention, and surrender or dedicate it to the public; but mere forbearance to apply for a patent during the progress of experiments, and until the party has perfected his invention and tested its value by actual practise, affords no just grounds for any such presumption. — *Agawam v. Jordan*, 74 U. S. 583; 19 L. Ed. 177.

Kendall v. Winsor, 21 How. 322; *Pennock v. Dialogue*, 2 Pet. 1.

The inventor was absolutely impecunious. For nearly nine years he struggled with poverty, with rejections of his application, with delays of his solicitor, but never admitted abandonment or gave up hope or effort. The application was three times renewed and finally allowed for what the applicant had contended. Held that even such a long delay, in view of condition and conduct did not amount to abandonment. — *Smith v. Goodyear*, 93 U. S. 486; 23 L. Ed. 952.

Dissenting: Bradley, Miller, Field.

Godfrey v. Eames, 1 Wall. 317.

A delay of some nine years after the invention was complete held to be abandonment. — *Consolidated v. Wright*, 94 U. S. 92; 24 L. Ed. 68.

It is sometimes said an inventor acquires an undue advantage over the public by delaying to take out a patent, insomuch as he thereby preserves the monopoly to himself for a longer period than is allowed by the policy of the law; but this cannot be said with justice when the delay is occasioned by a bona fide effort to bring the invention to perfection, or to ascertain whether it will answer the purpose intended. It is in the interest of the public, as well as himself, that the invention should be perfect and properly tested before a patent is granted. Any attempt to use it for profit, and not by way of experiment, for a longer period than two years before the application, would deprive the inventor of his right to a patent. — *Elizabeth v. American*, 97 U. S. 126; 24 L. Ed. 1000.

Delay in applying for patent until foreign patent expires is abandonment. — *Huber v. Nelson*, 148 U. S. 270; 37 L. Ed. 447; 13 S. Ct. 603.

Nesbit's case, C. D. 1870, 106.

§ 7. Constructive.

If an inventor makes his discovery public, looks on and permits others to freely use it without objection or assertion of his claim to the invention, of which the public might take notice, he abandons his invention. — *McClurg v. Kingsland*, 1 How. 202; 11 L. Ed. 102.

Pennock v. Dialogue, 2 Pet. 14; *Grant v. Raymond*, 6 Pet. 248; *Shaw v. Cooper*, 7 Pet. 313.

But if the inventor allows his machine to be used by other persons generally either with or without compensation, or if it is, with his consent, put on sale for such use, then it will be a public use and on public sale within the meaning of the law. — *Elizabeth v. American*, 97 U. S. 126; 24 L. Ed. 1000.

It has sometimes been said that an invention cannot be held to have been abandoned, unless it was the intention of the inventor to abandon it. But this cannot be understood as meaning that such an intention must be expressed in words. — *Woodbury v. Keith*, 101 U. S. 479; 25 L. Ed. 939.

Kendall v. Winsor, 21 How. 322; *Shaw v. Cooper*, 7 Pet. 292; *Adams v. Jones*, 1 Fish. P. C. 527.

His inaction, his delay, his silence, under the circumstances, were most significant. Though not express avowals of abandonment, "to reason's ear they had a voice" not to be misunderstood. They spoke plainly of acquiescence in the rejection of his application for a patent. They encouraged the manufacture and sale of his invention. — *Woodbury v. Keith*, 101 U. S. 479; 25 L. Ed. 939.

Where there is an entire abandonment of all expectation of succeeding in an invention and securing a patent under circumstances that justifies the formation of the expectation that the ideas of the inventor will always be free to the public, and the inventor clearly manifests his intentions to relinquish any rights thereto, the inchoate right to the patent thus abandoned cannot be resumed. But the law does not favor forfeiture, and, it being a question of fact whether there has been abandonment, all reasonable doubts must be resolved in favor of the patent. — *Crown v. Aluminum*, 108 Fed. 845; 48 C. C. A. 72.

§ 8. Decision of Commissioner — Not Final.

The decision of the Commissioner in favor of the applicant, upon the question whether the invention has been abandoned, is not conclusive, but may be contested and reviewed in a suit brought for the infringement of the patent. — *U. S. v. Whitney*, 118 U. S. 22; 30 L. Ed. 53; 6 S. Ct. 950.

Planing v. Keith, 101 U. S. 479.

§ 9. Division of Application.

Pending consideration in the patent office, a subordinate claim became the subject of interference upon which a patent was issued, which proclaimed its divisional character. Subsequently the patents were issued upon the broad claims which had lingered in interference in the patent office, and it is not contended that the main invention has been in fact included in the claim for a series of shelves, etc. Such a construction is not demanded by decided cases, or by known principles of law. — *Electric v. Brush*, 52 Fed. 130; 2 C. C. A. 682.

The combination claimed in 1883 was shown in the drawing and specification of the earlier patent, but it was not claimed, and it was thereby irrevocably dedicated to the public by the appellant. A description of a device or combination which is not claimed in the drawings or specification of a patent estops the patentee from securing a monopoly of its use by a subsequent patent as well as by any other means. — *M'Bride v. Kingman*, 97 Fed. 217; 38 C. C. A. 123.

James v. Campbell, 104 U. S. 356; *Adams v. Stamping Co.* 28 Fed. 360.

The original patent in the present case was a divisional application, required by the Patent Office; consequently the description of the unitary structure or mechanism of the original patent, together with claims for combinations embracing the whole structure or apparatus, or combinations of the elements of the reissue with additional elements, such as the tension devise, did not work an abandonment or disclaimer of the combination specified in the reissue. — *Thomson-Houston v. Black River*, 135 Fed. 759; 68 C. C. A. 461.

Suffolk v. Hayden, 3 Wall. 315; *Barbed Wire Case*, 143 U. S. 275.

That an applicant having filed an application sufficiently broad to carry all the claims, may file a second application while the first is pending and divide the claims without abandonment, see *Victor v. American*, 145 Fed. 350; 76 C. C. A. 180.

§ 10. Experimental Use.

Experimental use for the purpose of testing the qualities of an invention is never public use, nor is there any proof that the delay operated to mislead others in taking up the invention and with greater diligence perfecting it. The case would be presented in a different aspect if another inventor had entered the field, induced by the supposed abandonment and misled by the delay. It is of no advantage to the public that an inventor should apply for his patent before he satisfies himself as to the best form in which to embody the invention, and the statute which provides that two years' public use shall not work a forfeiture clearly has no application to a case of merely uncompleted experimentation. — *Crown v. Aluminum*, 108 Fed. 845; 48 C. C. A. 72.

Wood v. Rolling Mill, Fed. Cas. 17,941.

If, then, an alleged invention is in fact an invention, no subsequent abandonment of it can be said to be an abandoned experiment. At most, it is an abandoned invention. But an invention that has been abandoned is as much an anticipation and to as great an extent negatives novelty, as an invention that has not been abandoned. — *Buser v. Novelty*, 151 Fed. 478; 81 C. C. A. 16.

Gayler v. Wilder, 10 How. 496; *Rich v. Lippincott*, Fed. Cas. 11,758; *Shoup v. Henrici*, Fed. Cas. 12,814.

Note: It is evident in comparing this remarkable ruling with the authorities that the judge writing the opinion has made a general statement subject to very grave qualifications.

An abandoned experiment is an experiment that has been abandoned. As a mere experiment never amounts to anticipation, the epithet "abandoned" here is unnecessary. If, however, the machine or other thing is complete, and capable of producing the result sought to be accomplished, it has passed the experimental stage and becomes an invention; and in order that it may constitute an anticipation, it is immaterial how well it became known or how much it was used. Indeed, it has been held that if the alleged invention is complete and capable of producing the results sought to be accomplished, though it may never have been used, is an invention and an anticipation. — *Buser v. Novelty*, 151 Fed. 478; 81 C. C. A. 16.

Coffin v. Ogden, 18 Wall. 120; *Reed v. Cutter*, Fed. Cas. 11,645; *Walker on Pat. sec. 71*; *Stitt v. Easton*, 22 Fed. 649.

Note: These statements, as applied to the facts in this case, constitute a remarkable form of judicial reasoning.

§ 11. Evidence of.

The evidence of abandonment is clearly a question of fact for the jury. — *Kendall v. Winsor*, 62 U. S. 322; 16 L. Ed. 165.

Desertion of a machine, never patented, may be proved by showing that the inventor, after he had constructed it, and before he had reduced it to practice, broke it up as something requiring more thought and experiment, and laid the parts aside as incomplete, provided it appears that those acts were done without any definite intention of resuming his experiments, and of restoring the machine with a view to apply for letters patent. — *Seymour v. Osborne*, 78 U. S. 516; 20 L. Ed. 33.

Johnson v. Root, 2 Cliff. 123; *Gayler v. Wilder*, 10 How. 498; *Parkhurst v. Kinsman*, 1 Blatchf. 494; *White v. Allen*, 2 Cliff, 230.

It is quite certain that the action of the Commissioner granting the patent is not conclusive of the question whether there had not been an abandonment. — *Woodbury v. Keith*, 101 U. S. 479; 25 L. Ed. 939.

Abandonment may undoubtedly be proved within two years prior to the filing of the application, but it ought not be presumed, and it should be established by convincing evidence of the intention of the owner of the invention to dedicate it to the public. An abandonment is a dedication, and like any other dedication, it should be clearly proved. — *Mast v. Dempster*, 82 Fed. 327; 27 C. C. A. 191. But see 177 U. S. 485.

§ 12. Failure to Claim.

A failure to claim what has been described is abandonment and dedication; and a reissue to recover such unclaimed matter is subject to the rules of laches. — *Miller v. Brass Co.*, 104 U. S. 350; 26 L. Ed. 783.

C's acquiescence in H's claim must be regarded, so far as he is concerned, as an abandonment of any right on his part to a patent for the same invention, and having deliberately rested in that acquiescence for a period of nine or ten years, it is too late according to the settled course of decisions in this court to resume his rights. — *Hartshorn v. Saginaw*, 119 U. S. 664; 30 L. Ed. 539; 7 S. Ct. 421.

What is described in the specification of a patent and not claimed is presumed to have been old. — *Electric v. Boston*, 139 U. S. 481; 35 L. Ed. 250; 11 S. Ct. 586.

Where an inventor describes all and claims only part of his invention he is presumed to have abandoned the residue to the public. — *McClain v. Ortmyer*, 141 U. S. 419; 35 L. Ed. 800; 12 S. Ct. 76.

An omission to claim a device or combination apparent on the face of the patent is abandonment and dedication of that part of the invention. — *Underwood v. Gerber*, 149 U. S. 224; 37 L. Ed. 710; 13 S. Ct. 854.

Miller v. Brass Co. 104 U. S. 552; *Mahn v. Harwood*, 112 U. S. 354.

It is possible that the inventor was entitled to a broader claim than that to which he limited himself; but if he described and claimed only a part of his invention, he is presumed to have abandoned the residue to the public. — *Deering v. Winona*, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

McClain v. Ortmyer, 141 U. S. 419.

An inventor, by describing an invention in a patent granted to him, does not necessarily preclude himself from patenting it subsequently. His omission to claim what he describes may operate as a disclaimer or abandonment of the matter not claimed; but it has no such effect when it appears that the matter thus described, but not claimed, was the subject of a pending application in the patent office by him for another patent. This was explicitly adjudged in *Suffolk v. Hayden*, 3 Wall. 315, and recognized as sound doctrine in the barbed wire case, 143 U. S. 275. — *Thomson-Houston v. Elmira*, 71 Fed. 396; 18 C. C. A. 145.

When a specific element is not claimed as a device by itself, it is, in effect, admitted that the particular element is old and was not invented by the patentee. — *Overweight v. Improved*, 94 Fed. 155; 36 C. C. A. 125.

3 Rob. Pat. sec. 923; *Cornplanter Pat.* 23 Wall. 181; *Rowell v. Lindsay*, 113 U. S. 97; *Meter Co. v. Desper*, 101 U. S. 332.

The statute requires the inventor to particularly point out and distinctly claim the improvement or discovery which he seeks to secure (R. S. sec. 4888), and that when he has made his claims he has thereby disclaimed and abandoned to the public all other combinations and improvements that are not mere evasions of the device, combination, or improvement which he claims. — *Kinloch v. Western*, 113 Fed. 652; 51 C. C. A. 362.

Keystone v. Phoenix, 95 U. S. 274; *Mfg. Co. v. Sargent*, 117 U. S. 373; *McClain v. Ortmyer*, 141 U. S. 419; *Building Co. v. Eustis*, 65 Fed. 804; *Stirrat v. Mfg. Co.* 61 Fed. 980; *Adams v. Lindell*, 77 Fed. 432.

His specifications and claims constitute a dedication to the public of every invention they disclose but do not claim. — *Ide v. Trorlicht*, 115 Fed. 137; 53 C. C. A. 341.

Adams v. Lindell, 77 Fed. 432.

That, although the patent may disclose distinct novelty, unless the novel feature is claimed, recovery is barred, see *Robinson v. Chicago*, 118 Fed. 438; 55 C. C. A. 254.

§ 13. Prosecution of Application.

The patent law favors meritorious inventors by conditionally conferring upon them, for a limited period, exclusive rights to their inventions. But it requires them to be vigilant in complying with the statutory conditions. It is not unmindful of possibly intervening rights of the public. An inventor cannot, without cause, hold his application pending during a long period of years, leaving the public uncertain whether he intends to prosecute it, and keeping the field of his invention closed against other inventors. — *Woodbury v. Keith*, 101 U. S. 479; 25 L. Ed. 939.

An inventor whose application for a patent has been rejected, and who, without substantial reason or excuse, omits for many years to take any step to reinstate or renew it, must be held to have acquiesced in its rejection, and to have abandoned any intention of further presenting his claim. — *U. S. v. Whitney*, 118 U. S. 22; 30 L. Ed. 53; 6 S. Ct. 950.

Planing v. Keith, 101 U. S. 479.

The failure of the applicant to prosecute his application within two years after any action is laches, which unexcused operates as abandonment. — *Gandy v. Marble*, 122 U. S. 432; 30 L. Ed. 1223; 7 S. Ct. 1290.

Butterworth v. U. S. 112 U. S. 50; *Whipple v. Miner*, 15 Fed. 117; *Ex p. Squire*, 3 B. & A. 133; *Butler v. Shaw*, 21 Fed. 321.

The failure to prosecute appeal action within two years from any decision comes under the rule of sec. 4894. — *Gandy v. Marble*, 122 U. S. 432; 30 L. Ed. 1223; 7 S. Ct. 1290.

§ 14. Prosecution of Interference.

The contestant got the patent; and although complainant got a license under it, he got it at a pretty large price. But, whatever may have induced his action, it should be regarded as an admission of contestant's priority, fully sufficient to make out a prima facie case against him. If he could have answered this, it was his privilege to do so and he would, no doubt, have done it. As he did not, we must hold it to be decisive. — *Shoemaker v. Merrow*, 61 Fed. 945; 10 C. C. A. 181.

§ 15. Prosecution of Renewal Application.

We concur in so much of the opinion of the court below as holds that:

"If more than one application could be made, the final application must be made within two years after the allowance of the original application, the term 'the original application,' as used in this section, meaning the first application."

There is no ambiguity in the language of the statute as to the limitation of time within which the later application must be made. The provisions for withholding the patent upon the nonpayment of the final fee within six months, and for relief from the effect of such provisions, are imperative. — *Weston v. Empire*, 136 Fed. 599; 67 C. C. A. 374.

§ 16. Piracy.

If before his 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. — *Pennock v. Dialogue*, 2 Pet. 1; 7 L. Ed. 327.

The right of the plaintiff to his invention is compared to his right to other property, which cannot be divested by fraud or violence; and the case of *Miller v. Taylor* (4 Burr, 2303) where seven judges against four held, that at common law an author by publishing a literary composition does not abandon his right, is referred to as illustrative of the principle. — *Shaw v. Cooper*, 7 Pet. 292; 8 L. Ed. 689.

§ 17. Prior Patent.

Quaere; The defendant claims that an expired foreign patent for a specified and described invention is so substantial a limitation that it is in fact a bar to a subsequent United States patent for the same invention to the same inventor, and that an expired foreign patent for a subordinate feature of a described but unclaimed invention is a bar to a subsequent United States patent to the same inventor for the generic invention, because, by not taking out his foreign patent for the generic invention and by permitting the short term patent to expire, he had abandoned the generic invention to the world. The interesting questions of law which are involved in these two propositions will become practically important if the facts in the case require their decision. — *Electric v. Brush*, 52 Fed. 130; 2 C. C. A. 682.

Note: See *Welsbach v. Apollo*, 96 Fed. 332.

§ 18. Public Use.

Where the inventor practised his art as a completed invention for more than two years, taught it to a large number of persons and received pay for such

instruction, such use will be considered abandonment. — *International v. Gaylord*, 140 U. S. 55; 35 L. Ed. 347; 11 S. Ct. 716.

Smith v. Sprague, 123 U. S. 249; *Consolidated v. Wright*, 94 U. S. 92; *Egbert v. Lippmann*, 104 U. S. 333; *Elizabeth v. Nicholson*, 97 U. S. 126.

The invention was one which the inventor could have tested in his own home, and by use in his own family. He did not sell simply one or two and wait to see how they satisfied the purchasers or what defects were discovered by them; but the firm of which he was a member invited the public to buy, representing the beds to be unequalled, and continued to manufacture and sell them from month to month and from year to year, in the same manner as any other article in their stock was manufactured and sold; and each sale was made at a profit and with the contemplation of a profit. The experiment was not a testing for the purpose of discovering defects and perfecting the invention, but a testing of the market, and to see how the article would sell, or, as the inventor said, "to see how it will take with the trade." This was a trader's, and not an inventor's experiment. Such a use does not carve an exception out of the statute. — *Smith & Davis v. Mellon*, 58 Fed. 705; 7 C. C. A. 439.

Elizabeth v. Pavement Co. 97 U. S. 126; *Egbert v. Lippmann*, 104 U. S. 333; *Manning v. Glue Co.* 108 U. S. 462; *Mfg. Co. v. Sprague*, 123 U. S. 249; *Andrews v. Hovey*, 123 U. S. 267; *Root v. Railroad Co.* 146 U. S. 210.

Mere forbearance to apply for a patent until one has protected his invention, and tested it by actual practice, affords no just ground to presume its abandonment; nor will the use or sale of it within two years before the application is filed afford such ground, unless such use or sale is accompanied by other acts or by declarations which clearly evidence an intention to dedicate an improvement to the public. — *Mast v. Dempster*, 82 Fed. 327; 27 C. C. A. 191. But see 177 U. S. 485.

Agawam v. Jordan, 7 Wall. 583; *Adams v. Jones*, Fed. Cas. 57; *Babcock v. Degener*, Fed. Cas. 698; *Jones v. Seewall*, Fed. Cas. 7,495; *McMillin v. Barclay*, Fed. Cas. 8,902; *Pitts v. Edmonds*, Fed. Cas. 11,191.

§ 19. Subsequent Patent.

No. 260,653 states on its face that it is a division of case I in which other features of the invention were claimed, so that the public was not misled into the idea that unpatented portions of the invention had been abandoned. — *Electric v. Brush*, 52 Fed. 130; 2 C. C. A. 682.

So long as it was not in public use, and no one else had made and procured a patent for the same discovery, his right to apply for a patent was subject to no restriction. Even if he had forgotten the invention, or laid it aside, as worthless, — abandoned it, — he had the right to take it up again, and to proceed as if he had then first made the discovery. Even if he did acquire knowledge of the subsequent patent before his own patent was granted, it was only natural and right, as the quotation from the decision of the Supreme Court recognizes, that he should be stimulated to a fresh attempt to obtain a patent, it being clear beyond dispute that he was the first discoverer. (Referring to *Planing Mill v. Keith*, 101 U. S. 479.) — *Western v. Sperry*, 58 Fed. 186; 7 C. C. A. 164.

(This holding, as stated, is in my opinion, absolutely wanting in equity and an absolute misconstruction of *Planing Mill v. Keith*. The fact that Chief Justice Fuller concurred in the decision of this case would suggest that he must have done so on other grounds than the ruling here stated in the opinion of Justice Woods.)

§ 20. Miscellaneous Rulings.

The assignee of an abandoned invention takes no better title than the inventor has, and takes it subject to the abandonment. — *Whitely v. Swayne*, 74 U. S. 685; 19 L. Ed. 199.

The act of 1839 (sec. 7, Mar. 3, 1839, 5 Stat. at L. 354) as has repeatedly been held had no effect to invalidate the patent, unless there be proof of abandonment or of a use of the invention for more than two years prior to the application. — *Beedle v. Bennett*, 122 U. S. 71; 30 L. Ed. 1074; 7 S. Ct. 1090.

Dissented to JJ. Bradley, Field and Gray.

Reversed on facts, *Andrews v. Hovey*, 123 U. S. 267.

The answer in the case does not raise the question, — the abandonment alleged being of the invention, and not of the application for the patent. It is true that the respondents denied any information or belief whether "the letters patent" referred to in the bill of complaint, were issued in due form of law. If the respondents proposed to tender an issue of abandonment, it was necessary to do it by averments to that effect, specific and clear enough to be understood. — *Western v. Sperry*, 58 Fed. 186; 7 C. C. A. 164.

It sometimes happens that a device is abandoned for reasons wholly other than its own inherent qualities. As this machine is relied on by the appellant only as anticipatory, it is not necessarily of importance to inquire whether it possessed utility or was in all respects patentable, and we agree with the circuit court that it cannot be classed with mere abandoned experiments. — *Packard v. Lacing*, 70 Fed. 66; 16 C. C. A. 639.

Barr was employed under White. White made application for a patent and Barr signed the application as a witness. The claims were so restricted that White abandoned the application. Later Barr made application for and secured a patent on the same invention; and on the trial swore that the original invention was his and not White's, and that the reason he did not assert claim to it was because he was under White and was afraid of losing his position. Held: Both were free men, White, with the consent of the railway company, could discharge Barr at any time, and Barr at all times was at liberty to leave his employment. It would be carrying the rule a great way and to a dangerous extent to hold that anyone occupying a subordinate position is not to be bound by his acts, as between himself and his superior, because of a supposed fear upon the part of the clerk that, should he protest, he might lose his employment. His conduct under the circumstances, if he was in fact, or deemed himself to be, the inventor, is inexplicable, and runs counter to the general conduct of responsible human beings. — *Barr v. Chicago*, 110 Fed. 972; 49 C. C. A. 194.

Leary v. Railroad, 139 Mass. 580; *Dougherty v. Steel Co.* 88 Wis. 343; *Reed v. Stockmeyer*, 74 Fed. 186; *Atlantic v. Brady*, 107 U. S. 192.

What is meant by forgotten, or as Mr. Chief Justice Taney puts it, "finally forgotten?" It certainly does not mean that the value of the invention has not been realized and its use has been abandoned. Judge Taney says that these facts are not sufficient of themselves to prevent anticipation, if the invention is still in the memory of the prior inventor; thus recognizing that its value may not have been realized and its use may have been abandoned, and yet it may still be in the memory of the inventor. Robertson (Sic) says that it must be both "abandoned and forgotten," or "disused and unremembered." Possibly light is thrown on the meaning of the word by the fact that a forgotten invention is likened to a lost art or an unpatented or

unpublished foreign invention. — *Buser v. Novelty*, 151 Fed. 478; 81 C. C. A. 16.

Rob. Pat. Vol. 1, p. 323; *Cahoon v. Ring*, Fed. Cas. 2,291; *Hall v. Bird*, Fed. Cas. 5,926; *Hartshorn v. Tripp*, Fed. Cas. 6,168; *Davis v. Brown*, 9 Fed. 647.

Note: Like the entire opinion in this case, this is a remarkable holding.

ABATEMENT.

Assignment of Patent Pending Suit
§ 21
Death of Complainant § 22

Dissolution and Merger of Corporation § 23
See — Pleading § 800

§ 21. Assignment of Patent pending suit.

The equity rule, apart from the statutory or code provisions, is not the same with respect to the effect of assignments pendente lite by plaintiff and by defendant. "An assignment by a defendant of his interest in a litigation does not necessarily defeat a suit. The assignee may, at his own election, come in by an appropriate application, and make himself a party, so as to assume the burden of the litigation in his own name, or he may act in the name of his assignor." *Ex parte Railroad Co.* 95 U. S. 221. If a sole plaintiff, suing in his own right, assigns his whole interest to another, he is no longer able to prosecute the suit, because he is without interest in the litigation. *Story Eq. Pl. sec. 348; Hoxie v. Carr*, 1 Sumn. 173; *Rose v. Fort Wayne*, 63 Fed. 466. But this does not mean that the bill must be dismissed. The effect of the assignment is stated by Judge Story not to be "necessarily a destruction of the suit, like an abatement at law, where a judgment quod cassetur is entered. It is merely an interruption to the suit, suspending its progress until the new parties are brought before the court, and if this is not done at a proper time the court will dismiss the suit." — *Ecaubert v. Appleton*, 67 Fed. 917; 15 C. C. A. 73.

If a sole plaintiff, suing in his own right, assigns his whole interest to another, he is no longer able to prosecute the suit because he is without interest in the litigation. — *Automatic v. Cutler-Hammer*, 147 Fed. 250; 77 C. C. A. 176.

Ecaubert v. Appleton, 67 Fed. 917.

§ 22. Death of Complainant.

Since the present appeals were taken, the patentee has died, and the appellant now suggests that the causes of action do not survive, and the suits cannot be further prosecuted in the name of the legal representatives of the decedent. As to this, it is sufficient to say that what was called by Chief Justice Marshall, in *Gordon v. Ogden*, 3 Pet. 35, "the silent practice of the court" has always been the other way. It is every day practice to revive such suits, and the books are full of cases in which this has been silently done, no one apparently entertaining a doubt of its propriety. — *Railroad v. Turrill*, 110 U. S. 301; 28 L. Ed. 154; 4 S. Ct. 5.

§ 23. Dissolution and Merger of Corporation.

The dissolution of complainant under the N. Y. consolidation act in its merger with the new corporation did not work abatement of its right to continue the suit after such dissolution and consolidation. — *Edison v. U. S.* 52 Fed. 300; 3 C. C. A. 83.

ACTIONS.

General Statement § 24 To Compel Issue of Patent § 25 Cancellation of Patent § 26 Interfering Patents § 27 <i>See — Administrator § 41; Arbitration § 145; Assignment § 151; De-</i>	<i>fenses § 306; Demurrer § 323; Designs § 336; Equity § 370; Fraud § 425; Government § 428; Interferences § 582; Interfering Patents § 586; Law Actions § 733; Pleading and Practice § 788; Unfair Trade § 929</i>
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§ 24. General Statement.

Actions for infringement of letters patent, of which the district courts of the United States have exclusive original jurisdiction under the Judicial Code, Secs. 24, 256, both at law and in equity, are considered separately under *Equity, Law Actions, and Jurisdiction*. Actions otherwise arising, of which the district courts have exclusive jurisdiction and which arise out of the Patent Statute, are the following:

§ 25. To Compel Issue of Patent.

Whenever a patent on application is refused, either by the Commissioner of Patents or by the Supreme Court of the District of Columbia upon an appeal from the Commissioner, the applicant 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 that such applicant is entitled, according to law, to receive a patent for his invention, as specified in his claim, or for any part thereof, as the facts in the case may appear. And such adjudication, if it be in favor of the right of the applicant, shall authorize the Commissioner to issue such patent on the applicant filing in the Patent Office a copy of the adjudication, and otherwise complying with the requirements of law. In all cases, where there is no opposing party, a copy of the bill shall be served on the Commissioner; and all the expenses of the proceeding shall be paid by the applicant, whether the final decision is in his favor or not. R. S. 4915.

Mandamus will lie to compel a ministerial officer to do what is required of him by law; but it will not lie to reverse his action when taken. — *Holloway v. Whiteley*, 71 U. S. 522; 18 L. Ed. 335.

Decatur v. Paulding, 14 Pet. 515.

The remedy by bill in equity under sec. 4915 applies only when the Commissioner decides to reject an application for a patent, on the ground that the applicant is not, on the merits, entitled to it. — *Butterworth v. Hoe*, 112 U. S. 50; 28 L. Ed. 656; 5 S. Ct. 25.

Will lie against the Commissioner. — *Butterworth v. Hoe*, 112 U. S. 50; 28 L. Ed. 656; 5 S. Ct. 25.

Com'r. v. Whiteley, 4 Wall. 522.

By sec. 739 and by the act of 1875 "no civil suit shall be brought before either of said courts (Circuit or District) against an inhabitant of the U. S. by any original process in any other district than that of which he is an inhabitant or in which he may be found at the time of serving the writ." We entertain no doubt that this statute applies to suits brought under sec. 4915. The Commissioner of Patents is by law located in the Patent Office, R. S. 476. His official residence is therefore at Washington, in the District of Columbia. — *Butterworth v. Hill*, 114 U. S. 128; 29 L. Ed. 119; 5 S. Ct. 960.

By sec. 739 and by the act of 1875, suits brought against the Commissioner of Patents under 4915 are limited to the jurisdiction of courts including

his official residence, which is, Washington. — *Butterworth v. Hill*, 114 U. S. 128; 29 L. Ed. 119; 5 S. Ct. 960.

The provision of sec. 4915 is that the circuit court may adjudge that the applicant "is entitled according to law, to receive a patent for his invention, as specified in his claim or for any part thereof, as the facts in the case may appear;" and that, if the adjudication is in favor of the right of the applicant, it shall authorize the commissioner to issue the patent. It necessarily follows that no adjudication can be made in favor of the applicant, unless the alleged invention for which a patent is sought is a patentable invention. The litigation between the parties on this bill cannot be concluded by solely determining an issue as to which of them first made the device. A determination of that issue alone, in favor of the applicant, carrying with it, as it does, authority to the commissioner to issue the patent to him for the claims in interference, would necessarily give the sanction of the court to the patentability of the invention involved. — *Hill v. Wooster*, 132 U. S. 693; 33 L. Ed. 502; 10 S. Ct. 228.

Where action is brought to compel issue of a patent under R. S. sec. 4915 the court will not only determine prior rights between the parties but will also adjudicate the patentability of the invention. — *Hill v. Wooster*, 132 U. S. 693; 33 L. Ed. 502; 10 S. Ct. 228.

Whether the original conception was Gillette's, whether he disclosed it adequately to Sendelbach, whether Sendelbach was chargeable as Gillette's agent in embodying the conception in the forms of the two claims, were questions of fact presented to the Patent Office tribunals on virtually the same evidence that is now adduced. To justify us in directing the issuance of a patent to Gillette, we should be shown very clearly that the adverse findings were erroneous. — *Gillette v. Sendelbach*, 146 Fed. 758; 77 C. C. A. 55.

When the patent was issued to the wrong person, the rightful owner may maintain an action to compel a surrender and reissue. — *Appleton v. Bacon*, 67 U. S. 699; 17 L. Ed. 338.

§ 26. Cancellation of Patent.

The bill was filed the day after the patent had expired and sought to set aside and annul all claims arisen thereunder. Held: that there remained nothing which could be the subject of a suit. — *U. S. v. Goodyear*, 76 U. S. 811; 19 L. Ed. 786.

A patent cannot be abrogated in a proceeding collateral thereto. — *Rubber Co. v. Goodyear*, 76 U. S. 788; 19 L. Ed. 566.

Jackson v. Lawton, 10 Johns. 23; *Field v. Seabury*, 19 How. 332; *Foley v. Harrison*, 15 How. 448.

An action to repeal or annul a patent on the ground of fraud or misrepresentation in obtaining the same can be brought only in the name of the Government by the Attorney General. — *Mowry v. Whitney*, 81 U. S. 434; 20 L. Ed. 858.

The ancient mode was by scire facias; but as this writ is not used in this country, the chancery jurisdiction is by bill. — *Mowry v. Whitney*, 81 U. S. 434; 20 L. Ed. 858.

U. S. v. Stone, 2 Wall. 525; *Atty. v. Vernon*, 1 Vern. 277; *Jackson v. Lawton*, 10 Johns. 24; *King v. Butler*, 3 Lev. 220.

Whether court of equity will annul patent when obtained without fraud or deceit, *quaere*. But we do not decide here whether a patent is absolutely void because the patentee is not the first inventor, nor whether a court of equity should set aside a patent where the party has obtained it without fraud or deceit believing himself to be the first inventor. — *U. S. v. Bell Tel. Co.* 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

These provisions, while they do not in express terms confer upon the courts of equity of the United States the power to annul or vacate a patent, show very clearly the sense of Congress that if such power is to be exercised anywhere it should be in the equity jurisdiction of those courts. The only authority competent to set aside a patent, or to annul it, or to correct it, for any reason whatever is vested in the Judicial Department of the Government, and this can only be effected by proper proceedings taken in the courts of the United States. — *U. S. v. Bell*, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

U. S. v. Stone, 69 U. S. 525; *Jackson v. Lawton*, 10 Johns. 24; *Attorney v. Vernon*, 1 Vern. 277; *U. S. v. Hughes*, 52 U. S. 552; also 71 U. S. 252; *Moore v. Robbins*, 96 U. S. 530; *Moffat v. U. S.* 112 U. S. 24; *U. S. v. Minor*, 114 U. S. 233; *Colorado v. U. S.* 123 U. S. 307; *U. S. v. San Jacinto*, 125 U. S. 273; *Mowry v. Whitney*, 81 U. S. 434.

While it cannot be successfully denied that the general powers of a court of equity include the right to annul and set aside contracts or instruments obtained by fraud, to correct mistakes made in them, and to give all other appropriate relief against documents of that character, such as requiring their delivery up, their cancellation, or their correction, in order to make them conform to the intention of the parties, it would seem to require some special reason why the Government of the United States should not be able to avail itself of these powers of a court of equity. — *U. S. v. Bell*, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

Before the government is entitled to a decree cancelling a patent for an invention on the ground that it has been fraudulently and wrongfully obtained it must, as in the case of a like suit to set aside a patent for land, establish the fraud and the wrong by testimony which is clear, convincing and satisfactory. — *U. S. v. Bell Tel. Co.* 167 U. S. 224; 42 L. Ed. 144; 17 S. Ct. 809.

The Government, therefore, if seeking simply to protect the right of an individual, ought not to be permitted to maintain a suit in equity to cancel that against which the individual has a perfect legal defense available in an action brought by or against him. — *U. S. v. Bell Tel. Co.* 167 U. S. 224; 42 L. Ed. 144; 17 S. Ct. 809.

See full discussion and cases in *U. S. v. Bell Tel. Co.* 167 U. S. 224; 42 L. Ed. 144; 17 S. Ct. 809.

It has been settled that when a patent has received the signature of the Secretary of the Interior, countersigned by the Commissioner of Patents, and has affixed to it the seal of the Patent Office, it has passed beyond the control and jurisdiction of that office, and is not subject to be revoked or cancelled by the President, or any other officer of the government. — *McCormick v. Aultman*, 169 U. S. 606; 42 L. Ed. 875; 18 S. Ct. 443.

U. S. v. Schurtz, 102 U. S. 378; *U. S. v. Bell Tel. Co.* 128 U. S. 315; *Seymour v. Osborn*, 11 Wall. 516; *Cammeyer v. Newton*, 94 U. S. 225; *U. S. v. Palmer*, 128 U. S. 262; *James v. Campbell*, 104 U. S. 356.

The only authority competent to set a patent aside, or to annul it, or to correct it for any reason whatever, is vested in the courts of the United

States, and not in the department which issued the patent. — *McCormick v. Aultman*, 169 U. S. 606; 42 L. Ed. 875; 18 S. Ct. 443.

Moon v. Robbins, 96 U. S. 530; *U. S. v. Bell Tel. Co.* 128 U. S. 315; *Lumber Co. v. Rust*, 168 U. S. 589.

The bill contains enough on its face and in its form, and in its signature by the attorney general, to bring it within *U. S. v. Am. Bell Tel. Co.* 128 U. S. 315. But in the development of proofs all allegations of affirmative or positive fraud dropped out; so *U. S. v. Am. Bell Tel. Co.* fails to reach the merits of the case. — *Am. Bell Tel. v. U. S.* 68 Fed. 542; 15 C. C. A. 569.

The rule of fraud applied and *U. S. v. Am. Bell Tel. Co.* 128 U. S. 531 explained and limited. — *Am. Bell Tel. v. U. S.* 68 Fed. 542; 15 C. C. A. 569.

§ 27. Interfering Patents.

Provision is made by Sec. 4918, R. S. for the determination of rights under issued patents, the claims of which overlap or interfere. The terms of the statute and the appellate law relating thereto will be found in full under *Interfering Patents*.

ADJUDICATION.

(See § 250)

General Statement § 28

Effect of § 29

Patent Office Decision § 30

Prior

Conclusiveness § 31

Different Parties § 32

Estoppel on Complainant § 33 (see § 381)

Judicial Notice § 34

New Evidence § 35

Privity § 36

Stare Decisis § 37

See — *Arbitration* § 145; *Comity* § 250; *Commissioner of Patents* § 261; *Defenses* § 315; *Estoppel* § 381; *Injunction* §§ 541, 570; *Interferences* § 580; *Patent Office* § 785; *Res Judicata* § 893

§ 28. General Statement.

The general effect of adjudications, prior and collateral, in patent causes is similar to the general law. The Patent Statute makes no special provision on this subject, except as to special matters relating to the decisions of the Commissioner and those under him. In the following paragraphs the various general rulings of the courts are given. The effect of adjudications as *Estoppels* and *Res Judicata* will be found under those titles. The special applications as relating to *Injunctions* and other special matters will be found under those titles.

§ 29. Effect of.

An adjudication in the case of a patent is not only a judgment inter partes, but is a judicial construction of a grant by the government, and in a broad sense deals with and determines the rights of the public. A patent is sui generis. By it the public, through its authorized representatives, grants a monopoly for a term of years in consideration of the surrender of the invention to public use upon expiration of the term. When, upon judicial contest, a competent court has sanctioned the grant and determined the right thereunder, the monopoly thereby granted ought not to be permitted to be invaded except under a clear showing that the decision was wrong. — *Electric v. Edison*, 61 Fed. 834; 10 C. C. A. 106.

(The patent had been held valid in S. D. N. Y.; S. D. O.; N. D. Ga.; & Ct. App. Rep. of France. The C. C. A. 6th Cir. held the patent invalid).

The case in the Court of Appeals for the Sixth Circuit was not a proceeding in rem. The defendant in that particular suit has a decree on which . . . he could base a plea of res adjudicata. That plea would be as good in the other circuits as in the sixth. No other member of the public could plead that decree in any circuit. — *Rubber Tire v. Milwaukee*, 154 Fed. 358; 83 C. C. A. 336.

§ 30. Patent Office Decisions.

Patents are often granted with a view to leaving open, to be decided by the courts, questions which the Patent Office does not deem it proper to adjudicate against the applicant by withholding the patent. — *Andrews v. Hovey*, 124 U. S. 691; 31 L. Ed. 557; 8 S. Ct. 676.

The learned counsel for the defendants, who testified as an expert in the case, bears testimony as to the great experience and competency of these officials; and while we do not go so far as to hold that their decision upon this point is conclusive, (upon a question of reissue), as some of the courts are manifestly inclined to do, we are of opinion that the decision of competent experts, made after a full hearing, where both sides have been represented by able counsel, and not impeached by fraud or favoritism, has great persuasive force. — *Crown v. Aluminum*, 108 Fed. 845; 48 C. C. A. 72.

§ 31. Prior — Conclusiveness.

While one infringer may succeed in defeating a patent under one of the statutory defenses, such action does not prevent another from being sued, or mulcted, in case he fails to produce the requisite evidence to maintain his defense. — *U. S. v. Bell*, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

The patent had been held void in one circuit by the Circuit Court and by the Circuit Court of Appeals. In another suit by the same complainant against a party who was a customer of the former defendant, the patent was held by the Circuit Court in another circuit to be void and on appeal to the Circuit Court of Appeals of that circuit, the patent was held valid. The defendant in the first suit brought action against the owner of the patent to restrain him from bringing suits in other circuits on said patent against his customers. On certification of the questions involved to the Supreme Court, it was held that the defendant in the first suit and the complainant in the suit to restrain such further actions, had no adequate remedy at law; that such action could be maintained in equity and that by an action in equity, the Circuit Court having jurisdiction of the party owning the patent, could restrain him from bringing action thereon in any Circuit either against the original defendant or against any of his customers, regardless of the fact that another Circuit Court of Appeals in another circuit had held the patent valid. — *Kessler v. Eldred*, 206 U. S. 285; 51 L. Ed. 1065; 27 S. Ct. 611.

Note: This decision of the Supreme Court effaces with a single stroke of the pen the accumulated holdings of the past 20 years. That the position is tenable with certain modifications is undoubted; but that serious modifications will have to be made is equally evident. A probable certification to the Supreme Court in the case of *Consolidated v. Diamond*, 157 Fed. 677, may serve to limit and locate this holding; but it is believed that nothing short of Congressional action amending the Circuit Court of Appeals act, can give relief from the utter chaos which now exists.

The patent had been held void in one circuit by the circuit court and by the Circuit Court of Appeals. In another suit by the same complainant against a party who was a customer of the former defendant, the patent was

held by the Circuit Court in another circuit to be void and on appeal to the Circuit Court of Appeals of that circuit, the patent was held valid. The defendant in the first suit brought action against the owner of the patent to restrain him from bringing suits in other circuits on said patent against his customers. On such action the following was certified to the Supreme Court.

Did the decree rendered by the Circuit Court in the District of Indiana in the suit of *Eldred v. Kessler* have the effect of making a suit by Eldred against any customer of Kessler's for alleged infringement of the Chambers patent by use or sale of Kessler's lighters a wrongful interference by Eldred with Kessler's business? To this the Supreme Court answered in the affirmative. — *Kessler v. Eldred*, 206 U. S. 285; 51 L. Ed. 1065; 27 S. Ct. 611.

Note: See this question considered in *Consolidated v. Diamond*, 157 Fed. 677. Look for Supreme Court decision on certification of that case.

The patent had been held void in one circuit by the circuit court and by the circuit court of appeals. In another suit by the same complainant against a party who was a customer of the former defendant, the patent was held by the circuit court in another circuit to be void and on appeal to the Circuit Court of Appeals of that circuit, the patent was held valid. The defendant in the first suit brought action against the owner of the patent to restrain him from bringing suits in other circuits on said patent against his customers. On such action the following was certified to the Supreme Court.

Did the decree in Kessler's favor rendered in the circuit court for the District of Indiana in the suit of *Eldred v. Kessler*, (the first suit) have the effect of entitling Kessler to continue the business of manufacturing and selling throughout the United States, the same lighter he had theretofore been manufacturing and selling without molestation by Eldred, through the Chambers patent? To this the Supreme Court answered in the affirmative. — *Kessler v. Eldred*, 206 U. S. 285; 51 L. Ed. 1065; 27 S. Ct. 611.

Note: See this question considered in *Consolidated v. Diamond*, 157 Fed. 677. Look for Supreme Court decision on certification of that case.

That where a cause has been once fairly tried, fully heard and finally decided, upon its merits, by a competent tribunal, the same question as between the same parties or their privies in interest, ought not to be tried over again see, *Norton v. San Jose*, 83 Fed. 512; 27 C. C. A. 576.

Parrish v. Ferris, 2 Black. 606; *Cromwell v. Sac*, 94 U. S. 351; *Stout v. Lye*, 103 U. S. 66; *Johnson v. Wharton*, 152 U. S. 252; *Last Chance v. Tyler*, 157 U. S. 683; *Forsyth v. City*, 166 U. S. 506; *Norton v. Fruit Packing Co.* 79 Fed. 793; *Mining Co. v. Dangberg*, 81 Fed. 73.

The decision of the Supreme Court in *Potts v. Creager*, 155 U. S. 597, is not technically determinative of this case, because the parties are different, and because the claims in issue now and then are not the same. So far as found applicable, the opinion of the Supreme Court will, of course, be followed. — *Anderson v. Potts*, 108 Fed. 379; 47 C. C. A. 409.

Though the former case might not prevent a renewed inquiry into the merits, we are persuaded that the pronouncements therein, in view of the Supreme Court's denial of appellant's application for a writ of certiorari should, in the interest of faith in the stability of judicial decisions, be adhered to by us as the law of the patent. — *Rawson v. Western*, 118 Fed. 575; 55 C. C. A. 403.

We should seemingly place ourselves in the attitude of reopening, upon substantially the same evidence, the question of the validity of the Grant

patent after the Supreme Court under its revising powers, had refused to re-examine the case. — *Rubber Tire v. Victor*, 123 Fed. 85; 59 C. C. A. 215.

In *Kessler v. Eldred*, Eldred, the owner of a patent, sued Kessler, a manufacturer of electric cigar lighters, in the district of Indiana. The court found non-infringement and dismissed the bill. Subsequently Eldred sued Kirkland, another manufacturer of similar lighters in the Western district of New York, was defeated at circuit, but prevailed in the Circuit Court of Appeals. Eldred next sued Breitweiser, a user of Kessler lighters, in the same district. While this last suit was pending, Kessler filed a bill in the Northern District of Illinois against Eldred to enjoin him from prosecuting any suit against any one for alleged infringement of the patent by purchase, use or sale of any cigar lighter manufactured by Kessler and identical with the lighter in evidence before the court in the first suit. The Supreme Court held that the original judgment conclusively settled the right of Kessler to manufacture and sell his manufactures free from all interference from Eldred by virtue of the patent there adjudicated, and granted the relief prayed for. Inasmuch as defendant here is a dealer, and as such may wish to sell tires manufactured by the Goodyear Company which has secured adjudication adverse to the patent in the Circuit Court of Appeals, Sixth Circuit, supra, the judge who heard the motion at circuit in view of the decision in *Kessler v. Eldred* inserted the following clause in the order:

“ Nothing in this injunctive order shall prevent, or is intended to prevent or enjoin, the defendant from handling, using, or selling rubber tires and rims covered by the Grant patent, . . . manufactured by the Goodyear Tire & Rubber Company, having a right to manufacture, use, and sell such tires under a judicial decree in a litigation in the federal courts in the district of Indiana heretofore pending between this complainant and such parties, wherein it has been judicially determined that said Grant patent is invalid and void.”

The complainants cannot now question the propriety of inserting this clause, because they have no appeal from an order refusing to issue injunction, and the clause is a refusal to enjoin tires made by the Goodyear Company. Defendant contends, however, that the reservation does not go far enough, that defendant should be left free to sell any infringing tires made in the Sixth Circuit, or in any circuit other than the Second, or that no injunction at all should have been issued. *Kessler v. Eldred*, as the Supreme Court itself remarked, was a case of novel impression, and in deciding it that court carefully confined the decision to the single point that the original judgment was conclusive upon the parties to it. As to the proposition that such adjudication afforded a defense to Breitweiser in the direct suit against him, it said: “ Upon that question we express no opinion.” It would seem that inferior courts should be cautious about extending the principle enunciated in that case beyond the limits within which it was there applied. The opinion opens up a new subject in patent law practice, and it is desirable, no doubt, that an early expression of opinion by the Supreme Court should be secured upon a record which will present its broader aspects, but we do not think it wise to certify the question to that tribunal upon this record. Besides, that question there is the further one whether upon the merits of the whole case the Second Circuit was right in holding the patent to be valid and infringed by a manufacturer other than the Goodyear Tire & Rubber Company. Should the Supreme Court reach the conclusion that this circuit erred in that respect, the further application of the *Kessler v. Eldred* rule would no longer cut any figure in the case, and by certifying it now we would have unnecessarily vexed that tribunal with a moot question. — *Consolidated v. Diamond*, 157 Fed. 677; 85 C. C. A. 349.

That where a manufacturing infringer, though not made a party to the suit, comes in and makes the substantial defense, such conduct operates as

an estoppel against such infringer in a subsequent suit to the extent of such former adjudication upon the patent; and for the purpose of determining the extent of such estoppel the court may examine the decision in such former case, see *D'Arcy v. Staples*, 161 Fed. 733; 88 C. C. A. 606.

Lane v. Welds, 99 Fed. 286; *Penfield v. Potts*, 126 Fed. 475; *Cromwell v. Sac*, 94 U. S. 351; *Russel v. Place*, 94 U. S. 606; *Stearns v. Lawrence*, 83 Fed. 738; *Corcoran v. Canal*, 94 U. S. 741; *Last Chance v. Tyler*, 157 U. S. 690.

§ 32. Prior — Different Parties.

The defendants in the case before us are other persons than the defendant in the former case, and of course are not concluded by the judgment in that case. But it must be expected that we should adhere to our former opinion upon a record substantially the same. — *American v. Cleveland*, 158 Fed. 978; 86 C. C. A. 182.

§ 33. Prior — Estoppel on Complainant.

The patent had been held void in one circuit by the Circuit Court and by the Circuit Court of Appeals. In another suit by the same complainant against a party who was a customer of the former defendant, the patent was held by the Circuit Court in another circuit to be void and on appeal to the Circuit Court of Appeals of that circuit, the patent was held valid. The defendant in the first suit brought action against the owner of the patent to restrain him from bringing suits in other circuits on said patent against his customers. On such action the following was certified to the Supreme Court.

Did Kessler's assumption of the defense of Eldred's suit against Breitweiser (Kessler's customer) deprive Kessler of the right, if that right would otherwise exist, of proceeding against Eldred in the state and district of his citizenship and residence for wrongfully interfering with Kessler's business? To this the Supreme Court answered in the negative. — *Kessler v. Eldred*, 206 U. S. 285; 51 L. Ed. 1065; 27 S. Ct. 611.

Note: See this question considered in *Consolidated v. Diamond*, 157 Fed. 677. Look for Supreme Court decision on certification of that case.

§ 34. Prior — Judicial Notice.

These proceedings (prior adjudications) were laid before us at this hearing, but, if they had not been, we, probably, would have been entitled to take notice of them, as they appear of record in this court. — *Bresnahan v. Tripp* 72 Fed. 920; 19 C. C. A. 237.

Butler v. Eaton, 141 U. S. 240; *Aspen v. Billings*, 150 U. S. 31.

§ 35. Prior — New Evidence.

It is believed that after an exhaustive litigation upon a patent which is of importance, and has been widely advertised, and after its careful re-examination and a favorable adjudication upon its validity by the appellate court, this class of paper affidavits in regard to priority by individuals, ought not to be permitted to delay the owner of the patent from receiving the advantages which accrue from his successful struggle with infringers. — *New York v. Niagara*, 80 Fed. 924; 26 C. C. A. 252.

Where a new defense is interposed, the evidence to support it must be so cogent and persuasive as to impress the court with the conviction that, if

it had been presented and considered in the former case, it would probably have availed to a contrary conclusion. — *New York v. Niagara*, 80 Fed. 924; 26 C. C. A. 252.

Electric v. Edison, 61 Fed. 834; *Bresnahan v. Tripp*, 72 Fed. 921.

While the prior litigation and these adjudications, for the reasons already stated, do not operate strictly as an estoppel, they do serve to forcibly confront us with conditions of stare decisis, considerations of public policy, consideration of laches, and considerations of the rule that the newly discovered evidence, to entitle a party to a rehearing and a reversal of prior adjudications must disclose clear and unmistakable anticipations of a patent which has been sustained on final hearing, on the ground that it involved invention. — *Bresnahan v. Tripp*, 99 Fed. 280; 39 C. C. A. 508.

The mere introduction of additional patents does not change the situation, unless they indicate that the prior art knew of devices not indicated by the patents in proof before the judge who heard the cause at final hearing. — *Consolidated v. Hays*, 100 Fed. 984; 41 C. C. A. 142.

§ 36. Privity.

Judgments are binding upon privies as well as upon parties, but only those are privies, within the meaning of the rule, who acquire their interest in the subject-matter of a suit subsequent to the suit. — *Carroll v. Goldschmidt*, 83 Fed. 508; 27 C. C. A. 566.

Ingersoll v. Jewett, Fed. Cas. 7,039; *Freeman Judgm. Sec. 162*; *Campbell v. Hall*, 16 N. Y. 575; *Doe v. Earl*, 1 Adol. & E. 783; *Winslow v. Grindal*, 2 Greenl. 64.

§ 37. Stare Decisis.

The rule of stare decisis is a salutary one, at least to the extent that a court should with reasonable stability adhere to its solemnly declared and authoritatively published decisions, in respect to similar situations, and upon questions depending upon similar facts which relate to general interests, as well as to private and particular interests, and in respect to which the public, in a measure, is supposed to adjust itself and its business affairs. Public policy requires the decision which involves general law, and the determination of facts, such as those involved in a patent which may concern the general public, should be adhered to, unless it shall subsequently be made clearly to appear that the decision and the findings were erroneous, when, it goes without saying, the decision should be corrected. The reasons which are so often given for holding that the judgment estops, not only as to every ground of recovery or defense actually presented, but also to every ground which might have been presented, are cogent reasons to be considered upon the question of reversing a long line of judicial decisions upon a rehearing grounded upon newly discovered evidence. — *Bresnahan v. Tripp*, 99 Fed. 280; 39 C. C. A. 508.

Southern Pacific v. U. S. 168 U. S. 1; *Columb v. Mfg. Co.* 84 Fed. 592; *Stark v. Starr*, 94 U. S. 477.

The case had been to the Supreme Court, considered on its merits, and a new trial ordered. Held: The Supreme Court having thus held, upon a consideration of the written instruments themselves, that the Cramer invention was not of a pioneer character, and that the alleged infringing device is essentially different in construction from that of Cramer, there was nothing left for the court below to do on the last trial of the case but follow the decision of the Supreme Court. — *Cramer v. Singer*, 147 Fed. 917; 78 C. C. A. 53.

ADMINISTRATOR OR EXECUTOR, OR GUARDIAN OF INSANE PERSON.

(See § 300)
 Statutory Provision § 38
 Powers of § 39
 License § 40 (see § 749)

Right to Sue § 41
 See — *Attorneys* § 177; *Death of Applicant* § 300

§ 38. Statutory Provision.

When any person, having made any new invention or discovery for which a patent might have been granted, dies before a patent is granted, the right of applying for and obtaining the patent shall devolve on his executor or administrator, in trust for the heirs at law of the deceased, in case he shall have died intestate; or if he shall have left a will disposing of the same, then in trust for his devisees, in as full manner and on the same terms and conditions as the same might have been claimed or enjoyed by him in his lifetime; and when any person having made any new invention or discovery for which a patent might have been granted becomes insane before a patent is granted, the right of applying for and obtaining the patent shall devolve on his legally-appointed guardian, conservator, or representative in trust for his estate in as full manner and on the same terms and conditions as the same might have been claimed and enjoyed by him while sane; and when the application is made by such legal representatives, the oath or affirmation required to be made shall be so varied in form that it can be made by them. The executor or administrator duly authorized under the law of any foreign country to administer upon the estate of the deceased inventor shall, in case the said inventor was not domiciled in the United States at the time of his death, have the right to apply for and obtain the patent. The authority of such foreign executor or administrator shall be proved by certificate of a diplomatic or consular officer of the United States.

The foregoing section, as to insane persons, is to cover all applications now on file in the Patent Office, or which may be hereafter made. — R. S. 4896, as amended May 23, 1908.

§ 39. Powers of.

Construed with reference to applications. — *De La Vergne v. Featherstone*, 147 U. S. 209; 37 L. Ed. 138; 13 S. Ct. 283.

§ 40. License.

A license to use a patented invention that does not contain words importing assignability is a grant of a mere personal right to the licensee which does not pass to his heirs or representatives and which cannot be transferred to another without the expressed consent of the licensor. — *Bowers v. Lake Superior*, 149 Fed. 983; 79 C. C. A. 493.

Hapgood v. Hewitt, 119 U. S. 227; *Oliver v. Rumford*, 109 U. S. 75; *Troy v. Corning*, 14 How. 193.

§ 41. Right to Sue.

When several executors have been appointed under a will and only one has qualified, that one may sue. — *Rubber Co. v. Goodyear*, 76 U. S. 788; 19 L. Ed. 566.

An assignment of a right to make, use and sell in a limited territory for a limited time is a mere license, and does not give an administrator a right to sue for infringements occurring after the death of the assignee. — *Oliver v. Rumford*, 109 U. S. 75; 27 L. Ed. 862; 3 S. Ct. 61.

AGGREGATION.

General Statement § 42
 Arrangement of Parts § 43
 Combination § 44
 Duplication § 45
 Manufacture § 46 (see § 772)

Old Elements
 General Rule § 47
 Independent Functions § 48
 Old Results § 49
 Old Function § 50
 Utility — Patentability § 51
 See — *Invention* §§ 594, 603, 653, 670

§ 42. General Statement.

The non-patentability of mere aggregations grows out of judicial construction of Sec. 4886, R. S., which limits patentable inventions to "any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof." The general rules and applications are given in the following sections, while the special applications of the rule to *Combinations* will be found under that title, and those specially relating to *Mechanical Skill* will be found under that sub-title under *Invention*.

§ 43. Arrangement of Parts.

Of course there is nothing in placing the sections (sectional book-case) one above the other, or the tiers of sections end to end, which is a mere duplication. — *Globe-Wernicke v. Macey*, 119 Fed. 696; 56 C. C. A. 304.

All those portions of the patent submitted to us relate to matters which were common in the arts, and common aside from the arts in the technical meaning of the word; and the details, therefore, concern merely mechanical skill, and in no degree inventive faculty. — *Waterman v. Lockwood*, 125 Fed. 497; 60 C. C. A. 333.

Rubber-Tip v. Howard, 20 Wall. 498; *Perry v. Revere*, 103 Fed. 314.

§ 44. Combination.

A mere aggregation of parts into a supposed combination producing no new function is not patentable. — *Davis v. Parkman*, 71 Fed. 961; 18 C. C. A. 398.

It is not easy, and perhaps not possible, to formulate a definition or test of a patentable combination of old elements, which will serve in all cases to distinguish it from a mere aggregation of the results of the several elements of which it is constituted. But it is safe to say that the effect produced by the combination must be new and useful, and not such as would suggest itself to the mind of an ordinarily intelligent person experienced in the art to which the supposed invention relates. — *Thompson v. Chestnut*, 127 Fed. 698; 62 C. C. A. 454.

§ 45. Duplication.

The functions of the two presses were not changed. A connection was made between them, and the product of the one subjected to the operation of the other. The connection by which this was done was a mere mechanical improvement, and which one skilled in the art could solve. The idea of so coupling up two presses so as to print larger paper was but the natural advance incident to new demands upon the art. — *Goss v. Scott*, 108 Fed. 253; 47 C. C. A. 302.

The test in such cases is not whether duplication exists, but whether duplication produces, not mere duplication of product or function, but a new unitary, additional result, and not the mere aggregate of prior, separate mechanism. The mere elements of the combination are immaterial. In

their individual relations they may be old, may be mere duplicates; but the test is not the character of the combining elements, but the result flowing from their being combined. — *Goss v. Scott*, 108 Fed. 253; 47 C. C. A. 302.

Parker v. Hulme, Fed. Cas. 10,740.

Mere duplication of parts is not invention. It is true that the assembling of old elements having a new mode of operation producing a more beneficial result does amount to invention. It is also well settled that there is no invention in merely selecting and putting together parts of different machines in the same art, where each operates in the same way in a new machine producing the same result. — *Burnham v. Union*, 110 Fed. 765; 49 C. C. A. 163.

Overweight v. Vogt, 102 Fed. 957.

§ 46. Manufacture.

The proposition that the doctrine of aggregation is restricted in its application to machines as distinguished from articles of manufacture, does not seem to be sustained by the decided cases. — *Antisdel v. Chicago*, 89 Fed. 308; 32 C. C. A. 216.

Hailes v. VanWormer, 20 Wall. 353; *Reckendorfer v. Faber*, 92 U. S. 347; *Trimming v. Welling*, 97 U. S. 7; *Slawson v. Railroad*, 107 U. S. 653; *Bussey v. Mfg. Co.* 110 U. S. 146; *Hill v. Wooster*, 132 U. S. 693; *Rob. Pat. Sec.* 154, 182, 185; *Campbell v. Bayley*, 63 Fed. 463.

§ 47. Old Elements — General Rule.

It is simply (coating a metal ring with imitation ivory) the application and the action of old and well-known modes and materials in an accustomed manner. It is a case of aggregation, not combination. — *Rubber v. Welling*, 97 U. S. 7; 24 L. Ed. 942.

Mere aggregation or subdivision is not invention. — *King v. Gallun*, 109 U. S. 99; 27 L. Ed. 870; 3 S. Ct. 202.

Hotchkiss v. Greenwood, 11 How. 248; *Phillips v. Page*, 24 How. 167; *Brown v. Piper*, 91 U. S. 43; *Terhune v. Phillips*, 99 U. S. 592; *Atlantic v. Brady*, 107 U. S. 192; *Slawson v. R. R.* 107 U. S. 649; *Smith v. Goodyear*, 93 U. S. 486.

If several old devices are so put together as to produce even a better machine or instrument than was formerly in use, but each of the old devices does what it had formerly done in the instrument or machine from which it was borrowed and in the old way, without uniting with other old devices to perform any joint function it seems that the combination is not patentable. — *Brinkerhoff v. Aloe*, 146 U. S. 515; 36 L. Ed. 1068; 13 S. Ct. 221.

Hailes v. VanWormer, 87 U. S. 353; *Reckendorfer v. Faber*, 92 U. S. 347.

That a machine comprising old elements and combinations in which there is not conjoint action is not patentable, see *Portland v. Hermann*, 160 Fed. 91; 87 C. C. A. 247.

American v. Helmstetter, 142 Fed. 978; *Beecher v. Atwater*, 114 U. S. 523; *Dunlap v. Willbrandt*, 151 Fed. 223.

See also, *Pickering v. McCullough*, 104 U. S. 310; 26 L. Ed. 749; *Watson v. Cincinnati*, 132 U. S. 161; 33 L. Ed. 295; 10 S. Ct. 45.

§ 48. Old Elements — Independent Functions.

Concededly, *Dunbar* is entitled to the credit of originating the conception of using a second elevator as an adjunct to the ordinary grain elevator, which could be moved so as to reach the different hatches of the vessel, and dis-

charge into the main elevator; but his right to a patent cannot rest upon this conception alone. It must rest upon the novelty of the means which he contrived to embody in the conception and to carry it into practical application. He effected a new organization of a portable elevator, but if this did not involve invention, but was that which could have been done by the skilled mechanic by selecting known devices, applying them to their appropriate uses, and introducing such modification of detail to fit them for the new environment as would be dictated by experience and good judgment, the patent cannot be sustained. The circumstance that the same congregation of devices has never been assembled in a new location is not controlling, and is often of little value in determining the question of patentable novelty. Their assemblage may be nothing but another instance of the double use. — *Dunbar v. Eastern*, 81 Fed. 201; 26 C. C. A. 330.

Atlantic v. Brady, 107 U. S. 192; *Aron v. Railway*, 132 U. S. 90.

Each of these elements appears to operate separately to produce its own separate individual results, just as they might in connection with any other business where an exhaust fan was needed to draw away the air from a given place, and an elevator with endless belts and buckets to carry any given substance to another place or to a different level. There is nothing in the findings or in the case anywhere, to show anything more than a mere juxtaposition or aggregation. The combination to be patentable, must produce a different force or effect or result in the combined forces or processes from that given in their separate parts. There must be a new result produced by their union; or if not so, it is only an aggregation of separate elements. — *Clisby v. Reese*, 88 Fed. 645; 32 C. C. A. 80.

Reckendorfer v. Faber, 92 U. S. 347; *Hailes v. Van Wormer*, 20 Wall. 353.

The aggregation of these several old elements in one structure may have produced, and doubtless did produce, a hot air furnace that was some improvement upon the prior art, in the respect that they may have been stronger, more durable, or easier of construction. But these results were due to the function of each old element acting independently and by itself, without co-action with the other elements. A box put together with screws, mitred joints and dowel pins, may be an improvement, in appearance, strength and utility, upon one put together with nails alone, but the elements of screws, mitred joints and dowel pins is an aggregation of elements, each contributing its own function and not a patentable combination. — *Spear v. Kelsey*, 158 Fed. 622; 85 C. C. A. 444.

§ 49. Old Elements — Old Result.

An aggregation of old and well-known devices, operating in the old way, and producing no new result is not patentable. — *Foos v. Springfield*, 49 Fed. 641; 1 C. C. A. 410.

Hailes v. Van Wormer, 20 Wall. 353; *Pickering v. McCullough*, 104 U. S. 318; *Royer v. Roth*, 132 U. S. 201; *Heating Co. v. Burtis*, 121 U. S. 286; *Florsheim v. Schilling*, 137 U. S. 64; *Mill Co. v. Walker*, 138 U. S. 124; *Union v. Keith*, 139 U. S. 530; *Electric v. LaRue*, 139 U. S. 601; *Aron v. Railway*, 132 U. S. 84; *Day v. Railway*, 132 U. S. 98; *Gardner v. Herz*, 118 U. S. 180.

If Grant's construction is an aggregation of well-known parts, each part doing its own appropriate function in substantially the old way, it does not show a patentable invention, even though the sum of all the old results is a tire more serviceable or durable than shown in the old art. — *Goodyear v. Rubber*, 116 Fed. 363; 53 C. C. A. 583.

Hailes v. Van Wormer, 20 Wall. 353; *Office v. Fenton*, 174 U. S. 492; *Richards v. Elevator*, 158 U. S. 299; *Overweight v. Vogt*, 102 Fed. 957; *Smith v. Nichols*, 21 Wall. 112.

The mere bringing together of old parts and allowing each to work out its old effect, without producing some new product or result as a consequence of the union and cooperating action, is a mere mechanical juxtaposition. — *Germer v. Art*, 150 Fed. 141; 80 C. C. A. 9.

Goodyear v. Rubber, 116 Fed. 363; *Overweight v. Vogt*, 102 Fed. 957.

§ 50. Old Function.

The mere combination of a staple made and used according to well known methods with a washer, where neither modified the function of the other was mere aggregation. — *Double Pointed v. Two Rivers*, 109 U. S. 117; 27 L. Ed. 877; 3 S. Ct. 105.

The railway, the guard-plate, and the car, in function and in result, he left unchanged; and the spray-deflectors which he fixed to the latter are wholly inoperative until the water is reached and the entirely distinct and separate service of a boat becomes requisite. This requirement made it necessary, of course, that the toboggan should differ somewhat from those which had been used exclusively upon land, but the change which was made was merely structural, and did not involve invention. — *Boynton v. Morris*, 87 Fed. 225; 30 C. C. A. 617.

Maitland v. Gibson, 63 Fed. 840.

§ 51. Utility — Patentability.

The utmost that can be justly credited to the applicant is that, in their aggregation, he exhibited an appreciated realization of the utility of each of them. It does not appear that he so associated them as to produce any new result as the consequence of their union, and therefore, he did not create a patentable combination. — *Roemer v. Peddie*, 81 Fed. 380; 26 C. C. A. 440.

AMENDMENT.

Statutory Provisions § 52		Delay § 57
General Statement § 53		See — <i>Abandonment</i> § 4; <i>Attorneys</i>
Broadening Scope of Invention § 54		§ 178; <i>Claims</i> § 199; <i>Divisional</i>
New Matter		<i>Patenting</i> § 348; <i>Reissue</i> § 869;
Broadening § 55		<i>Specification</i> § 902
Miscellaneous § 56		

§ 52. Statutory Provisions.

The fundamental provision as to amendment is in Sec. 4886, R. S., which provides that the inventor * * * "may, upon payment of the fees required by law, and other due proceedings had, obtain a patent therefor," and Secs. 481 and 483, R. S., which provide for the appointment of a Commissioner of Patents and the promulgation of rules by him for the conduct of applications. The specific provision as to amendment grows out of 4888 R. S., which prescribes in definite terms the requisites of an application; and Sec. 4889 provides for drawings. Under Sec. 4893, the Commissioner is required to cause an examination of the application to determine whether the applicant is, under the law, entitled to a patent: and Sec. 4894 places the statutory time-limit as to the completion of the application. Sec. 4897 provides for renewal applications; Sec. 4903 as to notice of rejection; and Sec. 4917 as to disclaimer. The statute also provides for the surrender and reissue of the patent; but as that is a subject quite by itself and the matter of amendment governed by other and different rules, that subject is found in full under *Reissue*.

§ 53. General Statement.

The decisions of the appellate courts are, except in isolated cases, unconcerned with the proceedings in and the regulations of the Patent Office. The legality of the grant and the effect of the proceedings in the Patent Office as determining the scope of the grant are the main considerations.

But it should be noted in this connection that the development of the American patent system has kept step with the marvellous growth of Art and Science. The inventor of today is not one who whittles and thinks; he is a trained thinker, and one who combines the art and science of today. The Patent Office examiner is no longer a mere clerk; he is a trained specialist, both in engineering and in the patent law. While many inventions are stumbled upon by untrained minds, and while there will always be examiners who never get beyond the clerical and the technical, in the main the domain of patents has passed over from the untrained to the most thoroughly skilled specialists. It would seem, under such circumstances, that the matter of preparing an application, examining and amending the same, and the clear statement of a claim should be a simple matter. Not so. Great inventions lie on the borderland of the known. It is easy, now, to say how Tesla should have described and claimed his inventions; it was not when the applications were filed. And there are two other facts which, in the consideration of the specifications and claims of a patent, should be in the mind of both judge and attorney: First, the examination in the Patent Office is the best that it can be under the niggardly policy of Congress, but far short of what it should be, for the simple reason that the constantly-increasing volume of business must be done and done by an insufficient and overworked force. Second, the lamentable fact is that a great proportion of applications are filed by solicitors wholly unqualified for the duty. One of our grave mistakes has been that, while we have raised the standard of efficiency in the Patent Office from year to year, both by internal development and by the addition of examiners of higher skill and training, we have placed no such requirements upon the patent solicitors. Only occasionally have the courts been outspoken on this subject, but he who runs may read, and he will read in the reports — shielded by judicial gentleness — a condemnation of the incompetency of the patent solicitor in general that is startling. Since this book is mainly for the use of the general practitioner, and since the highest duty of the lawyer is to conserve the interests of his client and to keep him out of litigation, I am constrained to place the strongest emphasis upon the necessity and ultimate economy of sending clients about to make application for patent to solicitors of recognized training and skill, both in law and in science.

§ 54. Broadening Scope of Invention.

So long as he did not change the structure of his device or invention, he had the right to change the specification, even though he did it with reference to the patent in suit issued for the same device, which was applied for and issued while his application was pending; and, the specification being as we find it, there is no support for the proposition that for the purpose of preserving the possibility of a function, which the patentee had repudiated before the patent issued, the claims, though worded differently, should be read so as to cover only the exact construction and relation of parts illustrated in the drawing. The proposition is not reasonable, nor, so far as we know, supported by authority. — *Western v. Sperry*, 58 Fed. 186; 7 C. C. A. 164.

Courts ought, therefore, to be more careful, under circumstances like those at bar (when amendment was not merely upon objection by the examiner, and not in view of anticipations found) to give a patentee the benefit of all the equities which can be raised in his behalf by any reasonable

implication, from what appears on the face of the amendments or from the transaction as it passed through the patent office. — *Reece v. Globe*, 61 Fed. 958; 10 C. C. A. 194.

Winans v. Denmead, 15 How. 330; *B. & S. Fastener v. Ball*, 58 Fed. 818; *Leggett v. Avery*, 101 U. S. 256; *Morgan v. Albany*, 152 U. S. 425; *Sargent v. Lock Co.* 114 U. S. 63; *Sheppard v. Carrigan*, 116 U. S. 593; *Sutter v. Robinson*, 119 U. S. 530; *Crawford v. Heysinger*, 123 U. S. 589; *Watson v. Railway*, 132 U. S. 161; *Roemer v. Peddie*, 132 U. S. 313; *Caster v. Spiegel*, 133 U. S. 360; *Yale v. Berkshire*, 135 U. S. 342; *Dobson v. Lees*, 137 U. S. 258; *Corbin v. Eagle*, 150 U. S. 38; *Knapp v. Morss*, 150 U. S. 221; *Union v. U. S.* 112 U. S. 624; *Vulcanite v. Davis*, 102 U. S. 222; *Royer v. Coupe*, 146 U. S. 524.

The amendment was filed within three months after the filing of the original specifications, and before, so far as appears, other inventors whose rights had been prejudiced had entered the field. *Railway v. Sayles*, 97 U. S. 554. The original drawings and specification sufficiently show and suggest the claims finally made, or at least are not inconsistent therewith. *Hobbs v. Beach*, 180 U. S. 383. Subject to the foregoing rules, an inventor may amend his specification so as to include therein all of the advantages within the scope of his invention. *Singer v. Cramer*, 109 Fed. 652. — *Kirchberger v. American*, 128 Fed. 599; 64 C. C. A. 107. See 215 U. S. 161.

The validity of such an amendment depends upon the question whether it brought in original matter, or was of something that might be fairly deduced from the original application. In the first instance the amendment would not be justified; in the latter it would. — *Cleveland v. Detroit*, 131 Fed. 853; 68 C. C. A. 233.

Michigan v. Consolidated, 121 Fed. 232; *Hobbs v. Beach*, 180 U. S. 396; *Western v. Sperry*, 58 Fed. 186; *Sugar v. Yaryan*, 43 Fed. 140.

It may be noted that these broad claims are not found in the original application for the Johns patent. They were not inserted until, five years after the application, and subsequent to the date of the Rowe patent, and to the time when the Rowe device was put upon the market. — *Mayo v. Jenckes*, 133 Fed. 527; 66 C. C. A. 503.

Note: This is a most important and far-reaching holding. It places the amendment of an application long coddled in the Patent Office upon substantially the same ground as a reissue wherein the claims are broadened after intervening rights. In my opinion it should be good law. Such a wholesome rule would do much to do away with the practice of delaying issue of patents unduly.

§ 55. New Matter — Broadening.

No doubt it is competent to amend the specifications while the application is pending, so long as it is done within the scope of the original application; but it is not competent, under color of this privilege, to introduce new matter. — *Michigan v. Consolidated*, 67 Fed. 121; 14 C. C. A. 232.

Railway v. Sayles, 97 U. S. 554; *Eagleton v. West*, 111 U. S. 490; *Brush v. Julian*, 41 Fed. 679; *Kittle v. Hall*, 29 Fed. 508; *Refrigerating v. Featherstone*, 49 Fed. 916; *Refrigerating v. Featherstone*, 147 U. S. 209; *Western v. Sperry*, 58 Fed. 186; *Robinson*, 561, 635.

The objection to new matter brought in by amendment of the specifications stands upon the same ground as when it is introduced upon a reissue, and in respect to the latter the statute declares that it shall not be done (sec. 4916). — *Michigan v. Consolidated*, 67 Fed. 121; 14 C. C. A. 232.

Railway v. Sayles, 97 U. S. 554; *Eagleton v. West*, 111 U. S. 490, *Brush v. Julian*, 41 Fed. 679; *Kittle v. Hall*, 29 Fed. 508; *Refrig. v. Featherstone*, 147 U. S. 209; *Western v. Sperry*, 58 Fed. 186; *Robinson* 561, 635.

The question of broadening an application by amendment is raised indirectly but not decided in *Westinghouse v. New York*, 96 Fed. 991; 37 C. C. A. 649.

We are unable to assent to the doctrine that an inventor is thus circumscribed by the words which he may first use to describe the advantages of his invention, and that he may not afterwards, on further consideration, either upon his own suggestion or that of his counsel, amend his specification so as to assert and maintain all the advantages which his device possesses. — *Singer v. Cramer*, 109 Fed. 652; 48 C. C. A. 588.

Reversed in 192 U. S. 265.

§ 56. New Matter — Miscellaneous.

In view of the entire change in the specification, as to the invention described, the patent, to be valid, should have been granted on an application made and sworn to by the administratrix. The specification, as issued, bears the signature of the deceased, and not of the administratrix, and it is sufficiently shown that the patent was granted on the application and oath of deceased, and for an invention which he never made. — *Eagleton v. West*, 111 U. S. 490; 28 L. Ed. 493; 4 S. Ct. 593.

See *De La Vergne v. Featherstone*, 147 U. S. 209.

The changes made in the application were manifestly to develop the newly conceived theory of the mode of operation, and to add claims for the process. If this was to be accomplished and the theory were to be embodied in practical means, the specifications should have been made to distinctly point out such means, as we have already pointed out. But in this regard the former specifications were retained. If the application as amended were to be construed as embodying such an invention as is now claimed, it was another and different invention from that for which the patent was originally sought, and, if an amendment having the consequence were permissible it should have been verified by the oath of the inventor. — *American v. Steward*, 155 Fed. 731; 84 C. C. A. 157.

Ry. Co. v. Sayles, 97 U. S. 554; *Eagleton v. West*, 111 U. S. 490; *Kennedy v. Hazelton*, 128 U. S. 667; *Mich. Cent. v. Consolidated*, 67 Fed. 121; *Cleveland v. Detroit*, 131 Fed. 853. See 128 Fed. 599.

§ 57. Delay.

If the applicant is under no obligation touching the delay, there is no rule of law by which it can be said that, because he may receive an incidental benefit therefrom, his purpose in relation thereto is unlawful. A man's motives will not make wrongful an act which, in itself is not wrongful. — *Am. Bell Tel. v. U. S.* 68 Fed. 542; 15 C. C. A. 569.

Heald v. Carey, 11 C. B. 977.

The inventor does not determine the measure of his rights or of his obligations. The law determines that for him, and if the government thinks that more speed is desirable in the interest of the public, it should change the law; the courts cannot do so. Nor can they exact of inventors any degree of diligence other than compliance with the statutory provisions. — *Crown v. Aluminum*, 108 Fed. 845; 48 C. C. A. 72.

The claims sued upon are generic. Assuming that this concept of the patentee was complete when the patent was exhibited in the census office in 1890 (eight years before the patent application was filed) so as to be practicable and operative, the machine was sufficiently completed to obtain a patent (if the feature were patentable at all) upon the broad feature claimed. The accessories subsequently developed added nothing either to the concept, or to the operativeness of the mechanism embodying the concept. What followed, if anything, was not development or evolution, but improvement merely. And an inventor having grasped an idea and put it in mechanical form, may not wait to secure a monopoly upon the broad thought until everything in the nature of mere accessory improvement that makes it commercially better has been run out and perfected. To so hold would put it in the power of a patentee to hold back his improvement from the world indefinitely, obtaining in the end a patent that would exclude everything relating to the art, although the whole world had contributed to the perfecting, commercially, of his conception. — *Universal v. Comptograph*, 146 Fed. 981; 77 C. C. A. 227.

ANTICIPATION.

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|--|---|
| Statute Authority § 58 | Inoperative Device § 87 |
| General Rules § 59 | Knowledge § 88 |
| Abandoned Device or Experiment
(see § 1) | Old Elements or Device (see §§ 66,
693) |
| Anticipatory § 60 | Different Use § 89 |
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murrer § 325; Designs § 334; Evi-
dence §§ 389-93; Infringement §§
483, 525; Interfering Patents § 586;
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§ 859 |
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| “Infringe-if-Later” Test § 86 | |

§ 58. Statute Authority.

The provisions of 4886, R. S., upon which novelty (and conversely, anticipation) depends, are, —

1. Not known or used by others in this country, before his invention or discovery thereof;
2. Not patented or described in any printed publication in this or any foreign country before his invention or discovery thereof, or more than two years prior to his application;
3. Not in public use or on sale in this country for more than two years prior to his application;
4. Not abandoned.

And 4923, R. S., provides that, —

Whenever it appears that a patentee, at the time of making his application for the patent, believed himself to be the original and 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 known or used in a foreign country, before his invention or discovery thereof, if it had not been patented or described in a printed publication.

While every rule of anticipation is founded in some one of these statutory provisions, the classification varies materially therefrom, and conforms rather to the acts and conditions which constitute anticipation.

§ 59. General Rules.

It is about as difficult to state a general rule of anticipation as it is to define invention. The difficulty with all such general rules, or attempts at general rules, is that when we come to apply them to a specific case, there are so many variations from the supposed conditions upon which the general rule is predicated that application is difficult, if not impossible. The following may, to a certain extent, be regarded as general rules:

Admitting the words "originally discovered" to be explained or limited by the subsequent words (act of 1800), still, if the thing had been in use, or had been described in a public work, anterior to the supposed discovery, the patent is void. It may be that the patentee had no knowledge of the previous use or previous description; still his patent is void; the law supposes he may have known it. — *Evans v. Eaton*, 3 Wheat. 454; 4 L. Ed. 433.

It was left for Bell to discover that the failure was due not to workmanship, but to the principle which was adopted as the basis of what had to be done. He found that the intermittent current could not be made under any circumstances to produce the vibrations of the human voice, but that the true way was to operate on an unbroken current by increasing and diminishing its intensity. This Reis never thought of, and he failed to transmit speech. Bell did, and he succeeded. Under such circumstances it is impossible to hold that what Reis did was an anticipation of the discovery of Bell. To follow Reis is to fail. To follow Bell is to succeed. — *Telephone Cases*, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

Foreign use for more than two years, in absence of publication or use or sale in this country does not negative patentable novelty. — *Gandy v. Main*, 143 U. S. 587; 36 L. Ed. 272; 12 S. Ct. 598.

To sustain the defense of anticipation, it is necessary that the anticipatory matter should clearly show the invention subsequently patented in such manner as to enable any person skilled in the art or science to which it relates, to make or construct and practically use the invention for the purposes contemplated by the subsequent patent. — *McNeely v. Williams*, 96 Fed. 978; 37 C. C. A. 641.

Eames v. Andrews, 122 U. S. 40.

That an alleged anticipation must disclose a practically operative device and one which may be constructed by one skilled in the art without the exercise of invention, see *Simonds v. Hathorn*, 93 Fed. 958; 36 C. C. A. 24.

Hanifen v. Godshalk, 84 Fed. 649; *Heap v. Tremont*, 82 Fed. 449; *Consolidated v. American*, 82 Fed. 993; also 85 Fed. 662.

If the question of identity of method and result is doubtful, the doubt must be resolved in favor of the successful patentee, who had in a practical way, materially advanced the art. — *Simonds v. Hathorn*, 93 Fed. 958; 36 C. C. A. 24.

Washburn v. Gould, 3 Story, 122.

The statute (sec. 4886) conditions the grant that it shall not have been "in public use or on sale in this country for more than two years prior to" the application; and the policy of this provision and its strict construction against the patent are well settled. *Egbert v. Lippman*, 104 U. S. 333. Nevertheless, the evidence of such public use to defeat the patent must be clear and convincing. — *American v. Warren*, 141 Fed. 655; 72 C. C. A. 649.

Morgan v. Daniels, 153 U. S. 120.

The rule in *Bates v. Coe*, 98 U. S. 31, it is clear, can be applicable only to the one defense "that the improvement had been patented or described in some printed publication prior to the supposed invention." In order to come under the provision of the statute which authorizes that defense, the patent or publication relied on must be prior in point of time to the patent in suit. And it is perhaps true in respect to any form of defense that if a patent is referred to simply by number and date, without averment of earlier invention and use, or of the date of the application upon which it was granted, evidence of those particulars would not be competent, because not within the issue. But when the answer is framed, like this one, to show, not a prior patent or publication, but that the grantee of the patent in suit was not, and that the patentee of a patent of later date, issued upon an earlier application, was the first inventor, it is an anomalous proposition that the fact which the statute declares to be a defense cannot be established by any proof which, under the ordinary rules of evidence, is admissible. — *Barnes v. Walworth*, 60 Fed. 605; 9 C. C. A. 154.

Western v. Sperry, 59 Fed. 295.

§ 60. Abandoned Device or Experiment — Anticipatory.

The device in substantial anticipating form had been publicly used years before and was abandoned by the prior user. Weld; Whatever abandonment there was, was evidently to the public which would give no one the right to obtain a patent for the same device. — *Clisby v. Reese*, 88 Fed. 645; 32 C. C. A. 80.

Numerous witnesses establish that, before the application was filed, *McCarty* erected and operated a large model from which the drawings were made. It is true that it was susceptible of improvement, but that does not negative novelty. — *Lamson v. Hillman*, 123 Fed. 416; 59 C. C. A. 510.

Telephone Cases, 126 U. S. 1; *Rogers v. Mergenthaler*, 64 Fed. 799.

The . . . machine was produced at the hearing in the circuit court, and also at the hearing in this court, and the substantial identity of the two clutch mechanisms was established by concrete proof. The evidence also shows that the clutch was not used for purposes of experiment, or to gratify

curiosity, or to see whether it was successful, or whether anything more was to be done to perfect it; but that it was put to use in ordinary business as a thing which was completed, and that the reason why it was only used for a short time has no bearing upon its practical operativeness. It thus fulfills the tests with respect to anticipation. — *United v. Greenman*, 153 Fed. 283; 82 C. C. A. 581.

Brush v. Condit, 132 U. S. 39; *Deering v. Winona*, 155 U. S. 286; *Brooks v. Sacks*, 81 Fed. 403; *Westinghouse v. Stanley*, 133 Fed. 174.

The fact that the clutch in suit is practically operative raises a strong presumption that the clutch of the abandoned machine was practically operative, since the two clutches are substantially identical. — *United v. Greenman*, 153 Fed. 283; 82 C. C. A. 581.

§ 61. Abandoned Device or Experiment — Non-Anticipating.

The re-invention of a prior lost art or abandoned unproved device is not anticipated by such facts. — *Gayler v. Wilder*, 10 How. 477; 13 L. Ed. 504.

The case to this point admits, that, although Connor's (the anticipating) safe had been kept and used for years, yet no test had been applied to it, and its capacity for resisting heat was unknown, there was no evidence to show that any particular value was attached to it after it passed from his possession, or that it was ever afterwards used as a place of security for papers; and it appeared that he himself did not attempt to make another like the one he is supposed to have invented, but used a different one. — *Gayler v. Wilder*, 10 How. 477; 13 L. Ed. 504.

Embryonic or inchoate device does not defeat a completed, working invention. — *Washburn v. Beat Em All*, 143 U. S. 275; 36 L. Ed. 154; 12 S. Ct. 443.

Coffin v. Ogden, 85 U. S. 120; *Cantrell v. Wallick*, 117 U. S. 689; *Hitchcock v. Tremain*, 9 Blatchf. 550; *Parkham v. American*, 4 F. P. C. 468; *Bell v. People's Tel.* 22 F. R. 309.

Unsuccessful and abandoned experiments do not affect the validity of a subsequent patent. — *Deering v. Winona*, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

Brown v. Guild, 90 U. S. 181; *Coffin v. Ogden*, 85 U. S. 120.

It appears that Wood applied for a patent and was rejected. His application was accompanied by a model, which, it is claimed, embodied the invention in suit. The model itself was not produced and the account given of it is somewhat conflicting. The only use ever made of it by Wood was merely experimental. It was never used for any practical purpose. There is no pretense that the inventor of the patent in suit ever knew of its existence. The evidence is wholly insufficient for the court to conclude that the patent in suit was anticipated by the Wood device. — *Gamewell v. Municipal*, 61 Fed. 948; 10 C. C. A. 184.

It is not enough to defeat the patent that someone other than Gilmour had conceived the invention before he did, or had even perfected it, so long as it had not been in public use or described in some patent or publication. If Gilmour was an original inventor, though a subsequent one, it was his right to obtain a patent unless he "surreptitiously and unjustly obtained the patent for that which was invented by another who was using reasonable diligence in adapting and perfecting the same." — *Lincoln v. McWhirter*, 142 Fed. 967; 74 C. C. A. 229.

This machine after having been used a couple of years was thrown aside, competitors getting out a better looking and more salable product than could be produced by means of it; and it was sold soon afterwards to the defendants, in whose stockroom it has been stored away ever since, unnoted and unused, until resurrected for the purpose of this suit. Whatever virtue, therefore, it may have originally had, as it stands, it must be regarded as in the nature of an abandoned experiment, of which no notice need now be taken. — *American v. Mills*, 149 Fed. 743; 79 C. C. A. 449.

§ 62. Abandoned Device or Experiment — Application.

If, upon the whole of the evidence, it appears that the alleged prior invention or discovery was only an experiment and was never perfected or brought into actual use, but was abandoned and never revived by the alleged inventor, the mere fact of having unsuccessfully applied for a patent therefor cannot take the case out of the category of unsuccessful experiments. — *Brown v. Guild*, 90 U. S. 181; 23 L. Ed. 161.

§ 63. Analogousness — Art.

In a case where an insulated cable or wire was in question, the citation of a sub-marine cable coated somewhat similarly for the purpose of rendering it impervious and not intended at all as a high insulator held not good as a citation. — *Ansonia v. Elec. Sup.* 144 U. S. 11; 36 L. Ed. 327; 12 S. Ct. 601.

Time was wasted in attempting to show that machines relating to diverse and analogous arts, in which some sort of an envelope was wrapped round some sort of a core, prevented the exercise of invention in the formation of a previously unknown machine. — *Bonsack v. Elliott*, 69 Fed. 335; 16 C. C. A. 250.

It is true that the device belongs to another art. But the patent is interesting as exhibiting the application of the dove-tail method of connection under conditions that are mechanically similar to those of the device of the patent in suit. — *Bullock v. General*, 162 Fed. 28; 89 C. C. A. 68.

§ 64. Analogousness — Use.

Anticipation ought not to be found in prior devices in the art to which a patent belongs unless they are of such a character as to furnish clear, if not unmistakable suggestion, of the improvement in question; and if the anticipatory suggestion comes from another art, it should, of course, have less significance, proportioned inversely to the distance from which it is brought. — *Williams v. American*, 86 Fed. 641; 30 C. C. A. 318.

We do not think that the disintegration of apples or of cocoanut kernels is so analogous to the disintegration of wet clay that the ingenuity shown in the adoption of the device for disintegrating clay can be minimized by reference to these other arts. — *Potts v. Creager*, 97 Fed. 78; 38 C. C. A. 47.

§ 65. Anticipating an Anticipation — Burden of Proof.

Where a patent is introduced in suit showing with certainty the date of its publication and prior to the date of the patent in suit it is incumbent upon complainant to show, if not with equal certainty, yet to the satisfaction of the court, that the invention of the patent in suit preceded that date. — *Clark v. Willimantic*, 140 U. S. 481; 35 L. Ed. 521; 11 S. Ct. 846.

St. Paul v. Starling, 140 U. S. 184.

An anticipating design having been produced and established as antedating the patent in suit, it became necessary for the patentee to establish to the satisfaction of the court that his invention preceded the time when the design in evidence was shown to have been first made. — *Untermeyer v. Freund*, 58 Fed. 205; 7 C. C. A. 183.

Plow Works v. Starling, 140 U. S. 184; *Clark v. Willimantic*, 140 U. S. 481.

That the burden of proof to overcome an anticipation by carrying the date of the patent in suit back of the anticipation proved, is upon the complainant, see *Rogers v. Fitch*, 81 Fed. 959; 27 C. C. A. 23.

Clark v. Willimantic, 140 U. S. 492.

No attempt was made by the complainant to show the actual date of his invention, and in a case of this sort we will not presume that the invention was made prior to the time when the defendants constructed and began to use in their mills the shingle-edging machines which they are now using. If such be the fact, the complainant should have established it by competent evidence, or show that the defendants did not construct their machine at the time stated, nor until subsequent to the date of Wilson's alleged invention. — *Wilson v. Townley*, 125 Fed. 491; 60 C. C. A. 327.

A public knowledge and use prior to the date of the application being thus clearly shown, the burden was upon the complainant to show that the invention of the patent in suit was made at an earlier date. Complainant must furnish the court with convincing proof that the anticipation has been anticipated. — *New England v. Sturtevant*, 150 Fed. 131; 80 C. C. A. 85.

Westinghouse v. Saranac, 108 Fed. 221.

With the facts of complete anticipation in construction and use — known to the patentee several months prior to his application for a patent — settled by the evidence, we are of opinion that the presumption of invention by the patentee, which arises from the patent, application, and grant, is overcome, prima facie by such anticipation in *Sherbondy's* prima facie conception reduced to practice, so that the burden of proof is transferred to the patentee to establish priority in fact. — *Consolidated v. Adams*, 161 Fed. 343.

Westinghouse v. Catskill, 121 Fed. 831; *Loom Co. v. Higgins*, 15 Blatchf. 446; *Thayer v. Hart*, 20 Fed. 693; *Westinghouse v. Saranac*, 103 Fed. 221; *Westinghouse v. Mutual Life*, 129 Fed. 213; *Walk. Pat. § 510*; *Clark v. Willimantic*, 140 U. S. 481.

§ 66. Application.

A mere prior application is not a bar to a subsequent application except as affecting priority. — *Brown v. Guild*, 90 U. S. 181; 23 L. Ed. 161.

Statements in a prior application relied on to prove anticipation must be so clear and explicit that those skilled in the art will have no difficulty in ascertaining their meaning. When they are so vague, involved, intricate and contradictory that experts disagree radically as to their meaning and, following the instructions given, construct devices differing in fundamental features, it is safe to reject such a document as an anticipation. — *Hillard v. Fisher*, 159 Fed. 439; 86 C. C. A. 469.

§ 67. Combining Old Elements — Different Devices.

Where the thing patented is an entirety, consisting of a single device or combination of old elements, incapable of division or separate use, the respondent cannot escape the charge of infringement by alleging or proving

that a part of the entire thing is found in one prior patent or publication or machine, and another part in another exhibit, and still another part in a third one, and from the three or any greater number of such exhibits to draw the conclusion that the patentee is not the original and first inventor of the patented improvement. — *Bates v. Coe*, 98 U. S. 31; 25 L. Ed. 68.

The defendant's theory is not that this invention was anticipated by any one pre-existing machine, taken by itself, but that its important features were separately found in two older machines and could have been combined without the exercise of inventive skill. It is true that anybody could have done this if he had ascertained the cause of the defect in the Siemens machine, and the kind of motion, and the proper means of applying it, which would obviate the defect. But the defendant's theory, like many theories of a similar character, assumes what is not apparent, that the cause of the pre-existing defect, and its remedy, were open to the discernment of the skilled mechanic. — *Smith v. Macbeth*, 67 Fed. 137; 14 C. C. A. 241.

It is also probably true that by selecting from the various known machines of that character, and indeed by selecting only from those devised with reference to lacing hooks, including especially the Palmer machine, all the elements of the patented machine in suit could be brought together. This, however, on well-settled rules, falls far short of demonstrating that appellee's device contains no patentable qualities, though it compels us to regard them as of a limited and restricted character. — *Packard v. Lacing*, 70 Fed. 66; 16 C. C. A. 639.

It may be true that an imaginable combination of the two prior patents would closely resemble the patent in suit but such a combination is not obvious and would require patentable invention. — *Hart v. Anchor*, 92 Fed. 657; 34 C. C. A. 606.

That attempted anticipation by combining the elements and combination of old devices, or showing possible capabilities of old devices, after the fact is not good evidence of anticipation, see, *Hatch v. Electric*, 100 Fed. 975; 41 C. C. A. 133.

The all-sufficient answer to an imaginary machine such as this being introduced in anticipation (a showing that a combination and arrangement of old presses would produce the same result) is the fact that no one either changed the Globe press, or suggested the possibility of such change. — *Goss v. Scott*, 108 Fed. 253; 47 C. C. A. 302.

The finding in the old devices, one portion here, one in another, and so on, should not defeat a patent for the combination, which is only truly anticipated by a prior device having identically the same elements, or their mechanical equivalents, co-operating to produce the same results. — *Imperial v. Crown*, 139 Fed. 312; 71 C. C. A. 442.

§ 68. Combining Old Elements — Different Patents.

It is probably very true that, by selecting the various prior machines in this particular art, all the elements in the device in suit, could be brought together. But to hold that this fact always defeats novelty would be to shut out every combination of old elements from the protection of the patent laws. — *Heap v. Tremont*, 82 Fed. 449; 27 C. C. A. 316.

Packard v. Lacing, 70 Fed. 66; *Boston v. Bemis*, 80 Fed. 287.

The elements appear severally in one or another of such prior patents, but are not all united in either. These patents furnish evidence of the prior state of the art, but do not deprive the new combination of patentable novelty. — *Milwaukee v. Brunswick-Balke*, 126 Fed. 171; 61 C. C. A. 175.

Parks v. Booth, 102 U. S. 96.

The line which separates invention from mechanical skill is at best a narrow one, and the difficulty of demarkation in this case is enhanced by the fact that of necessity we look upon the alleged anticipation with eyes instructed by the patent in suit and other subsequent patents, and must take care that we do not in such light reconstruct the alleged anticipation so as to see in it the possibilities which may seem very obvious now, but which may not have been disclosed by the patent itself. — *Ideal v. Crown*, 131 Fed. 244; 65 C. C. A. 436.

Some disclose one element and some another, but none of them, including those already specifically referred to, disclose all the elements or the combination of elements of the patent in suit. For that reason they cannot constitute anticipation. — *St. Louis v. American*, 156 Fed. 574; 84 C. C. A. 340.

Bates v. Coe, 98 U. S. 31; *Emerson v. VanNort*, 116 Fed. 974.

§ 69. Combining Old Elements — Mechanical Skill.

The mechanical skill which may be evoked to exclude the idea of invention must be mechanical skill applied in accordance with the direction of the alleged anticipating patent; not the skill which, taught by the invention in suit, seeks to reform and reorganize the former patent, so disguising it under a cloud of subtlety of argument and suggestion as to transform it. — *Ideal v. Crown*, 131 Fed. 244; 65 C. C. A. 436.

§ 70. Double Patenting.

While the effect of double patenting is to render the later patent void by reason of anticipation, only sufficient references are given here to indicate the rule. A full list of decisions on the subject will be found under *Double Patenting*.

If the feature referred to were old and already patented at the time of the patent in suit, it makes no difference that such other patent issued to the same patentee. This suit is brought solely upon the later patent, and the earlier one was outstanding against it when it was issued. — *Doig v. Morgan*, 122 Fed. 460; 59 C. C. A. 616.

Underwood v. Gerber, 149 U. S. 224.

In any case, it was invented before the issue of the patent in suit. That patent, therefore, is not in a prior art, properly so-called, and has priority only as a prior patent issued to the same inventor. — *Hart v. Anchor*, 92 Fed. 657; 34 C. C. A. 606.

§ 71. Evidence of — Burden of Proof.

The invention or discovery relied upon as a defense, must have been complete, and capable of producing the result sought to be accomplished; and this must be shown by the defendant. The burden of proof rests upon him, and every reasonable doubt must be resolved against him. If the thing were embryonic or inchoate; if it rested in speculation or experiment; if the process pursued for its development had failed to reach the point of

consummation, it cannot avail to defeat a patent founded upon a discovery or invention which was completed. The law requires, not conjectures but certainty. If the question relate to a machine, as thus exhibited, the conception must have been clothed in substantial forms which demonstrate at once its practical efficiency and utility. — *Coffin v. Ogden*, 85 U. S. 120; 21 L. Ed. 821.

Gayler v. Wilder, 10 How. 496; *Reed v. Cutter*, 1 Story, 590; *Bedford v. Hunt*, 1 Mas. 302.

The defendant must make out the allegation satisfactorily. The evidence must clearly show the anticipation. — *Clough v. Gilbert*, 106 U. S. 178; 27 L. Ed. 138; 1 S. Ct. 198.

The burden of proof is upon the defendants to establish this defense. For the grant of letters patent is prima facie evidence that the patentee is the first inventor of the device described in the letters patent and of its novelty. — *Cantrell v. Wallick*, 117 U. S. 689; 29 L. Ed. 1017; 6 S. Ct. 970.

Smith v. Goodyear, 93 U. S. 486; *Lehnbeuter v. Holthaus*, 105 U. S. 94.

Not only is the burden of proof to make good this defense upon the party setting it up, but it has been held that "every reasonable doubt should be resolved against him." — *Cantrell v. Wallick*, 117 U. S. 689; 29 L. Ed. 1017; 6 S. Ct. 970.

Coffin v. Ogden, 18 Wall. 120; *Washburn v. Gould*, 2 Story, 122, 142.

Anticipation is a question of fact, and the burden of establishing it is on the appellant. — *Busch v. Jone*, 184 U. S. 598; 46 L. Ed. 707; 22 S. Ct. 511.

It will be noticed that Dusenbury's application was first filed; so that it is settled law that the burden was thrown on the complainant below to prove priority in behalf of his patent to the satisfaction of the courts and by evidence which shall strongly outweigh that of the respondents below, if not beyond a reasonable doubt. — *Brooks v. Sacks*, 81 Fed. 403; 26 C. C. A. 456.

Mfg. Co. v. Sprague, 123 U. S. 249; *Clark v. Willimantic*, 140 U. S. 481; *Walk. Pat. Sec. 70*.

Inasmuch as defendants' contention is based on the claim that the Buller or other devices of the prior art were capable of practical successful operation when made of lava or steatite, the burden was upon the defendants to prove this fact as part of their prima facie case. — *Kirchberger v. American*, 128 Fed. 599; 64 C. C. A. 107. See 215 U. S. 161.

When the defense of anticipation is set up, it is unquestionable that the defendant is charged, not only with the burden of proof upon that issue, but priority of conception and reduction to practice must be clearly made out, by well-authenticated evidence, to defeat the patent. — *Consolidated v. Adams*, 161 Fed. 343; 88 C. C. A. 355.

§ 72. Evidence of — Device or Exhibit.

These seven original sketches are undoubtedly rude and imperfect, and do not show, or attempt to show, an organized working machine. But we do not regard this as a vital defect. The claims put in interference do not involve anything more than certain improvements upon machines well known in the art, and contemplate a combination of certain novel features with the loading tools and other devices of the old Peters machine. The question as to whether these sketches so clearly show the novel features as that

one familiar with the construction and operation of the Peters machine could from these construct a machine embodying the endless belt feature is one addressed to persons possessing a mass of information about the old art. If such persons, from these sketches, could construct a machine containing the improvements conceived by Ligowsky, without the further exercise of the inventive faculty, then it is very clear that Ligowsky must be held to have had a sufficient conception in 1887 to entitle him, on a question of priority, to carry the date of his invention back to the date of these drawings. That they are incomprehensible to one unacquainted with such machinery, or to a mechanic unaware of what they purported to be is no answer. That they do not in all respects show the relation of the novel features to the old loading tools, nor describe precisely the mode of attachment, nor, with scientific exactness, show other details of the combination, is not fatal, if the absent features are such as would be readily supplied by a mechanic familiar with the subject, and without requiring further invention. The well-known statement of the doctrine touching the sufficiency of description in the specifications and drawing of an application for a patentable novelty by Justice Bradley, in *Loom Co. v. Higgins*, 105 U. S. 586, applies with even greater force to the adequacy of such sketch drawings, when the question is one of carrying back the date of an invention to the time of first conception. — *Standard v. Peters*, 77 Fed. 630; 23 C. C. A. 367.

The following extended quotation from the opinion of Judge Coxe (Lacombe and Townsend concurring) appears to sum up and conclude the question of the evidential value of models in proving anticipation.

It is urged by the complainant that novelty of the combination of the ninth claim cannot be negatived by the Yost model, and in support of this proposition we are referred to Walker on Patents, Sec. 61, and cases there cited.

Cahoon v. Ring, 1 Cliff. 592, was a trial of certain feigned issues of fact by a jury to determine whether complainants' patent for an improved seeding machine was valid and infringed. At page 611 Judge Clifford charged the jury:

"You are accordingly instructed to inquire and determine, from the evidence, whether Luce made his alleged invention of the vertical machine public, and if he did not, but had used it for no purpose, except simply for his own private experiments, and if it had been broken up prior to the 14th of May, 1857 (the date of Cahoon's application) and its materials used for other purposes, and its essential parts lost, and the invention forgotten or abandoned, that such an invention and use would be no obstacle to the taking out of a patent by Cahoon, or those claiming under him, and that the model, or machine, now in evidence, on that state of facts, would not invalidate the Cahoon patent, if he was an original inventor of his improvements, without any knowledge of said machine, and did not derive any of them from Luce."

In *Stainthorp v. Humiston*, 4 Fish. P. C. 107, the court says:

"The machine of Whitfield never went into practical use. Although a working model was made in or about the year 1849, and was soon after used for two or three hours in making candles, by way of experiment, the machinery may well be considered as but an abandoned experiment."

In *Johnson v. McCullough*, 4 Fish. P. C. 170, the court said:

"I have also examined all the testimony relating to the Shaw model, and find it does not show more than the making of a model, and not of any practical working machine, which is necessary to overthrow a patent."

In *Stilwell v. Cincinnati*, 1 Ban & A. 610, the court said of a model made prior to the invention in question:

"That (the making of a mere model) does not constitute invention, and

it can only be used as an item of testimony, reflecting upon the making and using of the wooden heater in 1845 or 1846. Taking it in connection with the testimony on that point, and weighing all the testimony together, I cannot say, that it is of that clear and satisfactory character, as requires me to find that James Armstrong invented the device, as claimed, in 1845 or 1846."

In *Bowers v. Von Schmidt*, 63 Fed. 572, the court, at page 577, says:

"That models or drawings will not constitute invention, so as to amount to anticipation, may be true, but models or drawings may constitute invention to avoid anticipation."

Non constat models and drawings may be used to establish an invention prior to that of the patentee.

These are all the authorities cited by Mr. Walker, and we are convinced that they do not sustain the broad contention of the complainant. The law, section 4886 of the Revised Statutes, provides that any person may obtain a patent, inter alia, for a machine invented by him "not known or used by others in this country before his invention or discovery thereof." It is clear, as pointed out by Mr. Walker, that knowledge of a model of a machine is not knowledge of the machine itself any more than knowledge of a model of Brooklyn Bridge is knowledge of that structure. But we think the rule should be restricted to a model pure and simple as the word is understood in common parlance, viz., a pattern, a copy, a representation usually upon a reduced scale. The word "model" should not be construed to mean the identical device which is covered by the patent. If this were otherwise a defendant who produces the exact structure of the claims and proves that it was known prior to the date of the alleged invention is completely answered if the complainant can show that the anticipating structure was filed as a model. In other words, the question is not one of nomenclature but of fact. In the case of a complicated machine a small model incapable of actual use may be filed for the purpose of explaining and illustrating the drawing; that such a model alone would not anticipate is, of course, perfectly clear. On the other hand, it frequently happens that the applicant files as his model not a pattern or reproduction of the thing invented by him but the thing itself. Take, for illustration, an application for a patent for a horse-shoe nail when one of the nails made by the inventor is filed as a model, can it be that a subsequent applicant can hold a patent for that nail or any feature thereof after proof of its prior existence and the knowledge thereof by the public? During the pendency of an application a model filed in the Patent Office is supposed to be inaccessible to the public and therefore proof of its filing date is not alone proof of public knowledge at that time, but, on the other hand, such knowledge having been shown by extrinsic evidence, the model is not open to the suspicion that it has been altered and, until proof to the contrary is adduced, must be presumed to be in the condition it was at the date of filing. As before stated, we think the Yost model was something more than a mere model, for the reason that it is a full operative embodiment of the tabulating mechanism, and for the further reason that its existence and purpose is established by evidence independent of its connection with the Patent Office. — *American v. Wagner*, 151 Fed. 576; 81 C. C. A. 120.

Note: Compare this clear statement with the opinion in *Buser v. Novelty*, 151 Fed. 478.

With reference to this model, it is sufficient to say that it was proven on the trial of the case that it was not an original model of the press which it purported to represent, but was made by the defendant Livengood about six months after the institution of the suit at bar for the purpose of being used as evidence to invalidate the claims of the Power patent. It was so

made merely from the witness' recollection of the structure of the press that it purported to represent, which he had not seen for eight or ten years, and the fact that it was not an original model was not disclosed when it was offered in evidence, but was intentionally concealed until the fact was developed on cross-examination. Under the circumstances, we cannot accept the model in question as sufficient evidence to invalidate the claims.—*Kansas City v. Devol*, 81 Fed. 726; 26 C. C. A. 578. Reversed, 84 Fed. 463.

That when counsel is called upon by the court to differentiate the device of the patent in suit, his failure to do so will not be looked upon with favor, see *Greene v. Buckley*, 135 Fed. 520; 68 C. C. A. 70.

No writing supports the defendant's contention, and human memory is not to be relied upon as to minute details of transactions occurring twenty-five years before. — *United v. Beattie*, 149 Fed. 736; 79 C. C. A. 442.

Keasby v. Carey, 139 Fed. 571.

§ 73. Evidence of — Expert.

It is perhaps possible for an expert, having the patent in suit before him, to build up the structure covered by these claims, by selecting and deftly adapting appliances theretofore known, "yet it would still be true that neither the same combination in its entirety nor the same operation" had previously been described or in any manner exemplified. — *McMichael v. Ruth*, 128 Fed. 706; 63 C. C. A. 304.

Parks v. Booth, 102 U. S. 96; *Bates v. Coe*, 98 U. S. 31; *Mast v. Stover*, 177 U. S. 497.

§ 74. Evidence of — Parol.

Evidence of anticipation consisting wholly of the recollection of witnesses, especially when contradicted and when at variance and when not substantiated, but impaired by the production of one of the alleged anticipating articles is not sufficient to negative novelty. — *Untermeyer v. Freund*, 58 Fed. 205; 7 C. C. A. 183.

The personal recollection of a number of unimpeached and disinterested witnesses of an anticipating device, fully described and identical, though the device itself has passed out of existence, is sufficient to establish prior invention. — *American v. Weston*, 59 Fed. 147; 8 C. C. A. 56.

Washburn v. Beat Em. All. 143 U. S. 275; *Fruit Jar Co. v. Wright*, 94 U. S. 92; *Egbert v. Lippmann*, 104 U. S. 333; *Andrews v. Hovey*, 124 U. S. 694; *Jones v. Barker*, 11 Fed. 597.

The inherent dangers of oral proofs in this class of cases are explained in the *Barbed Wire Patent*, 143 U. S. 275, and in *Deering v. Harvester Works*, 155 U. S. 286. — *Brooks v. Sacks*, 81 Fed. 403; 26 C. C. A. 456.

The unsupported oral testimony which will warrant a finding of prior use, should be clear and satisfactory. It is also open to suspicion. It ought to be sufficient to establish such a use beyond a reasonable doubt. — *Mast v. Dempster*, 82 Fed. 327; 27 C. C. A. 191.

Barbed Wire Pat. 143 U. S. 275; *Deering v. Harvester*, 155 U. S. 286.

The brief and fragmentary testimony of the two witnesses is unpersuasive, especially in view of the circumstance that no one whose business made him familiar with the chest, rather than its contents, was called. The evi-

dence of Meade indicated where the best witnesses on this subject were to be sought for, and their non-production would seem to require greater caution in accepting the statements of others. — *Acme v. Cary*, 101 Fed. 269; 41 C. C. A. 338.

Unsupported oral testimony of a prior use is always open to suspicion, and it cannot prevail over the legal presumption of validity which accompanies the patent, unless it is sufficient to establish such a use beyond a reasonable doubt. — *National v. Interchangeable*, 106 Fed. 693; 45 C. C. A. 544.

Mast v. Dempster, 82 Fed. 327; *In re Barbed-Wire Patent*, 143 U. S. 275; *Deering v. Harvester*, 155 U. S. 286; *Miller v. Handley* (C. C.) 61 Fed. 100.

This (alleged prior public use) was more than 20 years after the event. Under the circumstances of the case, this not only throws the practical burden on the complainant, but it also requires that the proofs offered by him should be "full, unequivocal, and convincing." The strictness with which this rule is applied, and the unwillingness of the courts to regard unsupported oral testimony, given after a lapse of many years, as constituting "full, unequivocal and convincing" proof, are practically illustrated by the Supreme Court in (cases cited). — *Swain v. Holyoke*, 111 Fed. 408; 49 C. C. A. 419.

Clark v. Willimantic, 140 U. S. 481; *Barbed Wire Patent*, 143 U. S. 275; *Morgan v. Daniels*, 153 U. S. 120; *Deering v. Harvester*, 155 U. S. 286; *Brooks v. Sacks*, 81 Fed. 403.

He failed to so describe the said apparatus that this court can determine whether they did in fact embody in structure and practical operation the specific form of apparatus used by the defendant. Such evidence, under the familiar rule, called either for corroboration or for some explanation why corroboration was impossible. — *Westinghouse v. Catskill*, 121 Fed. 831; 58 C. C. A. 167.

Testimony that something occurred "about a month" preceding a day unestablished, except by the unsupported recollection of an interested witness twelve years after, is too indefinite and uncertain to be accepted as establishing a five days' anticipation of a patent. — *Bettendorf v. Little*, 123 Fed. 433; 59 C. C. A. 473.

Clark v. Willimantic, 140 U. S. 481; *Brooks v. Sacks*, 81 Fed. 403; *Westinghouse v. Saranac*, 108 Fed. 221.

Courts have frequently taken the ground that where a long time has elapsed since the alleged use, and the fact depends upon the fading recollection of a single witness, that an exhibit of the device or thing actually used must accompany the affidavit. There is, however, no hard and fast rule as to this. In this, as in other cases, the weight and effect of testimony must be passed upon and a conclusion as to the existence of an alleged prior use will be reached if the evidence thereof is clear and satisfactory to the judicial mind. — *Sipp v. Atwood-Morrison*, 142 Fed. 149; 73 C. C. A. 367.

In order to invalidate a patent by oral testimony of prior invention, it must be such as to convince one beyond a reasonable doubt of that fact. — *Buser v. Novelty*, 151 Fed. 478; 81 C. C. A. 16.

Barbed Wire Case, 143 U. S. 275; *American v. Weston*, 59 Fed. 147; *Columbus v. Standard*, 148 Fed. 622.

The anticipation relied upon was the oral testimony of one witness whose testimony was collaterally but not directly supported. In holding such testimony sufficient to anticipate, the court said: we are clearly of the opinion that such a rejection (i. e. of his testimony) would be unjustifiable for the following reasons: (1) the witness occupies an important position in which mendacity would not be countenanced, and there is no stain upon his character. (2) He is in the prime of life, of sound mind and memory, and therefore likely to remember the important details in a business in which he has been engaged for over 20 years. (3) He was a disinterested witness, and when he imparted his knowledge of the prior use, he did not know of the pendency of this action. (4) In view of the undisputed prior use of the illusion for a very analogous use, the use he describes seems the natural thing to have done. (5) This is not the case, which so frequently occurs, where a witness, having no knowledge of the art in question, testifies as to the minute details of a complicated machine or a complex chemical process which he saw years before. We are now dealing with a witness concededly familiar with the art, who narrates acts of his own, so simple in character that he can hardly be mistaken regarding them. (6) He is corroborated by a number of witnesses whose testimony though relating to different instances, is substantially to the same effect. (7) His inability to remember the relative fineness of the illusion as compared with the weave of the exhibit in suit, does not militate against his truthfulness. — *National v. Stolts*, 157 Fed. 392; 85 C. C. A. 300.

§ 75. Evidence of — Prior Patent.

Every invention disclosed in a patent, and not claimed, is dedicated to the public, and no one may thereafter appropriate it. It becomes thenceforth as much a part of the art as does the invention disclosed in the same patent and also claimed therein. The question whether an individual is or is not, an original and first inventor and discoverer, can only be determined by comparing what he did or discovered with that body of information upon the subject with which he and all the world are chargeable, and which is called the "state of the art." — *Saunders v. Allen*, 60 Fed. 610; 9 C. C. A. 157.

§ 76. Evidence of — Rebuttal.

As against the defense of anticipation, it is well settled a patentee may show, if he can, the fact of invention by drawings, sketches, models, or any other competent proof. — *Von Schmidt v. Bowers*, 80 Fed. 121; 25 C. C. A. 323.

Walk. Pat. Sec. 70; Loom Co. v. Higgins, 105 U. S. 594; *Bates v. Coe*, 98 U. S. 34; *Smith v. Vulcanite*, 92 U. S. 486; *Apparatus Co. v. Woerle*, 29 Fed. 451.

To avoid the defense which this design patent establishes, it is necessary for complainant to show that his invention antedates the date of his application by several months. The burden of proving this is upon complainant. — *Lein v. Myers*, 105 Fed. 962; 45 C. C. A. 148.

That the proof to anticipate an anticipation must be clear and convincing, see *Westinghouse v. Catskill*, 121 Fed. 831; 58 C. C. A. 167.

For a general discussion of the character of proofs necessary to overcome substantial evidence of anticipation, see with authorities *Westinghouse v. Stanley*, 133 Fed. 167; 68 C. C. A. 523.

§ 77. Evidence of — Miscellaneous Holdings.

Proof of such foreign manufacture and use, if known to the applicant for a patent, may be evidence tending to show that he is not the inventor of the alleged improvement; but it is not sufficient to supersede the patent if he did not borrow his supposed invention from that source, unless the foreign inventor obtained a patent for his improvement, or the same was described in some printed publication. — *Roemer v. Simon*, 95 U. S. 214; 24 L. Ed. 384.

It is, therefore, impossible to say that the sulphuric acid process was a known equivalent at the time. It is easy now, after the event, for scientific men to say, with the knowledge of today, that the thing was obvious. But the crucial facts contradict the assumption. — *Cochrane v. Badische*, 111 U. S. 293; 28 L. Ed. 433; 4 S. Ct. 455.

Anticipation is a question of fact, and the burden of establishing it is on the appellant. The patent bears a presumption of novelty and invention, and the lower courts, having passed on the evidence, found against appellant's construction. Such united judgment this court accepts unless there is a clear showing to the contrary. — *Busch v. Jones*, 184 U. S. 598; 46 L. Ed. 707; 22 S. Ct. 511.

Brainard v. Buck, 184 U. S. 99.

During a quarter of a century, the scientific world was struggling with the problem and could not solve it; and yet, if the claim asserted be well founded, it had already been solved, and the discoverer had made public demonstration of it in the commercial metropolis of the Union; the scientific world, however, and the public generally remaining in total ignorance of it. How he could thus hide his light under a bushel passes comprehension. The mind cannot readily yield assent to the assertion of a claim under such circumstances, and when it is supported solely by *ex parte* evidence. — *Electric v. Edison*, 61 Fed. 834; 10 C. C. A. 106.

There was no attempt to secure the protection of the law for an invention that, had it been known would have startled the world and made him a millionaire. That he should have been so careful to secure his rights with respect to trifling matters, and evidence such utter disregard of his interests in a matter of great moment challenges belief. This renders the more improbable the story of his invention. — *Electric v. Edison*, 61 Fed. 834; 10 C. C. A. 106.

Telephone Cases, 126 U. S. 556; *Barbed Wire Patent*, 143 U. S. 275.

The positive testimony of several witnesses produced on the trial is corroborated by the actual presence of the machine in court, and yet the testimony was apparently rejected on the ground that if Brown, who was manufacturing corn-planters, and who was in the business of obtaining patents on similar machinery, had constructed this machine, he would have applied for a patent and continued to manufacture the machine. Such a reason might be sufficient if the testimony were doubtful or conflicting. If the evidence on the question of anticipation were conflicting or doubtful then, no doubt, the circumstance that Brown had never applied for a patent or continued the manufacture of the machine, might be allowed to turn the scale. — *Parlin v. Moline*, 89 Fed. 329; 32 C. C. A. 221.

From the similarity of the two patents, it seemed wellnigh manifest that the French patent had been read by the patentee, who was urged

by the first patentee of the patent in suit to invent an economical method of repairing asphalt pavements. — *U. S. v. Standard*, 95 Fed. 137; 37 C. C. A. 28.

Note: This is an excellent illustration of the way in which a court may be mistaken as to conclusions inferentially drawn from the record. As a matter of fact, (the writer having prepared the defense in this case), the French patent was not only unknown to the patentee, but was absolutely unknown to the American art. The French patent to Crochet had been misclassified in the patent office and was discovered only after three searches had been made and then almost accidentally, among the classes relating to stuccoes and similar objects made from plaster and cements. The point to be observed is that an inference of this character is generally unsafe; and when allowed to turn the weight of evidence, when a question is in doubt, renders the decision of no more value than the inference itself.

It will therefore be observed that, while the Cleveland Company is now denying the priority of the Hebbard use, it formerly asserted such priority solemnly and repeatedly, by declarations of record, by offering evidence in support thereof, and by the earnest arguments of its counsel, in a suit involving substantially the same question as is now presented. It may be admitted that no estoppel is made out by the foregoing facts, but we cannot agree that they should have no influence upon the burden or degree of proof required of the defendant in the present case. At the least, they called upon the Cleveland Company for a satisfactory explanation why witnesses whom it formerly relied upon as truthful and accurate were now challenged as untrustworthy and not to be believed. In the absence of such explanation, we think that the court should not have treated the facts referred to as if they involved merely some unimportant inconsistency between the position taken then and the position taken now by the Cleveland Company. It does not agree with our sense of fair dealing that in one jurisdiction a party should succeed by upholding the truthfulness and reliability of witnesses, and should thereafter attack the same witnesses in another jurisdiction as persons not credible, merely because the exigencies of his case require a change of attitude. We do not deny that such change is permissible where the element of estoppel or other sufficient objection does not exist, but to treat the change, when no satisfactory explanation has been offered, as without influence upon the burden or the degree of proof, seems to us to be going too far. — *Empire v. Cleveland*, 102 Fed. 354; 42 C. C. A. 393.

The courts uniformly require strict and convincing proof of a prior use not thus set up for the purpose of defeating a patent, and especially when the invention has been a long time in general use, and has several times been through the ordeal of litigation. — *Loew v. German-American*, 107 Fed. 949; 47 C. C. A. 94.

§ 78. Experiment.

It is freely admitted that the patent of an originator of a complete and successful invention cannot be avoided by proof of any number of incomplete and imperfect experiments made by others at an earlier date. This is true, though the experimentors may have had the idea of the invention and may have made partially successful efforts to embody it in a practical form. And though this doctrine has been more frequently asserted when patents for machines have been under consideration, we see no reason why it should not be applied in cases arising under patents for chemical products. — *American v. Fiber*, 90 U. S. 566; 23 L. Ed. 31.

We are satisfied Smith's invention did not anticipate Reynolds'. He and Reynolds had conferences on the subject of their work, and Smith sketched something, but whatever it was no one can tell; the sketches were evidently considered unimportant, for they were not even preserved. He had ideas on this subject, but he certainly had not perfected such invention. Reynolds' conduct was not an admission that he had. It may be that the latter feared litigation and delay in the patent office, because of something Smith said, and for that reason wanted Smith to delay his application. If he induced such delay it did not invalidate his patent. He was the original inventor and was lawfully entitled to the patent. His conduct was not fraudulent, either as respects Smith or the public. — *National v. Belcher*, 71 Fed. 876; 18 C. C. A. 375.

Nothing is shown but occasional, tentative experiments by the Farnhams, made years ago to meet their personal and temporary wants. Precisely what they accomplished is uncertain; no sample of their device is exhibited. Whatever it may have been it was never applied to nor intended for the public use; it was a mere makeshift for a temporary purpose, which disappeared with the occasion that called for it, never known to anybody but the Farnhams, and now is almost forgotten by them. — *Schenck v. Diamond*, 77 Fed. 208; 23 C. C. A. 122.

Thus the respondent's patent points out, on mathematical principles, exactly what was required to make a last operative. The result is that, so far as claim 2 is concerned, the patent in suit accomplished only a crude experiment, without practical success. As the latter was reached in the respondent's last, the complainant is not entitled to stand in its way. — *Miller v. Mawhinney*, 105 Fed. 523; 44 C. C. A. 581.

For nearly 20 years it remained nothing but an ambiguous description of incomprehensible drawings. It emerged from oblivion solely to meet the exigencies of this litigation. The inquiry is pertinent, why was it that this machine was permitted to remain unused? Since the success of the device of the patent in suit every effort has been made by infringers to evade it by introducing specious changes of form, and yet, if we are to accept the contention of appellant, there is an operative machine in existence doing the work as well as the machine of the patent in suit and free to anyone who desires to use it. Is not the presumption almost conclusive that it was not used because it was not usable? — *Cimiotti v. American*, 115 Fed. 498; 53 C. C. A. 230.

Considering this patent as an alleged limiting or anticipating document, what would a person skilled in the art of barrel making produce from inspecting the drawings of the patent and following it? Nothing but a tight, unventilated barrel, with a cylindrical center and cones at the ends. For nearly 30 years it had been on the public record without producing any effect on the art or trade of barrel making. It cannot be said that a patent for a device which fails to accomplish the desired end is an anticipation of one which successfully accomplishes it. — *Farmers' v. Spruks*, 127 Fed. 691; 62 C. C. A. 447.

Note: This and other similar holdings are in absolute contradiction of the rule that a mere paper patent, if it discloses the principle, anticipates. It is, to my mind, an approximation to the proper rule.

§ 79. Foreign Invention.

That testimony of a witness that he had seen the device used abroad, and that the same had been imported along with chests of tea ever since

he had known of China teas, is not sufficient to defeat a patent through public use by importation, see *Acme v. Cary*, 101 Fed. 269; 41 C. C. A. 338.

Much time and space have been devoted to an effort to establish "prior use" in Germany. Since such prior use if established, would be no defense, under sec. 4923, it is difficult to understand why the record is thus encumbered. — *Badische v. Kalle*, 104 Fed. 802; 44 C. C. A. 201.

There is no proof which would warrant a conclusion that the patentee at the time of his application did not believe himself to be the original and first inventor and discoverer. Therefore, under sec. 4923, testimony tending to show knowledge or use in a foreign country need not be discussed. — *Badische v. Kalle*, 104 Fed. 802; 44 C. C. A. 201.

The French machine, of which the machine of the patent was a close copy, was imported a year and a half prior to the filing of the patent application. No proof was offered to carry the date of invention back of the date of filing. The patentee made machines, prior to his application, which were copies of the French machine. *Held*: Anticipation. — *Stuart v. Auger*, 149 Fed. 748; 79 C. C. A. 60.

§ 80. Foreign Patent or Publication — Burden of Proof.

One of the joint inventors had taken out foreign patents on the same invention. *Held*: Upon these patents being proved by the defendant, the burden of proof was cast upon the complainant to show that the joint inventors were the earlier inventors. — *De Laval v. Vermont*, 135 Fed. 772; 68 C. C. A. 474.

The burden was on appellant to establish that he invented his device prior to the date of issuance of the foreign patent, and that beyond a reasonable doubt. It is well settled that, if a defendant seeks to invalidate the patent in suit by showing, by oral testimony, prior invention, the proof must be clear, satisfactory, and beyond a reasonable doubt. *Barbed Wire Case*, 143 U. S. 275; *American v. Weston*, 59 Fed. 147. It is also the law that, if a plaintiff seeks to maintain the patent in suit by showing by oral testimony invention prior to a patent which anticipates it and would otherwise invalidate it, the proof must be of the same character. — *Columbus v. Standard*, 148 Fed. 622; 78 C. C. A. 394.

Thayer v. Hart, 20 Fed. 693.

§ 81. Foreign Patent or Publication — Date of.

But in order that the foreign patent may invalidate the patent in suit, it is not sufficient that it antedates that patent. If, notwithstanding such antedating, the patentee invented his device prior to the date of the foreign patent, then his patent is not invalidated thereby. — *Columbus v. Standard*, 148 Fed. 622; 78 C. C. A. 394.

Seymour v. Osborne, 11 Wall. 555.

§ 82. Foreign Patent or Publication — Invention.

The act of Congress provides that when the patentee believes himself to be the first inventor, a previous discovery in a foreign country shall not render his patent void, unless such discovery, or some substantial part of it, had been before patented or described in a printed publication. — *O'Reilly v. Morse*, 15 How. 62; 14 L. Ed. 601.

This is not the case of an interference in the patent office, or of a contest in the courts between two original inventors for priority of invention, in which it is the established rule under Sec. 4923, Rev. St. U. S., that an original inventor, who applies for letters patent of the United States, cannot be deprived of his right to a patent by the fact that an inventor had made in a foreign country, at a prior date, the same original invention, but which had not been described at a prior date in a patent or in a printed publication. This question then arises: Can an infringer defeat letters patent of the United States to an original inventor in a foreign country by proof that a few days before the date of a prior foreign patent to the same inventor, but not before the date of the application for such patent, and less than two years before the date of the application for a United States patent, the invention was used in this country by a person who did not invent it?

It is contended by the defendant that, under section 4886 of the Revised Statutes, the Rawson patent was void, on the ground that the improvement was known and used in this country before the invention thereof, because the actual inventor is not permitted to show that the date of his invention was prior to the date of his foreign patent.

The section gives to an inventor, foreign or domestic, the right to a patent unless certain conditions existed, neither of which in fact existed in this case. The Rawson invention had not been patented or described in any country before the patentees invented it, had not been in public use or on sale for more than two years prior to their application, had not been abandoned, and had not been known or used in this country by anyone before the date of the invention. If no other disabilities prevent, an inventor may obtain a patent of the United States for an invention made and previously patented in a foreign country, unless the same has been introduced into public use in the United States for more than two years prior to the application (section 4887), which is, in substance, the qualification which exists in section 4886, as applicable to any invention; and it is not necessary that the introduction shall have been made with the consent of the inventor. It is, however, said that the section requires that the invention must not have been known or used in this country before the date of the invention, and that the date of the publication of the foreign Rawson patent is the date de jure. The section applies to all inventions, irrespective of the place of their origin, and the term "date of invention" is used without discrimination between classes of inventions. The theory of the defendant is that, as to the domestic inventor, knowledge in this country must precede the actual date of the invention, but that, as to a foreign inventor, knowledge in this country need only precede the date of the publication of his foreign patent. We are of opinion that the language of the section refers to the actual, and not an artificial date, and that, where there is no contest between inventors, if knowledge in this country did not precede the actual date of the invention, unless it had been used in this country for two years before the application, the inventor was entitled to a patent. This question was before Judge Dallas in *Hanifen v. Godshalk Co.*, 78 Fed. 811, and before Judge Townsend in *Hanifen v. Price*, 96 Fed. 435, whose opinions are in conformity with those herein expressed. Our conclusion is that, as against an infringer, the patentee in a United States patent for an invention previously made by him and patented in a foreign country may, to avoid alleged use in this country by an infringer before the date of the foreign patent, show the date of the application for the foreign patent, for the purpose of showing the actual date of his invention in a foreign country. — *Welsbach v. American*, 98 Fed. 613; 39 C. C. A. 185.

Ireson v. Pierce, 39 Fed. 797; *Roemer v. Simon*, 95 U. S. 214; *Elizabeth v. Pavement*, 97 U. S. 126; *Lander v. Cowles*, 16 O. G. 405; *Andrews v. Hovey*, 123 U. S. 267; *id.* 124 U. S. 694.

§ 83. Foreign Patent or Publication — Publication — Date.

A foreign patent, or other foreign printed publication describing an invention, is no defense to a suit upon a patent of the United States, unless published anterior to the making of the invention or discovery secured by the latter, provided that the American patentee, at the time of making application for his patent, believed himself to be the first inventor or discoverer of the thing patented. He is obliged to make oath to such belief when he applies for his patent; and it will be presumed that such was his belief until the contrary is proven. — *Elizabeth v. American*, 97 U. S. 126; 24 L. Ed. 1000.

Act 1836, 55 S. at L. 117, 7, 15; Act 1870, 16 S. at L. 198, 24, 25, 61; R. S. 4886, 4887, 4920. Curt Pat. Sec. 375, 375a.

§ 84. Foreign Patent or Publication — Same Inventor.

Under section 4887, an existing foreign patent is not a bar to a subsequent United States patent for the same invention to the same inventor, unless the invention has been in public use in this country for two years prior to the application. — *Electric v. Brush*, 52 Fed. 130; 2 C. C. A. 682.

§ 85. Foreign Patent or Publication — Sufficiency.

If a foreign invention had been printed or patented, it was already given to the world and open to the people of this country, as well as of others upon reasonable inquiry. They would therefore, derive no advantage from the (this) invention here. It would confer no benefit upon the community, and the inventor therefore, is not considered to be entitled to the reward. But if the foreign discovery is not patented, nor described in any printed publication, it might be known and used in remote places for ages, and the people of this country be unable to profit by it. The means of obtaining knowledge would not be within their reach, and so far as their interest is concerned, it would be the same thing as if the improvement had not been discovered. It is the inventor here that brings it to them and places it in their possession, and as he does this by the effort of his own genius, the law regards him as the first and original inventor, and protects his patent, although the improvement had in fact been invented before, and used by others. — *Gayler v. Wilder*, 10 How. 477; 13 L. Ed. 504.

The statutes authorize the granting of patents only for such inventions as have not been patented or described in any printed publication in this or any foreign country before the applicant's embodiment of his own conception. It may be a hardship to meritorious inventors, who, at the expenditure of much time and thought, have hit upon some ingenious combination of mechanical devices, which for aught they know, is entirely novel, to find that, in some remote time and place, someone else, of whom they never heard, had published to the world, in a patent or a printed publication, a full description of the very combination over which they have been puzzling; but in such cases the act, none the less, refuses them a patent. — *New Departure v. Bevin*, 73 Fed. 469; 19 C. C. A. 534.

It is a well settled and familiar doctrine that an invention patented here is not to be defeated by a prior foreign patent unless its descriptions or drawings contain or exhibit a substantial representation of the patented invention in such full, clear, and exact terms as to enable any person skilled in the art or science to which it appertains, without the necessity of making experiments, to practise the invention. — *Hanifen v. Godshalk*, 84 Fed. 649; 28 C. C. A. 507.

Seymour v. Osborne, 11 Wall. 516; *Cahill v. Brown*, Fed. Cas. 2,291; Rob. Pat. sec. 329.

Great stress is laid upon the English patent to Rose as embodying anticipatory features, but the Rose device did not do the thing that this device does. It did not undertake to do it, and, so far as appears, no one ever thought of its being applied to such a situation, and doing the work in the manner in which the device in question does it. Quite likely the Rose patent had some of the ideas involved in the patent in question, — as, for instance, the idea of radiating heat by means of coils of wire, — but it did not describe, or even suggest, the distribution of heat, either in detail or in substance, in the manner and by the means employed in the complainants' device. As was said by the circuit court, under the rules applying to foreign patents it cannot be viewed as anticipating the McElroy invention. — *Consolidated v. West End*, 85 Fed. 662; 29 C. C. A. 386.

That the patent was allowed by the patentee to expire in 1891 (when only four years old) through non-payment of a renewal fee, required by British law, is cogent evidence that the patent was found to be inoperative or valueless. — *Streator v. Wire-Glass Co.*, 97 Fed. 950; 38 C. C. A. 573.

If the light thrown by Nicholl's provisional specifications on the art 30 years ago met the test laid down by the court in reference to a prior foreign patent, that it must be "sufficient to enable those skilled in the art to understand the nature and operation of the invention, and to carry it into practical use," and "that it must be an account of a complete and operative invention, capable of being put into practical operation" (*Seymour v. Osborne*, 11 Wall. 516) it is inconceivable that the device suggested would not have been seized upon in the 20 odd years ensuing before Firm's patent, and embodied in a practical press. The fact that it did not so instruct press builders proves the disclosures were not sufficient to so instruct. — *Goss v. Scott*, 110 Fed. 402; 49 C. C. A. 97.

The Galand device complies fully and clearly with all the requisites necessary to constitute a foreign anticipation. Not only is its essential principle described in his patent, but the details are also fully set out, and a pistol constructed substantially in accordance therewith has gone into extensive use in the French army. — *Colt v. Wesson*, 127 Fed. 333; 62 C. C. A. 167.

Being a foreign publication, it does not contain a substantial representation of the patent improvement in such clear and exact terms as to enable a person skilled in the art to construct and practise the invention. — *Kirchberger v. American*, 128 Fed. 599; 64 C. C. A. 107. See 215 U. S. 161.

Seymour v. Osborne, 11 Wall. 516; *Eames v. Andrews*, 122 U. S. 40; *Chase v. Fillebrown*, 58 Fed. 374.

§ 86. "Infringe-if-Later" Test.

That which infringes if later would anticipate if earlier. — *Knapp v. Morss*, 150 U. S. 221; 37 L. Ed. 1059; 14 S. Ct. 81.

Peters v. Active, 129 U. S. 530; *Thatcher v. Burtis*, 121 U. S. 286; *Grant v. Walter*, 148 U. S. 547; *Gordon v. Warder*, 150 U. S. 47.

That which infringes if later anticipates if earlier. — *Miller v. Eagle Mfg. Co.* 151 U. S. 186; 38 L. Ed. 121; 14 S. Ct. 310.

If one invention infringes another if later, it anticipates it if earlier. — *Wells v. Curtis*, 66 Fed. 318; 13 C. C. A. 494.

Peters v. Active, 129 U. S. 530; *Knapp v. Morss*, 150 U. S. 221; *Miller v. Mfg. Co.* 151 U. S. 186.

If it would infringe, it would anticipate if earlier. — *Eames v. Worcester*, 123 Fed. 67; 60 C. C. A. 37.

Miller v. Eagle, 151 U. S. 186.

A person making, using, or selling the patented device would infringe, and he would not be permitted to escape on the plea that it was not intended for use on an underwaist or a belt (the patent being for a hose supporter). It follows, as a necessary corollary, that such a structure in the prior art will anticipate irrespective of its connection, use or lack of use. — *Parra-more v. Siegel-Cooper*, 143 Fed. 516; 74 C. C. A. 386.

Rule followed in *Standard v. Ramsay*, 143 Fed. 972; 75 C. C. A. 158.

We are fully convinced that these motors if later in time would infringe the Eikemeyer patent; and, since they were in fact prior in the art, the patent must be held void for lack of invention. — *General v. Corliss*, 160 Fed. 672; 87 C. C. A. 560.

§ 87. Inoperative Device.

That this was a comparatively small machine and used only for applying moldings to combs is not material. — *Peters v. Active*, 129 U. S. 530; 32 L. Ed. 738; 9 S. Ct. 389.

Woodbury v. Keith, 101 U. S. 490.

That the fact that the devices of the prior art were not commercially successful until after the invention of the electric generator, does not bar the devices of the prior art from anticipating subsequent devices invented after the generator invention made such devices commercially successful, see *Kelly v. Springfield*, 92 Fed. 614; 34 C. C. A. 570.

That a device which is essentially a toy, without practical use, and not known and suggesting the invention will not be held to anticipate, see *Westinghouse v. New England*, 110 Fed. 753; 49 C. C. A. 151.

We are not satisfied that the apparatus is inoperative, but incline to the opinion that the alleged defects are merely in details of construction, which would be readily obviated by the skilled mechanic. The presumption arising from the grant of the United States patent must prevail in the absence of proof to overthrow it. — *Edison v. American*, 114 Fed. 926; 52 C. C. A. 546.

§ 88 Knowledge.

The fact that the inventor obtained all the assistance and information possible from writings and from persons skilled in the art, obtained the best counsel obtainable and acted upon it, does not detract from his invention. — *O'Reilly v. Morse*, 15 How. 62; 14 L. Ed. 601.

The fact that the inventor had no prior knowledge of the anticipating patent may entitle him to claim the quality of invention, but as he is deemed in a legal point of view to have had this and all prior patents before him his invention rests upon a modification of these too trivial to be the subject of serious consideration. — *Duer v. Corbin*, 149 U. S. 216; 37 L. Ed. 707; 13 S. Ct. 850.

That a single instance incontrovertibly established a prior knowledge and use by a single person, is sufficient to defeat a patent, see *Bannerman v. Sanford*, 99 Fed. 294; 39 C. C. A. 534.

Coffin v. Ogden, 18 Wall. 124.

Giving to Deprez's theorem all the value to which it is entitled, its application by Tesla to the production of a new, original and most beneficial practical result by new and described means and the use of polyphase alternating currents, — in brief, by the polyphase system, — and the apparatus of Tesla was an invention of a very high order. The defense of non-patentability was elaborated in the record in the most painstaking manner, and with abundant reference to statements and theories of scientists who preceded Tesla, and who were trying to discover the laws of a mysterious force, the utilization of which is still far from complete development. Each was prospecting in a mine not thoroughly explored, and dimly lighted, and each produced something of value; but the attempt to minimize Tesla's invention of the method of successfully using electricity for very important purposes by means theretofore thought to be impracticable rested upon a very inadequate foundation. — *Westinghouse v. New England*, 110 Fed. 752; 49 C. C. A. 151.

There is no evidence in the record which indicates that Gilmour obtained the conception from Brown of fastening the two tables together. As the means for embodying this arrangement in the machine are the essence of the invention described in the patent, and all that was new in the existing state of the art, we are of opinion that the defense interposed was not proven. Brown did not communicate anything new or patentable to Gilmour. He only communicated that which was accessible to all who might have chosen to familiarize themselves with the prior art. — *Lincoln v. McWhirter*, 142 Fed. 967; 74 C. C. A. 229.

The Watts patent is a design patent. It illustrates and describes an interlocking tile of precisely the form of one of the figures in the patent in suit. The tiles manufactured under this patent were of pottery ware, and were used for wainscoting. Watts, the inventor, is the owner of one-third of the present patent. Furness (the inventor of the patent in suit) had seen this Watts pottery tile before he applied for his patent. It is apparent, therefore, that what Furness did — and all that he did — was to make the Harland yielding but not interlocking tile in the form of the Watts unyielding and interlocking tile. Was it invention to apply the old interlocking device to yielding tile? Was it invention to change the material of the old interlocking tile and make it yielding? From whichever point of view we examine the present case no patentable invention is to be found. There was no original conception in applying the old interlocking device to yielding tiles. Conversely, there was no invention in changing the material of the old interlocking tiles. — *New York v. Sierer*, 158 Fed. 819; 86 C. C. A. 79.

Aron v. Manhattan, 132 U. S. 90; *Higgin v. Murdock*, 132 Fed. 810; *General v. Yost*, 139 Fed. 568; *Florsheim v. Schilling*, 137 U. S. 64; *Phillips v. Detroit*, 111 U. S. 604; *Brown v. D. C.* 130 U. S. 87; *Potts v. Creager*, 155 U. S. 605.

§ 39. Old Elements or Device — Different Uses.

The structure was not designed for the same purpose; no person looking at it or using it would understand that it was to be used in the way the device in suit is used, and it is not shown to have been really used and operated in that way. — *Clough v. Gilbert*, 106 U. S. 166; 27 L. Ed. 138; 1 S. Ct. 198.

With a strong disinclination to permit the remains of old experiments to destroy the pecuniary value of a patent for a useful and successful invention, and remembering that the defendants must assume a weighty burden of proof, I am of the opinion that the patentee's invention has been clearly proved to have been anticipated. — *Brush v. Condit*, 132 U. S. 39; 33 L. Ed. 251; 10 S. Ct. 1.

Coffin v. Ogden, 85 U. S. 120; *Reed v. Cutter*, 1 Story, 590; *Pickering v. McCullough*, 104 U. S. 310; *Curtis on Patents*, secs. 89-92; *Hall v. Macneale*, 107 U. S. 90.

A prior device which in some degree performs the function of the patent in suit, but the purpose and function of which was wholly different, and which in no way pointed out the function of the device in suit cannot be construed as an anticipation. — *Edison v. Electric*, 66 Fed. 309; 13 C. C. A. 487.

The patent in suit is for a dress stay. The alleged anticipation is a corset patent. The two subject matters seem to be essentially dissimilar. The respective inventors were dealing with plainly distinct problems. The difficulty which the one proposed to overcome was very different from that which the other desired to surmount. Their improvements were not both for use upon the same article or in the same way, and the means which they severally employed were not, in any admissible sense, identical. — *Lublin v. Stewart*, 77 Fed. 303; 23 C. C. A. 176.

Its (the Goldie nail) use and functions are different. It was adapted to an entirely different art from a spike. — *Diamond v. Goldie*, 84 Fed. 972; 28 C. C. A. 589.

Electric Co. v. LaRue, 139 U. S. 601; *Potts v. Creager*, 155 U. S. 606.

§ 90. Old Elements or Device — Function.

The court did not err in refusing the instruction that before the invention could be held invalid by reason of a prior patent it was not sufficient to find one element in one patent and another in another. If the patent had been for a combination of new and old elements producing a new result such instructions might have been correct, but as it was merely a new aggregation of old elements in which each element performed its old function and no new result was produced by their combination the instruction was properly refused. — *Adams v. Bellaire*, 141 U. S. 539; 35 L. Ed. 849; 12 S. Ct. 66.

To constitute anticipation of a later patent it is enough that such construction had been in well-established use, whether it originated in design or by accident. — *National v. Quirk*, 74 Fed. 236; 20 C. C. A. 410.

The fact that the device of the prior patent was intended to, and will, accomplish more than the device of the patent in suit, does not prevent its being an anticipation of the latter. It is sufficient that in part it was intended to, and will, accomplish the same result, and that in the same way. — *Columbus v. Standard*, 142 Fed. 622; 78 C. C. A. 394.

§ 91. Old Elements or Device — Requiring Adaptation.

It is not sufficient to constitute an anticipation that the device relied upon might, by modification, be made to accomplish the function performed by the patent in question, if it were not designed by its maker nor adapted, nor actually used, for the performance of such functions. — *Topliff v. Topliff*, 145 U. S. 156; 36 L. Ed. 658; 12 S. Ct. 825.

There is generic sameness, we concede, but there are differences, and the Patent Office and both lower courts found novelty and invention in those differences. — *Busch v. Jones*, 184 U. S. 598; 46 L. Ed. 707; 22 S. Ct. 511.

We are not satisfied from the rebuttal testimony of complainant's expert that it will not flow in this way. The most that he says is that the small packing will have to be so large that there would probably be a waste of oil. But that does not eliminate his patent from the prior art. — *Nathan v. D. L. & W.* 157 Fed. 685; 85 C. C. A. 453.

An alleged infringer is far from maintaining anticipation by showing what more or less approximates the patented article, but which, nevertheless, requires to be adjusted so as to accomplish a new purpose before it can come into the same field with it. — *O'Brien v. Foster*, 159 Fed. 710; 86 C. C. A. 464.

§ 92. Paper Patent — Insufficient.

The contention that these prior patents must be treated as failures — as mere paper patents of no especial value — is untenable. "The very fact" of the grant of a patent for the process described, "is some evidence of its operativeness, as well as of its utility," when introduced by way of anticipation. — *National v. Swift*, 104 Fed. 87; 43 C. C. A. 421.

On the one hand, in *Packard v. Lacing Stud Co.* 70 Fed. 66, we explained why, under some circumstances, a prior device cannot be rejected as an anticipation, although it has not been perfected into a practical and merchantable machine. On the other hand, the entire topic of inventive suggestions which have not been put into useful operation, including what is known as "paper patents," is a difficult one, so that in each case a practical rule of judicial determination can rarely be worked out, except by a thorough and keen analysis of all the surrounding circumstances. — *Decco v. Gilchrist*, 125 Fed. 293; 60 C. C. A. 207.

Park's History of Medicine (2d Ed.) p. 312.

In determining the question of identity of the inventive idea, it is not a sufficient answer to say of any alleged anticipation that it was a mere paper patent, and that the same had not been operative or commercially successful; for prior existing conditions might not have stimulated full development. — *Ideal v. Crown*, 131 Fed. 244; 65 C. C. A. 436.

In these circumstances, the rule frequently invoked in the case of mere paper patents may with much greater force be applied to these machines, which, even though they may have worked imperfectly, were confessedly capable of a limited, successful, practical operation. Where such patents, or machines constructed under them, embody the principle covered by a later patent; the mere fact that they are not capable of successful practical working because of objections as to minor matters of detail in construction will not deprive them of their effect as defenses where they sufficiently disclose the invention claimed in the later patent. — *Van Epps v. United*, 143 Fed. 869; 75 C. C. A. 77.

Pickering v. McCullough, 104 U. S. 310.

§ 93. Paper Patent — Sufficient.

It may be assumed that these were paper patents, not capable of successful operation. But this does not defeat their relevancy as limitations upon the scope of the patent in suit, provided they sufficiently embody the ele-

ments and disclose the principle of operation of said patent. — *Westinghouse v. Christensen*, 128 Fed. 437; 63 C. C. A. 179.

Pickering v. Lomax, 104 U. S. 310; *Packard v. Lacing-Stud*, 70 Fed. 66; *Dashiell v. Grosvenor*, 162 U. S. 425.

Under ordinary circumstances, a patent which caused no advance in the art should have small effect upon a successful patent of 20 years later. — *Daylight v. American*, 142 Fed. 454; 73 C. C. A. 570.

The Healy device was to some extent a paper patent, since it never came into general or extensive use. Although issued about 18 years prior to the patent in suit, it never seems to have suggested to anyone a construction like that of the Robins patent, which was designed to, and does substantially, obviate all of the disadvantages of the Healy patent. — *Robins v. American*, 145 Fed. 923; 76 C. C. A. 461.

If the new function existed in the machines made under the patent, it was accidental, unrecognized by the patentee and no disclosure thereof made to the public. — *Hillard v. Fisher*, 159 Fed. 439; 86 C. C. A. 469.

Tilghman v. Proctor, 102 U. S. 711.

§ 94. Prior Art — Insufficient.

The prophetic suggestions in English patents of what can be done, when no one has ever tested by actual and hard experience and under the stress of complication the truth of these suggestions, or the practical difficulties in the way of their accomplishment, or even whether the suggestions are feasible, do not carry conviction of the truth of these frequent and vague statements, and the result which was then reached is not shaken by merely a single sentence in the English patent. — *Westinghouse v. Great Northern*, 88 Fed. 258; 31 C. C. A. 525.

A machine or combination which is not designed by its maker, nor actually used nor apparently adapted to perform the function of a patented machine, or combination, but which is discovered in a remote art and was used under radically different conditions to perform another function, neither anticipates nor limits the scope of the patent. — *National v. Interchangeable*, 106 Fed. 693; 45 C. C. A. 544.

Ansonia v. Electrical, 144 U. S. 11; *Topliff v. Topliff*, 145 U. S. 156; *Potts v. Creager*, 155 U. S. 597; *Westinghouse v. Air-Brake Co.* (C. C.) 59 Fed. 581; *Walk. Pat.* (2d Ed.) p. 54, sec. 68.

Where mechanical improvements have moved so fast as they have in the last half century, great caution is required in investigating alleged anticipations which date back nearly the whole of that period; and, so far as they did not go into use, so there was no practical exhibition of them, it is often difficult to determine whether they disclosed such full, clear, and exact terms as are necessary to anticipate. — *Draper v. American*, 161 Fed. 728; 88 C. C. A. 588.

§ 95. Prior Art — Sufficient.

Devices, though not claimed to fully anticipate the patent in suit, are important in their bearing upon the construction of this patent and upon the alleged infringement by the defendants. — *Deering v. Winona*, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

We must presume the patentee was fully informed of everything which preceded him, whether such were the actual fact or not. There is no doubt

that the patent laws sometimes fail to do justice to an individual who may, with the light he had before him, have exhibited inventive talent of a high order, and yet he denied a patent by reason of antecedent devices which actually existed, but not to his knowledge, and are only revealed after a careful search in the Patent Office. But the statute (4886) is inexorable. It denies the patent if the device were known or used by others in this country before his invention. Congress having created the monopoly, may put such limitations upon it as it pleases. — *Mast Co. v. Stover Co.* 177 U. S. 485; 44 L. Ed. 856; 20 S. Ct. 708.

In view of the prior art, of which his own prior patent must be deemed a part, the claims in question must be confined to combinations substantially embodying the specific elements claimed. — *Davis v. Morris*, 81 Fed. 407; 26 C. C. A. 460.

James v. Campbell, 104 U. S. 382; *McCreary v. Canal Co.* 141 U. S. 459.

That the court is not limited in its examination of the prior art to the specific class to which the invention belongs, see *Kelly v. Clow*, 89 Fed. 297; 32 C. C. A. 205.

We have no doubt that Hardy had no knowledge of any of these former patents, for they had not been much extended in use or public notice; but the consequence of their existence no less affects his claim for novelty than if he had known all about them, notwithstanding their obscurity. — *Sanders v. Hancock*, 128 Fed. 424; 63 C. C. A. 166.

Evans v. Eaton, 3 Wheat. 454; *Stearns v. Russell*, 85 Fed. 218; *Sewall v. Jones*, 91 U. S. 171; *Crompton v. Knowles*, 7 Fed. 199.

§ 96. Prior Patent — Date.

It is true Bishop's patent was not set up by way of defense in the answer; but there is no dispute as to the time it was issued, and that fact, together with Bishop's testimony, makes it clear that his invention which was exemplified in the Wiggins Ferry, was made as far back as 1858, anticipating Brady according to his own showing for at least seven or eight years. — *Atlantic v. Brady*, 107 U. S. 192; 27 L. Ed. 438; 2 S. Ct. 225.

Defendant may show that the invention claimed was patented or described in some printed publication (not before the American patent was granted — nor before the application was filed but) before the patentee's supposed invention or discovery thereof. — *Clark v. Willimantic*, 140 U. S. 481; 35 L. Ed. 521; 11 S. Ct. 846.

U. S. R. S. 4920.

It is indispensable to the maintenance of the defense that the combination had been patented prior to his invention or discovery thereof that the defensive patent should have been issued before the patentee under the patent in suit made his invention. As the patent was not issued until after complainant conceived and perfected his device, nor until after he had applied for a patent for it, it is neither competent nor material evidence upon the issues in this case. — *Anderson v. Collins*, 122 Fed. 451; 58 C. C. A. 669.

Bates v. Coe, 98 U. S. 31; *DuBois v. Kirk*, 158 U. S. 58; *Walk. Pat. sec. 55*.

§ 97. Prior Patent — Insufficient.

The fact that a former patent cited suggests the possibility or advantage of performing the function of the patent in suit is not sufficient to be construed as anticipation. — *Gordon v. Warder*, 150 U. S. 47; 37 L. Ed. 992; 14 S. Ct. 32.

The Dodson patent was an instance of the intermeshing of projections on the surface of an abutment with corresponding projections on the surface of a cylinder. It is not shown to have produced disintegrations of the clay, and is one of those wrecks and failures of inventive genius that are constantly found lining the path of the successful inventor, who takes the last step which wins. — *Potts v. Creager*, 97 Fed. 78; 38 C. C. A. 47.

Nor can we think that the existence in the Patent Office of something which might merely supply a hint, but was not specifically described or claimed as intended to be covered by a patent, ought to be held as an anticipation of an otherwise valid invention. Inventors are not precluded by the embryonic and shapeless ideas found in former patents, any more than they are by such undeveloped matter existing elsewhere. — *Canda v. Michigan*, 124 Fed. 486; 61 C. C. A. 194.

§ 98. Prior Patent — Sufficient.

The learned judge who decided this case in circuit apparently laid stress on the proposition that the respondent could not defend itself against a suit for infringement brought by Mann (the owner of the foreign patent set up in anticipation) provided Mann's patent were in vigor in this country. Even if this were true, and even if the complainant also, were in a similar position with reference to Mann, it would not necessarily be decisive of this case. This litigation is not with Mann, or with Mann's patent, but it is in favor of those who, in the most adverse view of them, have improved on Mann, so that, if the improvement amounts to invention, the respondent, if he has used the improvement, cannot shield itself behind Mann. — *Decco v. Gilchrist*, 125 Fed. 293; 60 C. C. A. 207.

The Buller patent does not anticipate the patent in suit because: (1) The defendants have failed to show that it is capable of successful practical operation, or that the objections thereto were such as could be obviated without the exercise of the faculty of invention. (2) Because, being a foreign publication, it does not contain a substantial representation of the patent improvement in such clear and exact terms as to enable a person skilled in the art to construct and practise the invention. (3) It appears that it does not operate upon the theory or in the manner covered by the invention in suit. — *Kirchberger v. American*, 128 Fed. 599; 64 C. C. A. 107. See 215 U. S. 161.

Sage v. Wyncoop, 104 U. S. 319; *Seymour v. Osborne*, 11 Wall. 516; *Eames v. Andrews*, 122 U. S. 40; *Chase v. Fillebrown*, 58 Fed. 374.

It may be true that the patented can was the first which was ever actually manufactured and put upon the market; but whether such as are described in the prior patents were ever actually made or not is an immaterial consideration. These patents show so plainly what they purport to show that he who runs can read; and their effect in negating novelty of the claim cannot be impaired by any argument that they are impracticable structures. — *Ironclad v. Dairyman's*, 143 Fed. 512; 74 C. C. A. 372.

§ 99. Prior Patent — Reference on Application.

That a prior patent cited as a reference against the claim of the patent in suit, while the application was before the commissioner, followed by allowance of the claim, is evidence of novelty and patentable difference, see *Warren v. Casey*, 93 Fed. 963; 36 C. C. A. 29.

Lehnbeuter v. Holthaus, 105 U. S. 94.

§ 100. Process — Machine.

A process patent can only be anticipated by a similar process. It is not sufficient to show a piece of mechanism by which the process might have been performed. — *Carnegie v. Cambria*, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.

A process patent, such as that of Jones, is not anticipated by mechanism which might with slight alterations have been adapted to carry out the process, unless, at least, such use of it would have occurred to one whose duty it was to make particular use of the mechanism described. In other words, a process patent can be anticipated by a similar process. A mechanical patent is anticipated by a prior device of like construction and capable of performing the same function but it is otherwise with a process patent. The mere possession of an instrument or piece of mechanism contains no suggestion whatever of all the possible processes to which it may be adapted. (*New Process v. Maus*, 122 U. S. 413.) If the mere fact that a prior device might be made effective for carrying on a particular process were sufficient to anticipate such process, the assured result would follow that, if the process consisted merely of manipulation, it would be anticipated by the mere possession of a pair of hands. — *Carnegie v. Cambria*, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.

That where complainant held a patent for a process and for a machine for carrying out that process, and the distinguishing novel feature of the process lay in the use of the patented machine, and not in the steps of the process, the steps of the process being all old and old in combination, the novelty of the result of the operation of the machine could not impart patentable novelty to the process, see *United States v. Assyrian*, 100 Fed. 965; 41 C. C. A. 123.

That a patent for a process is anticipated by a machine capable of performing the process and so used, see *Johnson v. Chisholm*, 115 Fed. 625; 53 C. C. A. 123.

§ 101. Process — Process Rule.

A process patent can only be anticipated by a similar process. — *Johnson v. Foos*, 141 Fed. 73; 72 C. C. A. 105.

Carnegie v. Cambria, 185 U. S. 403.

§ 102. Process — Miscellaneous.

The method of Burnham, whether workable or not, was not the process of Johnson, and his patent is not an anticipating patent for that reason as well as because it had not been issued at the date of the Johnson application. — *Johnson v. Foos*, 141 Fed. 73; 72 C. C. A. 105.

Bates v. Coe, 98 U. S. 31; *Dubois v. Kirk*, 158 U. S. 64; *Anderson v. Collins*, 122 Fed. 451.

There can, of course, be no anticipation of Johnson's method, which was purely mechanical, by one which involved chemical agencies alone. — *Johnson v. Foos*, 141 Fed. 73; 72 C. C. A. 105.

§ 103. Public Use — Sufficient.

The identical combinations having been previously used for the same purpose, there is no invention. — *Dane v. Chicago*, 131 U. S. cxxvi; 23 L. Ed. 82.

If the hoe made by the Tool Company infringes the patent of the applicant, it was an anticipation of the invention, and the patent is void, for the testimony leaves no doubt whatever in our minds that the Company made and sold its hoes long before the date of the invention patented. If it is not an anticipation, it is not an infringement. — *Cook v. Sandusky*, 28 L. Ed. 124.

When defendant assumed and proved that he had made and used the device shown and claimed by complainant for five years, four years of which time was prior to complainant's patent, the answer and defense were held good. — *Anderson v. Miller*, 129 U. S. 70; 32 L. Ed. 635; 9 S. Ct. 224.

Prior public use of a single device in a store, used by a number of employees for more than two years is anticipation. — *American v. Weston*, 59 Fed. 147; 8 C. C. A. 56.

There can be no doubt that, under the decisions of the supreme court, if these witnesses are to be believed, the making of the machine and its public use, more than two years before the complainant's patent was applied for, would constitute a complete anticipation. — *Parlin v. Moline*, 89 Fed. 329; 32 C. C. A. 221.

Aiken v. Dolan, Fed. Cas. 110; *Coffin v. Ogden*, 18 Wall. 120; *Worley v. Tobacco Co.* 104 U. S. 343; *Manning v. Glue Co.* 108 U. S. 465; *Magin v. Karle*, 150 U. S. 388; *Brown v. Davis*, 116 U. S. 237.

150 sample cans were sent to the French government in response to a request for cans of that character, before the date of invention of the patent in suit. But no commerce with the French government resulted. *Held*: Sec. 4886, R. S. voids a patent for a thing that has been known or used by others in this country prior to the alleged invention. No clearer case for the application of the statute can be found in the books. — *American v. Morris*, 142 Fed. 166; 73 C. C. A. 384.

Brush v. Condit, 132 U. S. 39.

§ 104. Public Use — Miscellaneous.

The action of the commissioner of patents in granting a patent is not conclusive either as to novelty, utility or prior use. — *Reckendorfer v. Faber*, 92 U. S. 347; 23 L. Ed. 719.

The fact that the anticipating device was concealed from view and could not have come to public notice does not constitute a secret device such as would take it outside the law of public use. — *Brush v. Condit*, 132 U. S. 39; 33 L. Ed. 251; 10 S. Ct. 1.

Conceding that there was sufficient evidence of use in England (of the patented article for more than two years) we think this does not vitiate the patent. Sec. 4886 declares, "Any person who has invented any new and useful art, machine, etc., and not in public use or on sale for more than two years prior to his application may obtain a patent therefor." While it is true there is no restriction as to place or country, sec. 4887 provides "unless the same has been introduced into public use in the United States for more than two years prior to the application." We think that the public use or sale contemplated by sec. 4886 must be limited to a use or sale in this country. Sec. 4923 providing that foreign use does not void a patent and sec. 4920 providing that defendant may plead use or sale in this country for more than two years establishes the intent of sec. 4886, that the right of

the patentee should not be denied by reason of the fact that he had made use of it or put it on sale abroad for more than two years, provided it were not so used or sold in this country. — *Gandy v. Main*, 143 U. S. 587; 36 L. Ed. 272; 12 S. Ct. 598.

§ 105. Publication — Insufficient.

A description in an encyclopedia before patent of an improvement claimed to be anticipatory, unsupported by any proof that it was operative, is not sufficient to defeat a patent. — *Seymour v. McCormick*, 60 U. S. 96; 15 L. Ed. 557.

It must be admitted that, unless the earlier printed and published description does exhibit the later patented invention in such a full and intelligible manner as to enable persons skilled in the art to which the invention is related to comprehend it without assistance from the patent, or to make it or repeat the process claimed, it is insufficient to invalidate the patent. — *Cohn v. U. S.* 93 U. S. 366; 23 L. Ed. 907.

Some of the expressions taken by themselves, seem to foreshadow the Jones idea; but there was nothing in any of these discoveries that filled the requirement of the law (Rev. Stat. sec. 4886) of a description in a publication sufficient to anticipate the patent. — *Carnegie v. Cambria*, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.

It, therefore, serves no useful purpose to strive to show that the Brush patent was anticipated because some pre-existing scientist has described a battery which corresponds with the general phraseology of the claims, provided their language should be so construed as to include the class of batteries which has been mentioned, a construction which is forbidden by the history of the invention and by a disinterested examination of the patent. — *Electric v. Brush*, 52 Fed. 130; 2 C. C. A. 682.

The description must be such as to show that the article described in the patent can be certainly arrived at by following the description, without the assistance of local prior knowledge or local prior use in the foreign country where the description is published. — *Badische v. Kalle*, 104 Fed. 802; 44 C. C. A. 201.

Atlantic v. Parker, 16 Blatch. 295.

Of all these publications, so far as they contain suggestions which Mouras did not indicate, they are "mere vague and general representations not sufficient to enable those skilled in the art or science to understand the nature and operation of the invention and to carry it into practical use." — *Cameron v. Saratoga*, 159 Fed. 453; 86 C. C. A. 483.

Seymour v. Osborne, 11 Wall. 555.

§ 106. Publication — Sufficient.

A prior publication which describes a process or machine with sufficient exactness to enable one skilled in the art to employ it is a publication which will anticipate. — *Downton v. Yaeger*, 108 U. S. 466; 27 L. Ed. 789; 3 S. Ct. 10.

Seymour v. Osborne, 11 Wall. 516; *Cohn v. Corset*, 93 U. S. 366.

The "description in a printed publication" of the statute is to be found within the four corners of such printed publication. — *Badische v. Kalle*, 104 Fed. 802; 44 C. C. A. 201.

§ 107. Uncontemplated Use or Function.

The fact that incidentally the process of the patent in suit was performed by the accidental operation of certain substances, which was not understood, and which accidental phenomenon gave no hint to the discoverer of the process in suit will not be regarded. — *Tilghman v. Proctor*, 102 U. S. 707; 26 L. Ed. 279.

The case is one for the application of the doctrine, well settled in the law of patents, that novelty is not negatived by a prior accidental production of the same thing, when the operator does not recognize the means by which the accidental result is accomplished and no knowledge of them or of the method of its employment is derived from it by anyone. — *Wickelman v. Dick*, 88 Fed. 264; 31 C. C. A. 530.

Pittsburgh v. Cowles, 55 Fed. 301; *Chase v. Fillebrown*, 58 Fed. 377; *Topliff v. Topliff*, 145 U. S. 161; *Tilghman v. Proctor*, 102 U. S. 707.

The essence of the invention was the provision of new means to accomplish a new result in a new way by a radical departure from the prior art. In these circumstances, the fact that the old Gorge pocket of 1878 might be forced around to a position in which it might receive and hold the prominence of the abdomen instead of that of the hip bone is immaterial. — *Young v. Wolfe*, 130 Fed. 891; 65 C. C. A. 199.

We are brought to the argument that these prior constructions do not negative invention because they were not designed to be used for the purpose stated in the patent in suit. In the consideration of this question we are not unmindful of the rule as stated by this court in *Wickelman v. Dick*, 88 Fed. 264, 266. See also *Boyd v. Cherry*, 50 Fed. 279, 283; *Clough v. Barker*, 106 U. S. 166.

But in order to apply this doctrine to the case at bar, we must not only treat the device of the prior patent as an accidental construction, but we must ignore the evidence that it was used in the manner contemplated in the patent in suit. — *American v. Carter-Crume*, 150 Fed. 333; 80 C. C. A. 339.

To assert that Moran's invention (air-locks for caissons) is anticipated by freight elevators which pass through several stories of a building, the openings on each floor being closed by two-part doors, is tantamount to asserting that he who solves the problem of aerial navigation will be entitled to no credit because similar vehicles with the same motive power have traveled successfully over the land and through the water. — *O'Rourke v. McMullen*, 160 Fed. 933; 88 C. C. A. 115.

§ 108. Miscellaneous Rulings.

So far as the defense of anticipation is concerned, it must be established as of a date anterior to the patentee's invention or discovery; not merely prior to the application for, or the dating of his patent. — *Von Schmidt v. Bowers*, 80 Fed. 121; 25 C. C. A. 323.

R. S. 4886, 4920; *Plow Works v. Starling*, 140 U. S. 198; *Clark v. Willimantic*, 140 U. S. 492; *Loom Co. v. Higgins*, 105 U. S. 592; *Kneeland v. Sheriff*, 2 Fed. 901; *Woodman v. Stimpson*, Fed. Cas. 17,979; Merw. Pat. Inv. sec. 323.

His long delay in making application for the patent creates a strong countervailing presumption, but is reasonably and adequately explained by the surrounding facts and circumstances, and thus explained, ought not to prevail against the very convincing evidence that has been adduced by the complainants. — *Frost v. Cohn*, 119 Fed. 505; 56 C. C. A. 185.

Burdick was the first to make an air brush on the plan of concentric nozzles; and the primary character of his invention is not to be destroyed by references to patents for oil burners. Of course the oil burners cannot be used in painting pictures. And if the arts are analogous enough to charge Burdick with notice of the concentric nozzles in oil-burners, nevertheless it required invention to adapt them to co-operate with other elements, not present in the oil-burners, so as to produce Burdick's unquestionably new combination. — *Wold v. Thayer*, 148 Fed. 227; 78 C. C. A. 350.

APPEALS.

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§ 109. The Statutes — Appeals to the Supreme Court.

Prior to the Circuit Court of Appeals Act of Mar. 3, 1891, all appeals in patent causes were from the circuit courts directly to the Supreme Court by sec. 690, R. S. By the act of 19 Feb. 1897, the paragraph of said section providing for appeals to the Supreme Court in patent causes was repealed; but the section following (699, R. S.) was not so amended, and consequently, by the first paragraph of sec. 699, an appeal lies directly from the Court of Appeals, D. C., to the Supreme Court. Herein lies the reason why the decisions of the Court of Appeals, D. C., prior to January 1, 1912, were not included in this work as a part of the fixed law. But with the repeal of § 699 by the Judicial Code Act, in effect Jan. 1, 1912, this court becomes a court of last resort in patent causes, and its decisions are fixed law from that date. While it might be said that the repeal of § 699, by retroaction, made the previous decisions of the Court of Appeals, D. C. fixed law, it has not been deemed expedient to so regard them in the absence of any authority.

Appeals may, however, reach the Supreme Court in patent causes by either of the following provisions of the Judicial Code:

Sec. 239. In any case within its appellate jurisdiction, as defined in section 128, the circuit court of appeals at any time may certify to the Supreme Court of the United States any questions or propositions of law concerning which it desires the instruction of that court for its proper decision; and thereupon the Supreme Court may either give its instruction on the questions and propositions certified to it, which shall be binding upon the cir-

circuit court of appeals in such case, or it may require that the whole record and cause be sent up to it for its consideration, and thereupon shall decide the whole matter in controversy in the same manner as if it had been brought there for review by writ of error or appeal.

Sec. 240. In any case, civil or criminal, in which the judgment or decree of the circuit court of appeals is made final by the provisions of this Title, it shall be competent for the Supreme Court to require by certiorari or otherwise, upon the petition of any party thereto, any such case to be certified to the Supreme Court for its review and determination, with the same power and authority in the case as if it had been carried by appeal or writ of error to the Supreme Court.

§ 110. The Statutes — Appeals to Circuit Court of Appeals.

The Federal Judicial Code is not a repeal or general revision of the Circuit Court of Appeals Act and amendments thereto, but is a continuation of these previous acts except where the change is clearly manifest. The following are without substantial change from the former law.

Sec. 116. There shall be nine judicial circuits of the United States, constituted as follows:

* * * * *

Sec. 117. There shall be in each circuit a circuit court of appeals, which shall consist of three judges, of whom two shall constitute a quorum, and which shall be a court of record, with appellate jurisdiction, as hereinafter limited and established.

Sec. 128. The circuit courts of appeals shall exercise appellate jurisdiction to review by appeal or writ of error final decisions in the district courts, including the United States district court of Hawaii, in all cases other than those in which appeals and writs of error may be taken direct to the Supreme Court, as provided in section two hundred and thirty-eight, unless otherwise provided by law; and except as provided in sections two hundred and thirty-nine and two hundred and forty, the judgments and decrees of the circuit courts of appeals shall be final in all cases in which the jurisdiction is dependent entirely upon the opposite parties to the suit or controversy being aliens and citizens of the United States, or citizens of different States; also in all cases arising under the patent laws, under the copyright laws, under the revenue laws, and under the criminal laws, and in admiralty cases.

When, however, the subject-matter of the appeal is a question of jurisdiction, appeal lies directly to the Supreme Court, even when the cause of action arises under the Patent Laws.

From a final decree of a Circuit or District Court on a question of jurisdiction, whether of the cause or of the person, the appeal lies directly to the Supreme Court, and this Court is without jurisdiction to entertain it. — *Waterman v. Parker*, 107 Fed. 141; 46 C. C. A. 203.

Shepard v. Adams, 168 U. S. 618.

Preliminary injunction appeals have been a most fruitful source of appellate decision since the passage of the C. C. A. Act. The law has been amended, and the entire subject-matter is so closely related to — and in fact of the very essence of — the right to a preliminary injunction, that such appeals are best considered in connection with *Injunctions*.

§ 111. Assignments of Error — Sufficiency.

A writ of error covers all questions which arose on the trial. — *Hogg v. Emerson*, 6 How. 437; 12 L. Ed. 505.

Note: It is thought that this rule has not always been followed.