The period of six months referred to in this section has been construed to mean six calendar months.\textsuperscript{307}

There is nothing in this section to prevent the issuance of valid claims on the renewal application which were not embodied in the original application as allowed.\textsuperscript{308}

§ 83. Public use proceedings.

Public use proceedings are brought by a private party, who has in some way become aware of the pendency of a patent application in the Patent Office, for the purpose of defeating the allowance of the application by a showing that the subject-matter is not patentable because of prior public use. Such proceedings are sometimes referred to as "protests," but that term more properly describes the statement filed by the party who seeks to have the proceedings instituted, and who is called the "protestant."\textsuperscript{309} "Such proceedings are not to be regarded as a contest between the protestant and the applicant, but as an investigation on behalf of the public by the Patent Office.\textsuperscript{310} The parties in interest are the applicant on the one hand and the public on the other. The protestant does not represent the public. * * *

This office alone represents the public."\textsuperscript{311}

The practice in such proceedings has been thus outlined:

"This is deemed to be a suitable occasion to indicate the practice to be followed when it appears from an ex parte affidavit that the invention claimed

\textsuperscript{309} In re National Phonograph Co., 89 Off. Gaz. 1669.
\textsuperscript{311} Ex parte Kephart, 103 Off. Gaz. 1914.
has been in public use for more than two years prior to the date of the filing of the application. When such an affidavit is filed with the Examiner, he should examine it and determine whether it makes out a prima facie case of public use. If in his opinion such a case is made out, he should call the Commissioner's attention to the fact and transmit the papers in the case for the Commissioner's consideration. If the Commissioner holds that the affidavit warrants an investigation of the question of public use, he will call upon the applicant to show cause why public use proceedings should not be instituted and give the protestant or affiant an opportunity to be heard at this preliminary hearing before the Commissioner. If after this hearing the Commissioner decides to investigate the question, he will issue an order setting a time for taking testimony to prove the facts set up in the affidavit. At this hearing, of course, the affiant will have a right to be heard and at the taking of testimony to cross-examine witnesses and also to rebut their testimony by witnesses of his own. After the testimony has been closed it will be filed in the office, where it will be considered, and not until it has been determined affirmatively that the testimony discloses that the invention has been in public use for more than two years prior to the date of the filing of the application will the claims be rejected."  

312 Under the practice thus stated, the protest should, if based upon the existence of unpatented devices urged as a bar, be supported by affidavit, and the protestant will then be permitted to offer proofs, taken under condi-

tions permitting the applicant to cross-examine the wit-
tnesses.\footnote{313} If the application against which a protest is
filed is involved in an interference, the other parties to
the interference will be permitted to become parties to
the public use proceedings, if they so request, and will
be permitted to cross-examine the protestant’s wit-
tnesses.\footnote{314}

The questions of priority and public use have been
held to be closely related, and where the evidence as to
prior public use was developed as against an applicant,
who was in interference with a patentee it was held that
the interference should be dissolved, and that the de-
feated party would not be granted an ex parte rehearing
as to public use, on petition.\footnote{315}

In a case similar to the one just referred to, the pat-
entee filed his petition requesting suspension of proceed-
ings in the interference, and the institution of public
use proceedings. The petition was denied upon the fol-
lowing reasons: “Bloomberg is a patentee. In his pre-
liminary statement he alleges public use of the invention
more than two years prior to the filing date of Siebert’s
application. The petition is supported by the affidavit of
Bloomberg and two others.

“The affidavits fail to make out a \textit{prima facie} case of
public use of the invention in interference more than
two years prior to Siebert’s filing date. They state the
conclusions of the witnesses largely to the exclusion of
the facts upon which such conclusions are based. Where
facts are given, they are not recited with sufficient par-
ticularity and certainty. A portion of the showing is
also objectionable as mere hearsay. This office should

\footnote{313}{In re National Phonograph Co., 89 Off. Gaz. 1669.}
\footnote{314}{In re National Phonograph Co., 89 Off. Gaz. 1669.}
\footnote{315}{Mills v. Torrance, 110 Off. Gaz. 857.}
not institute a proceeding which may uselessly consume the time and labor of all parties upon such a showing.

"Moreover, it does not appear that copies of the petition and affidavits have been served upon the applicant, nor is any offer found to produce the witnesses and bear the expenses of the office in conducting the investigation. The lack of service is alone sufficient reason for denying the petition, and public-use proceedings are not ordinarily instituted except upon an offer of the character mentioned."

When an order to show cause why public use proceedings should not be instituted was made against an applicant, and, in return, the applicant showed that an interference was in progress involving the same subject-matter, it was ruled that the public-use proceedings should be instituted, and carried on simultaneously with the interference.

Where the protest rested upon a single affidavit that the machine alleged to have been in public use corresponded to one claim of a pending application, the affidavit containing no description of that machine, the protest was dismissed, Commissioner Allen observing: "Corroborating affidavits should also be filed if other witnesses are to be relied upon. Altogether, the protestants should present their prima facie case as well as may be done by affidavits so as to give the applicant opportunity to intelligently oppose the institution of the proceedings and the consequent delay in the prosecution of his application."

As to the review, on petition, of a decision of the primary examiner adverse to a protestant, Commissioner

Moore has observed: "Public-use proceedings are *ex parte* in their nature, the sole question being whether the applicant is barred from obtaining a patent on the invention claimed by reason of the public use or sale of devices embodying the invention claimed.

"While it is the practice to permit one of the general public to file a protest and to take testimony in behalf of the Patent Office upon this question, such party has no right in the controversy other than those authorized by the Commissioner. When the evidence presented has been submitted to the Primary Examiner for consideration and in his opinion this testimony does not establish a statutory bar of public use, there is no greater warrant for a review of his decision upon this question than from a decision by the Examiner that references in his possession, whether obtained by search or upon motion for dissolution in an interference, do not anticipate the claims of an application. The action of the Examiner holding that testimony in public-use proceedings is insufficient to warrant the rejection of the applicant's claims will be reviewed only where such obvious error appears as will warrant the supervisory action of the Commissioner. In the present case no such error is found."\(^{319}\)

At the hearing upon public-use proceedings it is customary to set a time within which briefs may be filed by the applicant, but oral argument is not permitted.\(^{320}\)

An experimental use will not suffice to sustain public-use proceedings. Where the machine alleged to have been in prior public use was a cigar-making machine, and the use was in a machine shop, and not in a cigar factory, only employees being admitted, and the testimony showing that the machine was operated for the primary pur-

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pose of developing imperfections, and that many minor changes were made, as a result of such tests, it was held that a case of public use was not made out, though incidentally merchantable cigars were made and marketed.\textsuperscript{321}

One who files a protest based upon prior public use will be bound by that protest in litigation upon a patent of his own for the same subject-matter, and if his protest showed that subject-matter to have been in public use at a time sufficiently anterior to his own application to anticipate his patent, it will have that effect in subsequent litigation.\textsuperscript{322} Similarly, an unsuccessful patentee-protestant may be estopped by his efforts to thwart a reissue, from denying infringement when sued upon the reissued patent. In such a case Judge Brawley has said: "We are clearly of opinion that the Hall patent is an infringement. None of the defendants' experts have disputed it, and the protest filed by Hall in the Patent Office against the reissue, and the long contest made by him and his attorneys against it, are in the nature of a confession, for, had he not apprehended that the invention was the same, it would be difficult to understand why so much effort and money should have been expended to prevent the reissue."\textsuperscript{323}


CHAPTER IV.

APPEALS IN PATENT OFFICE PROCEDURE.


The rule is well settled that no review by the appellate tribunals of the Patent Office can be had, either on petition or by appeal, unless the Examiner has either twice acted or twice refused to act upon the issue involved.¹ An appeal from the Examiner cannot be taken until a final (second) rejection has been made upon all his grounds for refusing a patent.²

§ 85. Where appeals originate.

Appeals may be taken from a second rejection of any claim by the Examiner, or from his second refusal to act thereon;³ from the decision of the Examiner of interferences upon the merits in interference cases,⁴ and in public use proceedings.⁵

§ 86. What reviewable by petition.

The Commissioner of Patents is peculiarly the responsible head of the Patent Office. Though that office is a bureau of the Interior Department, the Secretary of the Interior has no direction of or supervision over

¹ Ex parte Bishop, 63 Off. Gaz. 153; Ex parte Schulze, 84 Off. Gaz. 981.
² Ex parte Donovan, 52 Off. Gaz. 309.
³ Ex parte Schulze, 84 Off. Gaz. 981.
⁴ Trevette v. Dexter, 84 Off. Gaz. 1283.
⁵ Ex parte Finch, 40 Off. Gaz. 1027.

1 Hop.—11
the Commissioner in his exercise of judicial functions. In the exercise of his plenary power to regulate the procedure of the office, a petition will lie to him to review any question, not affecting the merits, arising in the proceedings of the office. The questions reviewable by the Commissioner upon petition are obviously of every conceivable character, and it would be a vain task to here undertake a summary of the decisions. A few cases will be adverted to in illustration of the purposes of the petition.

Before a petition will be entertained it must appear that the petitioner has fully presented to the Examiner his reasons for the object sought to be attained; the Examiner must have twice acted, or twice refused to act, in the matter complained of.

Petitions have been entertained to review an Examiner’s ruling that a claim was indefinite; a ruling excluding as new matter an addition to a description or drawing not extending to or affecting the claim; a ruling that certain claims in the same application are substantially identical; a requirement that the original drawing, structure or model, referred to in an affidavit filed before the Examiner be produced; a ruling that an alleged divisional application covers subject-matter which could not be legitimately divided out of the early application of which it is alleged to be a division; a


ruling requiring an applicant to file the affidavits of third parties in addition to his own;¹⁵ the failure of an Examiner to respect and apply a decision of the Commissioner;¹⁶ a ruling of the Primary Examiner requiring a new oath.¹⁷

The Commissioner has reviewed upon petition decisions of the Examiner of interferences denying leave to take additional testimony;¹⁸ refusing, in advance of final hearing, to consider and rule on a motion to strike out the testimony of the wife of a party.¹⁹

On the other hand, a petition cannot properly be invoked to secure a review upon the merits. Review on petition has been denied where matter involving the merits of the claims was held to constitute a departure from the applicant’s original disclosure;²⁰ where the ruling sought to be reviewed was a rejection of certain claims upon the claims of an allowed application of the same applicant;²¹ or a rejection upon a prior patent of the same applicant;²² where the ruling was the rejection of a mechanical application, upon a design patent reference;²³ where the claims were rejected under the doctrine of aggregation.²⁴

The formal requisites of the petition for the purposes of review by the Commissioner are provided in the rules

¹⁶. Ex parte Ryley, 67 Ms. Dec. 495.
²⁰. Ex parte Welch, 93 Off. Gaz. 2105.
²³. Ex parte McQueen, 85 Off. Gaz. 609.
of the Patent Office, and they are insisted upon in practice, being treated as requirements of pleading.\textsuperscript{25}

From what has been said it will be seen that a question to be reviewed by the Commissioner upon petition must relate to matters of form and practice only, and cannot involve the merits; all questions as to the merits, the applicant's right to the patent sought, or to a particular claim refused by the inferior tribunals of the Patent Office, must reach the Commissioner by the route of appeal through the Board of Examiners-in-Chief. The Commissioner's decision upon a question presented by petition is final, so far as the Patent Office is concerned,\textsuperscript{23} and can only be reached by mandamus.\textsuperscript{27}

No fee is required upon the filing of a petition to the Commissioner.\textsuperscript{28} Upon the petition being lodged, the Examiner whose ruling is sought to be reviewed is required to file a statement of the reasons for his decision.\textsuperscript{29}

§ 87. Appeals to the Examiners-in-Chief.

The duties of the Examiners-in-Chief are defined by statute as follows:

§ 482, R. S. U. S.—The Examiners-in-Chief shall be persons of competent legal knowledge and scientific ability, whose duty it shall be, on the written petition of the appellant, to revise and determine upon the validity of the adverse decisions of Examiners upon applications for patents, and for reissues of patents, and in interference cases.


This appellate board was established by the Act of 1861, ch. 88, 12 Stat. at L. 246, "for the purpose of securing greater uniformity of action in the grant and refusal of letters patent." 30

Mr. Justice Matthews thus described the course of appeals through the Patent Office:

"The claim is examined in the first instance by a Primary Examiner assigned to the class to which it belongs; if twice rejected by him, the applicant is entitled (§ 4909, R. S. U. S.) to appeal from his decision to that of the Board of Examiners-in-Chief, constituted a tribunal for that purpose; and from their decision, if adverse, he may appeal to the Commissioner in person (§ 4910, R. S. U. S.)." 31

No appeal can be taken to the board on the rejection of an application until a final rejection has been had upon all the grounds held adversely by the Examiner. 32

The appeal can be taken at any time before the application becomes abandoned under the statute (one year after final rejection). 33 In contested cases, a limit of appeal is fixed by the Examiner of interferences or other Examiner making the ruling and may be extended by the Commissioner for cause shown. 34 An appeal fee of $10 must be paid upon taking an appeal to the board; but if the same question is twice appealed by the same party a single fee suffices. 35

The appellant must specify the part or portion of the decision from which the appeal is taken. 36

is answered by the Examiner from whose action it was taken, by a statement of his reasons for his decision.37

At the time of taking the appeal, if the appellant wishes the appeal to be argued orally he should so request in writing. Otherwise the appeal will be taken as submitted on the date assigned to it before the board, upon such brief as may have been filed by the appellant.

Upon the hearing of interference appeals the board tries the whole case de novo. Such appeals should be accompanied by a brief statement of reasons, but a defective statement, or the failure to provide any statement will not render the appeal void.38 But in ex parte appeals the board must affirm or reverse the Examiner on the points raised by the appeal;39 they may make recommendations for the benefit of the Examiner, which he may accept or reject. Should he reject recommendations favorable to the applicant, the applicant can usually acquire their benefit by a second appeal, if they involve matter which he can incorporate in his application by amendment.40

The Board of Examiners-in-Chief consists of three members, any two of whom can act in the absence of the third.41

Where the right of appeal to the board is denied in the Patent Office, it can be enforced in a proper case by the writ of mandamus.42

41. Ex parte Smith & Drum, 63 Ms. Dec. 429.
§ 88. Appeals to the Commissioner of Patents.

An appeal may be taken from the adverse decision of the board to the Commissioner, unless the applicant, in an *ex parte* case, acquiesces in the decision of the board upon the resumption of jurisdiction by the Primary Examiner. The rendition of its decision by the board reinvests the Primary Examiner with jurisdiction forthwith in *ex parte* cases,\(^{43}\) and if the applicant proceeds to eliminate the rejected claim or claims, or amend them in scope, he is held to have elected to abide by the decision of the board and to have abandoned all right of appeal.\(^{44}\)

The Commissioner may assign cases appealed from the board to either of the Assistant Commissioners, and mandamus will not lie to compel him to hear and decide such appeals in person.\(^{45}\)

It is the settled rule that where an application has been finally rejected by the Commissioner in an *ex parte* proceeding, that adjudication may be relied on by him as a conclusive bar to a second application for the same invention;\(^{46}\) but he may entertain and allow the second application if he deems proper.\(^{47}\)

The jurisdiction of the Commissioner in interference cases is very comprehensive, and necessarily so for the prevention of injustice, not only to the parties but to the public. The inferior tribunals of the office having to deal only with the question of priority, patents would

\(^{43}\) *Ex parte* Pearson, 40 Off. Gaz. 244.

\(^{44}\) *Ex parte* Williams & Raida-baugh, 40 Off. Gaz. 1337.


frequently issue in derogation of the rights of the public if the Commissioner had not, at all times the right to examine questions other than priority.

Mr. Chief Justice Shepard has thus touched upon the appellate and supervisory jurisdiction of the Commissioner in interference cases: "The doctrine of res adjudicata necessarily applies in favor of the successful party to an interference to whom an award of priority has been made, against his opponent's attempt to renew the interference upon a new application with claims for the same invention although in different or broader form."\(^{43}\)

"While the question of the patentability of the issue will not be entertained on appeal from an award of priority, the right of one of the parties to make the claims under the disclosures of his application will be entertained as an ancillary question for the reason that 'if it be incorrectly held that such party has the right to make the claim, priority may be awarded to him, and his adversary deprived of a substantial right, in that he is not given a claim where he necessarily is the prior inventor, his adversary never having made the invention.'\(^{49}\)

"As a consequence of the doctrine established by that case, it has been held that where an interference has been dissolved on that ground, without appeal from the decision, this right to make the claim, must be considered res adjudicata in a later interference between the parties on the same application."\(^{50}\) * * * The question of the right of one of the parties to make claims, is inseparably connected with that of priority. When adjudged


that one of the parties had no right to make the claims, in other words, that his description fails to show a conception of the invention of the issue, the other, who thereby appeared to be the sole inventor, was necessarily entitled to the award and to his patent. The effect of the decision is to establish his right of property in the invention, and he is entitled to the benefit without further impeachment of that right by his adversary in renewed litigation in the Patent Office. If the losing party can go back to the Examiner, and proceeding ex parte, secure an allowance of his right to make the claims and then renew the litigation with his adversary, there might be no end to it. It is to meet conditions of this kind that the statutory doctrine in respect to the conclusiveness of former judgments has been applied in proceedings in the Patent Office. On the other hand the patentability of a described invention is a question that arises on each application when presented, and is necessarily determined ex parte. It is only when patentability has been allowed in the ex parte proceeding that an interference with a like application of another can be declared. This allowance is not appealable. It is true that the patentability of the claims of an issue in interference may be questioned in a motion to dissolve. (Patent Office Rule 122.) Why this is permitted by the rule we do not understand, unless it is to enable the Commissioner to re-examine the question in the light of argument and put an end to useless litigation if he find that an allowance of patentability ought not to have been made in the first instance. So finding he acts for the protection of the public from an unauthorized monopoly and dissolves the interference so that each application may be rejected. The decision determines no right between the two opponents but one between them both, on one side, and the public on the other. If either desire to appeal from the final order
of rejection, he must do so, *ex parte* in regular course of procedure.51 That the question is to be considered as one between the public and the parties, and not between the latter, is also evidenced by the provisions of Rule 126 which authorizes the Examiner of Interferences, and the Examiner-in-Chief to direct the attention of the Commissioner to matters not relating to priority. Moreover the Commissioner may, with or without such direction or attention, raise the question of patentability of his own motion, and send the application back for rejection without deciding the question of priority, or he may, after the question of priority has been determined, reject the application of the successful interferant, and put him upon an *ex parte* appeal.52 We must hold that the question of patentability was not concluded by the decision of the original motion to dissolve the interference on that ground.”53

§ 89. Patent Office appeals to the Court of Appeals of the District of Columbia.

The Act of February 9, 1893, ch. 74, 27 Stat. at L. 436, provides, in part as follows:

“§ 9. That the determination of appeals from the decision of the Commissioner of Patents, now vested in the general term of the Supreme Court of the District of Columbia, in pursuance of the provisions of section seven hundred and eighty of the Revised Statutes of the United States, relating to the District of Columbia, shall hereafter be and the same is hereby vested in the court of appeals created by this act; and in addition, any party

aggrieved by a decision of the Commissioner of Patents in any interference case may appeal therefrom to said court of appeals.'"

This Act has been held to be constitutional by the United States Supreme Court. The jurisdiction of the Court of Appeals of the District of Columbia in relation to appeals from the Patent Office is of a peculiarly limited character. "The purpose of the appeal is simply to have a review of the decision of the Commissioner of Patents on the identical record before the latter officer. It is in no just sense a substitute for the trial provided for by a bill in equity in the Circuit Court. The decision on the appeal in no respect changes the character of the proceeding. All that the Appellate Court can do is to affirm or reverse the decision of the Commissioner of Patents. If a reversal occurs, the Appellate Court awards a mandate directing what decision shall be entered by the Commissioner of Patents. But it is the decision of the Commissioner of Patents, and not that of the Appellate Court, by virtue of which the patent must finally be granted. The office of an appellate tribunal is to direct an inferior court or officer, from whom an appeal is taken, what decision or judgment must at last be entered by the inferior court or officer, and not the decision or judgment of the appellate tribunal. The order of the appellate tribunal operates upon the court or officer below, by directing what such officer or court shall do; but it is the order of the latter which must dispose of the matter in controversy." 55

Of the character of the judgment rendered upon such appeals Mr. Chief Justice Alvey has said: "There is no final judgment of this court rendered in such cases, nor is there any such judgment required or authorized

to be rendered, not even for costs of the appeal. This court is simply required in such cases, after hearing and deciding the points as presented, instead of entering judgment here, to return to the Commissioner of Patents a certificate of the proceedings and decision of this court, to be entered of record in the Patent Office, to govern the further proceedings in the case. But it is declared by the statute that no opinion of this court in any such case shall preclude any person interested from the right to contest the validity of any patent that may be granted by the Commissioner of Patents. D. C. Rev. Stat., § 780; U. S. R. S., § 4914.

"There is no provision of any statute, within our knowledge, that authorizes a writ of error or an appeal to the Supreme Court of the United States in such case as the present. It would seem clear that the case is not within the purview of § 8 of the Act of Congress of February 9, 1893, providing for the establishment of this court. That section only applies to cases where final judgments by this court have been entered, and not to decisions to be made and certified to the Patent Office, under the special directions of the statute." 56

"Its adjudication," said Mr. Justice Matthews, "though not binding upon any who choose, by litigation in courts of general jurisdiction, to question the validity of any patent thus awarded, is nevertheless conclusive upon the Patent Office itself; for, as the statute declares (§ 4914, R. S. U. S.), it 'shall govern the further proceedings in the case.'" 57

Accordingly, the decisions of the court cannot be reviewed by the United States Supreme Court on appeal or writ of error. 58

58. Frasch v. Moore, 211 U. S. 1, 53 L. Ed. 65.
§ 90. Time for taking appeal.

Rule 21 provides, as to all appeals from the Commissioner of Patents, that they should be taken within forty days, exclusive of Sundays and legal holidays, from the date of the ruling or order appealed from, and not afterwards. It has been held by the United States Supreme Court that this rule was within the authority of the Court of Appeals of the District of Columbia, and the rule is strictly enforced.

Under this rule time is reckoned from the date of the decision and not from the time that notice of the decision is sent to, or received by, the party against whom it is made. The running of the time for appeals is not arrested by filing a motion for rehearing in the Patent Office, and as under § 1389 of the Code of the District of Columbia every Saturday, after 12 o'clock noon, is a half holiday in the District of Columbia, one-half of each Saturday, as well as Sundays and legal holidays, will be excluded in computing the time limit for appeal.

§ 91. Perfecting the appeal.

Rule 21 of the Court of Appeals of the District of Columbia provides in part as follows: "If the petition for an appeal and the certified copies of papers and evidence on appeal mentioned in this and the preceding section of this rule shall not be filed and the case duly docketed in this Court within forty days (exclusive of Sundays and legal holidays) from the day upon which notice of appeal is given to the Commissioner of Patents,

59. In re Hien, 166 U. S. 432, 41 L. Ed. 1066.
the Commissioner, upon such facts being brought to his attention by motion of the appellee, duly served upon the appellant or his attorney, may take such further proceedings in the case as may be necessary to dispose of the same, as though no notice of appeal had ever been given."

This rule is strictly enforced.64

§ 92. What matters appealable.

No appeal lies from the Commissioner of Patents except in the case of a final order.65 His decision dissolving an interference is not appealable,66 nor is a requirement for division.67

As a general rule the Court of Appeals will not review the discretionary orders of the Patent Office, such as its rulings upon motions to reopen a case for the introduction of alleged newly discovered evidence,68 or upon motions for leave to amend a preliminary statement.69 Even his ruling upon the question of striking an application from the files of the Patent Office will not be disturbed unless there is a palpable abuse of his discretion,70 and so of his ruling upon the question whether a design application contains a proper description.71

A decision denying the right of a party to make a claim is appealable as an ancillary question in an interference case.72

In one of its opinions the Court of Appeals of the District of Columbia has said: "The jurisdiction of this court to entertain appeals from the Commissioner of Patents is limited to two classes of decisions, namely, a final rejection of an application for a patent, and a final award of priority to one of the parties in an interference case." It has been settled also that the question of the right of a party in an interference to make the claims of the issue is one that may be raised, decided, and brought up as an ancillary question necessarily involved in that of priority. The order dissolving the interference on that ground is, itself interlocutory, and cannot be appealed from independently of a final decision putting an end to the litigation through an award of priority to the rival applicant. When that final award has been made the interlocutory order may be reviewed in an appeal therefrom, but not otherwise."

§ 93. The scope of the appellate review.

In its consideration of interference cases the Court of Appeals will not pass upon the patentability of the alleged invention, but will regard that question as concluded by the decision of the Commissioner of Patents, and will confine its examination of the record to the question of priority. It will decline jurisdiction of the question of priority when the Patent Office has expressly reserved for determination at some future time the question of the patentability of the invention. The question of interference in fact is presumed to have been finally

determined in the Patent Office and will not be reviewed on appeal except in very rare and exceptional cases.\textsuperscript{78} An order of the Commissioner dissolving the interference as to certain counts will not be reviewed,\textsuperscript{79} nor will a recommendation of the Examiners-in-Chief that has not been adopted by the Commissioner.\textsuperscript{80} Similarly the court will not consider the question as to the operativeness of the disclosure of one of the parties,\textsuperscript{81} or the question of the sufficiency of the disclosure of an application involved in an interference.\textsuperscript{82}

\textsection{94. The weight given the Patent Office decisions on appeal.}

Where the three tribunals of the Patent Office have been in accord in their opinions the appellant must show plain error in order to reverse the decision of the Commissioner.\textsuperscript{83}

This rule applies with peculiar force to an ex parte appeal where all of the tribunals of the Patent Office have denied the existence of patentable novelty in the


application. Where the question of priority is doubtful, the decision of the Commissioner is usually persuasive.

§ 95. Mandamus to compel action in public use proceedings.

The writ of mandamus has been so often invoked to direct the action of the Commissioner of Patents in proceedings in the Patent Office that it is appropriate to note the statement which the Court of Appeals of the District of Columbia has formulated as to the purpose of the writ.

"The function of the writ of mandamus in the law is well settled. It lies simply for the enforcement of the performance of some act or duty required by law to be performed in the performance of which the applicant for the writ is interested or by the non-performance of which he is aggrieved or injured, and when there is no other specific legal remedy."  

It seems, within the doctrine thus expressed, that the protestant in a public use proceeding has no "legal interest" which will give him the right to apply for mandamus to review any action of the Commissioner relative to the public use proceeding.

In the case from which this conclusion is drawn the protest was filed, the public use proceedings were instituted, and the order directing the investigation of the question of public use was subsequently set aside. The protestant applied to the Supreme Court of the District

of Columbia for a writ of mandamus to compel the Commissioner to reinstate the public use proceedings, and to recognize the petitioner as a party in interest in the proceedings when reinstated; the writ being sought, in the latter regard, because the Commissioner had refused the request of the protestant to be furnished with a copy of the application involved. In refusing the writ, the court said:

"In order to maintain an application for a mandamus upon a public officer as to his duty, I think the authorities are very clear that he (the protestant) must have a legal interest in the matter. It must be something more than a mere commercial interest, an interest such as he avers he has, that is, that he has built some factories and invested money in machinery and buildings for the purpose of manufacturing this article, and his business would be injured by the issuance of a patent to the present applicant. He claims that although such a patent might really be worthless, and he might be entitled to show it if the patentee should ever sue him for an infringement of it, yet he would be injured, inasmuch as the issuing of the patent would cast a cloud upon his right to manufacture, and would enable the patentee to disturb and annoy him, and prevent his enjoying the profits from the manufacture of the article which he now enjoys, and which he says he is entitled to enjoy as matters now are.

"That, I am inclined to think, is not such an interest as would enable him practically to ask for an injunction, although that is not the form in which the matter stands at this time; but that is what it amounts to. He calls upon this court to command the Commissioner of Patents to assume a certain position with reference to the consideration of the matter of granting a patent to Macdonald, which practically amounts to an injunction
by this court upon the Commissioner enjoining him from proceeding in the regular consideration of the application of Macdonald for a patent. * * * The interest of the relator, such as it is, is commercial. It is not a legal interest. If the proceeding is not allowed, and if the patent should be issued, the only way in which he could be disturbed would be by a suit for infringement upon the patent; and that he has expressly, by act of Congress, the right to defend, and to interpose the matter which he now sets up as the reason for the issuing of the writ of mandamus. He would have the right to set that up as a complete defense to any action which the patentee might bring for infringement of that patent.

"That, it seems to me, gives to the relator all the remedy to which, in law, he is entitled. If he has placed himself in a position where he is liable to have some litigation, it is not a matter which, under the circumstances stated in this petition of the relator, would entitle him to the benefit and to the relief which he claims by way of mandamus." 87

CHAPTER VI.

CONSTRUCTION OF LETTERS PATENT.

§ 96. Letters Patent are contracts.

The construction of letters patent for invention involves, in the first instance, a clear comprehension of their intrinsic character. But two of their characteristics need be alluded to by way of introduction. The right created by their issuance is a public franchise, 88 of which the letters patent are the grant. 89 Quoting from one of the leading opinions of Mr. Chief Justice Marshall, "a contract executed is one in which the object of contract is performed; and this, says Blackstone,

88. Seymour v. Osborne, 78 U.
differs in nothing from a grant." 90 Judge Sanborn has said that "A patent is a contract by which the government secures to the patentee the exclusive right to vend and use his invention for a few years, in consideration of the fact that he has perfected and described it and has granted its use to the public forever after." 91 "Letters patent may well be regarded in the light of a quasi contract, without disturbance of their character and object, a contract between the government and the patentee. The object of the patentee is to secure to himself complete control, the monopoly of his invention, and the use of it as a certain source of income. The object sought by the government is to obtain from the inventor a clear, definite, precise description of the invention for the public good. These constitute mutual considerations for the proposed contract evidenced in the letters patent. Therefore, the letters patent should embrace both of these objects. If either be omitted, or be so disguised in language as to be wanting in preciseness, a practical fraud is committed by the one or the other party to the contract, inasmuch as the end sought is not attained. Thus it is just and proper for the protection of the patentee, and as well for the protection of the public, that in construing the terms of the specification and claims of letters patent there would be no departure from well-established rules. Any other method would but carry with it confusion and uncertainty." 92


In considering the construction of letters patent the elementary rule is that their construction is for the court

90. Fletcher v. Peck, 6 Cranch 37, 136, 3 L. Ed. 328.
as a question of law. The testimony of experts as to
the construction of letters patent is therefore inadmis-
sible, though they may explain terms of art employed
therein and they may testify to facts which are of
controlling influence in their construction. Questions
of identity are questions of fact, and the proper subject
of expert testimony.

§ 98. Construction not permissible when construction is not
needed.

Judge Coxe has stated this doctrine in the terms of
its last analysis, as follows: "Construction may be re-
sorted to when there is something to construe; when,
however, the language used can have but one meaning
that meaning must be adopted no matter what the con-
sequences may be."

And speaking for the Circuit Court of Appeals of the
Third Circuit, Judge Acheson has said "This is a claim
for a combination. Its terms are explicit and clear. It
needs no interpretation. It speaks for itself. The Court
must take the claim as it finds it."


It is a matter of great delicacy, if not of impossibility,
to arrange in the order of their relative importance the
canons of construction applied by the courts in the in-
terpretation of letters patent. As in all other bodies of

93. Winans v. Denmead, 15 Howard, 330, 14 L. Ed. 717; Coupe
94. Corning v. Burden, 15 How-
ard, 252, 14 L. Ed. 683; Waterbury
Brass Co. v. New York Brass Co.,
95. Loom Co. v. Higgins, 105
U. S. 580, 26 L. Ed. 1177.
Rep. 203.
97. Tyler v. Boston, 74 U. S.
(7 Wallace) 327, 19 L. Ed. 93.
98. Safety Oiler Co. v. Scovill
99. Pittsburg Meter Co. v.
legal rules, we find them to have great interdependence, but, in their entirety to present a symmetrical whole. It is manifest, however, that the first test to be applied to a given patent to determine its scope, is that of determining whether the inventor has contributed anything to the knowledge of mankind; whether his invention is a generous contribution to a broad and important art, a mere step forward in such an art, a substantial advance in an art of limited boundaries, or but a limited advance therein. We may therefore formulate this group of rules.

**GROUP 1. The Patent in its relation to the prior Art.**

§ 100. Rule 1. Letters patent are always construed in the light of the prior art.

According to the place they occupy in the arts to which they appertain, patents are said to be primary (or pioneer), or secondary. It is manifest that a great invention such as that of wireless telegraphy, is primary in its character. But for the purposes of construction a patent may be far from being great or of material advancement to science, and yet be "a pioneer in its limited field." 100

The prior art to be considered includes prior inventions of the same inventor, 101 and prior foreign patents to the same inventor. 102

It has been said by the Circuit Court of Appeals for the Eighth Circuit that "the question of infringement or non-infringement must be determined by the limitations placed upon (the) patent by the state of the art when it was issued;" 103 and, in a later case, "the claims

and specifications of every patent must be read and construed in the light of a knowledge of the state of the art when it was issued. * * * The question of infringement or non-infringement in this case, as in every case, must be determined under this rule by the limitations placed upon the patent by the state of the art when it was issued, and by the specification and claims of the inventor.”

104 In the case first quoted from, the learned court cites McCormick v. Talcott,105 in support of the doctrine. McCormick v. Talcott has no such statement of law, and contains no facts which could support such a statement. The case involved the McCormick Reaper patents of 1845 and 1853, the latter being the reissue of an original dated 1847. The patents referred to by the Supreme Court as exhibiting the state of the art were Dobbs, English, of 1814; McCormick of 1834 and Phillips of 1841. Consequently this doctrine of the Eighth Circuit is equally without support in precedent or reason. For why should the inventor suffer by what has intervened between the filing of his application and the issuance of his patent?

On the contrary, the holdings cited are directly opposed to the established doctrine that the state of the art is to be shown as of the date of the invention.

“Evidence of the state of the art is admissible in actions at law under the general issue without a special notice, and in equity cases, without any averment in the answer touching the subject. It consists of proof of what was old and in general use at the time of the alleged invention. It is received for three purposes and none other—to show what was then old, to distinguish what

was new, and to aid the Court in the construction of the patent.”

§ 101. The interpretation of patents according to their position in the arts.

There is no hard and fast classification of letters patent based upon the value of their contributions to public knowledge. The fundamental rule is that pioneer patents are liberally construed; and what is meant by “pioneer” is thus defined by Judge Colt: “Where a patent represents a marked advance in the art (for example, where an inventor for the first time accomplishes a certain result by organizing several groups of instrumentalities into a single automatic machine, as in the Morley patent for sewing shank buttons to a fabric, or in the Reece patent for a buttonhole sewing machine), such a patent is called a ‘pioneer;’ and the courts, in its construction, have adopted a liberal rule with respect to equivalents.”

As to patents whose contribution to science is the minimum that will support a patent as valid, Judge Sanborn has said, “one who merely makes and secures a patent for a slight improvement on an old device or combination, which performs the same function before as after the improvement, is protected against those only who use the very device or improvement he describes and claims, or mere colorable evasions of it.”

But what of those patents that are within neither of these classes? There are necessarily many which are of considerable, many of very substantial, advancement to their arts which are entitled to an expanding range of equivalency according to their standing in those arts. This is the established rule. In speaking of a sewing-machine patent, Judge Van Devanter has said, "we regard it as neither primary nor a slight improvement on the prior art, but as possessing enough of patentable novelty to command a reasonable range of equivalents." 109 The Supreme Court has also recognized the rule as to classifying patents for the purpose of determining the range of equivalency to which they are entitled. Mr. Justice Jackson said, "the range of equivalents depends upon the extent and nature of the invention." 110

§ 102. Rule II. The patentee is bound by a statement as to the prior art in his specification.

"The patent is, as is well said by counsel for defendant in their brief, the title deed through which the complainant must derive all his rights. It is the grant of a monopoly, and, with rare exceptions, every statement of the prior state of the art therein contained bears upon the construction, and is a limitation of the grant. The description in the specification of the existing art, and of the applicant's improvements, form the representations upon which he obtains the grant. Having done so, he is estopped to say that his representations were incorrect. If the recitals of the state of the art do


not tend to limit, explain, or nullify the grant, they are of no possible pertinence, even if the same facts were fully proved aliunde. If, on the other hand, they do have such tendency, the patentee is bound thereby, and the patent must be construed in the light of the facts so recited." 111

§ 103. Rule III. Patents of a primary character are liberally construed.

"Where an invention is one of a primary character and the mechanical functions performed by the machine are, as a whole, entirely new, all subsequent machines which employ substantially the same means to accomplish the same result are infringements, although the subsequent machine may contain improvements in the separate mechanisms which go to make up the machine." 112 "If one inventor precedes all the rest, and strikes out something which includes and underlies all that they produce, he acquires a monopoly, and subjects them to tribute." 113

"The more meritorious the invention, the greater the step in the art, the less the suggestion of the improvement in the prior art, the more liberal are the courts in applying in favor of the patentee the doctrine of equivalents. The narrower the line between the faculty exercised in inventing a device and mechanical skill, the stricter are the courts in rejecting the claim of equivalents by the patentee in respect of alleged infringements." 114


§ 104. Rule IV. Patents of a secondary character receive a close construction.

"If the advance toward the thing desired is gradual, and proceeds step by step, so that no one can claim the complete whole, then each (inventor) is entitled only to the specific form of device which he produces, and every other inventor is entitled to his own specific form, so long as it differs from those of his competitors, and does not include theirs." 115

This rule might be termed one of necessity. With the progress of the arts the patent field becomes so thoroughly tilled that its rewards must become steadily less to the inventor. Yet the language quoted is not strictly adhered to. Even among patents which are not basic or pioneer in character there are enormous differences of scope and contribution to the arts in which they lie. The range of equivalency must be adjusted to respond to the merit of the patent in its art.

GROUP 2. The patent in the light of other extrinsic limitations of its scope.

§ 105. Rule V. The law in force when the patent is granted is the law by which its validity must be tested. 116

Special statutory grants of patents must be construed in the light of the general patent statutes. 117

In the case of a reissue, "the second patent being a continuation of the first one, the rights of the plaintiff must be ascertained by the law under which the original application was made." 118

117. Evans v. Eaton, 3 Wheat. 454, 5 L. Ed. 472; Bloomer v. McQuewan, 14 Howard 539, 14 L. Ed. 532.
118. Mr. Justice McLean, in Shaw v. Cooper, 7 Peters 292, 315, 8 L. Ed. 689.
§ 106. Rule VI. Self-imposed limitations contained in the claims cannot be disregarded.

This rule would seem to be self-evident. The claim being the measure of the rights of the patentee, its limitations are the limitations of his rights. As stated by Judge Townsend, "No principle has been more firmly established and consistently applied, in the Federal courts of last resort, than that the patent must be construed in conformity with the self-imposed limitations contained in the claims. The application of this principle of construction may be invoked in support of the validity of the patent as well as in denial of infringement." 119

The rule as announced by the Supreme Court is, that "if the language of the specification and claim shows clearly what he (the patentee) desired to secure as a monopoly, nothing can be held to be an infringement which does not fall within the terms the patentee has himself chosen to express his invention." 120

This rule should not be disregarded, even in the case of a primary or pioneer invention. 121

§ 107. Rule VII. The patent must be construed in the light of the limitations imposed by the patent office as a condition of the grant. 122

"If a patentee acquiesces in the rejection of his claim on references cited in the Patent Office, and accepts a patent on an amended claim, he is thereby estopped from


120. Mr. Justice Brown, in McClain v. Ortmaryer, 141 U. S. 419, 35 L. Ed. 800.


maintaining that the amended claim covers the combinations shown in the references, and from claiming that it has the breadth of the claim that was rejected." 123 When the practice of the Patent Office was to make references to and deny patents on rejected applications, a patentee who amended his claim upon reference to a device contained in such a rejected application was held estopped to claim the device in question to be an infringement of his amended claim, even though the citation was erroneously made by the Patent Office. 124

But the estoppel is limited to the devices shown in the references, and covered by the claim before amendment. "One who acquiesces in the rejection of his claim because it is said to be anticipated by other patents or references is not thereby estopped from claiming and securing by an amended claim every known and useful improvement which he has invented that is not disclosed by those references." 125

"In patents for combinations of mechanism, limitations and provisos, imposed by the inventor, especially such as were introduced into an application after it had been persistently rejected, must be strictly construed against the inventor and in favor of the public, and looked upon in the nature of disclaimers." 126 A claim


so modified cannot be construed to be as broad as before its enforced modification;¹²⁷ and this rule obtains though the applicant made the amendment under protest, undertaking to seek such broadened construction after issue.¹²⁸

§ 108. Rule VIII. Amendments made to meet the objections of the patent examiner are not to be construed to disclaim the patentee's actual invention, if such construction can be avoided without doing violence to the obvious meaning of the language employed.¹²⁹

The mere statement of the patentee's solicitor of reasons why two claims should be included in one patent does not estop the patentee from claiming what was clearly granted in the patent,¹³⁰ and, generally speaking, language of the applicant's solicitor in addressing the Patent Office, which does not lead to change in the wording of the application, will not prevail to alter or modify the unambiguous language of the patent.¹³¹

This rule is substantially a limitation upon the rule next preceding. The principal rule is an application of the broad doctrine of estoppel; the limitation arises from the equitable doctrine that "an estoppel is not to be implied from circumstances of doubtful import."¹³²

GROUP 3. Letters patent construed according to their terms.

§ 109. Rule IX. A patent is to be interpreted by its own terms.\(^{133}\)

Inasmuch as the inventor is bound by his claims, and matter described but not claimed is presumed to be *publici juris*,\(^{134}\) the construction of letters patent depends upon the construction of their claims.\(^{135}\) "If a claim is not properly described in a patent, the claim is of no validity."\(^{136}\)

"The terms employed to describe an invention are to be interpreted with reference to the art to which it relates, and what a mechanic skilled in the art would be able to do with it."\(^{137}\)

§ 110. Rule X. Patents are to receive a liberal construction, and under the fair application of the rule, ut res magis valeat quam pereat,\(^{138}\) are, if practicable, to be so interpreted as to uphold and not to destroy the patent.\(^{139}\)

Accordingly, "limitations in the terms of the claim do not import any limitation in the construction of the claim, in cases where such limitation is not imposed by

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133. Goodyear Dental Vulcanite Co. v. Davis, 102 U. S. 222-227, 26 L. Ed. 149.
138. "That the thing may rather have effect than to be destroyed." Bouvier Dict. Title "Maxims."
the state of the art."" 140 "This principle is not to be carried so far as to exclude what is in it (the patent), or to interpolate anything which it does not contain. But liberality, rather than strictness, should prevail where the fate of the patent is involved, and the question to be decided is whether the inventor shall hold or lose the fruits of his genius and his labors." 141

"It is manifest that where two interpretations are possible, that one should be chosen which upholds the patent."" 142

"The duty of the court is to so construe claims as, without doing violence to the language used, to give the patentee what he has actually invented. In other words, 'to make the claim commensurate with the invention.'" 143

The rule here under consideration is what has been styled by the English Courts and text writers as the doctrine of "Benevolent Interpretation." It has been the subject of frequent consideration in the English Courts. The late Sir George Jessel said of this doctrine:

"I am anxious, as I believe every judge is who knows anything of patent law, to support honest bona fide inventors who have actually invented something novel and useful, and to prevent their patents being overturned on mere technical objections or on mere cavillings with the language of their specifications, so as to deprive the inventor of the benefit of his invention; that is sometimes called a benevolent

mode of construction; perhaps that is not the best term to use, but it may be described as construing the language of the specification fairly, with a judicial anxiety to support a really useful invention, if it can be supported by a reasonable construction of a patent; beyond that the benevolent mode of construction does not go." 144

The expression was criticised by Lindley, L. J., as follows:

"I do not like the expression 'benevolent interpretation.' I do not believe in it. The question is whether a given construction is the true construction; but, of course, if any patent is capable of more constructions than one, the general rule would be applied that you would put upon it that construction which makes it a valid patent rather than a construction which renders it invalid." 146

Lord Esher referred to the rule in explicit terms as follows:

"I am clearly of opinion that, whether the patent be a pioneer patent, or a master patent, or a patent of the first invention, or whether it be a valuable patent or a patent for the smallest thing, or whether it be a patent for an improvement, or whatever the patent may be, the canons of construction of the patent are precisely the same. What is more, I am further of opinion that the canons of construction of a patent are the same canons of construction that are to be applied to every written instrument which has to be construed by the Court." 146

§ 111. Rule XI. The whole instrument is to be construed together, for the purpose of ascertaining the meaning of the whole and of every part.

In reference to the application of this rule, an examination of the cases discloses that there are two classes of defective claims.

First, claims which are so deficient in themselves that they cannot be made good from other parts of the patent.

"A claim clearly deficient of itself cannot be made good from other parts of the patent."

A claim "ought not to be enlarged beyond the fair interpretation of its terms."

"We may go to the description to amplify a claim, but we cannot, out of the mere descriptive portion of the patent, wholly create a claim."

Second, claims in which a defect evidently exists, but where it is plain that the claim assumes the existence of the missing elements, and recourse may be had to the descriptive portion of the specification to cure the defect.

Judge Putnam has referred to claims of this character as "that class where reference may be made to the specifications to supply in a claim what it is plain to every one the claim assumes as existing."

This has been styled by Judge Severens "the beneficent rule of construction—that the claims should be construed by the specifications, and that if, looking at both, the Court is able to understand the meaning of the patentee in the language of his claims, and, as so understood, the combination is a practicable one, it will give effect to them according to the apparent purpose." ¹⁵³

§ 112. Rule XII. Devices expressly disclaimed in the specification limit the construction of the patent, and are considered part of the prior art. ¹⁵⁴

This rule, however, is not inexorable. The more liberal application of it has been thus stated. "Everything in the specifications which must be resorted to by the court in construing the claims might be considered as part of the complainant's pleadings. But all portions which merely set out the state of the art, like recitals of facts in contracts or other instruments, are more or less conclusive on the party who sets them up, yet in the eyes of the law explainable, and not absolutely presumed to have been so alleged as to become the subject of demurrer. Especially must this be so with specifications in patents, in which many statements are necessarily complex, relate to unfamiliar topics, and are not easily understood without extrinsic evidence. It is true that, so far as the specifications contain any misrepresentations which, if erroneous, may be presumed to have mis-


led the Patent Office to the detriment of the public, the patentee may be estopped. On the other hand, I do not understand the law has gone so far as to forfeit a valuable patent because the patentee has inaptly, or somewhat inaccurately, described the state of the art, or that it conclusively prohibits him from showing such inaptitude or inaccuracy, if it also appears that the public has not been prejudiced thereby."  

§ 113. Rule XIII. "Nothing described in letters patent is secured to the patentee unless there be in the letters a valid claim covering it."  

"Hence the proper and legal construction of letters patent depends, necessarily, upon the construction of the claims made in them. And it follows that the claim thus becomes the sole criterion, so far as the rights of the patentee are concerned, and by it must be tested the extent and scope of the grant which the letters evidence."  

The function of the claim has been discussed elsewhere. The claim has been tersely and accurately defined by Judge Woolson to be "the measure of plaintiff's rights under his letters," and the Supreme Court has held that the claim is prescribed by the statute "for the very purpose of making the patentee define precisely what his invention is."  

Conversely, if the invention is broader than the claim, the patentee is "held to have surrendered the surplus to the public." Thus a patent may describe both a

157. Ibid.  
new article of manufacture and a new composition of matter. If the article of manufacture only is claimed, the composition of matter is dedicated to the public.\\(^{101}\)

§ 114. Rule XIV. "If a claim is not properly described in a patent, the claim is of no validity."\\(^{102}\)

The meaning of this rule is that an entire absence of description will invalidate the claim. As Judge Shipman has said: "There must be a written description of the invention. A description, which is said to be vague and uncertain, may be made clear by the drawings, which are a part of the specification. An imperfect written description will be aided by correct drawings, but when the written description is not only silent in regard to a feature of the invention, but places the novelty upon a different and described feature, the drawings will not help an entire omission, because the necessity of a written description is made absolute by the statute."\\(^{163}\)

§ 115. Rule XV. A claim may be limited\\(^{104}\) but can never be enlarged, by reference to the description\\(^{165}\) or drawings.\\(^{166}\)


164. McClain v. Ortmayer, 141 U. S. 419, 35 L. Ed. 800.
In the language of Mr. Justice Brown: "The object of the patent law in requiring the patentee to 'particularly point out and distinctly claim the part, improvement or combination which he claims as his invention or discovery,' is not only to secure to him all to which he is entitled, but to apprise the public of what is still open to them. The claim is the measure of his right to relief, and while the specification may be referred to to limit the claim, it can never be made available to expand it." 167

§ 116. Rule XVI. Construction cannot be employed to relieve the patentee from the consequences of self-imposed limitations. 168

But "limitations in the terms of the claim do not import any limitation in the construction of the claim, in cases where such limitation is not imposed by the state of the art." 169

§ 117. Rule XVII. A construction which would make two distinct claims of a patent identical, will be avoided if possible. 170

"The effort should be, in the construction of the letters, to ascribe a purpose to each claim, and to avoid a construction that would deprive a claim of a distinct purpose." 171


§ 118. Rule XVIII. Reference letters and numerals employed in
the claim do not restrict the inventor beyond the limita-
tions imposed by the state of the art.\textsuperscript{172}

As to this principle, Judge Carpenter has said: "In-
asmuch as the claim is not limited by the prior state of
the art, I do not think it should be limited by the fact
of references by letters to the specific mechanism shown
in the patent. A limitation is not to be inferred from any
words in the patent in cases where, from a considera-
tion of the whole patent, taken in connection with the state
of the art, the actual invention appears to transcend
such limitation."\textsuperscript{173}

Where, however, the state of the art is such that the
claim, if sustained, must be limited to the precise con-
struction shown, it will be restricted to the specific parts
shown in the drawings and imparted to the claim by the
reference numerals or letters.\textsuperscript{174}

\textsuperscript{172} Reed \textit{v.} Chase, 25 Fed.
Rep. 94; Delamater \textit{v.} Heath, 58
Co. \textit{v.} Marden, 64 Fed. Rep. 782;
McCormick Harvesting Machine
393, 16 C. C. A. 295; Muller \textit{v.} Tool
357; Sprinkler Co. \textit{v.} Koehler, 82
Rep. 355, 43 C. C. A. 578; National
Brake-Beam Co. \textit{v.} Interchange-
able Brake-Beam Co., 106 Fed.
Rep. 715, 45 C. C. A. 544; Weir \textit{v.}
Morden, 125 U. S. 98, 31 L. Ed.
645; Hendy \textit{v.} Miners' Iron
Works, 127 U. S. 370, 32 L. Ed.
207; Lehigh Valley R. R. \textit{v.} Kear-
ney, 158 U. S. 461, 469, 39 L. Ed.
1055. "It was substantially held
in that (the last named) case
that, if a patentee acquiesces in
the limitations suggested by the
Patent Office and the essential
elements of the claim are alluded
to by reference letters indicating
that the Patent Office intended to
restrict the claim to the particu-
lar device described, a claim to a
broader scope cannot be main-
tained." Hazel, J., in Good Form
759, 761.

\textsuperscript{173} Campbell Printing Press
Rep. 782-785.

\textsuperscript{174} Knapp \textit{v.} Morss, 150 U. S.
221-228, 37 L. Ed. 1059-1062.
Judge Archbald, speaking of this rule, has said:

"But the use of a reference letter in this way does not necessarily limit the inventor to the exact form or configuration of parts which is thus portrayed and described, without regard to possible equivalents thereto. It may or may not, according to circumstances, as the authorities abundantly show. * * * It is after all a matter of construction, in which, while a reference by letters to the drawings and specifications may be regarded, as a rule, as involving a greater particularity of description, than without, the real scope of the invention is nevertheless to be considered and given due weight. No doubt there are cases where, by reason of the limitations imposed by the prior art, it is necessary in order to distinguish and save the invention, to confine it to a certain form or arrangement of parts, which the use of reference letters may effectively serve to do. But where no such necessity exists, a patent is to be taken as a whole and effect given to the invention as it is there disclosed and claimed, in which the reference to the drawings merely goes in with the rest." 175

§ 119. Rule XIX. Each claim is a patent of itself.

"Each claim of the patent standing by itself, is a separate patent for the device covered by the claim." 176

Accordingly, a right to use one claim of a patent containing a plurality of claims, is no defense to a charge of infringement based upon other claims of the same patent.\textsuperscript{177}

This rule has seemed to the author a sufficient answer to many of the requirements for division of applications made by the Patent Office \textit{(ante, § 76)}.

Under the operation of this rule, the invalidity of one claim of a patent having more than one, does not affect the other claims nor impair the validity of the patent.\textsuperscript{178}

\textbf{§ 120. Rule XX.} "Where a claim is fairly susceptible of two constructions, that one will be adopted which will preserve to the patentee his actual invention."\textsuperscript{179}

This rule is a necessary incident of the doctrine of benevolent interpretation, considered under Rule X, \textit{ante}.\textsuperscript{180} It is only to be invoked where there is an actual ambiguity, and cannot be applied where the language of the patent is clear in its terms. In announcing the rule, Mr. Justice Brown said that "if the language of the specification and claims show clearly what he (the inventor) desired to secure as a monopoly, nothing can be held to be an infringement which does not fall within the terms the patentee has himself chosen to express his invention."\textsuperscript{181}


\textsuperscript{178} Carlton v. Bokee, 17 Wall. 463, 21 L. Ed. 517.

\textsuperscript{179} Mr. Justice Brown, in McClain v. Ortmayer, 141 U. S. 419, 425, 35 L. Ed. 800, 802.

\textsuperscript{180} § 110.

\textsuperscript{181} McClain v. Ortmayer, supra.

And, see, Mesick v. Moore, 100 Fed. Rep. 845, 846, where the rule of McClain v. Ortmayer is distinguished from cases where the claim is clearly restricted by the language employed.

\textsuperscript{180} § 110.

\textsuperscript{181} McClain v. Ortmayer, supra.
§ 121. Rule XXI. A missing element may be read into a claim from the description and drawings for the purpose of showing the connection in which the device of the claim is used, and proving that it is an operative device. 182

"We may go to the description to amplify a claim, but we cannot, out of the mere descriptive portion of the patent, wholly create a claim." 183

§ 122. Rule XXII. A missing element cannot be read into a claim from the description and drawings for the purpose of limiting its scope, so that it may be accorded novelty,184 or to subject another to the charge of infringement.185

"It is enough that the patentee did not so word the claim and it is beyond the province of the court to rewrite it."186 "They (the patentees) cannot expect the courts to wade through the history of the art, and spell out what they might have claimed, but have not claimed. * * * But the courts have no right to enlarge a patent beyond the scope of its claim as allowed by the Patent Office. * * * As patents are procured ex parte, the public is not bound by them, but the patentees are. And the latter cannot show that their invention is broader than the terms of their claim, or, if broader, they must be held to have surrendered the surplus to the public."187 In these terms, and for these reasons, the doc-


trine of the rule under consideration has been definitely established.

§ 123. Rule XXIII. "Where a specification by ambiguity and a needless multiplication of nebulous claims is calculated to deceive and mislead the public, the patent is void."¹⁸⁸

This rule was voiced by Mr. Justice Bradley at the conclusion of a vigorous condemnation "of these ingenious attempts to expand a simple invention of a distinct device into an all-embracing claim, calculated by its wide generalizations and ambiguous language to discourage further invention in the same department of industry and to cover antecedent inventions."¹⁸⁹

In the same opinion it is announced that "one void claim * * * does not vitiate the entire patent, if made by mistake or inadvertence and without any willful default or intent to defraud or mislead the public."¹⁹⁰

In its practical application, this rule—itself somewhat ambiguous and nebulous—appears merely to condemn claims of excessive breadth, embodying what Judge Brown has termed "a vague generality which makes them a constant menace to all inventors who may seek to improve the art."¹⁹¹ In his own condemnation of claims of this character, Judge Brown says: "It is a familiar rule that a generalization or definition that is too broad cannot be made good by making an arbitrary

¹⁸⁹. Ibid.
exception of each case that comes within its terms, but which should not have been included. A single contrary example destroys the generalization." 102

§ 124. Rule XXIV. Letters patent must be construed according to their terms even though such construction renders them valueless.

"In short, I am convinced that any man, however skilled, who should undertake to practice the patented process, would necessarily be led, by its terms, to take the view of it which was urged upon the patent office by the solicitor of the patentee, viz., that it 'involves the subjection of the rubber waste to boiling in a strong un-diluted commercial acid;’ and that, therefore, the use of acid and water would be a material departure from it. It is objected to this construction of the patents that it renders them valueless, and the invention as claimed, impracticable; but as no other construction can, in my opinion, be reasonably put upon them, any consequence which results, however serious, must be regarded as unavoidable. As 'the language of the specification and claim shows clearly what he desired to secure as a monopoly, nothing can be held to be an infringement which does not fall within the terms the patentee has himself chosen to express his invention.’" 103


§ 125. Rule XXV. "Form, location and sequence of elements are all immaterial, unless form or location or sequence is essential to the result, or indispensable, by reason of the state of the art. to the novelty of the claim."\textsuperscript{194}

This rule is so intimately connected with the others under consideration that its reasoning is apparent. The reversal of parts, the transposition of parts, or in process cases the reversal or transposition of the steps of the process, are the common artifices of the infringer. Where this displacement of parts or steps, or any other change, does not accomplish a new result, or the old result in a more advantageous way, the doctrine of the rule is applicable.

§ 126. Rule XXVI. An element will not be imported from one claim into another claim, merely for the purpose of sustaining the latter claim, and subjecting another to the charge of infringement.

"In the absence of words which do clearly indicate such a purpose, we are not disposed to import into the claim a feature of construction already protected by another claim, merely for the purpose of sustaining the claim, and subjecting another to the charge of infringement. Such a method of construing the claims of a patent has often been condemned."\textsuperscript{195}


"We know of no principle of law which would authorize us to read into a claim an element which is not present, for the purpose of making out a case of novelty or infringement. The difficulty is that if we once begin to include elements not mentioned in the claim in order to limit such claim and avoid a defense of anticipation, we should never know where to stop." 196

"To imply as elements of a claim parts not named therein for the purpose of limiting its scope, so that it may be accorded novelty, is contrary to a well-settled rule of the patent law." 197

§ 127. Rule XXVII. Where possible, the construction given to claims by the Courts, will follow the construction given to them in the Patent Office.

"It is the settled rule in patent law that claims must stand or fall as made; but it is equally well settled that the claims of a patent are to be construed by reference to the specifications (of which the drawings form a part), and that such reference may be had, not for the purpose of expanding the claim, but for the purpose of defining it and limiting it to the description of the invention. And within certain limits the courts are inclined to


adopt this mode of construction when it is necessary, as in the present case, to save the patent from the objection that the claims are too broad. And this would seem to be all the more safe and permissible where the construction adopted plainly appears to have been the one accepted by the patent office." 198

§128. Rule XXVIII. A claim will not be limited merely because language cannot be found to accurately describe the invention.

"While, in some cases, the voluntary choice of a name may well be regarded as imposing a limitation upon the thing or function which the patentee desires to cover, and an acknowledgment that the standard meaning of a word is an appropriate description and limitation of the thing claimed, such a doctrine is frequently abused and misapplied for the creation of verbal and meritless issues. When it appears that an art is advanced by a novel structure, which in some features resembles old and well-known things, and in other features differs from them, or which is intermediate of things respectively bearing different names, we should be slow to allow debatable implications, arising merely from the choice of a name, to overrule plain text and plain descriptions of things and functions. An inventor makes a thing which is new. He must name it, and, as he cannot usually coin a new word, he must take an old one which fits it approximately. He may, like this inventor, find two old words about equally applicable, but neither of which is exactly descriptive of the invention. He chooses one. He might as well or better have chosen the other. His rights in a patent cause should not turn upon an assump-

tion that he has thrown away all of what he describes except that which, in our opinion, is appropriately described by the general name he has chosen." 199

§ 129. Rule XXIX. The drawing may be referred to in construing an ambiguous claim.

"Whenever a correct drawing of the specific device is attached to the specification, the claims should in all fairness be construed in connection therewith unless they are free from ambiguity or indefiniteness of expression." 200

This rule is an outgrowth of the importance which the drawing has in the patent. Its purpose is to illustrate, and its illustration may always be invoked as an aid to the intelligent understanding and construction of the claim.

§ 130. Rule XXX. A claim for a function is void.

Any bare statement of this rule, which is in terms well established, must carry with it an appreciation of the difficulty appendant upon the interpretation of the word "function." 201 The rule is usually expressed in terms similar to the following:

"A valid patent cannot be secured for a function, a mode of operation, or a result, separate from the means or mechanical devices by which the result is accomplished." 202


It has been elaborated as follows: "The function of a machine or combination is not patentable under our laws. The means, the mechanical device, and that alone, was capable of protection by such a franchise." 203

§ 131. Rule XXXI. A claim functional in terms will be so construed as to restrict it to means, in order to preserve it, where possible. "In this way the court may sustain the validity of the claims, as it is its duty to do when possible." 204

"A valid patent cannot be secured for a function, a mode of operation, or a result, separate from the means or mechanical devices by which the result is accomplished." 205

"Function" is impatentable. But what is "function?" Judge Townsend has said: "It is not always clear what is meant by the use of this elastic and indefinite word 'function.' But it is thought that the assertion of a new function or effect should only be sustained upon proof of novel or unexpected properties or uses capable of producing novel results. We are not aware of any case where a claim for a new function has been sustained in the absence of such element of novelty or unexpectedness." 206

§ 132. Rule XXXII. It is not essential to the validity of a claim that it contain all the elements necessary to an operative machine.

"The law is well settled that a valid combination claim may be taken for a less number of parts than are required for the complete operation of a machine." 207

The reason for the rule is thus stated by Judge Wallace: "Many subcombinations, although new, are not useful, except to perform their appropriate functions in the machine of which they are a part. The description in the patent of the whole machine, and of the means or mode by which the subcombination is brought into cooperative relation with the other parts, usually indicates how the subcombination may effect a useful result. When this is so, the combination need not be operative alone." 208

§ 133. Rule XXXIII. To make a thing in one piece which was formerly made in two or more pieces is not invention. 209

"Nor would the mere fact that the one-piece device was cheaper or more durable constitute invention when


such results were merely such ordinary consequences of
* * * dispensing with joints as would naturally be
anticipated by the workman." 210

"There are cases in which, under very special circum-
stances, such an improvement may show (be) patentable
invention." 211

§ 134. Rule XXXIV. The claims of the patent as issued must be
read and interpreted with reference to the claims rejected
and abandoned in the Patent Office, and cannot be so con-
strued as to be co-extensive with such rejected and aban-
donated claims.

The reason for this rule has been clearly stated by Mr.
Justice Shiras: "An examination of the history of the
appellant's claim, as disclosed in the file wrapper and
contents, shows that, in order to get his patent, he was
compelled to accept one with a narrower claim than that
contained in his original application; and it is well set-
tled that the claim as allowed must be read and inter-
preted with reference to the rejected claim and to the
prior state of the art, and cannot be so construed as to
cover either what was rejected by the Patent Office or
disclosed by prior devices."

"It is quite true that, where the differences between
the claim as made and as allowed consist of mere changes
of expression, having substantially the same meaning,
such changes, made to meet the views of the examiners,
ought not to be permitted to defeat a meritorious claim-

210. Townsend, J., in General
Electric Co. v. Yost Electric Mfg.
Co., 139 Fed. Rep. 568, 570, 71 C.
A. 552.

211. Lurton, J., in Standard
Caster & Wheel Co. v. Caster
Socket Co., 113 Fed. Rep. 162, 165,
51 C. C. A. 109, referring to
Krementz v. S. Cotille Co., 140 J.
S. 556, 37 L. Ed. 558, as an ' il-
ustration of the exception to the
rule—a collar button made of a
single piece of sheet metal, such
buttons having theretofore been
made of two or more pieces sol-
dered together.
ant. While not allowed to revive a rejected claim by a broad construction of the claim allowed, yet the patentee is entitled to a fair construction of the terms of his claim as actually granted." 212

§ 135. Rule XXXV. The words "substantially as described," "substantially as set forth," or the like, are of no force in the claim.

This rule has been often repeated, and its expression has been occasioned by the frequency with which the expressions referred to are used as a termination for the claim. They are superfluous, because, if they are not expressed, they are implied, when that implication is necessary to sustain the claim as against a charge of excessive breadth, or a charge that is for a function, a principle, or a mode of operation.

Turning to the illustrative cases, we find the following:

"Where the claim immediately follows the description of the invention, it may be construed in connection with the explanation contained in the specifications, and when it contains words referring back to the specifications it cannot be properly construed in any other way." 213

"The claims are broadly for 'means' and 'mechanism' to do certain things, perform certain functions, and obtain certain results. In claim 1 the claim is for 'apparatus' on an engine and 'apparatus' on a car capable of operation by a reduction of pressure 'to apply brakes' and 'means' for, etc. That such expressions are too in-


213. Seymour v. Osborne, 11 Wall. 516, 547, 20 L. Ed. 33.
definite, see Ex parte Holt, Ex parte Wilkin, and Ex parte Demming unless used to denote appliances which are no part of the invention. Ex parte Stoughton; Ex parte Stanbridge. But later cases seem to settle the law differently. These claims are not for functions, or principles, or modes of operation, but for 'apparatus' and 'mechanism' and 'means' fully described in the specifications which immediately precede the claims. I think words in the claim referring to the specifications are entirely unnecessary. It is understood that the one refers to the other. Words of reference to the specifications, 'if not expressed in the claim, must be implied, else the patent in many cases would be invalid as covering a mere function, principle, or result, which is obviously forbidden by the patent law, as it would close the door to all subsequent improvements.' Mitchell v. Tilghman cited and approved in Hobbs v. Beach. Within the authorities, I think claims 1 and 2 sufficient and valid, read in connection with the specifications, as they must be, and that they are not for functions or results."

It is curious to note, in these cases, the reference to the description preceding the claims. As the description always precedes the claim, the expression referred to is mere surplusage.

§ 136. Rule XXXVI. The drawings will be referred to for definition of the terms used in the description.

"The drawings accompanying the specification and referred to in the descriptive parts thereof will be examined to ascertain the true meaning of the terms used in describing the invention. Section 4889, R. S. U. S. (U. S. Comp. St. 1901, p. 3382.)" 222

Letters patent have the great advantage of being interpreted by the aid of their self-contained drawings. This rule is merely illustrative of one of the uses of the drawings. The rule also indicates the wide latitude allowed to inapt phraseology in patent soliciting. Even the best available dictionaries are not reliable guides in technical terminology, as every experienced patent lawyer or solicitor knows. The question in interpretation is, What did the applicant mean by this word? not, Did he use the correct word.

§ 137. Rule XXXVII. In a combination claim each element is conclusively presumed as a matter of law to be old, whether old in fact or not.

The foundation of this rule is, that if, among the elements, there is one which is itself patentably new, it must be separately claimed, or it is dedicated to the public by its inventor's failure to claim it.

Thus Judge Baker has said: "The failure to claim either one of the elements separately raises the presumption that no one of them is novel." 223 And Judge


Woods has said: "When a combination is claimed, there arises an implied concession that the elements are old, and not separately patentable." 224

A combination claim is an entity; each element is merely an integer. It is not correct to say of any claim that some specified element is its "distinguishing element." As the omission of any element will destroy the claim, they should all be treated as co-ordinate for the purposes of interpretation and of determining infringement.

§ 138. Rule XXXVIII. A claim that is too broad is void.

This rule relates to claims that in terms extend beyond the real invention of the patent of which they are part. Its most frequent application occurs in cases where the prior art deprives the claim of novelty. As we have seen, the claim must be read in the light of the prior art, and when so read it will be given a sufficiently narrow construction to sustain it if possible. 225 On the other hand, excessive breadth of the claim may be determined not from the prior art, but from the disclosure of the description. It has been expressly held that an inventor cannot "speculate on the equivalents of his claimed invention, and thereby oblige the public to resort to experiments in order to determine the scope of the claims of his patent." 226 And the courts have uniformly condemned claims embracing all means, however differing in principle or mode of operation from the means described in the patent. 227

§ 139. Rule XXXIX. Immaterial omissions will not invalidate a claim.

The omissions indicated by this rule are omissions of those matters which are of common knowledge or are necessarily implied by the description and can be readily supplied by those skilled in the art to which the invention relates. In announcing this rule Mr. Justice Brown said: "Admitting that additional elements are necessary to render the device operative, it does not necessarily follow that the omission of these elements invalidates the claim, or that the precise elements described in the patent as rendering it operative must be read into the claim. If Steward were in fact the first to invent the pivotal extension to a butt-adjuster, he is entitled to a patent therefor, though the infringer may make use of other means than those employed by him to operate it. In such case any appropriate means for making it operative will be understood. Otherwise the infringer might take the most important part of a new invention and, by changing the method of adapting it to the machine to which it is an improvement, avoid the charge of infringement. The invention of a needle with the eye near the point is the basis of all the sewing machines used; but the methods of operating such a needle are many, and if Howe had been obliged to make his own method a part of every claim in which the needle was an element, his patent would have been practically worthless." 228

Of this doctrine, Judge Wales has said: "The law on this subject is too well settled to be open for discussion. A patentee is not required to claim the entire machine in each claim. Each of the claims at issue is for a complete combination of the spindle and its supporting tube.

and devices, and there was no necessity for expressing in terms the devices for revolving the spindle. Any appropriate means for operating it will be understood. The omission of the sleeve whirl does not affect the validity of either one of the claims, which belong to that class where reference may be made to the specifications to supply in a claim what it is plain, to any one skilled in the art, is a necessary incident." 229

§ 213. Rule XL. A claim for an abstract principle or law of nature is void.

This rule has been recognized throughout the history of the American Patent System. Mr. Justice Gray, on Circuit, said: "The discoverer of a natural force or a scientific fact cannot have a patent for that." 230

Judge McCrary elaborated the same idea as follows: "There can be no patent upon an abstract philosophical principle. Laws of matter and properties of matter are presumed to be known to and subject to be utilized by all alike. But application of any one or more of these laws or principles to a practical object, and so as to secure a useful result not previously obtained, is patentable." 231

Where it was argued in the defense of a charge of infringement of a process patent that the patent did not disclose the scientific principle of the process, Judge Morris showed the connection between the rule under consideration and the familiar rule that the inventor need not describe the principle of his invention by saying: "He describes the process, the mode of operation and the result, and the means for obtaining it. The scientific principle is not part of the process, is not patentable, and need not be set forth." 232


232. Emmerson Company v.
§ 141. Rule XLI. A new result is not necessary to the validity of a patent.

Novelty of result is strong evidence of patentability. The cases abound with variations of the phrase, "If a new combination and arrangement of known elements produce a new and beneficial result, never attained before, it is evidence of invention." 233

But it by no means follows that a new result is an indispensable requisite of a valid patent. If an inventor "has greatly increased the effectiveness of the mechanism he claims, his patent may be sustained, although his elements are old and no original result is accomplished." 234

CHAPTER VII.
WHAT CONSTITUTES INVENTION.

§ 142. The question broadly unanswerable.

What constitutes invention within the meaning of the patent act, is the unanswerable question of patent law. It involves the mental conception of one (the court) concerning the transpired mental processes of another (the alleged inventor). It involves the mental conception by a court of the state of the art into which the alleged inventor has entered, and the weighing of his accomplishment in the light of the state of the art to determine whether his contribution to its advancement was within the Domain of Mechanical Skill, or crossed the boundaries of that domain and entered the Realm of Invention. That the subject-matter of a valid patent must not only be new and useful, but the product of the exercise of the inventive faculty, is manifest from the lan-

guage both of the constitutional provision and of the patent act. In this regard Mr. Justice Blatchford has said:

"The provision of the Constitution (art. 1, § 8, subd. 8) is, that the Congress shall have power 'to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.' The beneficiary must be an inventor and he must have made a discovery. The statute has always carried out this idea. Under the Act of July 4, 1836, 5 Stat. at L., 119, § 6, in force when these patents were granted, the patentee was required to be a person who had 'discovered or invented, a 'new and useful art, machine, manufacture or composition of matter,' or a 'new and useful improvement in any art, machine, manufacture or composition of matter.' In the Act of July 8, 1870, 16 Stat. at L., 201, § 24, the patentee was required to be a person who had 'invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement thereof;' and the language is reproduced in section 4886 of the Revised Statutes. So, it is not enough that a thing shall be new, in the sense that in the shape or form in which it is produced it shall not have been before known, and that it shall be useful, but it must, under the Constitution and the statute, amount to an invention or discovery." 235

The rule thus laid down has been repeatedly re-affirmed.236

The conclusion that no rule of general application exists whereby the existence of invention can be affirmed or negatived in a particular case, is substantiated by Mr. Justice Brown in the following language:

"What shall be construed as invention within the meaning of the patent laws has been made the subject of a great amount of discussion in the authorities, and a large number of cases, particularly in the more recent volumes of reports, turn solely upon the question of novelty. By some, invention is described as the contriving or constructing of that which had not before existed; and by another, giving a construction to the patent law, as 'the finding out, contriving, devising, or creating something new and useful, which did not exist before, by an operation of the intellect.' To say that the act of invention is the production of something new and useful does not solve the difficulty of giving an accurate definition, since the question of what is new as distinguished from that which is a colorable variation of what is old, is usually the very question in issue. To say that it involves an operation of the intellect, is a product of intuition, or of something akin to genius, as distinguished from mere mechanical skill, draws one somewhat nearer to an appreciation of the true distinction, but it does not adequately express the idea. The truth is the word cannot be defined in such manner as to afford any substantial aid in determining whether a particular device involves an exercise of the inventive faculty or not. In a given case we may be able to say that there is present invention of a very high order. In another we can see that there is lacking that impalpable something which distinguishes invention from simple mechanical skill. Courts, adopting fixed principles as a guide, have by a process of exclusion de-
terminated that certain variations in old devices do or do not involve invention; but whether the variation relied upon in a particular case is anything more than ordinary mechanical skill is a question which cannot be answered by applying the test of any general definition." 237

The necessary result of this absence of definite test of invention has been to produce great uncertainty of the outcome of any issue involving the question of invention. Co-ordinate courts of great and equal ability have at times decided the issue involving the same device with opposite results.

Of this difficulty, Judge McPherson has said: "It is often very difficult to draw the line between invention and skill, and different minds may draw it at different points." 238

In the language of Judge Taft: "The line between mechanical ingenuity and invention is sometimes very hard to draw. It is a question of fact, and one upon which the opinions of men differ." 239

Mr. Justice Brown has said "the line between invention and mechanical skill is often an exceedingly difficult one to draw." 240

The effort of the student to ascertain from the authorities the nature of the inventive act, is often hampered by the want of familiarity of the courts with even the nomenclature of the patent law. Thus we find the

237. McClain v. Ortmayer, 141 U. S. 419-427, 35 L. Ed. 800. "This question of patentability is often one of very great embarrassment. The patent law requires the presence of what is called invention, as contra distinguished from constructive ability; but it furnishes no test, for all cases, by which they can be discriminated." Lowell, J., in Dunbar v. Albert Field Tack Co., 4 Fed. Rep. 543-544.


Court of Appeals of the Sixth Circuit, in the course of an otherwise well considered opinion, using the following expression: "While it may not always be helpful in determining whether a given act or result involves the exercise of constructive faculty rather than mechanical skill," etc.\(^\text{241}\) This language is employed in the course of a discussion of the question of invention, and the only possible meaning of the terms quoted indicates that "constructive faculty" is used as being synonymous with "Invention." Thus the misuse of words has rendered obscure an opinion which otherwise might have been illuminative.

Judge Grosscup has formulated a very useful definition of invention, as the term relates to improvements. "Invention, in the nature of improvements, is the double mental act of discerning, in existing machines or processes or articles, some deficiency, and pointing out the means of overcoming it,"\(^\text{242}\) which is a neat paraphrase of the adage, "necessity is the mother of invention."

\(\text{\S\ 143. The rules for testing invention.}\)

It is, perhaps, an embarrassment to a scientific determination of the existence or non-existence of invention that the rules laid down by the decisions are for the most part negative in character. The courts have proceeded upon the theory that, granted that invention is impossible of positive definition, the nearest approximation of accuracy in determining its existence would be attained by enumerating the things that do not constitute invention and whose presence affirm the absence of invention, upon the principle \textit{enumeratio unius est exclusio alterius}. We will now consider these rules and their exceptions.


§ 144. Rule I. Valid Letters Patent must be based upon an invention.

"If it is a useful article, and is new, it is the proper subject of a patent, provided it involved invention to produce it." 243

"To produce that which is new and useful, even though it requires ability of a high order, will not constitute invention if inventive genius is not involved." 244

All of which resolves itself into the doctrine that novelty in fact is not identical with patentable novelty.

§ 145. Rule II. Letters Patent are void, even if the thing patented is new and useful, if it does not embody invention.

"It is not enough that a thing shall be new, in the sense that, in the shape or form in which it is produced, it shall not have been before known, and that it shall be useful, but it must, under the Constitution and the statutes, amount to an invention or discovery." 245

This rule is a paraphrase of Rule I, § 144.

§ 146. Rule III. Rules I and II, §§ 144, 145, apply to patents for designs as well as to other classes of patents.

"The law applicable to this class of patents does not materially differ from that in cases of mechanical patents, and 'all the regulations and provisions which apply to the obtaining and protecting of patents for inventions or discoveries—shall apply to patents for designs.' Section 4933, R. S. U. S. The same general principles of construction extend to both. To entitle a party to the


benefit of the act, in either case, there must be originality and exercise of the inventive faculty.” 246

For the discussion of designs as the proper subjects of letters patent, see ante, § 58.

§ 147. Rule IV. The presence or absence of invention must be determined by the facts in each particular case.

The reason for this rule resides in the fact that “invention” is incapable of definition. “The truth is the word cannot be defined in such manner as to afford any substantial aid in determining whether a particular device involves an exercise of the inventive faculty or not. In a given case we may be able to say that there is present invention of a very high order. In another we can see that there is lacking that impalpable something which distinguishes invention from simple mechanical skill. Courts, adopting fixed principles as a guide, have by a process of exclusion determined that certain variations in old devices do or do not involve invention; but whether the variation relied upon in a particular case is anything more than ordinary mechanical skill is a question which cannot be answered by applying the test of any general definition.” 247

§ 148. Rule V. Letters Patent are void for want of invention only where the absence of invention is clear.

“Unless there is clearly no invention in what is claimed to be such, the patent should be sustained.” 248

This rule is a necessary supplement to the general rule that the patent itself is prima facie evidence “as to every


247. Mr. Justice Brown, in McClain v. Ortmayer, 141 U. S. 419, 427, 35 L. Ed. 800.

point touching the validity of a claim."" 249 But it is settled that "the presumption which this rule affords is sometimes slight and sometimes renders but little assistance." 250 It has been said that "the court should give due consideration to the action of the patent office, but should not permit that action to control its deliberate judgment when it is manifest that there is no invention." 251

§ 149. Rule VI. The length of time required in evolving the thing patented does not determine the question of invention.

"Just where the line of invention lies in an accomplished result is frequently difficult for the courts to determine. That it must extend beyond the merely novel and useful, and into the domain of original thought has been determined. The extent of the mental process, however, is immaterial. The result may come out of long consideration, or in may be the revelation of a flash of thought." 252

§ 150. Rule VII. The existence or non-existence of invention "does not necessarily depend upon the amount of thought, or even of experiment, which may have been had in reaching the results." 253

The rule applies even where the result was attained by accident, 254 or from suggestions from ordinary and familiar objects in nature or in art. 255

Notwithstanding this rule, it is often important to show to court or jury the course by which the invention was evolved. The long and weary search of the inventor, particularly when he is one skilled in the art, is very persuasive at times, and is a fact which should always be developed in the evidence, when it exists.

§ 151. Rule VIII. That the subject matter of the patent was produced accidentally does not negative the presence of invention.

"An invention is not like a will, depending upon the intention. It is a fact, and if the fact exists, it does not appear to be material whether it came by design or accidentally without being hidden." 256

§ 152. Rule IX. The mere exercise of mechanical skill is no invention. 257


"A device which displays only the expected skill of the maker's calling, and involves only the exercise of ordinary faculties of reasoning upon materials supplied by special knowledge, and facility of manipulation resulting from habitual, intelligent practice, is in no sense a creative work of the inventive faculty, such as "the Constitution and patent laws aim to encourage and reward."" 258

"Long practice and observation naturally lead those familiar with the arts to the perception of new adaptations. Mechanical education and skill, fostered and promoted by the public, are rapidly advancing in every direction, and there is a constant and universal endeavor in handicraft to utilize that which is known, and press it into service in the practical arts. But the steps of this normal progress and improvement are not invention, nor the subject of monopoly to one who, in the exercise of


the 'skill of his calling,' has put an old thing to a new use." 259

In contrasting invention and mechanical skill Judge Nixon has said, "Invention indicates genius and the production of a new idea. Mechanical skill is applied to an old idea and suggests how it may be modified and made more practical." 260

"Mere mechanical skill can never rise to the sphere of invention. The latter involves higher thought, and brings into activity a different faculty. Their domains are distinct. The line which separates them is sometimes difficult to trace; nevertheless, in the eye of the law it always subsists. The mechanic may greatly aid the inventor, but he cannot usurp his place." 261

§ 153. Rule X. The result of study, effort and experiment may not amount to invention. 262

The primary reason underlying this rule is, that letters patent are addressed to those who are skilled in the arts to which they relate. 263 Consequently, a display of ability which may, in the language of Judge Dallas "astonish the unskilled," 264 may not involve invention, but be strictly within the domain of mechanical skill.

What has been said in connection with Rule VII, ante, § 150, should be considered with this rule.

§ 154. Rule XI. The simplicity or obviousness of the thing evolved does not negative the presence of invention.

"We cannot yield our assent to the argument, that the combination of the different parts or elements for attaining the object in view was so obvious as to merit no title to invention. Now that it has succeeded, it may seem very plain to any one that he could have done it as well. This is often the case with inventions of the greatest merit." 265

The application of this rule is one of the most difficult tasks involved in the presentation or decision of the question of invention. While the rule has been laid down by the Supreme Court in the language above quoted, patents have been repeatedly overthrown and held void for want of invention because the subject-matter was held to be so simple and obvious in the art to which it relates, that it would spontaneously have occurred to any mechanic skilled in the art. The rule, therefore, must be read with this limitation: That the simplicity or obviousness of the device must not be of such degree as will leave the accomplishment within the domain of mechanical skill and deprive it of the dignity of invention. The illustrative cases are numerous. 266

§ 155. Rule XII. To apply an old process to old material is not invention, nor is the resulting product an invention. 267

This rule is but an application of the doctrine of analogous use. See § 164.

§ 156. Rule XIII. The mere change of form is not invention.  

"Under our law a patent cannot be granted merely for a change of form. The Act of February 21, 1793, § 2, so declared in express terms; and though this declaratory law was not re-enacted in the Patent Act of 1836, it is a principle which necessarily makes part of every system of law granting patents for new inventions. Merely to change the form of a machine is the work of a constructor, not of an inventor; such a change cannot be deemed an invention."  

It is to be noted that the rule is limited to a mere change of form, that is to say, such change of form as occurs where the same idea of means, mode of operation and result are to be found in both the original and the changed form.

In the language of Mr. Justice Curtis: "To change the form of an existing machine and by means of such change to introduce and employ other mechanical principles or natural powers, or, as it is termed, a new mode of operation, and thus attain a new and useful result, is the subject of a patent."  

§ 157. Rule XIV. Mere change of size, weight or rigidity, is not invention.

In the leading case under this rule, Mr. Justice Nelson said: "Nor does the enlargement of the organization of the machine compared with the old one, afford any ground, in the sense of the patent law, for a

269. Ibid.  
270. Ibid.  
INVENTION. 231

patent. This is done every day by the ordinary mechanic in making a working machine from the patent model." 274

"The substitution of the heavier wheel was not the product of a creative mental conception, but merely the result of the exercise of the ordinary faculties of reasoning upon the materials supplied by a special knowledge, and the facility of manipulation which results from its habitual and intelligent practice." 275

§ 158. Rule XV. "It is not invention to so enlarge and strengthen a machine that it will operate on larger materials than before." 276

This rule is an application of the general doctrine that the mere exercise of mechanical skill is not invention. See ante, § 152.

§ 159. Rule XVI. It is not invention to merely change the direction of motion of a machine. 277

"Nor is it an invention to apply to vertical uses a device which has previously been used in other connections to accomplish horizontal movement." 278

This, again, is but one way of applying the rule as to mere mechanical skill. See ante, § 152.

§ 160. Rule XVII. In determining the question of invention it is presumed that the patentee was fully informed of everything which preceded him.

"In determining the question of invention, 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 the patent laws sometimes fail to do justice to an individual who may, with the light he had before him, have exhibited an inventive talent of a high order, and yet be 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, R. S. U. S.) 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." 279

This rule is one of public necessity. The things which are of common right to use cannot be monopolized under the patent law, because there is a complete failure of consideration for the grant.

§ 161. Rule XVIII. The substitution of equivalents is not invention.

Equivalency may be invoked, under this rule, as a test of invention, although the question of equivalency usually arises as an incident to the issue of infringement. In the language of Mr. Justice Swayne, "the substitution of equivalents is not such invention as will sustain a patent." 280 The application of this rule depends so much upon the state of the art involved that its application is necessarily attended with uncertainty.

An equivalent may be broadly defined as a device having substantially the same function, mode of operation and result as another which has preceded it in point of time. The determination of the question of equivalency

depends upon the advancement of the art at the time the question is raised, and is, therefore largely dependent upon the state of the art.\textsuperscript{281}

Is not the application of this rule, however, addressed to the question of novelty, rather than invention? It is, within the true meaning of the term "novelty" in the patent law. It serves to illustrate the distinction between mere novelty and patentable novelty. In a young art, a degree of novelty may be patentable which in an older art would not. This is merely the reverse of the axiom that a pioneer patent is entitled to a broader range of equivalency than one which is secondary in character.

\textbf{§ 162. Rule XIX.} Mere omission of parts with corresponding loss of function, is not invention.

"A reconstruction of the machine so that a less number of parts will perform all the functions of the greater may be invention of a high order, but the omission of a part, with a corresponding omission in function, so that the retained parts do just what they did before in the combination, cannot be other than a mere matter of judgment, depending upon whether it is desirable to have the machine do all or less than it did before."\textsuperscript{282} In affirming the case from the opinion in which this statement of the rule is quoted, Mr. Justice Brown said: "We are satisfied that a mere severance of the double spring does not involve invention, at least in the absence of conclusive evidence that the single spring performs some new and important function not performed by it in the prior patent."\textsuperscript{288}


\textsuperscript{288} following, Stow v. Chicago, 8 Bliss. 47, 3 B. & A 91, Fed. Case No. 13,512.

\textsuperscript{283} McClain v. Ortmayer, 141 U. S. 419, 425, 35 L. Ed. 800, 804.
§ 163. Rule XX. The new combination of old devices without a resulting new mode of operation is not invention.

"Neither is it invention to combine old devices into a new article without producing any new mode of operation."

This rule appears to be based upon the theory that absence of novelty in the mode of operation negatives the presence of novelty in function or result.

§ 164. Rule XXI. To use an old composition of matter, design, machine, manufacture or process, for a new but analogous purpose (double use) is not invention.

"The mere mechanical adaptation of an old device to an analogous use is not invention, while a new application in a different art, whereby a new and distinct result is produced, will be." 290

It is no objection, however, to the validity of a patent for a new article of manufacture that it is the result of an operation of an old machine, where it is not the only thing that can be made on the machine, and the instruction of the patent is necessary to enable the workman to produce it. 291

To give to an old combination a new mode of operation may be invention, 292 even if the function of the combination is old. 293

The rule as to double use is sometimes stated as "the mere transfer of a device from one field to an analogous use, without change of function." 294

§ 165. Non-analogous uses.

The rule as to double use turns entirely upon the analogy between the uses. If the new use is remote from, and non-analogous to the old, the new use may create a patentable entity, if, in the opinion of the court, it has been developed by the exercise of the inventive faculty. 295

The questions for determination are; first, are the arts or uses closely allied, remotely allied, or wholly unallied, and, second, did the application to the new use involve invention.\textsuperscript{296} The question of the analogy of the uses will turn on the peculiar facts of each case.\textsuperscript{297}

§ 166. Rule XXII. Mere mechanical excellence is not invention.

"A patent only for superior workmanship—within all the authorities is invalid."\textsuperscript{298} In other words, this rule applies to devices which are new merely in their mechanical perfection; or, in the language of Judge Wallace, "if it is new only in the sense that it embodies and represents superior workmanship, or is an improvement upon an old article in (degree and) excellence, within all authorities the claim is invalid."\textsuperscript{299}

This rule is a paraphrase of the rule of § 152, which should be read with it. This rule looks to the result, the former, to the means whereby that result is attained.

§ 167. Rule XXIII. Mere substitution of materials is not invention.

In the leading case under this rule, Mr. Justice Nelson said: "No one will pretend that a machine, made, in whole or in part, of materials better adapted to the purpose for which it is used than the materials of which the old one is constructed, and for that reason better and cheaper, can be distinguished from the old one; or,

\begin{itemize}
\end{itemize}
in the sense of the patent law, can entitle the manufacturer to a patent. The difference is formal, and destitute of ingenuity of invention. It may afford evidence of judgment and skill in the selection and adaptation of the materials in the manufacture of the instrument for the purpose intended, but nothing more.”

§ 168. Rule XXIV. To merely make a machine portable is not invention.

“Merely putting rollers under an article, so as to make it movable, when, without the rollers, it would not be movable, does not involve the inventive faculty, and is not patentable.”

The rule applies even where “the fact that the machine is portable undoubtedly adds to its usefulness.”

This rule is akin to those of §§ 152, 166.

§ 169. Rule XXV. Mere improvement in degree is not invention.

In speaking of a patent involving stone blocks having sides with rough surfaces, Mr. Chief Justice Waite said: “The change was only in degree and, consequently, not patentable.”


In the language of Mr. Justice Lamar, "a mere carrying forward or more extended application of an original idea—a mere improvement in degree—is not invention." 304

This rule is based upon the theory that all improvements in degree must necessarily fall within the domain of mere mechanical skill. Yet improvement in degree may mean the last step, or the difference between success and failure, in which case it is certainly invention, and may be invention of the highest order. 305

§ 170. Rule XXVI. Mere aggregation is not invention. 306


This rule relates only to combination claims, and the full doctrine is thus stated by Mr. Justice Hunt: "The combination, to be patentable, must produce a different force or effect, or result in the combined forces or processes, from that given by their separate parts. There must be a new result produced by their union; if not so, it is only an aggregation of separate elements." 307

The distinction between an aggregation and a patentable combination of elements may be better understood by reference to the language of two of the ruling cases.

"All the devices of which the alleged combination is made are confessedly old. No claim is made for any one of them singly, as an independent invention. It may be conceded that a new combination, if it produces new and useful results, is patentable, though all the constituents of the combination were well known and in common use before the combination was made. But the results must be a product of the combination, and not a mere aggregate of several results, each the complete product of one of the combined elements. Combined results are not necessarily a novel result, nor are they an old result obtained in a new and improved manner. Merely bring-


ing old devices into juxtaposition, and then allowing each to work out its own effect, without the production of something novel, is not invention."

"A combination of well known separate elements, each of which, when combined, operates separately and in its old way, and in which no new result is produced which cannot be assigned to the independent action of one or the other of the separate elements, is an aggregation of parts merely, and is not patentable; but if to adapt the several elements to each other, in order to effect their co-operation in one organization, demands the use of means without the range of ordinary mechanical skill, then the invention of such means to effect the mutual arrangement of the parts would be patentable. The parts need not act simultaneously, if they act unitedly to produce a common result. It is sufficient if all the devices co-operate with respect to the work to be done and in furtherance thereof, although each device may perform its own particular function only."  

As to the method of determining whether a given group of elements are a valid combination or an aggregation, Judge Archbald has said: "The test is whether there is a new unitary result, to the production of which the different elements co-act." This may be a test of aggregation; it is certainly an exacting test. But it is far from being the only test. And it is not vital that there should be a new result—it is enough that an old result is produced with a new economy of time, power, or other elements of cost.

§ 171. Rule XXVII. Mere duplication of parts is not invention.\textsuperscript{311}

The application of this rule is limited to instances where the duplication of parts does not produce a new mode of operation.\textsuperscript{312}

§ 172. Rule XXVIII. Difference of form and arrangement which produces nothing new in function, result, or mode of operation, is not invention.\textsuperscript{313}

The selection and rearrangement of old elements to produce a machine new in form but old in function, is not invention.\textsuperscript{314}

"Neither is it invention to combine old devices into a new article without producing any new mode of operation."\textsuperscript{315}

"In a patentable combination of old elements, all the constituents must so enter into it as that each qualifies every other. * * * It must form either a new machine of a distinct character and function, or produce a result due to the joint and co-operating action of all the elements, and which is not the mere adding together of separate contributions. Otherwise, it is only a mechanical juxtaposition, and not a vital union."\textsuperscript{316}

§ 173. Rule XXIX. To change the sequence of operations in a mechanical method without accomplishing a new result is not invention.

In the leading case upon this question, the method of the patent in suit differed from one of the methods of

311. Dunbar v. Myers, 94 U. S. 187, 24 L. Ed. 34.
the prior art relating to the manufacture of paper bags, in that the material of the bellows fold was bent inward as soon as the tube was distended. Although there was a resulting economy in material, the court held that the change did not embody invention.317

§ 174. Rule XXX. "Invention is not disclosed by merely making in a single piece a device or connection which previously had been made of separate parts."318

This rule is merely a concrete application of the general rule that invention must embody something more than mere mechanical skill. "Nor would the mere fact that the one-piece device was cheaper or more durable constitute invention when such results were merely such ordinary consequences of dispensing with joints as would naturally be anticipated by the workman."319

§ 175. Rule XXXI. Where the prior art discloses the two elements of the alleged invention in combination, one fixed and the other movable, to make the first movable and the second stationary is not invention.

An illustration is the printing-press patent which made the type bed stationary under traveling cylinders, instead of having the type bed movable beneath a stationary cylinder.320

The reason of the rule is obvious. The change is one which under any state of facts so far presented to the courts is a mere mechanical expedient, and while circumstances might arise in which the change would amount to invention, the rule is well established in the cases.\footnote{Sargent v. Larned, 2 Curtis 340, Fed. Case 12,364; Abbott Machine Co. v. Bonn, 51 Fed. Rep. 223; Devlin v. Paynter, 64 Fed. Rep. 398, 12 C. C. A. 188; Duner Co. v. Grand Rapids R. Co., 171 Fed. 863, 96 C. C. A. 531; Union Paper Bag Mach. Co. v. Murphy, 97 U. S. 129, 24 L. Ed. 385.}

\section{176. Rule XXXII. The use of old elements does not negative invention.}

This rule is a necessary sequence of the rule that as to a combination claim the elements comprised in that claim are conclusively presumed, as a matter of law, to be old, whether they are old in fact or not; thus Judge Baker has said: "The failure to claim either one of the elements separately raises the presumption that no one of them is novel,"\footnote{Campbell v. Conde Implement Co., 74 Fed. Rep. 745.} and Judge Woods has said: "When a combination is claimed, there arises an implied concession that the elements are old, and not separately patentable."\footnote{Hay v. Heath Cycle Co., 71 Fed. Rep. 411-413, 18 C. C. A. 157.}

In support of the main rule, as stated above, Judge Rellstab has said: "The use of the old elements does not prevent the possibility of invention. It is perfectly well settled that a new combination of elements old in themselves, but which produces a new and useful result, entitles the inventor to the protection of a patent."\footnote{Steiner & Voegtly Hdw. Co. v. Tabor Sash Co., 178 Fed. Rep. 839; citing Webster Loom Co. v. Higgins, 105 U. S. 580, 26 L. Ed. 1177; Expanded Metal Co. v. Bradford, 214 U. S. 366, 53 L. Ed. 1034.}
§ 177. Rules in affirmance of invention.

In the consideration of the foregoing rules, which have been evolved by the development of patent litigation, we find them to be destructive in character. That is to say, beginning with the general premise before referred to, that "invention" cannot be defined, the preceding group of rules have all related to the negation of the existence of invention.

But just as invention is constructive, and not destructive, we find that the courts have established a correlative set of rules which are affirmative in character, and relate to those conditions surrounding an art which tend to establish the existence of invention in a new creation in that art.

§ 178. Rule I. Proof of the existence of a need in the art, and that it was supplied by the device of the patent, is evidence of invention.325

This rule lies at the foundation of the consideration of the presence or absence of invention. It is the purpose of the patent laws to encourage the progress of the arts. It seldom falls to the lot of the inventor to create a new need. The telephone and telegraph did not create the need of quick means of conveying messages. The need was co-existent with the beginning of the human race. Every system of transmitting thought to a distance from the foot messenger to wireless telegraphy was but an answer to that need. The extent to which the novel creation responds to the need is important, but not vital, under the other rules of the series we are now considering.

§ 179. Rule II. Proof of the fact that others have made unsuccess- 
ful attempts to fill a need in the art is evidence of 
invention on the part of the creator of the means of 
satisfying that need.\textsuperscript{326}

This is a wholesome rule. The ineffectual efforts of 
others to accomplish the result are certainly material 
upon the question of invention. The ability of the 
unsuccessful ones must be considered. Where they were 
skilled in the art, it is hard to reach the conclusion that 
the ultimate production of the needed thing merely in-
volved the exercise of mechanical skill.

§ 180. Rule III. Proof of extensive sales \textsuperscript{327} and “public approba-
tion” \textsuperscript{328} of the new creation is usually evidence of the 
existence of invention.

326. Terry Clock Co. v. New 
Haven Clock Co., Fed. Case No. 
13,340, 4 Bann. & Ard. 121; Wal-
696; Davis v. Fredericks, 19 Fed. 
Rep. 99; Patterson v. Duff, 20 
Deere, 21 Fed. Rep. 709; McFar-
Celluloid Mfg. Co. v. Chrolithon 
397; Sewing Machine Co. v. 
Frame, 24 Fed. Rep. 596; Asmus 
v. Peck, 42 Fed. Rep. 497; Ameri-
can Cable Ry. Co. v. New York, 
56 Fed. Rep. 149; Stohlmann v. 
Parker, 53 Fed. Rep. 925; West-
inghouse v. Air-Brake Co., 59 
Fed. Rep. 581; Electric Railway 
Rep. 655.

327. Smith v. Goodyear Dental 
Vulcanite Co., 93 U. S. 456, 23 L. 
Ed. 952; Hollister v. Benedict 
901; Adams v. Bellaire Stamping 
Co., 111 U. S. 539, 35 L. Ed. 549; 
Magowan v. New York Belting 
Co., 141 U. S. 332, 35 L. Ed. 781; 
Gandy v. Main Belting Co., 143 U. 
S. 587, 36 L. Ed. 272; Barb Wire 
Patent, 143 U. S. 275, 36 L. Ed. 
164; Sessions v. Romadka, 145 U. 
S. 29, 36 L. Ed. 609; Topliff v. 
Topliff, 145 U. S. 156, 38 L. Ed. 
658; National Hat Pounding Ma-
chine Co. v. Hedden, 143 U. S. 432, 
37 L. Ed. 529; Krementz v. S. 
558; Duer v. Corbin Cabinet 
Lock Co., 149 U. S. 216, 37 L. Ed. 
707; Keystone Mfg. Co. v. Adams, 
151 U. S. 139, 38 L. Ed. 103; OIln 
v. Timken, 155 U. S. 141, 39 L. 
Ed. 100; Potts v. Creager, 155 U. 
S. 597, 39 L. Ed. 275.

328. Johnson v. Johnston, 60 
This is so, because the fact of large sales is some evidence that the need existed, and that the matter of the patent served for the first time to satisfy that need, or at least to fill it in an adequate manner.

But the effect of evidence of this kind may be destroyed by showing that the sales were due not to the superior merits of the thing sold, but to skillful advertising and the like, or by proof that the patented article was manufactured with a peculiarly attractive finish, or sold under an "alluring trademark." 

In applying this rule, the qualification must be borne in mind, that (in the language of Judge Ray) "the test of invention is mental conception, not large sales, or improved results, or benefits conferred upon mankind."


CHAPTER VII.

NOVELTY.

§ 181. Introducing the Rules as to Novelty.

Letters patent depend for their validity (apart from the question of invention) upon the novelty and utility of the thing patented. As to novelty, the patent may be anticipated, and if not anticipated, it may yet be void for want of patentable novelty. The following groups of rules therefore, relate respectively to novelty, anticipation and utility.

Section 4886, R. S. U. S., provides that "Any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement thereof, not known or used by others in this country, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, and not in public use or on sale for more than two years prior to his application, unless the same is proved to be abandoned, may * * * obtain a patent therefor." The twice-used expression "new and useful," relates to the broad questions of novelty and utility, which we have elsewhere considered. The thing of the patent may, as we have seen, be new in a commercial sense, while entirely lacking in novelty in the patentable sense.

Anticipation is almost as impossible of definition as is "invention."
SECTION 248

HOPKINS ON PATENTS.

RULES RELATING TO ANTICIPATION.

§ 182. Rule I. The defense of anticipation "must be established as of a date anterior to the patentee's invention or discovery; not merely prior to his application for, or the date of his patent," 1 under the provisions of sections 4886 and 4920 of the Revised Statutes.

There are many reasons why the law should, as it does, allow the inventor to publicly practice his invention provided he applies for a patent before the subject-matter has been in public use or on sale for more than two years. The reasons for the rule of this section are equally cogent.

§ 183. Rule II. The grant of Letters Patent creates a prima facie presumption of patentable novelty.

"The presumption of novelty arising from the patent must be overcome." 2

This has been considered in connection with the other presumptions arising from the grant, ante, § 18.

§ 184. Rule III. The test of novelty is the same in the case of an article of manufacture as it is in that of a machine. 3

This rule appears self-evident. The statute makes no distinction, as to the requirement of novelty, between the several classes of patentable subject-matter.


§ 185. Rule IV. That every element of a combination is old is not conclusive against the novelty of the combination; for each element is conclusively presumed to be old.

"When a combination is claimed, there arises an implied concession that the elements are old, and not separately patentable."

That the use of old elements does not negative invention, see ante, § 176.

§ 186. Rule V. A combination may be void for want of novelty, even though the same elements cannot be shown to have been used before in the same relation to each other.

§ 187. Rule VI. It is necessary to the validity of a patent that its subject-matter must neither be an obvious or natural suggestion of what preceded in the art, nor fairly or logically deducible from any or all of the prior forms of construction.

§ 188. Rule VII. A great public demand for the patented article is highly persuasive evidence of patentable novelty and is generally controlling.

This rule should be read in connection with that of § 307, post, for an understanding of the close inter-relation of novelty and utility.

§ 189. Rule VIII. A patent may be held invalid for want of novelty though that defense is not set up in the answer.

The reason for this rule is clear. In every determination of the validity or scope of letters patent the rights of the public are paramount to the rights of the parties

litigant. If the court becomes satisfied that the alleged invention was of common right at the time of the application for Letters Patent, its duty to the public is clear. There has been a failure of consideration and the resulting grant is invalid.

§ 190. Rule IX. A defendant who has offered a large sum of money for the patent cannot consistently raise the defense of want of novelty.10

This rule savors of estoppel by conduct.

§ 191. Rule X. Patentable novelty must be distinguished from commercial novelty.

"A distinction must be observed between a new article of commerce and a new article which, as such, is patentable. Any change in form from a previous condition may render the article new in commerce; as powdered sugar is a different article in commerce from loaf sugar, and ground coffee is a different article in commerce from coffee in the berry. But to render the article new in the sense of the patent law, it must be more or less efficacious, or possess new properties by a combination with other ingredients; not from a mere change of form produced by a mechanical division. It is only where one of these results follows that the product of the compound can be treated as the result of invention or discovery, and be regarded as a new and useful article."11

§ 192. Rule XI. The question of novelty relates back to the date of invention and is not fixed by the date of the application.12

This rule is based upon the same reasoning as the time rule concerning anticipation, ante, § 182.

11. Mr. Justice Field in Milligan and Higgins Glue Co. v. Upton, 97 U. S. 3, 6, 24 L. Ed. 985, 988.
§ 193. Rule XII. A device which is a lost art will not negative novelty.\textsuperscript{13}

This doctrine, manifestly, can seldom be invoked. When it is, it is based upon the fact that it was not at hand for the public to do what the inventor has done, that he has not patented that which was of common right, and that by disclosing to the public knowledge of a lost thing, his service is as worthy of reward as if that thing had never before been known.

The age of the alleged anticipating device as an impairment of its anticipatory value.

There are in the cases some dicta which hold that the age of the prior device urged as an anticipation is to be considered as diminishing its effect. Thus, Judge Buffington has said "under ordinary circumstances, a patent which caused no advance in its art should have small effect upon a successful patent of twenty years later;"\textsuperscript{13a} and Judge Sanborn, of the Seventh Circuit, has said "like gravitation, it (the anticipatory effect of the alleged anticipation) decreases according to the square of the distance. Certainly a patent which caused no advance in the art should have but little effect on a successful one of fifty years later."\textsuperscript{13b} These dicta do not seem to accord with the spirit of the patent statutes, or with the great weight of the authorities. For example, see the case in which the United States patent Number 705,715 of July 29, 1902 was held anticipated by the British patent Number 10,938 of 1845;\textsuperscript{13c} the case in which the United States patent Number 256,504 of 1882 was held

anticipated by Geiger's Handbuch der Pharmacie, published in the year 1830 at Stuttgart, Germany; and the illustrations might be multiplied indefinitely. The fact that the patent set up as anticipatory "caused no advance in its art" may with propriety be considered in weighing its effect. Its early date would seem to be no detriment to its evidentiary value.

§ 194. Rule XIII. The question of novelty is one of fact for the jury.  
This matter is considered at length, post, § 333.

§ 195. Rule XIV. The burden of proof is upon the defendant alleging anticipation to establish both priority of conception and reduction to practice.

"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."  

§ 196. Rule XV. "It is not sufficient to constitute anticipation, that the device relied on might, by modification, be made to accomplish the functions performed by the patent (in suit), if it were not designed by its maker, nor adapted, nor actually used, for the performance of such functions."  

§ 197. Rule XVI. Prior use will not anticipate where it is "mere accidental use of some of the features of an invention, without recognition of its benefits." 17

§ 198. Rule XVII. A prior patent does not anticipate if more than mere mechanical skill is necessary to be applied to it to produce the device of the patent in suit.

The usual defense of want of invention here runs into the defense of anticipation. The defense of want of invention is almost always predicated upon the general disclosure of the prior art. The rule here stated applies when, singling out a patent of the prior art, it is attempted to build or produce the subject-matter of the patent in suit.

"The mechanical skill which may be invoked 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." 18

§ 199. Rule XVIII. If a prior patent has claims co-extensive with those of the patent in suit the latter is void.

Double patenting, defined. The rule as to double patenting is simply that if two patents for the same invention are issued to the same, or different, patentees, the later patent is void. 10 This rule would seem self-explanatory.

Only one grant of monopoly can be made for the same invention. When the term of the patent monopoly ceases, the right to make, use and sell the invention passes to the public. The grant of another and later patent for the same invention defeats the object of the patent statute by extending (or destroying, if the grant be to another patentee) the monopoly of the first patent. "Such an extension of the exclusive privileges would be a sheer abuse of the patent laws." If more than two patents are issued for the same invention it follows that only the first is valid.

How the question of identity is determined. The question of identity is necessarily a question of fact, and not of law. And it is by no means clear that identity is determined only by comparison of the claims of the earlier and later patents. Logically, it would seem that the claims should form the only basis of such a test, but to be interpreted, the claim must be analyzed in the light of the prior art, and the court is at liberty to avail itself of any testimony which may aid it in determining what the scope of the claim actually is. This is what is meant by the statement "no patent can rightfully issue for an invention actually covered by a former patent although the terms of the claims may differ," and a clear illustration of proper judicial methods in determining the question of double patenting is found in a case where the court observes "the claims are certainly not expressly alike, the testimony is in conflict," proceeds to recite his examina-

tion of the evidence, and his conclusion that double patenting was not present.\textsuperscript{23}

In subjecting patents to the test under consideration "it will be presumed that the Patent Office acted understandingly."\textsuperscript{24}

\textsection{200. Exact anticipation.}

Anticipation is the disclosure in the prior art of a thing which is identical with, or equivalent to the device against which it is cited. It is doubtful, however, whether the definition should include equivalents. Probably anticipation only exists where the alleged anticipatory matter is identical with the thing against which it is urged. Thus, where the anticipatory thing is not identical with the subject of the subsequent patent, the patent is usually held to be void for want of patentable novelty, if the suggestions of the anticipatory matter are such as to enable one skilled in the art to produce the thing patented. If a patent is void for want of novelty, using novelty in its colloquial sense, it is because it is anticipated. If the patent is held void for "want of novelty," as that expression is commonly used in the decisions, it is generally because, though not anticipated, the degree of commercial novelty which it possesses is not a sufficient departure from the prior art to be patented. Thus we see that "want of patentable novelty" and "want of invention" are overlapping, if not identical, in meaning. The use of the word "anticipation" in the decisions, as will be indicated by the rules which we are about to examine, has a varying significance ranging all the way from literal and absolute anticipation to a point somewhere within the domain of the defense of "want of patentable novelty."

It is obvious that the grant of a patent cannot deprive the public of the right to make and use and sell anything which is already public property. To permit a monopoly in such a matter to be subsequently acquired, would be at variance with the entire policy of our patent law.

It is equally obvious that to serve as an anticipation it is not necessary that the anticipatory thing should actually have been used by the public. It is sufficient that it was of common right to use it, or that it existed in the form of a publication so generally accessible as to be fairly a part of the common knowledge of the public.

§ 201. Rule XIX. Anticipation must be established as of a date prior to the patentee's invention, and not merely prior to the date of his application for patent.

"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 date of, his patent." 25

This rule is merely a corollary to the rule that the inventor is entitled to his actual date of invention, if he has not abandoned his invention.

§ 202. Rule XX. That which infringes if later, would anticipate if earlier.

"The rule is now well established that 'that which infringes if later would anticipate if earlier.'" 26


This rule relates back to the question discussed in § 200. It is sound if "want of novelty" and "want of invention" are equivalent terms. Supposing the earlier device to have been mechanically and commercially unsuccessful, it would not anticipate. But as against a patent covering a successful machine or method, no defendant would dare to argue that he did not infringe because his machine or method was a failure. So we conclude that this rule must be read in the light of the general doctrines relating to infringement, or it will be misunderstood, and therefore dangerous.

§ 203. Rule XXI. To serve as an anticipation, the anticipatory matter must have been designed or adapted or actually used to perform the same functions as the subject-matter of the patent.

"It must be remembered, too, that an invention whether original or an improvement, is not anticipated by a thing which was, in its original form and use, neither designed, adapted nor actually used, to perform the same function as the thing covered by the patent does; and novelty is not negatived or overcome by any such consideration, nor by showing prior construction, or a similar thing for a wholly different and foreign use to which the patent is being applied." 27

"It is not sufficient," said the court in Topliff v. Topliff, 145 U. S. 156, 12 Sup. Ct. 825, "to constitute anticipation, that the device relied on might, by modification, be made to accomplish the functions performed 'by that invention,' if it were not designed by its maker, nor adapted, nor actually used, for the performance of such functions." Following this guide, the Circuit Court for

the Western District of Pennsylvania held that "a mere accidental use of the features of an invention, without recognition of its benefits, does not anticipate a patent." 28

§ 204. Rule XXII. An accidental result not contemplated by a former inventor cannot serve as an anticipation.

"An accidental result not contemplated by a former inventor cannot anticipate a later patent." 29

"It may well have been that, before Stockheim was explained, some one may have filtered highly-charged beer under pressure successfully; the filter having been kept full of beer the while. But, so far as the evidence discloses, no one recognized that as the essential condition of a successful operation, or explained its function as a step in the process. One who accomplishes a result by a process which is only partially or not at all understood by him has invented nothing, and cannot deprive another, who afterwards discovers and proclaims the true principle of the operation, of the rights of an inventor." 30

"If by chance any manufacturer of lace paper had accomplished the result in the way described in Karfiol's patent, it would seem to have been done inadvertently, and even at the present time not to have been appreciated as being a departure from the original and old methods of manufacture. This would not interfere with the patentability of Karfiol's idea, nor the validity of his patent." 31

§ 205. Rule XXIII. The anticipating device should usually be found in the same art.

"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 have furnished 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." 32

"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." 33

§ 206. Rule XXIV. The mere secret practice of a process cannot serve as an anticipation.

"It seems clear that Congress intended to benefit the American public by a grant of a patent to the individual who, believing himself to be the first inventor, was the first in fact to disclose such invention in this country. This is shown by a comparison of section 4923 with section 4886, of the Revised Statutes. I therefore understand the law on this subject to be that the mere secret practice of a process or the physical presence of a product or manufacture in this country is insufficient as an

anticipation unless and until the public acquires or has opportunity to acquire, therefrom, such knowledge as would enable one skilled in the art to practice the invention. Such alleged anticipation, whether by foreign printed publication or physical presence in this country, must so embody the complete patented article, or be so substantially like it, that a specification could be based thereon."

34

But the mere fact that the anticipating device was so located as to be concealed from view does not make it a secret device, outside the law of public use.35

§ 207. Rule XXV. Lost arts, abandoned experiments and secret processes are non-anticipatory for a common reason.

The reason for this rule is exemplified by the following dicta:

"The consideration received from the disclosure of the discovery to the public is the foundation of the right to the monopoly of the patent. As against an original discoverer, the law recognizes no distinction between the lost art, the abandoned experiment, and the secret process. Whether the conception slumbers buried in the ashes of the past, lies inchoate in the brain of the would-be inventor, or is locked in the breast of its creator, it cannot afterwards be dug up, developed, or set free, to question the title of the complete creation first brought forth into the world of knowledge, and thus, as the first-born, the rightful heir to the patent estate. As against an original inventor, anticipation is not shown by prior use of the invention under conditions which fail to dis-


close its composition or operation. Such knowledge of the invention should be accessible to the public.’’

“In the sense of the patent statute, he is the first inventor who, by his own thought, makes an article or material and first perfects and adapts his discovery to actual use, although some one may have previously made a similar article without putting it to practical use or giving his discovery to the public in any way.”

§ 208. Rule XXVI. To serve as an anticipation, there must be a disclosure in such full and clear terms as to enable one skilled in the art to practice the invention without the necessity of making experiments.

“It is strongly urged that the English patent of Boggett & Pettit (No. 14,333), of 1852, anticipates Ballard. To do so, it must disclose a substantial representation of Ballard’s device, in such full and clear terms as would enable one skilled in the art to practice his invention without the necessity of experimenting.”

“The authorities leave no doubt as to the character of the disclosures necessary in a prior patent or publication to avoid a subsequent one, to-wit, the information

therein given must be so full, clear, and precise that one 
skilled in the art, and acting in the then state of know-
ledge, can, from such a patent or publication, perform 
the process or make the thing covered by the patent 
sought to be anticipated."  

"A court is not justified in finding anticipation in an 
old and discarded device, the meaning of which is ob-
scure and puzzles experts."

§ 209. Rule XXVII. That the same result was accomplished by 
the alleged anticipatory matter does not render it an 
anticipation, unless the result was accomplished by sub-
stantially the same means, in substantially the same 
way.

"The accomplishment of the same result is not an 
anticipation, unless it is done by the same means in sub-
stantially the same way."  

This rule must be read in the light of the rule as to infringement discussed in § 273; "identity or differ-
ence of result is no test of infringement." It is obvious 
that where the idea of means and mode of operation are 
various in the two patents, the attainment of a common 
result is no criterion of their identity.

§ 210. Rule XXVIII. It is immaterial whether the alleged antici-
pating device originated by design or accident.

"To constitute anticipation of a later patent it is 
enough that such a (prior) construction had been in well-
established use, whether it originated in design or by ac-
cident."  

11,889; Seymour v. Osborne, 11 Wallace 585; Eames v. Andrews, 
122 U. S. 55; Downton v. Milling Co., 108 U. S. 470, Cawood Patent, 
94 U. S. 704.

40. Ray, J., in Underwood Typewriter Co. v. Elliott-Fisher 


§ 211. Rule XXIX. That the alleged anticipatory matter has never gone into practical use may be considered in determining the question of anticipation.

Thus, Judge Putnam has said: "Anticipatory matter which has never gone into practical use is to be narrowly construed," and Judge Buffington has said: "In determining a question of this character it is a pertinent and reasonable inquiry, if it be true that the disclosure of an earlier patent was substantially that of Jones, why during a period of many years, was it not practically applied to the same use?" Judge Colt has said: "If the question of identity of method and result is doubtful, the doubt must be resolved in favor of the successful patentee, who has in a practical way materially advanced the art."

On the other hand, in applying this rule, the limitation must be observed that the failure of the matter urged as anticipatory to go into public use may have been occasioned by extraneous circumstances rather than any want of merit. Thus, Judge Blatchford, in a case involving this question, has said: "The plaintiff contends, and very forcibly, that from the history of the success of the plaintiff's structure any device made by Anden like No. 3 would have at once attracted the attention of the trade and have gone into use. This is often a controlling circumstance in a case of doubt. But it often happens that, from various fortuitous circumstances, a complete invention in a branch of business,


where much depends on energy and facilities and capital, fails to attract that attention which, under different and better auspices, it receives when independently produced at a later day." 46

§ 212. Rule XXX. The effect of a prior patent as an anticipation is not destroyed by defects in minor details of construction, where it discloses the principle involved in the later patent.

"The fact that the patents were issued raises a presumption in favor of their operativeness and utility; and, when the defects are merely in minor details of construction, such defects will not defeat the efficiency of such patents as anticipations, provided they sufficiently disclose the principle of the alleged invention." 47

§ 213. Rule XXXI. It does not constitute anticipation of a combination to find each of its elements in some structure of the prior art.

"It is probably very true that, by selecting from the various prior machines in this particular art, all the elements of 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." 48

A combination "can only be anticipated by a prior device having identically the same elements, or the me-

chanical equivalents of those that are not used. It will not do to find in older devices a portion of these elements in one machine, another portion in a second machine, another in a third, and so on, and then say that this device is anticipated."

§ 214. Rule XXXII. It is immaterial that the alleged anticipating device was not designed for the particular use to which the device of the patent is peculiarly adapted.

The rule necessarily results from the doctrine laid down by the Supreme Court, and recognized in all of the cases that "a patentee is entitled to every use of which his invention is susceptible, whether such use be known or unknown to him." In following the rule as above stated, Judge Aldrich has said: "Under the doctrine which gives to the patentee all the uses to which his invention is susceptible, whether known or unknown, it is difficult to see why the public should not be entitled to all the uses to which the means involved in devices covered by lapsed patents are susceptible, or why a patentee who employs the old means with improvements adapting the use to a new or non-analogous industry should not be limited to a monopoly of the combination or improved machine. To say that one who discovers that old means will do a new work without any change may thereby monopolize the old means as applied to such new work, or, in other words, to say that because of such discovery others engaged in the wire-cloth industry shall not, in weaving, run a wire thread through the


means used in the older industry, would be carrying the discovery doctrine altogether too far."

In a similar case, Judge Aldrich has said: "The claim of the complainant that the old atomizers were not designed for the particular use to which their device is peculiarly adapted is no answer to the fact that the older device would perform the same functions."

§ 215. Rule XXXIII. Mere oral testimony in support of the existence of an anticipating device is insufficient, unless it establishes the existence of the anticipating device beyond a reasonable doubt.

The reason for this rule is clear, and has nowhere been better expressed than by Judge Sanborn, who has said: "The memory of men is too brief and fleeting, too easily swayed by chance and by interest, to permit the recollection of one or two witnesses, prompted by presently prepared pictures of the proof desired, to condition the validity of valuable patents that have stood unchallenged for years. 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. The testimony relative to the use of this Wabash beam is not of that character, and it will not be further considered." And, in applying this rule, Judge Adams has said: "Neither the defendant nor any of his witnesses produce any specimen

of the case proved to have been constructed by Stiefel prior to complainant's invention. If their evidence is true, it would seem that some one of such cases properly identified as in existence before 1887, the date of complainant's invention, could readily have been produced. The evidence of the witnesses, such as it is, uncorroborated by the production of any specimen of the alleged anticipating device antedating the complainant's invention is not sufficient to overcome the *prima facie* evidence found in the letters patent, of their own validity."

§ 216. Rule XXXIV. "A process patent can only be anticipated by showing an earlier similar process."

It is not enough to show an earlier apparatus which might have been used in practicing the process, unless the character of the structure is such as to plainly indicate to one called upon to operate it that its intended mode of operation involved a process similar to that sought to be anticipated.

§ 217. Rule XXXV. A mere paper patent may anticipate.

While this is a generally accepted rule, it must be understood that the term "paper patent" is sometimes used, not in its ordinary sense as a patent which has not been practiced, but as a patent whose disclosures "do not appear to have been capable of successful practical operation."


In this sense, a paper patent will not serve to invalidate a later patent. 59 § 4920, R. S. U. S., puts a prior patent, a prior publication and a prior use on exactly equal footings as defenses, hence this rule, which has been distinctly stated, with its supporting logic, by Judge Townsend, as follows:

"The grant of a patent raises a presumption of operativeness, and of some utility, and, if prior, even though it be a mere paper patent, it may anticipate, provided it sufficiently discloses the principle of the alleged invention." 60

Judge Lacombe has illuminated this rule, as follows: "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 ought they know, is entirely novel, to find that, in some remote time and place, some one else, of whom they never heard, has 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." 61


Of the burden of proof concerning patents relied upon as anticipations, and charged to have inoperative disclosures, Judge Townsend has said:

"I do not understand that the law necessarily imposes upon a defendant who relies upon the prior art to limit the scope of a patent the burden of proving that prior patents were useful, operative or commercially successful or that they stated all the undeveloped possibilities of the invention therein disclosed. * * * It is well settled that mere paper patents may negative patentable novelty, provided they sufficiently disclose the principles of the alleged invention, or provided the alleged objections could be obviated by mere mechanical skill. * * * When, therefore, a prior patent appears upon its face to be relevant to the consideration of the prior art, I think the later inventor should show either that such device was not useful, or that it did not so disclose the principle of the later patent as to deprive it of its claim of patentable novelty." 62

§ 218. Rule XXXVI. A prior patent may anticipate although it fails to claim.

When a patentee fails to claim any portion of his disclosure, even though novel, the failure to claim may indicate that the applicant thought it was old, or that he intended to dedicate it to the public.63

It was held in one case by Judge Wheeler that an inventor was not barred from claiming in a later application matter which he had described but had not claimed, in an issued patent. The decision was in an ex parte case, which is the only excuse that can be offered for it.

It is unsupported by either reason, statute, or other authority.64

"The claim actually made operates in law as a disclaimer of what is not claimed," and hence does not affect the scope of the patent as an anticipation.65

§ 219. Rule XXXVII. Drawings alone, unaccompanied by description, will anticipate a design patent,66 but not those of any other class.67

This subject is fully discussed elsewhere, in connection with the statutory defenses.

CHAPTER VIII.

CAVEATS; REISSUES.

§ 220. Caveats.

While the caveat was abolished by the repeal of § 4902, R. S. U. S., and the amendment of § 4934, R. S. U. S., under the Act of June 25, 1910, 36 Stat. at L., ch. 414, there are many letters patent now outstanding, issued upon applications that were preceded by the filing of caveats.

Former § 4902, R. S. U. S., was as follows:

"Any person who makes any new invention or discovery and desires further time to mature the same may, on payment of the fees required by law, file in the Patent Office, a caveat setting forth the design thereof and its distinguishing characteristics and praying protection of his right until he shall have matured his invention. Such caveat shall be filed in the confidential archives of the office and preserved in secrecy, and shall be operative for the term of one year from the filing thereof; and if application is made within the year by any other person for a patent with which such caveat would in any manner interfere the Commissioner shall deposit the description, specification, drawings, and model of such application in like manner in the confidential archives of the office and give notice thereof by mail to the person by whom the caveat was filed. If such person desires to avail himself of his caveat, he shall file his description specification, drawings, and model within three months from the time of placing the notice in the postoffice in Washington, with the usual time required for transmitting it to the caventor added thereto, which time shall be indorsed on the notice."

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It will be seen that the purpose of the section was "to secure an opportunity to have questions of priority between rival inventors determined before the issue of a patent,"\(^1\) and the language of the statute limited the operation of the notice which it provides, to applications "made within the year," and so did not entitle the caveator to notice of applications filed before the caveat, or after the expiration of the one year period.\(^2\)

In view of the language of this section, some of the decisions regarding caveats are curious; notably a ruling that the filing of the caveat was not an admission that the invention was not perfected,\(^3\) and another ruling to the effect that a caveat filed by an individual as a sole inventor, and supported by his affidavit as such could be used in litigation upon a patent issued upon the application of the caveator and another to carry back the date of invention of the joint invention.\(^4\)

The inadvertent issuance of a patent for the same invention while a caveat was pending did not authorize the granting of a patent to the caveator, and the pendency of the caveat did not affect the validity of the issued patent.\(^5\)

Of the requirements of the caveat as to sufficiency Judge Townsend said: "The same particularity of description is not required as in an application for a patent, but it must be as complete and exact as the inventor is able to give, and sufficiently precise to enable the examiners to determine whether an invention described in a subsequent application is probably the same." And


he therefore ruled that a caveat must adequately describe the invention of the subsequent patent, or it could not be used in carrying back the date of the invention. 6

The pendency of the caveat is immaterial upon the question of public use, 7 nor were caveats ever considered as having any effect, positive or negative, 8 upon a subsequent patent for the same invention, issued on the application of the caveator, except as an aid in carrying back the date of his invention, when accompanied by a showing of due diligence in his reduction to practice. 9

REISSUES.

§ 221. The foundation of the right to reissue.

Prior to the enactment of any statutes authorizing the reissue of letters patent, the Secretary of State had reissued patents, where the original patent was defective, and the courts had sustained such reissued patents. In the leading case, decided in 1832, Mr. Chief Justice Marshall said: "It had been said that this permission to issue a new patent on a reformed specification, when the first was defective through the mistake of the patentee, would change the whole character of the act of Congress. We are not convinced of this. The great object and intention of the act is to secure to the public the advantages to be derived from the discoveries of individuals, and the means it employs are the compensation made to those individuals for the time and labor devoted to these discoveries, by the exclusive right to make, use and sell, the things discovered for a limited time. That which gives complete effect to this object


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and intention, by employing the same means for the correction of inadvertent error which are directed in the first instance, cannot, we think, be a departure from the spirit and character of the act.\textsuperscript{10}

§ 222. The present statute.

Shortly after the decision quoted from in the preceding section, the first statute providing for reissues was enacted.\textsuperscript{11} The present statute (sec. 4916, R. S. U. S.) is as follows:

(Reissue of defective patents.) "Whenever any patent is inoperative or invalid, by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention or discovery more than he had a right to claim as new, if the error has arisen by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, the Commissioner shall on the surrender of such patent and the payment of the duty required by law, cause a new patent for the same invention, and in accordance with the corrected specification, to be issued to the patentee, or in the case of his death or of an assignment of the whole or any undivided part of the original patent, then to his executors, administrators, or assignors, for the unexpired part of the term of the original patent. Such surrender shall take effect upon the issue of the amended patent. The Commissioner may in his discretion, cause several patents to be issued for distinct and separate parts of the thing patented, upon demand of the applicant, and upon payment of the required fee for a reissue for each of such reissued letters patent. The specifications and claim in every such case shall be subject to revision and

\textsuperscript{10} Grant v. Raymond, 6 Peters 218, 243. For the further history of the early law of reissues, see Shaw v. Cooper, 7 Peters 292; Wilson v. Rousseau, 4 Howard 646, 685.

\textsuperscript{11} 4 Statutes at Large, ch. 162, section 3, p. 559.
restriction in the same manner as original applications are. Every patent so reissued, together with the corrected specification, shall have the same effect and operation in law, on the trial of all actions for causes thereafter arising, as if the same had been originally filed in such corrected form; but no new matter shall be introduced into the specification, nor in case of a machine-patent shall the model or drawing be amended, except each by the other; but when there is neither model nor drawing, amendments may be made upon proof satisfactory to the Commissioner that such new matter or amendment was a part of the original invention, and was omitted from the specification by inadvertence, accident, or mistake, as aforesaid."

§ 223. The purpose of the statute.

The purpose of the statute has been thus defined by Mr. Justice Brown: "The plain purpose of this section is to give the patentee an opportunity to make valid and operative that which was before invalid and inoperative; invalid, because it claimed as new that which had been previously invented or used by the public; inoperative, because the specification was defective or insufficient. New matter cannot be introduced, nor can the scope of the invention be enlarged. All that the applicant can do is to so amend his patent as to enable him to receive some practical and beneficial result from his actual invention, of which he has been deprived by defects or omissions in the original patent. The object of a patentee applying for a reissue is not to reopen the question of the validity of the original patent, but to rectify any error which may have been found to have arisen from his inadvertence or mistake."

As Mr. Justice Blatchford has said, "in all these statutes on the subject of reissues, the only authority granted to the Commissioner is one to issue a new patent 'for the same invention.'" 18

Under a former statute (of 1836), Mr. Justice Grier said: "The surrender of valid patents, and the granting of reissued patents thereon, with expanded or equivocal claims, where the original was clearly neither 'inoperative nor invalid,' and whose specification is neither 'defective or insufficient,' is a great abuse of the privilege granted by the statute, and productive of great injury to the public. This privilege was not given to the patentee or his assignee in order that the patent may be rendered more elastic or expansive, and therefore more 'available' for the suppression of all other inventions." 14

The general rules concerning reissues have been thus expressed by Judge Archbald: "To warrant a reissue, inadvertence, accident, or mistake must be shown, and there must be no unreasonable delay in applying for it. The claims may be narrowed or enlarged, but in either case they must be within the terms of the invention as it is specified and described in the original patent; the invention, although differently stated, remaining the same." 15

The surrender of a patent for reissue under the statute does not necessarily imply that the original patent is void, notwithstanding the express language of the act, whose first phrase is "whenever any patent is inoperative or invalid, by reason of a defective or insufficient description." In the language of Judge Severens, "we

have * * * assumed that a patent, although the specifications be defective or insufficient, might still not be utterly void. It seems necessary to assume this because of the importance which the Supreme Court has attached to the right of the patentee to recall his patent if a reissue is not allowed. Allen v. Culp, 166 U. S. 501, 41 L. Ed. 1093; McCormick Harvesting Mach. Co. v. Aultman, 169 U. S. 606, 42 L. Ed. 875. It is possible, however, that this right to recall the patent was regarded as a privilege, to which he (the patentee) was entitled, to have the validity of his patent determined by a judicial decree. We need not speculate, however, upon this subject, which is involved in some intricacy, for the general proposition that the surrender of the patent upon a reissue involves the cessation of all rights acquired under it has been long stated." 16

Mr. Justice Brown said "to justify a reissue it is not necessary that the patent should be wholly inoperative or invalid. It is sufficient if it fail to secure to the patentee all of that which he has invented and claimed." 17

As we have seen (§ 106, ante) the patentee is bound by self-imposed limitations contained in the claims. The reissue statute, as has been pointed out by Judge Ray, affords the patentee relief in cases within its scope, where the courts cannot give him relief through construction. "The plain and clear meaning of the terms employed cannot be varied by construction, which must be in conformity to the self-imposed limitations contained in the claims, if any. The remedy for mistaken limitations in the claims of a patent (is) by reissue and not by construction." 18

Defective Description as Ground for Reissue. The great majority of reissues are sought solely to obtain new claims. But the amendment of the description, when defective, is one of the purposes of the statute. In an illustrative case Judge Lowell said: "The reissue was granted to correct the error of a single word in the specification (by changing 'hole' to 'slot'), * * *. The error was caused by oversight, and was unconnected with the gist of the invention, though its adoption rendered the machine inoperative. No change was made or needed in the claim. If the patentee made a meritorious invention, he ought not to lose the benefit of it by reason of a defect so narrow and technical." 19 "If it should be conceded that the changes in the description of the reissue are of no materiality * * * the circumstance would not impeach (the validity of the reissue). * * * A patentee who reissues his patent for the purpose of correcting a clerical error or improving the phraseology of his description may do what is unnecessary, but the public are not injured. Although the commissioner exceeds his statutory authority by granting a reissue for an invention which was not described or intended to be claimed in the original patent, he does not do so by permitting a change in the phraseology for the purpose of defining more perfectly what was described and claimed in the original. * * * If the claims in a reissue are valid which were contained in the original, notwithstanding its new claims are invalid, it would seem to follow that, where there are no new claims in the reissue all the claims should be valid, although in attempting to correct a mistake the commissioner has done nothing more than to introduce unimportant changes into the description." 20

Defective drawing as ground for reissue. It has been repeatedly ruled that a defective drawing may be the only, and a sufficient, ground for surrender and reissue. In the leading case Mr. Justice Brown said: "The reissue was applied for * * * merely to correct, as it would seem, an obvious error in one of the drawings. Possibly the error was such as would not have impaired the patentee's rights under his original designs; but he was entitled to the full scope of his invention, and if he were dissatisfied with the drawings as they stood, and the error was purely an inadvertent one, we think it was within the jurisdiction of the commissioner of patents to order the patent to be reissued."21

Mistake of the solicitor as ground for reissue. One of the cogent grounds for reissue is a mistake on the part of the solicitor leading to the improper cancellation or limitation of claims. Thus where the claims had been cancelled because of a mistaken belief that another party to an interference was the prior inventor, the cancelled claims were held properly obtained by reissue.22

Mistake of the Patent Office as ground for reissue. Errors of the Patent Office are recognized grounds for reissue. So where that office has rejected claims in the original application under an erroneous reference,23 or has improperly suggested a singular term, where it should have been plural,24 Where the applicant's name is misspelled in the specification and grant through the mistake of the Patent Office, a reissue will be made for the correction of the specific error, without charge of

office fees, at the request of the patentee, under Rule 170 of the Patent Office. But failure of the office to issue the patent to the assignee of the application does not come within the scope of that rule.

§ 224. Who may obtain reissue.

Where the patent has never been assigned, no one but the patentee, or, in the event of his death, his legal representatives, may apply for a reissue. The guardian of an insane person may apply for and receive a valid reissue of a patent belonging to his ward. The assignee of a patent may secure a reissue thereof, and the assignee of an undivided interest must be joined in an application for reissue. Where an assignment has not been recorded, the assignee need not join in the application for reissue, nor need a mere licensee be joined in such an application. The word "assigns" as used in this statute means the ultimate assignee, regardless of the number of mesne conveyances that may intervene.

§ 225. The original patent must be surrendered.

Upon application for a reissue the original letters patent must be tendered for surrender, although the statute since 1870 has provided that the surrender "shall

34. Dental Vulcanite Co. v. Wetherbee, Fed. Case No. 3810, 3 Fish. 87.
take effect upon the reissue of the amended patent.” 35 Mr. Justice Brown, referring to the use of these words in the statute has said:

“These words were obviously inserted for the purpose of preventing the surrender taking immediate effect, and to postpone its legal operation until the patent should be reissued. When a patent is thus surrendered, there can be no doubt that it continues to be a valid patent until it is reissued, when it becomes inoperative; but if a reissue be refused, it is entirely clear that the surrender never takes effect, and the patent stands as if no application had ever been made for a reissue.” 36

§ 226. The validity of claims obtained for the first time by reissue, as affecting the validity of claims imported from the original patent.

“In many cases where the new claims in a reissue have been held invalid, the claims repeated from the original have been sustained.” 37 In a leading case the Supreme Court held that “the patent must be regarded as void so far as the new and expanded claims are concerned.” 38

The Circuit Court of Appeals for the Seventh Circuit has adopted a doctrine at variance with the rule of the cases just cited. The reasoning of that court is as follows: “Without the existence of one or the other of two conditions precedent, the Commissioner of Patents is not authorized to grant a reissue. Either the original speci-

35. § 4916, R. S. U. S.
37. Wallace, J., in Thompson
Houston Electric Co. v. Black
759, 768, 68 C. C. A. 461; citing,
as illustrations Gage v. Herring,
107 U. S. 640, 27 L. Ed. 601; Mahn
v. Harwood, 112 U. S. 354, 28 L.
Ed. 665.
38. Mahn v. Harwood, 112 U.
S. 354, 28 L. Ed. 665.
fication must be defective or insufficient, or the original claims must embrace more than the patentee had a right to claim as new. But neither condition is available unless the error arose from inadvertence, accident or mistake, and without any fraudulent or deceptive intention.

* * * The attempted enlargement of the monopoly clearly applies to claims 10, 11, 12 and 13. To what extent, if at all, claims 1, 2, and 5 (same as in the original patent) are affected by the changes in the specification, or whether those claims are unavailable to appellant by reason of additional defenses interposed by appellee, are questions which we will not consider. The bill was based upon the reissue. And inasmuch as there existed none of the conditions precedent to the right of the commissioner to grant a reissue, the grant is utterly void." 39 This conclusion has cited in its support an opinion of Judge Hough, in which he says: "Upon the construction of the reissue above made, it appears clear that the Blackmore reissue not only enlarged the claims of the original patent, but sought to cover and does purport to cover an entirely different invention, and is therefore void." 40 The latter case is based upon the reissue being for a different invention; the former, upon the ground that the "original specification neither contained erroneous statements of fact nor failed to give a description in such full and clear terms as would enable any person skilled in the art to construct and use the device." Here is a clear line of distinction, and Judge Hough's opinion is no authority for the later holding, which is not in accord with the settled rule. 41 The Supreme Court has never abandoned the doctrine that "the invalidity of the new claim in the reissue does not in-

deed impair the validity of the original claim which is repeated and separately stated in the reissued patent. 42 And the reasoning of the Circuit Court of Appeals of the Seventh Circuit would be more convincing were it not for the fact that the statute concerning disclaimers has been held by the Supreme Court to apply to reissued as well as to original Letters Patent. In the opinion just quoted from, Mr. Justice Gray, after reciting the provisions of §§ 4917 and 4922, R. S. U. S., says, "a reissued patent is within the letter and the spirit of these provisions." 43

§ 227. Time within which reissue may be applied for.

So far as the statute is concerned, an application for reissue may be made at any time before the original or former reissued patent expires. 44 A reissued patent may be again reissued, 15 and the second reissue may be valid though identical in terms with the original. 46 Of course no reissue could be had after the expiration of the original patent, 47 or an expiration thereof, when the law permitted extensions. 48

The limit of time within which a reissue must be applied for has never been limited by statute, but the courts have arbitrarily fixed the term of two years as the limit, save under special circumstances, within which a reissue which seeks to expand the claim may be applied for. "The settled rule of decision is, that if it appears, in cases where the claim is merely expanded, that

43. Ibid.
44. Wilson v. Rousseau, 4 How. 646, 11 L. Ed. 1140.
the delay has been for two years, or more, it is adjudged to invalidate the reissue, unless the delay is accounted for and excused by special circumstances, which show it to have been not unreasonable." 49

"Due diligence must be exercised in discovering the mistake in the original patent, and, 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 an abandonment of the new matter to the public to the same extent that a failure by the inventor to apply for a patent within two years from the public use or sale of his invention is regarded by the statute as conclusive evidence of an abandonment of the patent to the public." 50

CHAPTER IX.

DISCLAIMERS.

§ 228. Disclaimer defined.

The word "disclaimer" is indifferently applied to those limitations imposed upon claims by representations made during the pendency of the application in the Patent Office and those limitations which are imposed subsequent to the issuance of the patent, in the formal manner prescribed by the statute. The disclaimer is a renunciation by the owner of the patent of a construction which, if placed upon the verbiage employed in the patent, would render it so broad as to invalidate it.

That the limitations embodied in the patent before its issuance are construed and denominated as the disclaimer appears from the following language of Judge Lacombe:

"When a patentee has practically disclaimed other devices by stating in his specifications that they existed before his own was contrived, such other devices may fairly be considered to be part of the prior art when he brings suit upon the patent issued to him upon the representations made in such specifications."

In another case the same judge has said:

"Whatever may have been the transactions between the applicant and the Patent Office, and whatever light may be thrown upon obscurities in the patent by the file wrapper and contents, it is the patent as issued by which the patentee's right to a monopoly must be tested. When it expressly de-

clares that there is some other process to which it does not apply, and in plain and unambiguous lan-
guage gives the earmarks by which that other pro-
cess is to be distinguished from the process of the patent, the public has the right to insist that the
patentee shall abide by the disclaimer he has made and proclaimed." ²

§ 2. The statutory provision.

Section 4917, R. S. U. S., is as follows:

"Whenever, through inadvertence, accident, or
mistake, and without any fraudulent or deceptive in-
tention, a patentee has claimed more than that of
which he was the original or first inventor or discov-
erer, his patent shall be valid for all that part which
is truly and justly his own, provided the same is a
material or substantial part of the thing patented;
and any such patentee, his heirs or assigns, whether
of the whole or any sectional interest therein, may,
on payment of the fee required by law, make dis-
claimer of such parts of the thing patented as he
shall not choose to claim or to hold by virtue of the
patent or assignment, stating therein the extent of
his interest in such patent. Such disclaimer shall
be in writing, attested by one or more witnesses, and
recorded in the Patent Office; and it shall thereafter
be considered as part of the original specification to
the extent of the interest possessed by the claimant
and by those claiming under him after the record
thereof. But no such disclaimer shall affect any ac-
tion pending at the time of its being filed, except so
far as may relate to the question of unreasonable
neglect or delay in filing it."

² Lacombe, J., in Jackson v.
Birmingham Brass Co., 25 C. C. A.
§ 229. Disclaimer—how construed.

The effect of the disclaimer upon the subsequent construction of the patent has been thus treated by Mr. Justice Clifford:

"Authority to make such a disclaimer is beyond question, if it be made in writing and is duly attested and recorded in the Patent Office. When so made, attested and recorded, it becomes a part of the original specification to the extent of the interest of those who make it; but the provision is that it shall not affect any action pending at the time of its being filed, except so far as may relate to the question of unreasonable neglect or delay in filing it.

"Pending suits may proceed, but the disclaimer, when recorded, becomes a part of the original specification, and must be taken into account in construing the patent, and in ascertaining the rights of the parties to the suit, unless it appears that the effect of the disclaimer is to enlarge the nature of the invention, and prejudice the rights of the respondents." Where the effect of the disclaimer is to diminish the claims of the patent without prejudicing the rights of the respondent, the suit may proceed, notwithstanding the disclaimer; it being held that the disclaimer, under such circumstances, does not affect the pending suit, except to limit and qualify the claims of the patent, and in respect to the question of unreasonable neglect or delay in filing the same. Unreasonable delay not having been suggested, the only effect of the disclaimer in such a case is to limit the nature of the invention secured by the patent, and to diminish the claims of the patent as set forth in the specification.

"Matters properly disclaimed cease to be a part of the invention; and it follows that the construction of the

patent must be the same as it would be if such matters had never been included in the description of the invention or the claims of the specification."

We find in the Second Circuit a case in which a disclaimer, pleaded upon by an amended bill, resulted in the invalidation of the patent in suit after it had been found valid by the Circuit Court of Appeals in the same case.

Supplementing the doctrine above quoted from Dunbar v. Meyers, Judge DeHaven has said: "In considering the scope and effect to be given a disclaimer, the same rules are to be observed as in construing any other written instrument, and so as to carry out the intention of the person executing it, as indicated by its language when construed with reference to the proceedings of which it forms a part. It cannot be read independently of its relation to the original specifications, of which it becomes a part when recorded." 6

It is obvious that there is no occasion for the defendant to prove the facts that are admitted by the disclaimer. Judge Wallace has said: "We are aware of no principle which will permit a patent to be defeated for want of novelty in respect to the subject-matter which has been eliminated from it by a disclaimer. The office of a disclaimer is to enable the patentee to save himself from the peril of such a defense. Matters which have been properly disclaimed cease to be a part of the invention." 7

It is equally obvious that a disclaimer cannot be so interpreted as to make a claim read for an invention different from that described and claimed in the patent before the disclaimer was filed. Criticising a disclaimer

of this character, Judge Lacombe has said: "The difficulty with this contention is that it substitutes a different invention from that described and claimed in the patent. It is not a narrower claim, but a different one. It is, as defendants suggest, 'an attempt to incorporate into a claim for a combination a feature which had not been claimed in connection with that combination before, and thereby make a new combination.' If one particular branch of the art of working in wood—cabinet making, for example—had never used circular saws, because they were supposed to be impracticable or useless or not economical, although such saws were used in other branches of the art, it might be invention to introduce them in cabinet making; and the individual who showed that they were useful, practicable, and economical in that branch of the art might be entitled to a patent for a circular saw in combination with the other parts of an old machine. But his specification and claim would be expected to indicate just what it was he had invented and what he claimed. An individual who had invented some specific improvement in circular saws generally—something novel and useful and applicable to those tools in every branch of the wood-working art—might also obtain a patent, with a claim covering all circular saws, which would be good to restrain infringement of his particular improvement. But it would be a startling proposition that he could, thirteen years afterwards, file a disclaimer of any combination containing circular saws, except such as might be used in cabinet-making machinery, and then insists that he was entitled to sustain his claim to cover all circular saws so used (with his improvement or without), on the theory that no one had used them in that branch of the art before." 8

1 Ilp.—19
After the disclaimer is made, the patentee will not be heard to contend that a concession contained in the disclaimer was made through inadvertence on the part of himself or his attorney. 9

§ 230. What may be disclaimed.

As noted by Mr. Justice Blatchford, "the statute expressly limits a disclaimer to a rejection of something before claimed as new." 10 So when the attempted disclaimer does not comply with the statutory requirement that the patentee shall give up some material or substantial part of the thing patented of which he was not the original inventor, and relates solely to matters that do not modify or change the construction of the claim as originally granted, it is ineffective as a disclaimer. 11 While this statement appears to be sound as thus formulated, the Supreme Court, in reversing the case just cited, said:

"We think there is no force in the criticism that a disclaimer may not extend to a part of the specification, as well as to a distinct claim." 12 Had the purpose of the disclaimer been to reform or alter the description of the invention, or convert the claim from one thing into something else, it might have been objectionable, as patents can only be amended for mistakes of this kind by a reissue. But the disclaimer in this case appears to have been made to obviate an ambiguity in the specification, and with no idea of obtaining the benefit of a reissue.

If the clauses had the effect of broadening the patent the disclaimer removes the objection. If they did not, the disclaimer could do no harm, and cannot be made the subject of criticism.” 13

Where a disclaimer has been properly filed, that is, where the statutory reason for filing a disclaimer existed, the patent must be construed in the light of the disclaimer. 14

It is clear that the office of a disclaimer does not extend to changing the invention from that described in the specification. Mr. Justice Bradley has said: “A disclaimer is usually and properly employed for the surrender of a separate claim in a patent, or some other distinct and separable matter, which can be excised without mutilating or changing what is left standing. Perhaps it may be used to limit a claim to a particular class of objects, or even to change the form of a claim which is too broad in its terms; but certainly it cannot be used to change the character of the invention. And if it requires an amended specification or supplemental description to make an altered claim intelligible or relevant, whilst it may possibly present a case for a surrender and reissue, it is clearly not adapted to a disclaimer. A man cannot, by merely filing a paper drawn up by his solicitor, make to himself a new patent, or one for a different invention from that which he has described in his specification.” 15

§ 231. When disclaimer may be filed.

The time when a disclaimer must be filed depends upon the circumstances of each case. The fact that the ob-


jectionable claim was sanctioned by the Patent Office and held valid by the Circuit Court gives the right to the patentee to disclaim within a reasonable time after the Appellate Court has rendered a judgment adverse to the claim. In such a case a disclaimer filed within two months after the decision of a Circuit Court of Appeals has been held to be reasonably prompt. And it is no objection that the disclaimer relates to a reissued pat-
ent.

It is within the discretion of the trial court to permit a disclaimer to be made and used upon a rehearing; but the discretion of the court in such a matter will not be reviewed on appeal. In the leading case, after the bill had been dismissed, the complainant filed a disclaimer in the Patent Office, and in order to avail himself of the disclaimer filed a motion for rehearing which was inform-
al. He then filed a formal petition for rehearing which the court granted upon condition that he pay to the defendant the costs accrued up to the time of filing the petition for rehearing. The costs were taxed, the plain-
tiff stated in open court that he was unable to comply with the condition, a final decree of dismissal was en-
tered, and the complainant appealed. Mr. Justice Gray said:

"After the case had been heard and decided upon its merits, the plaintiff could not file a disclaimer in court. or introduce new evidence upon that or any other sub-
ject, except at a rehearing granted by the court, upon such terms as it thought fit to impose. The granting or refusal, absolute or conditional, of a rehearing in equity, as of a new trial at law, rests in the discretion of the court in which the case has been heard or tried, and is

18. Gage v. Herring, 107 U. S.
not a subject of appeal. The terms imposed as a condition precedent to a rehearing not having been complied with, the disclaimer was not in the case."  

CHAPTER X.

LICENSED AND LICENSEE.

§ 232. License distinguished from assignment.

It is necessary to a proper understanding of the rights and liabilities arising from the relationship of licensor and licensee that the distinction between licenses and assignments be clearly understood. This distinction has been drawn by the United States Supreme Court, in these terms: "Every patent issued under the laws of the United States for an invention or discovery contains 'a grant to the patentee, his heirs and assigns, for the term of seventeen years, of the exclusive right to make, use and vend the invention or discovery throughout the United States and the Territories thereof.' R. S. U. S., § 4884. The monopoly thus granted is one entire thing, and cannot be divided into parts, except as authorized by those laws. The patentee or his assigns may, by instrument in writing, assign, grant and convey, either (1st) the whole patent, comprising the exclusive right to make, use and vend the invention throughout the United States; or (2d) an undivided part or share of that exclusive right; or (3d) the exclusive right under the patent within and throughout a specified part of the United States. Rev. Stat., § 4898. A transfer of either of these three kinds of interests is an assignment. * * * Any assignment or transfer, short of one of these, is a mere license." ¹

§ 233. How and when licenses granted.

Licenses may be granted orally as well as in writing, and they need not be recorded. They may be granted before the issuance of the patent.

§ 234. Licensing agreements—how construed.

The infinite variety of conditions to be met in licensing agreements, as well as the triplex nature of the patent franchise, and the fact that the license may be granted as to either, any two, or all, of the rights to make, use and sell, make it important to note the doctrine that such contracts have nought to do with the patent statute, that they are merely contracts, in writing or by parol, and are to be governed by the same rules of interpretation, with the same lex loci and lex fori, as other contracts, written or oral.

"There is nothing in the nature of a license in writing to place it outside the well-known rules of construction which are applicable to other contracts in writing. The writing itself is considered the ample and conclusive evidence of the final agreement of the parties thereto, and parol testimony to vary its terms is rigidly excluded. It is not the province of the court to make new contracts for parties, at the whim of one or the other. Rather it is the duty of the court to enforce literally the contract as it appears, unless indeed its unconscionable character or conditions, or its fraudulent inception,

or its evidence of the mutual mistake of the contracting parties, is so clear as to justify an appeal to the conscience of a court of equity. * * * It will not do to ask the court to so construe a writing that doubt may thereby be incorporated between its lines. Words are to be taken in their usual sense and significance." 5

A license to "use" implies the right to make for use, where otherwise the license would not benefit the licensee. 6

Where the licensing agreement is in writing, and imperfectly expresses the agreement of the parties, it is the duty of the one who first discovers the mistake in the language of the agreement to apply promptly to the other party for correction, or to a court of equity for reformation. Where he takes the former course, and the other party promptly offers to execute a corrected instrument, he must accept the offer, or will not be heard thereafter to complain of the imperfections of the contract. 7

§ 235. Particular classes of licenses.

A conveyance of particular claims of a patent has been held to be a license and not an assignment. The reason for this holding is as follows:

"While it is sometimes said that each claim of a patent is a separate patent, it is true only to a limited extent. Doubtless separate defenses may be interposed to different claims, and some may be held to be good and others bad, but it might lead to very great confusion to permit a patentee to split up his title within the same territory into as many different


parts as there are claims. If he could do this, his assignees would have the same right they now have to assign the title to certain territory, and the legal title to the patent might thus be distributed among a hundred persons at the same time. Such a division of the legal title would also be provocative of litigation among the assignees themselves as to the exact boundaries of their respective titles."

A conveyance of a right to practice the invention of a patent "so far as the same relates to and is used upon" specific articles, is a license and not an assignment; as has also been held of a conveyance of the exclusive right to make, use and vend the patented invention "for the following purposes and no others," which purposes are recited in the conveyance.

A conveyance of the exclusive right to use and sell the invention of the patent within certain designated states, the right to make not being conveyed, is merely a license.

A conveyance of the right "to use and manufacture and sell rights to use" in specific territory is not a territorial assignment but a license only.

A conveyance of the right to manufacture and sell even if accompanied by an assignment of all claims for damages arising from the past infringement of the letters patent is merely a license and not an assignment.

A conveyance reserving the right to license one other party and binding the patentee to prosecute infringers is merely a license.\textsuperscript{14}

§ 236. Who may grant licenses.

They may be granted by either of several owners in common with the same force and effect as if all joined in the license.\textsuperscript{15}

§ 237. License before issue of patent.

A license may be granted before the patent is issued;\textsuperscript{16} it seems probable, however, that in such a case the licensee may repudiate and surrender the license upon the issuance of the patent, if he was theretofore in ignorance of its claims.\textsuperscript{17}

§ 238. Express and implied licenses.

An express license may be defined as one whose terms are formulated by the verbal or written agreement of the parties; for it may be created by parol.\textsuperscript{18} A parol license, of course, must not be repugnant to the statute of frauds, and cannot embody covenants not to be performed within one year.\textsuperscript{19}

§ 239. License restrictions in sales of patented articles.

Where a patented article is once sold without restriction, it is forever freed from the monopoly of the pat-
Express restrictions may accompany the sale of that article, and will be enforced both as against the original purchaser and subsequent purchasers having actual notice of the restriction.

Such restrictions have been enforced in the following illustrative instances; restrictions as to

a. Territory.
b. Method of use.
c. Purpose of use.
d. Place of use.
e. Price at which the patented article may be leased or resold.
f. Duration.


g. Character of materials to be operated on.  
h. Class of structures in which the patent is to be used.  
i. Size and description of machines to be made under the patent.

§ 240. Rights and liabilities between licensor and licensee.

The validity of a patent cannot be determined in a suit against a licensee for royalties. This is because of the estoppel of the licensee to deny the validity of the patent under which he is licensed. The licensee is likewise estopped to deny that he is a licensee, and to deny the right of the licensor to unpaid royalty under the license. But this estoppel does not extend to purchasers who have merely bought from the licensee articles made under the license, and where the licensor elects to treat the license as void, and sue for infringement, the licensee is released from the estoppel.

It is, of course, competent for the parties to contract that the licensor will sue infringers during the life of the license. In a licensing agreement it was stipulated

35. Illinois Watch Case Co. v. Ecaubert, 177 Ill. 587.  
that the licensor should "use reasonable diligence in prosecuting or causing the prosecution of unlicensed persons who shall sell imitations of the gloves hereby licensed." The licensee breached the contract by non-payment of royalties, continued to manufacture, and was treated and sued as an infringer by the licensor. The answer alleged complainant's failure to prosecute infringers reported by the licensee. The proof showed the filing of several such suits and injunctions obtained in four, and there was no showing that the other infringers continued their infringements after the suits were filed. It was held that "if the action of the complainant was such that it resulted practically in stopping infringement, he fulfilled the spirit and the meaning of his obligation to the defendant to use reasonable diligence in prosecuting unlicensed sellers."  

§ 241. Termination.

The presumption is, when the terms of the license are silent, that the royalties are not payable upon articles manufactured and sold after the expiration of the life of the patent. The licensing agreement may expressly provide for the method of its termination by notice. "A license not expressly limited in duration continues until the patent expires or the license is forfeited, if not terminated by mutual consent."  

The license is not terminated by a failure to pay royalties. Nor does such failure to pay royalties entitle the licensor to a decree of annulment of the license.

"The failure to pay the royalties, upon which the claim of forfeiture is grounded, is a breach of contract, cognizable in a court of common law. That and the cancellation of the contract of license, or other equitable remedy in that regard, are all matters justiciable in a state court, but in the absence of diverse citizenship, are clearly outside the jurisdiction of a Federal court. It will not do to say that a forfeiture has taken place, ipso facto, by the non-payment of the stipulated royalties, and that, therefore, all handling of the patented articles by defendant since then has been an infringement. The law does not arm one party to a contract with the power to determine in his own favor a condition of this kind, and thus produce for the other party to the contract all the disabilities and consequences that would follow a forfeiture legally ascertained and declared. Even where the contract provides that the failure to pay shall render it null and void, the defendant has a right to be heard as to the facts upon which such annulment is made to depend. Forfeitures are not favored in equity, and the best-considered decisions hold that even licenses containing express stipulations for their forfeiture are not, ipso facto, forfeited upon condition broken, but remain operative and pleadable until rescinded by a court of equity."


Unless the license is in terms expressly made assignable, it terminates automatically upon the death of the sole licensee, or upon the dissolution of a corporate licensee.

§ 242. Revocation by licensor.

Licensing agreements usually provide for the method of their revocation for non-compliance of the licensee with his covenants. Frequently this is effected by a provision that if the licensee fails to perform his engagements the license may be revoked by a written notice served upon him. Such provisions are favored and uniformly sustained by the courts, and the general rule is that any method of terminating the agreement which is incorporated in the licensing agreement must, to be availed of, be followed according to its terms, and when such method is invoked will terminate the agreement.

Where written notice of revocation is called for a verbal notice will not suffice.

An adjudication of annulment based on notice of cancellation for breach of condition by the licensee will not be made except where the evidence of the licensee's default is clear.

§ 243. Waiver.

Where the licensing agreement provides for forfeiture upon breach of its conditions as to reports and payment of royalty, it is competent for the licensor to waive the forfeiture.\(^{53}\) Where in such case he sues in equity for specific performance of the agreement by the licensee, and an accounting of the royalties, he is held to have waived his right to forfeiture, will be remitted to his action at law, and a demurrer to the bill will be sustained.\(^{54}\)

§ 244. Licensor; election of remedies for breach.

Where the licensee is guilty of breach of the licensing agreement, and continues to make, use or sell, the licensor may have his election between standing on the contract and suing for its breach, or suing for the tort. "The remedy of complainant may be a double one; for liability may rest either upon the broken contract, or for the tortious use of the invention."\(^{55}\)

§ 245. Revocation by licensee.

The general principles just considered apply with equal force to the licensee. Under them the licensee must comply with the terms of the covenant for termination. Aside from this, the licensee may always rescind the contract upon the ground that it was obtained by fraudulent representations on the part of the licensor; but he must not be guilty of laches, and where he is, and has granted sub-licenses, relief will not be granted him.\(^{56}\)

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§ 246. Injunction in aid of suit to terminate license.

The jurisdiction of equity to preserve the status quo pending litigation may be invoked contemporaneously with a suit to cancel a license, and in a proper case an injunction will be granted to restrain making or selling under a patent, pendente lite, or until the licensing agreement has been decreed annulled. 57

CHAPTER XI.

ESTATES IN LETTERS PATENT; OTHER CHARACTERISTICS.

§ 247. Of the various kinds of estates.

The title to letters patent for inventions may be either
1. Legal, or
2. Equitable.

Such titles are acquired or lost in various ways, which, for convenience, may be treated under the following heads:

1. Title by original acquisition (the inventive act).
2. Title by grant.
3. Title by assignment.
4. Title by creditors' bill.
5. Title by proceedings in bankruptcy.
6. Title by bequest or intestacy.

And, finally, the title may be vested in one or more persons or corporations.

§ 248. The inventive act as a source of title.

It is obvious that the title created by occupancy depends upon three facts; first, that the person or persons upon whose application the patent has issued were the first to make the alleged invention; second, that he, or they were really sole or joint inventors, as alleged in the application; third, that the production of the thing patented embodied invention. In other words, the application must be for an invention, and the applicants must truthfully state their relationship to that invention. What constitutes invention is considered elsewhere in this book.
§ 249. Discrepancies between the patent and the facts as to sole or joint inventorship.

If the thing patented was invented solely by one of several joint applicants, the patent is void; conversely, if the invention is that of several joint inventors, a patent issued to one or more of them, less than the total number of joint inventors, is void; it is because such discrepancies lie at the very inception of title to the patent that they render the patent issued upon such a wrongful application void. And this is so of course, even where the patent is assigned to an innocent purchaser for value. Judge Kohlsaat, referring to this rule, has said: "This rule is well established, although the courts, on account of the hardship involved, have held the defense to be a technical one, and have required clear proof thereof."  

What is true of the patent, as a whole, under the rule we are considering, is true of each of its claims; because, as we have seen in considering the claim and its properties, each claim is practically a patent of itself, so that one claim may be infringed without infringing others in the same patent, and one may be valid while the others are invalid.

Therefore, where one of the several joint applicants is the sole inventor of the subject-matter of one claim, that claim is void.

§ 250. Title by grant.

The title arising from the fact of invention, and which we have just considered, is a title to the invention, rather than a title to the patent. When the inventor applies

for a patent upon his invention, and the Letters Patent issue to him, the grant of such patent is another, or confirmatory title. But an unpatented invention can be assigned, before or after a patent is applied for, and where it has been so assigned, and the assignment is (as is usual) accompanied by a request that the Letters Patent when issued be issued to the assignee, such assignee, and not the inventor, is the grantee under the grant of the patent. By common usage, any title by assignment is called a title by grant. Therefore, except as to the title created by the original grant, and which is considered in connection with the general subject of the grant, the titles usually treated under this head are properly dealt with as titles by assignment.

§ 251. Title by assignment.

The monopoly granted by Letters Patent for inventions is one entire thing, and cannot be divided into parts, except as authorized by the patent statutes.5

§ 252. Assignment defined.

Probably the most comprehensive definition is that given judicially by Mr. Justice Gray, in the following language:

"The patentee or his assigns may, by instrument in writing, assign, grant, and convey, either (1st) the whole patent, comprising the exclusive right to make, use and vend the invention throughout the United States; or, (2nd) an undivided part or share of that exclusive right; or, (3rd) the exclusive right under the patent within and throughout a specified part of the United States. A transfer of either of these three kinds of interests is an assignment properly speaking, and vests in the assignee a title in so much of the patent itself."6

§ 253. Requisites.

a. *As to description.* It is sufficient that the patent conveyed be described with sufficient particularity to identify it.7

b. *As to the grantor.* The statute merely requires the assignment to be in writing; it therefore need not be executed under seal.8

An assignment by a corporation need not bear the corporate seal. It is only necessary "that the agent (or officer) should, in the body of the contract, name the corporation as the contracting party and sign as its agent or officer."9

An infant, or other person, under guardianship may execute an assignment by guardian, the guardian being appointed under the laws of the State.10

An assignment made by an attorney in fact must be signed with the assignor's name. When merely signed with the name of the attorney, the assignment is inoperative.11

c. *As to the grantee.* A grant to a copartnership, in which only the firm name of the grantee is given, is valid.12

A married woman, an infant, or a person under guardianship, may be a grantee.13
d. *As to the consideration.* Where there is a total failure of consideration, it has been held that the failure

to pay the consideration does not invalidate the assignment as to persons dealing in good faith with the assignee, although the general rule is "that when a party has agreed to pay a certain price for a patent, if he does not pay the price he does not get the patent."  

§ 254. Title by creditors' bill.

By reason of their peculiar nature as embodying incorporeal rights, which do not exist in any particular state or district, but are co-extensive with the United States, it was said, in a dictum of Mr. Justice Curtis in a copyright case, that "there would certainly be great difficulty in assenting to the proposition that patents and copyrights, held under the laws of the United States, are subject to seizure and sale on execution." The remedy whereby letters patent may be reached and subjected to the payment of the claims of creditors is by a bill in equity. A license under letters patent may be similarly subjected to sale. Such a suit, however, is not a suit on a patent, and jurisdiction over it does not exist in the Federal courts in the absence of diversity of citizenship, and a sufficient amount in controversy. Patents belonging to the plaintiff in an equity suit, who has been decreed to pay costs, may be reached by a petition in the original suit, or an original bill may be filed in the same court and treated as a dependent or ancillary proceeding, without subpoena, and although the plaintiff is not an inhabitant of the district.

§ 255. Title through proceedings in receivership or bankruptcy.

Patents can be reached under the bankruptcy law, "because they are wholly subject to the laws of the United States." By section 70 of the National Bankruptcy Act of July 1, 1898, title to existing patents of the bankrupt passes to the trustee by operation of law. The language of the Act is "interests in patents and patent rights;" and, interpreting that language, it has been held to be limited to interests in or under patents in existence and in force on the day of the adjudication in bankruptcy, and not to extend to interests in applications for patent then pending.

A receiver of an insolvent corporation may maintain a bill in equity to compel the holder of the legal title to a patent, whereof the corporation was the equitable owner, to convey the title to the receiver.

Under the former National Bankruptcy Act where an assignee in bankruptcy did nothing regarding the patent and was discharged, and the bankrupt thereafter assigned the patent, the title thus acquired was held to be good.

§ 256. Title through bequest or intestacy.

As to the unpatented inventions of a deceased person, the Federal Statute is as follows:

"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 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."

As to patents issued prior to the death of the inventor, "the obvious intent of the law is, to vest in the legal representatives of a patentee, upon his death, the same rights he would have enjoyed if he had lived." 28

The words "heirs at law" in this section have been construed to mean "next of kin;" while the word "devisees" has been construed to mean "legatees." 29

The grant of letters patent, running, according to the provisions of § 4884, R. S. U. S., to the patentee, "his heirs or assigns," the fact that the patentee dies after the application is made and before the patent issues, does not render the patent void; it takes effect as a valid


grant to the heirs, executors, administrators or assigns.\textsuperscript{30}

Where a patent issues to the administrator of a deceased inventor, the administrator, of course, takes only such title as the deceased had at his death, and where the deceased had parted with the equitable title, that title will be unaffected by the death of the inventor.\textsuperscript{31} Where the patent is issued to the executor or administrator, the grant need not contain any recital that it is in trust for the heirs or devisees, as this is implied by law.\textsuperscript{32}

The death of an applicant for patent terminates the authority of his attorneys, and an amendment made after his death amounting to more than a mere amplification of what had been in the application, and unsupported by the oath of his administrator, has been held to avoid the patent.\textsuperscript{33} Where the owner of an undivided interest in the patent died intestate and the administratrix was appointed, qualified, administered the estate and was discharged, the title of the intestate was held to vest by operation of law in the next of kin.\textsuperscript{34}

\textbf{§ 257. Co-ownership of letters patent, how created.}

The title to Letters Patent may be held in undivided interests by two or more persons, as a result of the conveyance of one or more undivided interests by the sole patentee, or joint patentees, or as the result of the grant of the patent being to two or more persons who were joint applicants, or one or more of whom acquired his or

\begin{itemize}
\item \textsuperscript{31} Northwestern Fire Extinguisher Co. v. Philadelphia Fire Extinguisher Co., 1 B. & A. 177, Fed. Case No. 10,337.
\item \textsuperscript{32} Stimpson v. Rogers, 4 Blatchf. 333, Fed. Case No. 13,457.
\end{itemize}
their interest by assignment prior to the issuance of the patent. There has been some discussion as to the exact nature of the individual estates thus created, and whether the several owners of the Letters Patent hold as joint tenants, or as tenants in common. We will limit our attention to the rights and liabilities of these owners of undivided interest as among themselves.

§ 258. Rights and liabilities created by co-ownership.

"The owner of an undivided part of all the rights secured by a patent may, without the consent of his co-owners, grant a valid license to use the monopoly it protects." 36 Taking this as our fundamental rule, we find the general subject thus ably discussed by Judge Wales:

"The rights and liabilities of the co-owners of a patent, when not modified by contract or agreement among themselves, in respect to royalties received by them, in the light of all the authorities on the subject, may be stated thus: Where a patent belongs to several persons in common, each co-owner can assign his share, and sue for an infringement, and can also work the patent himself, give license to work it, and sue for royalties payable to him for its use, and is entitled to retain, for his own benefit, whatever profit he may derive from the working, although he may be liable to account for what he receives in respect of the licenses." 36

"In Dunham v. Railroad Co., 2 Ban. & A. 327, 7 Biss. 223, Fed. Cas. No. 4151, it was said by Judge Drummond


that, where a party owning less than the whole of the thing patented makes a grant or license under the patent, it would seem the better rule to hold, if there is any liability at all, that he shall be answerable to the others, rather than the other patentees shall look to the grantee or licensee. In Curran v. Burdsall, 20 Fed. Rep. 837, the court held that, if one of several joint patentees assigns to a third party, the estoppel upon the assignor must work a license to the assignee to use the patent, and the joint owner of the patent must look to the one who assigns, for an accounting. The rule deducible from the authorities would seem to be that the license of one or more of several owners in common of a patent confers a right as against all, and that the remedy of the other tenants in common, if they have any, is by a suit for an account for whatever may have been received by them. In other words, the licensee of a patent held by two or more co-owners is liable to his licensor only, and not to the other co-owners, for license fees or royalties, unless it is otherwise stipulated in the license." 37

§ 259. Letters Patent as payment for stock subscriptions.

It is the general rule that Letters Patent, or licenses thereunder, may, to the extent of their reasonable value, be accepted and given in payment of subscriptions to the capital stock of corporations. The difficulty of determining the value of the patent franchise, which is very great at all times, and particularly in the case of a newly issued patent, or one which has never been adjudicated, is no obstacle to such a transaction. "In the absence of fraud, an agreement may ordinarily be made by which stockholders can be allowed to pay for their shares in

patents, mines, or other property, to which it is not easy to assign a determinate value." 38

Under the well-known principles of corporation law, however, unduly inflated values placed upon patent rights, will result, upon the complaint of creditors, in holding the subscribers personally liable for their subscriptions, as stated by Mr. Justice Brown:

"It is the settled doctrine of this court that the trust arising in favor of creditors by subscriptions to the stock of a corporation cannot be defeated by a simulated payment short of an actual payment in good faith. And while any settlement or satisfaction of such subscription may be good as between the corporation and the stockholders, it is unavailing as against the claims of the creditors." 39

The same rule obtains in England. Lord Justice Gifford said: "If a man contracts to take shares he must pay for them, to use a homely phrase, in meal or in malt; he must either pay in money or money's worth; if he pays in one or the other that will be a satisfaction." 40

The language of the Missouri Supreme Court has been often referred to: "The authorities are not in entire accord as to whether the payment of a stock subscription can be made in anything else than money, some holding one way and some the other. But the class of authorities which declare that a subscription may be paid otherwise than in money, we regard as asserting a more reasonable doctrine, a doctrine better adapted to the practical affairs of business life. Regarding the matter then in this light, we shall rule that payment of stock subscriptions

38. New Haven Horse Nail Co. v. Linden Spring Co., 142 Mass. 349.


40. Drummond's Case, L. R., 4 Ch. App. 772.
need not be in cash, but may be in whatever, considering the situation of the corporation, represents to that corporation a fair, just, lawful and needed equivalent for the money subscribed. Any other doctrine than this would, as it seems to us, place a corporation at a disadvantage, under a disability not contemplated by the law and under which a natural person does not labor. Besides, a corporation, unless prohibited by statutory provisions, has a general capacity of contracting which the common law concedes to every one ordinarily competent to enter into binding engagements.” 41

The danger inherent in the organization of a corporation whose stock is issued wholly or in part for patent rights, is greatest in those jurisdictions in which the rule obtains which is followed in Missouri: “That it is the duty of the stockholder, and not of the creditor, to see that it is so paid; hence, the inquiry in a case between the creditor and a stockholder when property has been paid in for the capital stock of a corporation; is not whether the stockholder believed or had reason to believe that the property was equal in value to the par value of the capital stock; but whether, in point of fact, it was such equivalent.” 42

The rule that letters patent, or interests therein can be taken in payment of stock subscriptions is general in the United States; the difficulty lies in the remedy, or in the burden of proof that is imposed upon the creditor seeking to establish the personal liability of the subscribers to the stock. The Illinois Supreme Court has referred to this variance in the adjective law in the several jurisdictions as follows: “Some of the cases hold that over-valuation will not render the stockholder lia-

bie for the difference between the actual and accepted values, unless there is affirmative proof of fraud *alivnde*; but other cases hold what we regard as the better view, namely, that where property whose value is well known or can be easily learned is taken at an exaggerated estimate, a strong presumption is raised that the valuation is not in good faith and is made for a fraudulent purpose. This presumption will be conclusive unless rebutted by satisfactory evidence explanatory of the apparent fraud. Where the over-valuation is so great that the fraudulent intent appears on its face and is not explained, the court will hold it to be fraudulent as matter of law * * *. If there is a fraudulent over-valuation of the property taken by the corporation for the stock, the stockholder is liable for the difference between the actual value and the accepted value of such property and consequently his stock is regarded as unpaid stock to the extent of that difference. Hence, proof of fraudulent over-valuation is proof that the stock is unpaid. Under the allegation that the stock is unpaid, any proof that it is unpaid, even though it be proof of the unpaid difference referred to as growing out of a fraudulent over-valuation, may be legitimately introduced."

The doctrine followed by the Federal Courts in these cases is thus formulated by Mr. Justice Field:

"A gross and obvious over-valuation of property would be strong evidence of fraud.41 But the allegation of intentional and fraudulent under-valuation (over-val-

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uation) of the property is not sustained by the evidence. The patent and the machinery had been used by the corporation in their business which was continued under the charter. They were immediately serviceable, and therefore had to the company a present value. The corporators may have placed too high an estimate upon the property, but the court below finds that its valuation was honestly and fairly made; and there is only one item, the value of the chartered privilege, which is at all liable to any legal objection. But if that were deducted, the remaining amount would be so near to the aggregate capital that no implication could be raised against the entire good faith of the parties to the transaction."

The remedy of the creditor seeking to charge stock subscribers with liability in cases of the kind under consideration is, in some jurisdictions, by a motion for judgment in the suit in which judgment has been obtained against the corporation, and the execution returned unsatisfied in whole or in part. In the absence of such statutory provisions the remedy is by bill in equity, which may be brought in any jurisdiction where the stockholder may be lawfully served with process.

"The judgment ascertains the amount due, and apportions it between the * * * defendants in proportion to their respective holdings, and provides that, if satisfaction cannot he had against either, the other shall make up his deficiency. This is in accordance with the principle on which courts of equity proceed in such cases;


the shareholders are assessed to make up the sum required to be raised, but with the proviso that the shareholders who are solvent must, to the extent of their liability, make up the deficiencies caused by the failure of the insolvents to respond." 47

From the foregoing, it is obvious that counsel must have careful recourse, when advising in the organization of corporations, to the enabling acts and the decisions of the state of the incorporation. Where it is possible, it is advisable to safeguard the subscriber by an appraisement or other ascertainment of the value of the patent, or license, sought to be used in payment for the stock subscription. Some of the states have provisions by statute for such appraisement. The importance of securing some kind of valuation of the patent franchise is emphasized by the criticisms which the courts have made of various schemes of incorporation of this kind, such as the following:

"As the result shows, the whole matter was a mere speculation, and while the individual defendants doubtless were deceived by Braun, and gulled into the belief that they would become millionaires by investing two hundred dollars apiece in this enterprise, the court cannot regard such a transaction as amounting to a payment of the shares of stock which they respectively received in this corporation." 48 In a New York case we read: "The transfer of a patent which had no ascertained value, which, in the language of the witness, 'as it turned out was worth nothing,' cannot be regarded as 'money,' or its equivalent, because those engaged in

48. Van Cleave v. Berkey, 143 Mo. 109, 117.
the management of the company believe at the time it is valuable, and receive it after organization, upon some fixed estimate of its value, between them and the subscribers, as so much money. Before a thing can be regarded as money or its equivalent, it must be an actual, positive, and ascertained value—a value so thoroughly ascertained and fixed at the time, that it can at once be changed into money, of which it is regarded as the equivalent."


The power of Congress to impose a tax on letters patent cannot be doubted. But the question of the right of the several states to levy taxes upon patents or patent rights is one which is as yet undecided by the United States Supreme Court.50

In a suit in equity to enjoin the collection of taxes levied under a statute of Indiana, upon the capital stock of a corporation representing, in part, the value of certain letters patent, the Circuit Court for the District of Indiana granted an injunction restraining the collection of the taxes so levied "or any other amount (of taxes) which may be claimed to be due on account of the value of any patent rights or letters patent owned or held by complainants."51

The Court of Appeals held that the suit was not one arising under the patent laws of the United States; that it, consequently, was without jurisdiction to entertain the appeal, and that the appeal should be taken to the United States Supreme Court.52

49. Tasker v. Wallace, 6 Daly (N. Y.) 364.
50. See Notes, 29 L. R. A. 792, 58 L. R. A. 564.
That court, upon an appeal being taken to it, reversed the decree upon the sole ground that the Circuit Court had no jurisdiction. 53

However, the absence of an express adjudication by the Supreme Court upon the question of the taxing power of the states in this regard, does not leave the question in any serious doubt, in view of the finality and comprehensiveness with which the Supreme Court has defined the word "franchise" and laid down the rule that no franchise granted by Congress can be subjected to taxation by a State without the consent of Congress.

The definition and the rule are thus expressed by Mr. Justice Bradley:

"Assuming, then, that the Central Pacific Railroad Company has received the important franchises referred to by grant of the United States, the question arises whether they are legitimate subjects of taxation by the State. They were granted to the company for national purposes and to subserve national ends. It seems very clear that the State of California can neither take them away, nor destroy nor abridge them, nor cripple them by onerous burdens. Can it tax them? It may undoubtedly tax outside visible property of the company situated within the State. That is a different thing. But may it tax franchises which are the grant of the United States? In our judgment it cannot. What is a franchise? Under the English law Blackstone defines it as 'a royal privilege, or branch of the king's prerogative, subsisting in the hands of a subject.' 2 Com. 37. Generalized, and divested of the special form which it assumes under a monarchical government based on feudal traditions, a franchise is a right, privilege or power, of public concern, which ought not to be exercised by private individuals at their mere will and pleasure, but should

be reserved for public control and administration, either by the government directly, or by public agents acting under such conditions and regulations as the government may impose in the public interest and for the public security. Such rights and powers must exist under every form of society. They are always educated by the laws and customs of the community. Under our system, their existence and disposal are under the control of the legislative department of the government, and they cannot be assumed or exercised without legislative authority. No private person can establish a public highway, or a public ferry or railroad, or charge tolls for the use of the same, without authority from the Legislature, direct or derived. These are franchises. No private person can take another’s property, even for a public use, without such authority; which is the same as to say that the right of eminent domain can only be exercised by virtue of a legislative grant. This is a franchise. No persons can make themselves a body corporate and politic without legislative authority. Corporate capacity is a franchise. The list might be continued indefinitely.

"In view of this description of the nature of a franchise, how can it be possible that a franchise granted by Congress can be subject to taxation by a State without the consent of Congress? Taxation is a burden, and may be laid so heavily as to destroy the thing taxed, or render it valueless. As Chief Justice Marshall said in McCulloch v. Maryland, 17 U. S. (4 Wheat.) 316, 4 L. Ed. 579, 'the power to tax involves the power to destroy.' Recollecting the fundamental principle that the Constitution, laws and treaties of the United States are the supreme law of the land, it seems to us almost absurd to contend that a power given to a person or corporation by the United States may be subjected to taxation by a State. The power conferred emanates from,
and is a portion of, the power of the government that
confers it. To tax it is not only derogatory to the dig-
nity, but subversive of the powers, of the government,
and repugnant to its paramount sovereignty. It is un-
necessary to cite cases on this subject.”

Judge Barr, on circuit, has dealt directly with the sub-
ject, as follows:

“'The patent right * * * which is a grant by the
United States, cannot be taxed by a State. If the author-
ity to tax such a right of exclusion exists at all, the
limitation upon its exercise must depend alone upon the
Constitution and laws of the several states, and such an
authority is utterly inconsistent with the grant of the
patent right which is by the Constitution of the United
States given exclusively to Congress.”

There is a distinction to be drawn between taxation of
a patent right: taxation of articles made under a patent,
and taxation based, as in the New York statute, upon a
“corporate business or franchise.”

In the last named class of cases, the fact that part of
the capital stock is invested in United States bonds,
over which the State has no taxing power, does not in-
validate a general assessment of the corporation’s "business or franchise." In so holding, Mr. Justice Field
said: "We hold * * * that the tax for which the
suit is brought is not a tax on the capital stock or prop-
erty of the company, but upon its corporate franchise,
and is not therefore subject to the objection stated by

54. California v. Central Pacific
R. Co., 127 U. S. 1, 32 L. Ed. 150.
55. In re Sheffield, 64 Fed.
Rep. 833, 836.
56. Home Ins. Co. v. New York,
134 U. S. 594, 33 L. Ed. 1025; a de-
cision on rehearing; the decision
of the Court of Appeals of New
York (92 N. Y. 328) was affirmed
by a divided court in Home Ind.
Co. v. New York, 119 U. S. 129,
30 L. Ed. 350, and a rehearing or-
dered in Home Ins. Co. v. New
York, 122 U. S. 636, 30 L. Ed.
1241.
counsel, because a portion of its capital stock is invested in securities of the United States."

Coming to the decisions of the State courts we find that the New York court has held that the investment of the capital of a corporation in patents does not exempt any part of its "corporate business or franchise" from taxation, while holding in another case that patent rights are exempt from taxation by the State, and, again, that in assessing a tax upon the personal property of a corporation, the amount invested by it in patent rights must be exempted.

In Pennsylvania, capital stock issued for patent rights is held exempt from taxation; the same rule applies to the capital of the corporation invested in patent rights, and it is immaterial whether the patent issues to the corporation as patentee, or the corporation's rights thereunder are acquired after the issuance of the patent.

But the rule is different where the corporate stock is issued for the use of patented appliances, which stock is, like the appliances themselves, property subject to taxation.


CHAPTER XII.

INFRINGEMENT.

§ 261. Infringement defined.

As we have seen elsewhere, the right vested in a patentee by the grant of the patent is exclusive or monopolistic in character, for a term of years named, in a territory named, and embraces three distinct substantive rights, namely, the right to make, the right to use and the right to sell. An invasion of either of these rights by another, during the life of the patent and within the territory named in the patent, is called an infringement; and the device or art thus wrongfully made or practiced is also called an infringement; but whether the act or the instrumentality is meant can always be gathered from the context of the opinions. Thus we find in one paragraph by a very able judge, the word "infringement" aptly used in both of its meanings. "An infringement is a copy made after and agreeing substantially and in principle with the article described in the Letters Patent. The act of Congress confers upon the patentee and his assigns the exclusive right to make, to use, or to sell to others to be used, the article patented. It is, therefore, an infringement to make or manufacture a patented article though it is never used by the maker. It is likewise an infringement to use a patented article though made by another. It is also an infringement to sell to others the article when it is manufactured by another. The law vests the exclusive right to do all these three things in the patentee, and hence for another to do one or all of them is an infringement." 1

An English text-writer gives this terse definition, "the infringement of a patent is the doing that which the patent prohibits from being done."  

§ 262. Contributory infringement defined.

"Contributory infringement has been well defined as 'the intentional aiding of one person by another in the unlawful making or selling or using of the patented invention.'"

"It is well settled that where one makes and sells one element of a combination covered by a patent with the intention and for the purpose of bringing about its use in such a combination he is guilty of contributory infringement and is equally liable to the patentee with him who in fact organizes the complete combination. The leading case on the subject is Wallace v. Holmes (9 Blatchf. 65, Fed. Case 17,100). It was cited with approval in American Cotton Tie Co. v. Simmons, 106 U. S. 89, 27 L. Ed. 79, and the same doctrine was applied and extended by this court in Heaton-Peninsular Button Fastener Co. v. Eureka Specialty Co., 77 Fed. Rep. 288, 25 C. C. A. 267, to a case where the article sold was not even an element of the patented combination, but was an article the use of which in connection with (the) patented combination was a violation of the conditions of a license, and destroyed the protection the license would otherwise have afforded."  


§ 263. Intent—The necessity of establishing and how proven.

As will be seen from the foregoing paragraph, the intent to aid in the infringement is essential in fixing the liability of the contributory infringer;—he may well be termed a fractional infringer, contributing his proportion to the entity which is the whole, and ultimate, infringement.

There are, however, two classes into which all cases arising in this corner of the domain of patent law may be divided; one, in which the article furnished by the defendant to the real infringer is useful in other ways than in the infringing act or thing, in which class the intent of the defendant must be established by proof _alivnde_; the other in which the article furnished is so peculiarly adapted to the infringing use, that its sale carries with it the presumption of the defendant's wrongful intent. Examining into these divisions, the illustrative cases disclose the following:

A. _Cases involving an ordinary article of commerce._

The following statements of the doctrine are comprehensive:

"The doctrine of contributory infringement has never been applied to a case where the thing alleged to be contributed is one of general use, suitable to a great variety of other methods of use, and especially where there is no agreement or definite purpose that the thing sold shall be employed with other things so as to infringe a patent right. The cases which are cited (Thomson-Houston Electric Co. v. Kelsey Electric Ry. Specialty Co., 72 Fed. Rep. 1016; Heaton-Peninsular Button-Fastener Co. v. Eureka Specialty Co., 77 Fed. Rep. 297, 25 C. C. A. 267, 35 L. R. A. 728), do not support the position taken; for in those cases not only was the thing furnished peculiarly adapted to the infringing use, but
the court found as a matter of fact that there was a wrongful purpose on the part of the contributing defendant that the article supplied should be so used. These are the characteristics of a case for making one liable as a contributory infringer." 5 "The intent and purpose that the element made and sold shall be used in a way that shall infringe the combination in which it is an element constitutes the necessary concert of action between him who furnishes the single part and he who actually does the injury by the assembling and using of all the parts in such a way as to be an infringement." 6

It is instructive to compare the opinions in two cases involving the sale of acid phosphate as contributing to the infringement of Letters Patent 474,811, of May 17, 1892, to Catlin for improvements in baking preparations. One of its claims, was:

(1) A baking preparation containing phosphoric acid or its compounds in granular condition essentially free from pulverulent phosphatic material, substantially as described.

The patent had been sustained. 7

Subsequently two suits were brought against dealers in granular acid phosphate, in one of which the charge of contributory infringement was found in the negative by the Circuit Court, in whose opinion we read:

"The specific sale sought to be proven by the above testimony was of a barrel of acid phosphate, a constituent element in the manufacture of baking powder, and the claim is made that it was knowingly sold for the purpose of being used in the manufacture of baking powder,

that it was designed and intended for that use solely, and that consequently the defendant by the sale became guilty of contributory infringement. Assuming that the article in question was sold by the defendant to Clotworthy or others, there is no evidence showing for what purpose it was sold or used, or that it was only useful when combined in the manner provided in the patent in suit. On the contrary, there is evidence that it was an article of commerce in general and common use for a number of specific purposes. It is true it could be combined and used as claimed in the patent, but it could likewise be used, and was sold and used for a variety of other purposes, and I find no evidence in the case to show that there was any agreement, knowledge, or understanding that any acid phosphate sold by the defendant was to be combined with other articles to infringe the complainant's patent. The complainant made Heller his own witness, and his testimony, corroborated by Wadman to some extent as to the variety of uses for which acid phosphate is manufactured, adapted, and sold, is uncontradicted. In order to establish contributory infringement, it should be convincingly shown that a granular acid phosphate manufactured by the defendant went into a baking powder, which infringed the patent in suit, and that the defendant manufactured and sold said phosphate knowing, or having reasonable cause to know, that it was to be used in an infringing baking powder."

In the Second Circuit, the Court of Appeals held the opposite upon the same facts, saying:

"The Catlin patent was upheld because the inventor had succeeded in getting rid of the fine powder which

was supposed to be indispensable to success, and used a powder in a uniformly granulated condition. It is, therefore, the use of such powder which constitutes infringement and when a manufacturer of acid phosphates sells a manufacturer of baking powder a barrel of granular acid phosphate the presumption is not unfair that he expects it to be used for baking powder. There is testimony tending to show that 'special' phosphate is specially adapted for use in making baking powder.'

We thus see that the intent may be inferred from the peculiar circumstances attending the sale of an ordinary, staple, article of commerce.

B. Where the element sold by the alleged contributory infringer is useful, peculiarly or solely, as and for the performance of a function in the infringing combination, the intent is presumed. In some of the cases we read:

"Defendants cannot escape liability for infringement. They are making, and putting upon the market, an article, which, of necessity, to their knowledge, is to be used for the purpose of infringing the complainant's patent. They thereby concert with those to whom they sell the blocks to invade the complainant's rights. They are intentional promoters of the ultimate act of infringement." 10

"This knuckle is not an ordinary tool or piece of mechanism, which can be procured at any general hardware store, but is unique, and can be used only in connection with the balance of complainants device. There can be no doubt, therefore, that the defendant intended to manufacture and sell the knuckle to be used in, and as forming an important and essential part of, the com-

plaintiff’s patented device. If the defendant can do this with impunity, it, or any other person, can certainly manufacture and sell the other less important parts, and thereby the value of complainant’s monopoly will be limited to the first sales made by it. This cannot be the law.”

“Defendants further suggest that their trolley stand is capable of a lawful as well as an unlawful use, by way of reparation or restoration of a patented device, and that the presumption must be that this is the purpose for which it is to be used. As already shown, it does not appear, by advertisements or sales, that its use is to be confined to such purpose. Inasmuch as the defendants make and thus sell stands which are useful only for the purpose of performing functions involved in the operation of the patent, it raises a presumption that they intend their stands should be so used. A suit for infringement cannot be defeated by merely showing that such devices could be used for some other purposes.”

§ 264. Contributory infringement by the sale of machinery or materials for use in infringement.

Where apparatus is sold with the intent that it shall be used in practicing the invention of a process patent, contributory infringement exists; and intent is presumed or must be proven, under the rule just considered. Thus where the defendant sold filters adapted and intended solely to filter beer in accordance with complainant’s patented process.

Similarly, where plaintiff’s process was for water filtration and defendant sold filters, tanks, and a series of pipes "unnecessary and worthless" except to infringe plaintiff’s process patent.  

And where plaintiff’s patent was for "an improvement in obtaining cream from milk," and defendant sold milk cans "accompanied by directions to purchasers as to the mode of using them, which directions require the adoption and use of the (plaintiff’s) process," he was subjected to an injunction and an accounting.

§ 265. Materials.

A licensee under a process patent knowingly selling materials used in the process to unlicensed persons for use in infringing, is a contributory infringer. And so of one who sells a compound with directions to so make a liquid from it as to infringe a patent for a composition of matter.

§ 266. Infringement resulting from wear or adjustment.

In the early case of Page v. Ferry a jury found for the plaintiff in a case in which they were instructed that a machine so constructed and intended that by the wear of the metal in use its shaft would acquire the "end-play" of the patent in suit, through the wearing of the metal in use, would be an infringement. On the other hand, a machine that only comes within the claim of the patent in suit by misuse, or through accident or the negligence of the user, does not render its maker liable for infringement.

"If the machine, as made by the defendant, was not an infraction of the plaintiff's patent, the alteration of it, by a third person, will not make the defendant liable for an infraction to which he was not a party. But if the machine, as made by him, was intended by him to operate in such a way as to violate the patent, and has, in part. so operated, he was a party to the infraction, notwithstanding the ingenuity with which he may have sought to disguise his wrong;" (when he sent the machine out with journals separated, while in use they would be adjusted to contact).

§ 267. Replacement and repair of patented devices.

In an early case Mr. Chief Justice Taney said "when the (patented) machine passes to the hands of the purchaser, it is no longer within the limits of the monopoly. It passes outside of it." We have elsewhere considered those restrictions upon the use or sale of patented articles which may be created by the agreement of the original vendor and vendee. We will here examine the limits within which the patented device may be lawfully altered, or its integrity departed from by replacement or repair in the hands of the original or a subsequent vendee.

The leading case will first be drawn upon as a foundation for our analysis of the later adjudications.

"The proof in this case is, that one of Woodworth's machines, properly made, will last in use for several years, but that its cutting knives will wear out and must be replaced at least every sixty or ninety days.

"The right to replace them was a part of the invention transferred to the assignee at the time that he bought it, without which his purchase would have been

useless to him, except for sixty or ninety days after a machine had been put in use. It has not been contended, nor can it be, that such can be a limitation of the assignee's right in the use of the invention.

"If, then, the use of the machine depends upon the replacement of the knives, and the assignee could replace them from time to time, as they were needed, during the first term of the patent, though they are essential and distinct constituents of the principle or combination of the invention, frequently replacing them, according to the intention of the inventor, is not a reconstruction of the invention, but the use of so much of it as is absolutely necessary to identify the machine with what it was in the beginning of its use, or before that part of it had been worn out.

"The right of the assignee to replace the cutter knives is not because they are of perishable materials, but because the inventor of the machine has so arranged them as a part of its combination, that the machine could not be continued in use without a succession of knives at short intervals. Unless they were replaced, the invention would have been but of little use to the inventor or to others. The other constituent parts of his invention, though liable to be worn out, are not made with reference to any use of them which will require them to be replaced. These, without having a definite duration, are contemplated by the inventor to last so long as the materials of which they are formed can hold together in use in such a combination. No replacement of them at intermediate intervals is meant or is necessary. They may be repaired as the use may require. With such intentions, they are put into the structure. So it is understood by a purchaser, and beyond the duration of them a purchaser of the machine has not a longer use. But if another constituent part of the combination is meant
to be only temporary in the use of the whole, and to be frequently replaced, because it will not last as long as the other parts of the combination, its inventor cannot complain, if he sells the use of his machine, that the purchaser uses it 'n the way the inventor meant it to be used, and in the only way in which the machine can be used.

"Such a replacement of temporary parts does not alter the identity of the machine, but preserves it, though there may not be in it every part of its original material." 22

It will be observed that the rule of this case must be limited to the facts, and that the cutters and knives were themselves not the subjects of a patent. In the case of a knitting machine, where the vendor had separate patents upon the machine and the needles used in it, the fact that the needles wore out and became useless gave the vendee no right to make new needles for use in his machine. 23

By analogy to the leading case, the purchaser of a patented toilet paper fixture does not violate the rights of his vendor by supplying the fixture with roll toilet paper from another source. "The replacement is of a product which it is the object of the mechanism to deliver." 24

From this foundation, we reach the general rule that the test of the limit to which the owner of a patented machine may go, by way of replacement, repair or improvement, is that of the identity of the machine as altered with the machine as it left the hands of the original vendor.

"A purchaser, then, may repair, but not reconstruct or reproduce, the patented device or machine. Repair is 'restoration to a sound, good, or complete state after decay, injury, dilapidation, or partial destruction.' Reconstruction is the 'act of constructing again.' Reproduction is a 'repetition,' or 'the act of reproducing.' These definitions are instructive in bringing home to the mind that repair carries with it the idea of restoration after decay, injury, or partial destruction and that reconstruction or reproduction carries with it the idea of a complete construction or reproduction over again.

"But the difficult question still remains, what is legitimate repair, and what is reconstruction or reproduction as applied to a particular patented device or machine? When does repair destroy the identity of such device or machine and encroach upon invention? At what point does the legitimate repair of such device or machine end, and illegitimate reconstruction begin?

"It is impracticable, as well as unwise, to attempt to lay down any rule on this subject, owing to the number and infinite variety of patented inventions. Each case, as it arises, must be decided in the light of all the facts and circumstances presented, and with an intelligent comprehension of the scope, nature, and purpose of the patented invention, and the fair and reasonable intention of the parties. Having clearly in mind the specification and claims of the patent together with the condition of decay or destruction of the patented device or machine, the question whether its restoration to a sound state was legitimate repair, or a substantial reconstruction or reproduction of the patented invention, should be determined less by definitions or technical rules than by the exercise of sound sense and an intelligent judgment."  

1 Hop.—22
§ 268. Defenses to the charge of infringement.

The statutory provision is as follows:

§ 4920. "In any action for infringement the defendant may plead the general issue, and, having given notice in writing to the plaintiff or his attorney thirty days before, may prove on trial one or more of the following special matters:

First. That for the purpose of deceiving the public the description and specification filed by the patentee in the Patent Office was made to contain less than the whole truth relative to his invention or discovery, or more than is necessary to produce the desired effect; or,

Second. That he had surreptitiously or unjustly obtained the patent for that which was in fact invented by another, who was using reasonable diligence in adapting and perfecting the same; or,

Third. That it has been patented or described in some printed publication prior to his application for a patent therefor; or,

Fourth. That he was not the original and first inventor or discoverer of any material and substantial part of the thing patented; or,

Fifth. That it had been in public use or on sale in this country for more than two years before his application for a patent, or had been abandoned to the public."

These defenses may be set up either at law or in equity, and the section applies to patents for designs as well as to the other classes of patents.

As to these defenses, the law has resolved itself into a series of well defined rules; and they will be found treated in connection with those rules, which are here appended.

§ 269. Rule I. Two separate elements may be made integral or one element divided and infringement exist.

"One may not escape infringement by the mere joiner of two elements into one integral part. If the united part effects the same result in substantially the same way as the separate parts before the union, the change is colorable." 28

Nor the charge of infringement averted by the division of one element into two, if the two resulting parts jointly act to produce the unitary result of the single element. 29 "It is well settled that the mere doubling of parts to produce the same result does not prevent infringement, even though it may involve tributary invention." 30

§ 270. Rule II. "Non-interchangeability of parts tends strongly to negative infringement." 31

This rule has been illuminated by Judge Seaman, as follows: "Interchangeability is referred to in Miller v. Eagle Mfg. Co. (151 U. S. 186, 38 L. Ed. 121), and other cases cited in the argument on behalf of the appellee, as


an 'important test in determining the question of infringement,' and it is contended that the interchangeability of parts and functions thus conceded does not meet the requirements for such test, upon the assumption that the interchange involves substantial reorganization of one and the other structure. This contention is without force, under our conclusion that these deviations are plain equivalents within the scope of the patent, and do not depart substantially from the invention. If the test is applicable to such cases of recombination, the corresponding arrangement of means is essential for its application, and in that view interchangeability appears for any value it may have in solving the issue." 32

§ 271. Rule III. Any one who has made a separate profit from the sale of an infringing article is liable. 33

"Any person who has made a separate profit to himself out of the sale of infringing goods, and even a servant who has derived a distinct and independent benefit from invasions of the patent, incurs a distinct separate liability." 34

§ 272. Rule IV. To infringe, substantially similar means must be employed.

"To be an infringement, 'the alleged infringer must have done something more than reach it by substantially the same or similar means, or the rule that the function

of a machine cannot be patented is of no practical value.' "35

"The question of infringement involves considerations of practical utility and of substantial identity, and therefore must be quantitative as well as qualitative." 36

"Infringement should not be determined by a mere decision that the terms of the claim of a valid patent are applicable to the defendant's device. Two things are not precisely similar because the same words are applicable to each." 37

The idea of means is of the very essence of the invention. He who has no idea of means has made no invention.

§ 273. Rule V. Identity or difference of result is no test of infringement.

To be an infringement the alleged infringer must have done something more than reach the same result. 38

This rule must be read and considered in the light of the rule as to anticipation discussed ante, § 209.

§ 274. Rule VI. The knowledge or intent of the infringer is immaterial.

Thus the fact that the alleged infringer had no knowledge of the existence of the patent at the time of the


alleged infringing acts, is no defense to the charge of infringement. The reason for this rule is stated by Mr. Justice Brewer to be that such a person "would be in the attitude of a subsequent inventor, and the prior inventor is the one who, under the statutes, is entitled to the monopoly." Under this rule, it is no defense to the charge of infringement that the defendant has submitted the alleged infringing device to experts and been advised that it did not infringe.

§ 275. Rule VII. "A combination is not infringed unless all its elements as they are claimed are used, whether they are essential or not."


"A claim for a combination is not infringed if any one of the described and specified elements is omitted, without the substitution of anything equivalent there-to." 43

"If a patentee claims eight elements to produce a certain result, when seven will do it, anybody may use the seven without infringing the claim; and the patentee has practically lost his invention by declaring the materiality of an element that was in fact immaterial." 44

This rule is psychologically akin to what logicians term "the law of parsimony." The simple, as opposed to the complex, is the common ideal of logic and of invention.


§ 276. Rule VIII. The question of infringement is determined by the substantial identity of the thing patented and the thing made, or used, or sold by the defendant.

Under the rule the alleged infringing device may come within the language of the claim, yet not infringe, and a device not within the language of the claim may infringe.

In the language of Mr. Justice Brown:

"We have repeatedly held that a charge of infringement is sometimes made out, though the letter of the claims be avoided. Machine Co. v. Murphy, 97 U. S. 120 (24 L. Ed. 9351); Ives v. Hamilton, 92 U. S. 426, 431 (23 L. Ed. 494); Morey v. Lockwood, 8 Wall. 230 (19 L. Ed. 339); Elizabeth v. Pavement Company, 97 U. S. 126, 137 (24 L. Ed. 1000); Sessions v. Romadka, 145 U. S. 29 (12 Sup. Ct. 799, 36 L. Ed. 609); Hoyt v. Horne, 145 U. S. 302 (12 Sup. Ct. 322, 36 L. Ed. 713). The converse is equally true. The patentee may bring the defendant within the letter of the claims, but if the latter has so far changed the principle of the device that the claims of the patent, literally construed, have ceased to represent his actual invention, he is as little subject to be adjudged an infringer as one who has violated the letter of a statute has to be convicted, when he has done nothing in conflict with its spirit and intent. 'An infringement,' says Mr. Justice Grier in Burr v. Duryee, 1 Wall. 531, 572 (17 L. Ed. 650, 660, 661), 'involves substantial identity, whether that identity be described by the terms "same principle," "modus operandi," or any other *. * *. The argument used to show infringement assumes that every combination of devices is a machine which used to produce the same effect is necessarily
§ 277. Rule IX. Mere change of form, or transposition of parts, will not avert the charge of infringement.

This rule is based upon the same logic as the rule (X) relating to equivalency, which follows, § 278.

§ 278. Rule X. The substitution of an equivalent for an element named in a claim does not avert the charge of infringement.
"Equivalent" defined.—"An equivalent is a device which performs the same function as another, and in substantially the same way as by the thing of which it is alleged to be an equivalent." 49 Another definition, now obsolete, insisted that the substituted element, to be an equivalent "must have been known in the arts, at the fate of the patent, as endowed with this capability." 50

A fuller definition is:

"As a general definition, a mechanical equivalent that may be properly substituted for an omitted mechanical element, device, or agency in a patented machine is one that performs the same function by applying the same force to the same object, through the same mode and means of application. In a combination patent for improvement, only, in the arrangement and application of old ingredients, the patentee is not entitled to invoke broadly the doctrine of mechanical equivalents, so as to cover a device not specifically included in his claim and specifications. The term 'equivalent,' as applied to a combination of old elements, is special in its signification, and materially different from what is meant when the term is applied to an invention consisting of a new device or an entirely new machine. The assignee of the patentee, in this case, cannot be allowed to invoke the broad doctrine of equivalents liberally extended to useful primary inventions, so as to include all forms of devices and adjustments which operate to perform the same functions and accomplish the same result." 51

51.
§ 279. Rule XI. Where the mode of operation of the alleged infringement is substantially different from that of the patent in suit, infringement does not exist.\textsuperscript{52}

This rule is closely akin to those considered ante, §§ 209, 273. The mode of operation of two machines may be strikingly similar, without the idea of means being quite or nearly identical in each. Where there is a substantial difference as to mode of operation, the ideas of means must be so far divergent from each other that the substantial identity necessary to establish infringement cannot exist.

§ 230. Rule XII. Identity in mode of operation is not conclusive upon the question of infringement.

In Winans v. Denmead \textsuperscript{53} the Supreme Court by Mr. Justice Curtis announced it as a familiar rule, "that to copy the principle or mode of operation described, is an infringement." The rule thus expressed was finally negatived in Burr v. Duryee \textsuperscript{54} in which case the court holds that "the principle of a machine is properly defined to be its mode of operation." That a patent cannot be granted upon a principle or mode of operation. That, therefore, identity in mode of operation is inconclusive as to the question of infringement.

This rule must be read in conjunction with that of § 279, ante.

§ 281. Rule XIII. Mere experimental use does not constitute infringement.\textsuperscript{55}

Accordingly, the exhibition of a machine so made, merely as an illustration of its workings, is not an in-


\textsuperscript{53} 15 Howard, 330-342, 14 L. Ed. 722.

\textsuperscript{54} 1 Wallace 531, 17 L. Ed. 650.

\textsuperscript{55} 73 Fed. Rep. 206, 211.
fringement; and to constitute an infringement, its making must be with the intent to use it for profit. But where a machine is used for purposes of demonstration in connection with the sale of a patent, the reason of the rule, which is only for the advancement of invention, fails, and the rule does not apply.

§ 282. Rule XIV. A device may be within the literal terms of a claim yet not infringe.

"Even if it be conceded that the Boyden device corresponds with the letter of the Westinghouse claims, that does not settle conclusively the question of infringement. We have repeatedly held that a charge of infringement is sometimes made out, though the letter of (the claim) be avoided." 59

"The mere fact that the defendant’s device may be within the letter of the claim sued on is not conclusive proof of infringement." 60

§ 283. Rule XV. A charge of infringement may be made out though the letter of the claims be avoided.

"The patentee may bring the defendant within the letter of his claims, but, if the latter has so far changed the principle of the device that the claims of the patent,

57. Sawin v. Guild, Fed. Case No. 12,391, 1 Robb. 47.
literally construed, have ceased to represent his actual invention, he is as little subject to be adjudged an infringer as one who has violated the letter of a statute has to be convicted, when he has done nothing in conflict with its spirit and intent. 'An infringement,' says Mr. Justice Grier in Burr v. Duryee, 1 Wall. 531, 572, 'involves substantial identity, whether that identity be described by the terms 'same principle,' same 'modus operandi,' or any other. * * * The argument used to show infringement assumes that every combination of devices in a machine which is used to produce the same effect is necessarily an equivalent for any other combination used for the same purpose. This is a flagrant abuse of the term 'equivalent.' We have no desire to qualify the repeated expressions of this court to the effect that, where the invention is functional, and the defendant's device differs from that of the patentee only in form, or in a rearrangement of the same elements of a combination, he would be adjudged an infringer, even if, in certain particulars, his device be an improvement upon that of the patentee. But, after all, even if the patent for a machine be a pioneer, the alleged infringer must have done something more than reach the same result. He must have reached it by substantially the same or similar means, or the rule that the function of a machine cannot be patented is of no practical value. 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 patent his function. Mere variations of form may be disregarded, but the substance of the invention must be there.' 61

61. Mr. Justice Brown, in L. Ed. 1136, 1147; to the effect, Westinghouse v. Boyden Power Brake Co., 170 U. S. 537, 568, 42 Rep. 636, 641; Standard Comput-
§ 284. Rule XVI. Identity of function is not conclusive of the question of infringement.

As Judge Munger has said: "While it is necessary to constitute infringement that each should perform the same function, performance of the same function does not alone constitute infringement." 62

The reason of this rule is, that, to establish infringement, there must be substantial identity of the trinity of components, function, mode of operation, and result.

§ 285. Rule XVII. If the patented invention is not operative, it cannot be infringed by one that is.

In applying this rule Judge Ray has said:
"Two or more persons may use the same material, existing in precisely or substantially the same form, experimenting and making combinations, and having in mind the construction of a new and a useful invention that will produce a given result. The one or ones who fail invent nothing, but the one who succeeds may have invented a patentable thing; and, if a patent is granted, he is entitled to its protection and benefits. Those who failed, or others, cannot, by taking the same materials and making substantially the same combinations, varying the form or arrangement, or both, in nonessentials, but aiming at and producing the same results, claim either priority of invention, prior use, or new invention. Such facts will not defend the charge of infringement. And even if in such experimentation certain imperfect results were obtained, that fact does not estab-

lish priority of invention. "If the patented invention is not operative, it cannot be infringed by one that is." It would seem to follow that however close the resemblance between some prior alleged invention, even when put in actual use, and the patented invention, if such alleged prior invention was not operative, and failed to produce the beneficial results sought and produced by the patent, it could not constitute prior invention. In such case the patented invention cannot be regarded as old."  

§ 286. Rule XVIII. To reverse or transpose the steps by which a process is carried out does not avoid infringement.

This rule is a deduction from the doctrine of equivalency. The accomplishment of the product by the use of the steps of a process claim, though those steps be transposed or reversed, is to do the same thing, in substantially the same way, and by substantially the same means. Identity of function, mode of operation and result, are all present.

The rule is frequently set out in the cases.

§ 287. Rule XIX. The identity of two products does not establish the identity of the processes by which they are made.

This rule is manifestly sound. To imagine any exception to it would require the existence of a product which could only be produced by one process. The rule has been announced explicitly by Mr. Justice Matthews thus: "Whatever likeness may appear between the

product of the process described in the patent and the article made by the defendants, their identity is not established unless it is shown that they are made by the same process." 66

This rule is merely a paraphrase of Rule V, § 273, ante.

§ 288. Rule XX. A process patent is not infringed by selling the product.

"If it was a patent for a process, it would not be infringed by selling the product, and no conditions should have been annexed to the exercise of the vendor's rights. The broad proposition that the vendor of a product which has been made in infringement of a patented process is an infringer, or liable to any extent to the patentee, is untenable and does not require discussion. The patentee's remedy is against the manufacturer." 67

This rule is a necessary sequence of Rule XIX, § 287, ante.

§ 289. Rule XXI. The omission of any step of a process averts the charge of infringement.

In the leading case Mr. Justice Strong said: "It may be conceded the patentee is protected against equivalents for any part of his invention. He would be, whether he had claimed them or not. But when a product arrived at by certain defined stages or processes is patented, only those things can be considered equivalents for the elements of the manufacture which perform the same function in substantially the same way. The same result may be reached by different processes, each.


of them patentable, and one process is not infringed by the use of any number of its stages less than all of them." 68

This rule is merely the application of Rule VII, § 275, ante, to process patents.

§ 290. Rule XXII. To infringe a process claim exact identity is not necessary.

In applying this rule, Judge Severens has said:

"Complete identity is not necessary. As was stated by Mr. Justice Curtis in Winans v. Denmead, 56 U. S. 330 (15 How.), 14 L. Ed. 717:

'If the machine complained of were a copy, in form, of the machine described in the specification, of course, it would be at once seen to be an infringement. It could be nothing else. It is only ingenious diversities of form and proportion, presenting the appearance of something unlike the thing patented, which give rise to questions; and the property of inventors would be valueless, if it were enough for the defendant to say: "Your improvement consists in a change of form; you describe and claim but one form; I have not taken that and so have not infringed."'

This was said in a case where the original patent was for a cylindrical ore body in a railroad car, where the structure held to infringe was hexagonal. But it is equally applicable to inventions for processes. The patentee is entitled to claim, not only that which he precisely claims, but, where he claims a combination or process embodying the use of certain elements, his claims

will include such combinations and processes as adopt substantially the same means; where the variation is only such as common intelligence in that art would suggest. Incidental appliances in operating the substantial means invented would not prevent a second patented invention from infringement upon the first.”

§ 291. Rule XXIII. The addition of a step or steps to a process does not avert the charge of infringement.

This rule has been established by abundant authority, and is analogous to the rule applicable to mechanical combination claims. We quote from the leading case as follows:

“'It is probably true, as contended for by the defendants, that by the use of a small portion of lime, the process can be performed with less heat than if none is used. It may be an improvement to use the lime for that purpose; but the process remains substantially the same. The patent cannot be evaded in that way. The matter may be stated thus: Tilghman discovers a process of decomposing fats by mixing them with water, and heating the mixture to a high temperature under a pressure that prevents the formation of steam. It is a new process, never known before. The defendants seeing the utility of the process, and believing that they can use a method somewhat similar without infringing Tilghman’s patent, put a little lime into the mixture, and find that it helps the operation, and that they do not have to use so high a degree of heat as would otherwise be necessary. Still, the degree of heat required is very high, at least a hundred degrees above the boiling point; and a strong boiler or vessel is used in order to restrain

the water from rising into steam. Can a balder case be conceived of an attempted evasion and a real infringement of a patent?" 70

In another illustrative case we find the following:

"The process used by the defendant is the same as that described in the patent, with one step added which is not described. After the vessel to be enameled has been dipped in the glaze the operator shakes it, and by this means produces the desired result quicker than when the shaking is omitted. That the process can be practiced without this additional step is sufficiently demonstrated. It is a well-known fact among enameleurs that this manipulation would save time, and it is thought that one who applies it to the process in question does not thereby escape infringement. He does not use the process any the less because he uses something in addition to the process. Even if he assumed that the defendant has introduced an improvement, it is an improvement upon the Kegreisz process, and so long as the defendant uses that process it must be treated as an infringer." 71

Where the addition to the process does not affect the result attained, that fact will also be considered in determining the question of infringement.72

CHAPTER XIII.

OF UTILITY.

§ 292. Rule I. Utility is indispensable to a valid patent.

This is established by the language of the patent act (sec. 4886, R. S. U. S.), expressly limiting its benefits to arts, machines, etc., which are both new and useful. Novelty and utility, both, must concurrently exist or the grant of the patent is a nullity. While the word "useful" is largely employed in its colloquial sense, there have been engrafted upon it by judicial interpretation certain unusual shades of meaning hereinafter considered in detail. Suffice it to add at this point, therefore, that the language of the constitutional provision (paragraph 8, of section VIII, article I), "to promote the progress of science and useful arts" did not of itself limit the power of Congress to the enactment of a patent act expressly limited to inventions not only new but useful; certain inventions made in the progress of science are not "useful" in the sense of the language of the Patent Act. Thus a dangerous invention is of course new and may be a necessary incident to the progress of science, and yet, because of its dangerous qualities, it is not "useful" and is therefore unpatentable.¹

Consequently the word "useful" as it is employed in sections 4886, R. S. U. S. ("Any person who has invented or discovered any new and useful," etc.) and 4893, R. S. U. S. ("If * * * it shall appear * * * that the same is sufficiently useful and important, the Commissioner shall issue a patent therefor"), in the Re-

vised Statutes, has the same judicial definition as in its occurrence in the constitutional provision, and as established by the cases we are about to consider.

§ 293. Rule II. The patent is prima facie evidence of the utility of the thing patented. 2

While this presumption is rebuttable 3 and has been said to be in some cases slight and purely technical, 4 it is sufficient until rebutted. 5 "Utility in most cases is a question of fact, as it usually depends upon the evidence resulting from an actual experiment." 6

§ 294. Rule III. Utility alone does not establish patentability. 7
This is the rule generally recognized, although superior utility is always a circumstance entitled to weight in considering the question of novelty. 8

"Mere utility does not establish patentability. It is not every slight improvement in a mechanism that is the result of the exercise of the inventive faculty. In the exercise of the arts, such improvements are constantly developing themselves, almost, but are at any rate clearly the result of obvious mechanical suggestion. As has been said by the Supreme Court more than once, to grant


