

ships resorting to ports in the colony. Penalty for unauthorized uses of word "patent," £100.

XX. Ceylon.

<p>SEC.</p> <p>227. Law, date, and where recorded.</p> <p>228. Kinds of patents.</p> <p>229. Duration.</p> <p>230. Government fees.</p>	<p>SEC.</p> <p>231. Documents, where to be left.</p> <p>232. Specification, inspec'n, copies.</p> <p>233. Assignments.</p> <p>234. Other legal provisions.</p>
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227. LAW, DATE, AND WHERE RECORDED.—Inventions ordinance, 1859. (See *Commissioners of Patents' Journal*, *vide supra* 71, No. 684, An., 1860.)

228. KINDS OF PATENTS.—Patents for invention and importation. English patents granted prior to the date of this ordinance admissible. Prerogative of Crown saved.

229. DURATION.—Fourteen years. Extension of fourteen years more on petition presented not more than one year and not less than six months before the expiration of original term.

230. GOVERNMENT FEES.—Stamp of petition, £10.

231. DOCUMENTS REQUIRED AND WHERE TO BE LEFT.—Petition of the inventor, or his authorized agent, addressed to the Government, for leave to file specification, to be left with the Colonial Secretary of Government. Crown to refer petition for inquiry and report. Specification and declaration signed by inventor or his proxy.

232. SPECIFICATION, INSPECTION AND COPIES OF.—At the office of the Colonial Secretary. Fee, 5s. Certificate copies to be *prima facie* evidence.

233. ASSIGNMENTS.—Registered at the office of the

Colonial Secretary, and open to public inspection without fee.

234. **OTHER LEGAL PROVISIONS.**—False statement in declaration punishable as perjury. Invention not publicly used or known before application to file specification, or known only by fraudulent means, to be deemed new invention. Exclusive jurisdiction vested in the district court of Colombo. Causes of forfeiture: Invention not new; petitioner not the inventor; invention not described in specification; fraud in petition or specification; false statement in petition; fraudulent misdescription of part of invention in specification. Actual inventors entitled to assignment of an exclusive privilege fraudulently obtained.

XXI. Cuba, Porto Rico, and the Philippine Islands.

SEC.	SEC.
235. Law, date, and where recorded.	239. Government fees.
236. Kinds of patents.	240. Specifications, inspection of.
237. Duration.	241. Assignments.
238. Documents, where to be left.	242. Working.

235. **LAW, DATE, AND WHERE RECORDED.**—Royal decree of the 30th July, 1833. (See *Commissioners of Patents' Journal, vide supra* 71, No. 498, An., 1858.)

236. **KINDS OF PATENTS.**—Letters patent for inventions, improvements, and importation, (the latter under certain restrictions when relating to agriculture.) Letters patent to be taken up by their owner within three months of application.

237. **DURATION.**—Patent for invention, five, ten, and fifteen years; patent for importation, five years; exten-

sion, five years for patent of invention of five years, to be reckoned from the day of delivery.

238. DOCUMENTS REQUIRED AND WHERE TO BE LEFT.—A petition of the inventor, or his agent, addressed to the Governor General of Cuba, together with a correct description, plan, or model, (all sealed up.) Grants of patents to be published in the government papers and in the *Madrid Gazette*.

239. GOVERNMENT FEES.—Patent of five years, \$70 (pesos;) patent of ten years, \$210 (pesos;) patent of fifteen years, \$420 (pesos;) patent of importation, \$210 (pesos; besides \$8 for delivery of letters patent.

240. SPECIFICATIONS, INSPECTION OF.—Public register at the chambers of commerce. Specification and models open to the public after expiration of patent.

241. ASSIGNMENTS.—Certificates of assignments to be delivered within sixty days from their date.

242. WORKING.—Not to be interrupted for one year and one day.

XXII. France.

SEC.	SEC.
243. Law, date, and where recorded.	251. Specifications, inspection and copies of.
244. Kinds of patents.	252. List of patents delivered.
245. Previous examination.	253. Specifications published.
246. Duration.	254. Originals of specifications, (models.)
247. Government fees.	255. Jurisdiction, local proceedings.
248. Documents required, and where to be left.	256. Proceedings to obtain a patent.
249. Working and prolongation.	257. Form of French letters patent.
250. Assignments.	

243. LAW, DATE, AND WHERE RECORDED.—Royal decree

of 5th July, 1844. (See *Commissioners of Patents' Journal*, *vide supra* 71, Nos. 228, 229, 947, 948, and 949.)

244. **KINDS OF PATENTS.**—Patents of invention and certificates of addition for France and the French Colonies granted to natives or foreigners residing or represented in France. (Certificates of addition preferably to the original patentee within the first year.)

245. **PREVIOUS EXAMINATION.**—None. Neither medicines nor financial schemes can be patented. Patent articles to bear the mark “S. g. d. G.,” (without guaranty of the Government,) under a penalty of from £2 to £40.

246. **DURATION.**—Five, ten, or fifteen years from the date of deposit. Foreign inventions according to the term of the original foreign patent.

247. **GOVERNMENT FEES.**—One hundred francs each year. In case of transfer, the whole term originally demanded must be paid at once. Certificates of addition, twenty francs. (1 fr.=10d.)

248. **DOCUMENTS REQUIRED AND WHERE TO BE LEFT.**—A petition of the inventor, or his proxy, to the Minister of Commerce and Public Works; a specification, (two copies,) drawings, (two copies,) on a metrical scale, or specimens; an acknowledgment of the receipt of one hundred francs paid to the Receveur Général; a memorandum of the various documents deposited at the secrétariat of the respective préfecture; at Paris, at the Hôtel de Ville. In the Colonies, three copies of said documents to be delivered to the Director of the Interior.

249. **WORKING AND PROLONGATION.**—Working within two years; not to be interrupted for two years. Prolongation only by a special law.

250. **ASSIGNMENTS.**—Made before notary public and

registered at the préfecture; a register also kept at the Ministry of Agriculture and Commerce. In the Colonies, assignments are registered at the office of the Director of the Interior.

251. SPECIFICATIONS, INSPECTION AND COPIES OF.—Inspection fee, at the Ministry of Commerce and Public Works; copies on payment of twenty-five francs; drawings extra; copies of certificates of addition twenty francs.

252. LIST OF PATENTS DELIVERED.—Published monthly within six months of the date of application; also in the *Commissioners of Patents' Journal*.

253. SPECIFICATIONS PUBLISHED.—After payment of the second annual fee, in full or in the form of extracts. Kept at the Secrétariat of the Préfecture of each Department, also at the Public Free Library of the Patent Office, together with alphabetical and subject-matter indexes of all the specifications published under the old law of 1791 and new law of 1844.

254. ORIGINALS OF SPECIFICATIONS, (MODELS.)—Deposited, at the expiration of the patent, in the library of the Conservatoire des Arts et Métiers.

255. JURISDICTION AND LOCAL PROCEEDINGS.—Actions to be tried before the Tribunaux Civils de Première Instance, according to article 405 and following of the Code Civil; in the Colonies, before the court of appeal. Fines for infringement, from £4 to £80, with seizure of the goods or machines, damages to the patentee, and costs of publication of judgment; in case of a second offense, imprisonment of from one to six months, according to article 463 of the Penal Code.

256. PROCEEDINGS TO OBTAIN A PATENT.—The appli-

cant must deposit at the office of the Secretary of the Prefect of the Seine, (*au Secrétariat de la Préfecture*,) or in the provinces at the departmental prefectures, a sealed packet, containing the following documents, which must be in the French language, and without alterations or interlineations; any words erased must be counted and verified with the initials of the applicant and references to the pages; and when stating weights or measures those only must be employed which are decreed by the law of the 4th July, 1837:

1. A letter to the Minister of Agriculture and Commerce, containing a request for a patent.

2. A description of the discovery, invention, or application forming the subject of the patent.

3. A duplicate of the same.

4. The drawings or patterns necessary for understanding the description.

5. A duplicate of the same.

6. A list of the above documents.

The request for a patent must be limited to one principal object, with its constituent details and proposed application.

It shall mention the number of years for which the patent is solicited, and contain neither restrictions, conditions, nor reserves.

It shall indicate by a title the summary and precise designation of the object invented.

The drawings must be traced in ink, according to a metrical scale.

All the documents must be signed by the applicant or his agent. An agent must be authorized by a written power of attorney. This power ought, according to the

regulations, to be legalized, but in practice this is not required.

Besides the sealed packet containing the above documents, the applicant must hand in a receipt for one hundred francs, being the first year's payment of the patent tax. The Paris office, at which these payments are to be made, is that of the Receveur Central, Rue Neuve des Mathurins, No. 36.

These requirements fulfilled, the applicant receives a certificate stating the day and hour of depositing the documents. The patent commences from this date.

The documents are then transmitted by the prefect to the Minister of Agriculture and Commerce, and the patent is returned to the applicant in regular order. The patent consists in a decree of the minister declaring the regularity of the patent, accompanied by one of the copies of the description and drawings, duly certified.

The patent is delivered at the risk of the applicant, and without guaranty from the Government either as to the reality, the novelty, or the merit of the invention, or the accuracy of the description.

257. FORM OF FRENCH LETTERS PATENT.—

Patent of Invention without guaranty of the Government.

The Minister Secretary of State, at the Department of Agriculture, Commerce, and Public Works, considering the law of the 5th July, 1844, considering the declaration made on the _____, at forty minutes past three, at the office of the Secretary General of the Preference of the Department of _____, and which establishes the delivery made by _____, of an application for a patent of invention for [title of the patent], decrees as follows:

ART. 1. A patent of invention for _____ years, to begin from _____, for [title] is herewith delivered to _____, without previous examination, at his own risk, and without guaranteeing either the reality, novelty, or merit of the invention, or the correctness of the description.

ART. 2. The present decree constituting letters patent is delivered to prove his title. This decree will be accompanied with one of the duplicates of the description delivered in support of the application, the conformity between the descriptive documents having been duly established.

PARIS, the

For the Minister and by Delegation
the Director of the Commerce of the Interior.
[Signed] E. JULIEN.

For true copy,
[L. S.]

The Chief Clerk,
L. SMITH.

XXIII. Greece.

258. Government may grant privileges for inventions.

258. GOVERNMENT MAY GRANT PRIVILEGES FOR INVENTIONS.—According to a law passed in 1843 the Government is empowered to grant privileges for inventions, subject to the approbation of the Senate.

XXIV. British Guiana.

SEC.	SEC.
259. Law, date, and where recorded.	264. Documents required, and where to be left.
260. Kinds of patents.	265. Assignments.
261. Previous examination.	266. Originals of specifications, &c.
262. Duration.	267. Other legal provisions.
263. Government fees.	

259. LAW, DATE, AND WHERE RECORDED.—Ordinance No. 13, of the year 1861. (See *Commissioners of Patents' Journal, vide supra* 71, No. 798, An., 1861.)

260. KINDS OF PATENTS.—Letters patent to the true and first inventor; disclaimer and alterations; under the seal of the colony. English patents not to be affected by this ordinance.

261. PREVIOUS EXAMINATION.—By the Attorney General as to correctness of description.

262. DURATION.—Fourteen years. Patents to expire if before the end of the first seven years the required stamp duty has not been paid. Letters patent for foreign invention not to continue after expiration of foreign patent. Extension of original to another term not exceeding seven years by six months' previous notice.

263. GOVERNMENT FEES.—*To be paid at the Attorney General's office:* On examining provisional specification to be paid on filing petition, \$25; on reporting an application for letters patent after notice to proceed, \$25; on giving notice of disclaimer or alterations, \$25; on entering caveat, \$25. *Stamp duties to be paid at the Government Secretary's office:* On notice to proceed, \$5; on the sealing of the letters patent, \$20; on the letters patent or a duplicate thereof before the expiration of the seventh year, \$100; on petition for confirmation or prolongation of patent, \$50; on the sealing of grant confirming or prolonging letters patent, \$100. *Fees to be paid at the Register office:* On recording letters patent, 5 cents; on depositing complete specification, including copy, \$15; on entering disclaimer or alteration, including copy and notification in the official gazette, \$10; on entering caveat, including copy and notification in the official gazette, \$10. For copy of any of the before-mentioned documents, or of any provisional specification deposited, per page, 25 cents. On inspecting register of patents, for each patent and all documents connected therewith, 48 cents. (N. B. For copies of drawing, extra.)

264. DOCUMENTS REQUIRED, AND WHERE TO BE LEFT.—Petition, affidavit, and provisional (or complete) specifi-

cation, by inventor or his proxy, to be left at the office of the Government Secretary for provisional protection during twelve months. Provisional protection and notice to proceed to be advertised in the official gazette. Warrant to be issued after one month's notice.

265. **ASSIGNMENTS.**—Registered as above.

266. **ORIGINALS OF SPECIFICATIONS, DISCLAIMERS, DRAWINGS, &c.**—To be copied in the register of patents at the end of twelve months, and kept at a proper office, with indexes, &c., for public inspection.

267. **OTHER LEGAL PROVISIONS.**—Letters patent not to prevent the use of invention in foreign ships resorting to ports in the colony, (provided English ships enjoy the same privilege in the respective foreign ports.)

XXV. India.

SEC.	SEC.
268. Law, date, and where recorded.	278. Jurisdiction.
269. Kinds of patents.	279. Chief legal provisions.
270. Duration.	280. Proceedings to obtain a patent.
271. Government fees.	281. Form of petition.
272. Documents, where to be left.	282. Form of declaration to accompany petition.
273. Extension.	283. Form of declaration to accompany specification.
274. Disclaimer.	284. Form of declaration by agent.
275. Specification, inspection, copies.	285. Form of petition.
276. Assignments.	
277. List of patents delivered.	

268. **LAW, DATE, AND WHERE RECORDED.**—Act XV, An., 1859. Dated Osborne, 19th March, 1859. Promulgated in India on the 21st May, 1859. (See *Commissioners of Patents' Journal*, *vide supra* 71, Nos. 552 and 578.)

269. **KINDS OF PATENTS.**—Exclusive privileges granted to the original inventor, whether a native or alien, or his

authorized agent in India, subject, however, to any such conditions and restrictions as the Governor General may think expedient.

270. DURATION.—Fourteen years from the date of filing the specification.

271. GOVERNMENT FEES.—A stamp duty of one hundred rupees on the petition for leave to file a specification, and a reasonable fee for an inquiry and report, if any, on the petition.

272. DOCUMENTS REQUIRED AND WHERE TO BE LEFT.—A petition of the inventor, or his authorized agent in India, to the Governor General of India in Council, for leave to file a specification; a declaration of the original inventor, or, if absent, of his agent; a specification, with drawings, (five copies,) within six months of the order authorizing the filing of the specification. To be left with the Secretary to the Government of India in the Home Department.

273. EXTENSION.—By the Governor General in Council, for a further term, not exceeding fourteen years from the expiration of the fourteen years, upon petition, to be presented at any period not more than one year and not less than six calendar months before the expiration of the exclusive privilege.

274. DISCLAIMER.—Petitioner, after the filing of his specification, may apply for leave to file amended specification, having the same effect as the specification first filed.

275. SPECIFICATIONS, INSPECTION AND COPIES OF.—At the Government of India in the Home Department, of Bengal, of Fort St. George, of Bombay, of the North-western Provinces. Open to public inspection on pay-

ment of one rupee. Copies to be had at the office of the Secretary to the Government of India on paying the expense of copying.

276. ASSIGNMENTS.—Original inventors have power to assign their patents to other parties. Patents, however, fraudulently obtained, must, on the complaint of the original or actual inventor, made within two years of the filing of specification, be assigned to the latter, the profits thereof, at the same time, having to be accounted for and paid over to the said original or actual inventor.

277. LIST OF PATENTS DELIVERED.—Open at the office of the Secretary to the Government of India on payment of one rupee. Published in the *Commissioners of Patents' Journal*.

278. JURISDICTION.—Her Majesty's courts of judicature.

279. CHIEF LEGAL PROVISIONS.—No person is entitled to an exclusive privilege if the invention is of no utility, if invention is not new, if the petitioner is not the inventor, if the specification does not describe the invention, if petition or specification contains fraudulent mis-statements (false statements in declaration being punishable as perjury.) Exclusive privilege to cease if the Government declares it mischievous, &c., to the public, or if the Government, upon breach of condition proved, declares that it shall cease. Importer of an invention, if not the actual inventor, not to be deemed the inventor. An invention not publicly used or known in the United Kingdom or in India, before the application for leave to file the specification, to be deemed a new invention, (the right of the original inventor being still reserved during the first six months.) Defect in specification or petition, or

want of novelty in invention, &c., no defense to action for infringement. The actual use of an invention in India or the United Kingdom, before date of petition, a defense to such action. Amendment of specification may be ordered by the court. Certified copy to be *prima facie* evidence.

280. PROCEEDINGS TO OBTAIN A PATENT.—The inventor of any new manufacture may petition the Governor General of India in Council for leave to file a specification. The petition must be in writing, signed by the petitioner, or, in case of his absence from India, by his authorized agent, and shall state the name, addition, and place of abode of petitioner, and the nature of the invention. (§ 1.)

281. FORM OF PETITION.—

To the Governor General of India in Council:

The petition of [*here insert name, addition, and place of residence*], for leave to file a specification under act No. .

Showeth,

That your petitioner is in possession of an invention for [*state title of invention*], which invention he believes will be of public utility; that he is the inventor thereof, [*or, as the case may be, the assignee, or the executor or administrator of the inventor;*] and that the same is not publicly known or used in India or any part of the United Kingdom of Great Britain and Ireland, to the best of his knowledge and belief.

The following is a description of the invention, [*here describe it.*]

Your petitioner therefore prays for leave to file a specification of the said invention, pursuant to the provision of Act No. .

And your petitioner, &c.

The day of .

[*Signed.*].

On such a petition the Governor General may make an order authorizing the petitioner to file a specification.

Before making such order the Governor General in Council may refer the petition to any person or persons for inquiry and report, the fee for which is to be paid, the

amount of which, in case of dispute. to be settled by one of the courts of judicature in a summary manner. (§ 3.)

On obtaining such order the petitioner may, within six months, cause a specification of his invention to be filed, and, having done so, he and his legal representatives shall have a right to the exclusive use, &c., of his invention for fourteen years, and for a further term of not exceeding fourteen years, should the Governor General in Council so direct, upon petition from inventor, presented not more than a year nor less than six calendar months before the expiration of the first period of privilege. (§ 4.)

The order may be made subject to such restrictions as the Governor General in Council may think expedient. (§ 5.)

The specification shall be in writing, it shall be signed by petitioner, and shall particularly describe the nature of the invention and in what manner the same is to be performed. (§ 6.)

The petition and specification shall be left with the Secretary to the Government of India in the Home Department, and each petition and specification shall be accompanied by a declaration in writing in the following forms:

282. FORM OF DECLARATION TO ACCOMPANY PETITION.—

I, [*name, addition, and place of residence,*] do solemnly and sincerely declare, that I am in possession of an invention for [*title*]; that I believe the said invention will be of public utility; that I am the inventor thereof, [*or the assignee, or executor, or administrator of the inventor,*] and that the same is not publicly known or used in India or in any part of the United Kingdom of Great Britain and Ireland, to the best of my knowledge and belief; and that, to the best of my knowledge and belief, my said invention is truly described in my petition for leave to file a specification thereof.

The day of

[*Signed.*]

283. FORM OF DECLARATION TO ACCOMPANY SPECIFICATION.—

I, [name, addition, and residence,] do solemnly and sincerely declare, that I am in possession of an invention for [nature of invention]; which invention I believe will be of public utility; that I am the inventor thereof, [or the assignee, executor, or administrator of the inventor,] and that the same is not publicly known or used in India or in any part of the United Kingdom of Great Britain and Ireland, to the best of my knowledge and belief; and that, to the best of my belief, the instrument in writing under my hand, herewith annexed, particularly describes and ascertains the nature of the said invention and in what manner the same is to be performed.

The day of

[Signed.]

If the inventor be absent from India, the petition and specification are to be accompanied also by a declaration from the agent, to the effect that he verily believes that the declaration was signed by the inventor and that the contents are true. The agent's declaration is to be in similar form to that of the inventor, and the date of delivery of the petition and specification is to be indorsed on them and recorded at the office of the secretary. Any false statement in such declaration is punishable as perjury. (§§ 7, 8.)

284. FORM OF DECLARATION BY AGENT WHEN AN INVENTOR IS ABSENT FROM INDIA.—

I, , of , do solemnly and sincerely declare, that I have been appointed by the said his agent, for the purpose of ; and I verily believe that the declaration purporting to be the declaration of the said , marked (), was signed by him, and that the contents thereof are true.

The day of

[Signed.]

The fees under the act, and also the fees (if any) of the person to whom the petition may have been referred,

must be paid before filing the specification. (§ 9.) No fee is mentioned in the act, the only stipulation being that the petition for the original grant of exclusive privilege or for its extension must be written on stamped paper of the value of 100 rupees, (£10.) (§ 37.)

An inventor having obtained letters patent in the United Kingdom may, within twelve calendar months from the date of the letters patent, petition the Governor General for the exclusive privilege in India. He must state in his petition that such letters patent have been granted, with the date and term during which they are to be in force. The Indian privilege will cease in case of the revocation of the original letters patent, and shall not exceed the original term, unless the same be renewed. (§ 20.)

285. FORM OF PETITION.—

That your petitioner [*or that A. B., of whom your petitioner is the assignee, or executor, or administrator*] has obtained Her Majesty's letters patent, dated the day of , for [*title of invention*], and that such letters patent are to continue in force for years; that your petitioner believes that the said invention is not now and has not hitherto been publicly known or used in India.

The following is a description of the invention, [*here describe it.*]

Your petitioner therefore prays for leave to file a specification of the said invention, pursuant to the provisions of act No. .

And your petitioner, &c.

The day of .

[*Signed.*]

XXVI. Italy

SEC.

286. Law, date, and where recorded.

287. Kinds of patents.

288. Previous examination.

289. Duration.

SEC.

290. Government fees.

291. Documents required, and where to be left.

292. Working and prolongation.

SEC.	SEC.
293. Annulment.	298. Specifications published.
294. Infringements.	299. Proceedings to obtain a patent.
295. Assignments.	300. Petition.
296. Specifications, inspection and copies of.	301. Description.
297. List of patents delivered.	302. Memorandum.

286. LAW, DATE, AND WHERE RECORDED.—Royal decree of 31st January, 1864. (See *Commissioners of Patents' Journal, vide supra* 71, Nos. 1061, 1064, 636, 1656.

287. KINDS OF PATENTS.—Patent certificates, (letters patent;) certificates of addition; certificates of reduction, (disclaimers;) certificates of prolongation; delivered to natives or aliens residing or represented in Italy.

288. PREVIOUS EXAMINATION.—None as to novelty and utility, except with regard to inventions concerning beverages and food, which are to be referred to the board of health.

289. DURATION.—From one to fifteen years, to begin from the last day of either March, June, September, or December which follows nearest to the day of application. Foreign patents not to exceed their term allowed abroad. Original term of less than fifteen years prolonged to fifteen years.

290. GOVERNMENT FEES.—A proportional tax of as many 10 lire as there are years in the duration of the respective patent, and an annual tax of 40 lire for each of the first three years; 65 lire for each of the fourth, fifth, and sixth years; 90 lire for each of the seventh, eighth, and ninth years; 115 lire for each of the tenth, eleventh, and twelfth years; and 140 lire for each of the last three years. The first annuity and proportional tax to be paid at the time of application. Certificates of addition, 20

lire; certificates of prolongation, 40 lire; certificates of reduction, (disclaimers to be filed within the first six months,) 40 lire; extra copy of any certificate, 15 lire; (1 lira=8*d.*)

291. DOCUMENTS REQUIRED, AND WHERE TO BE LEFT.—An application of the inventor, or his proxy, to the Minister of Finances; a description, in French or Italian, and drawings, (three copies,) or a model and two drawings; a receipt for the fees paid into the treasury. Original or legalized copy of foreign letters patent. A memorandum of the documents and objects delivered. To be left at the Ministry of Finances, at Florence. Certificates of addition granted within the first six months, in preference to original patentees. Deficiencies in documents to be made good within fifteen days. Appeals (50 lire) to be submitted to a special commission.

292. WORKING AND PROLONGATION.—Patents of five years and less to be worked within one year, and the working not to be interrupted for one year. Patents of more than five years to be worked within two years, and the working not to be interrupted for two years, except by showing good cause for delay.

293. ANNULMENT.—By summary process before the provincial tribunals, with experts, (if desired.)

294. INFRINGEMENTS.—Punishable by a fine up to 500 lire, and confiscation of counterfeit machines, goods, &c., for the benefit of the patentee, who besides may claim damages. Actions not to be delayed beyond a week.

295. ASSIGNMENTS.—Registered at the Central Patent Office, and published in the official gazette, on the payment of 5 lire. The whole patent fees to be paid previous to registration.

296. SPECIFICATIONS, INSPECTION AND COPIES OF.—At the Central Patent Office, three months after the delivery of certificates. Copies to be had by paying for stamped paper, and 2 cents per line. Drawings extra.

297. LIST OF PATENTS DELIVERED.—Every three months, in the official gazette and in the *Commissioners of Patents' Journal*.

298. SPECIFICATIONS PUBLISHED.—Every six months, in full or in the form of extracts. Kept at the Public Free Library of the Patent Office.

299. PROCEEDINGS TO OBTAIN A PATENT.—Applications for patent are to be addressed to the head of an office in the Ministry of Finance specially appointed for the purpose. They must be presented by the inventor or his agent, and contain—

1. The Christian and surname of the inventor, the place of his birth and abode, and of his agent, if any.

2. A summary and precise designation of the nature and object of the invention, to form the title of it.

3. The number of years for which the patent is solicited.

Each application must be for one patent only, and one patent cannot include several inventions.

The following documents must accompany the application:

1. The description of the invention or discovery.

2. The drawings, if they can be made, as well as the models which the inventor may judge useful to explain his invention.

3. A receipt for the payment into the public treasury of the tax due on the patent.

4. The original or copy in due form of the foreign

patent, when the invention shall already have been patented abroad.

5. The power of attorney of the agent, (if any,) which must be drawn up by an authentic deed, or, if by private deed, the signature of the inventor must be certified by a notary or by the syndic of his place of residence.

6. A list of the documents thus presented.

The description must be in French or Italian, and contain a clear and complete description, such as will enable a person conversant with the subject to put the invention into practice.

The description and drawings are to be in triplicate, the applicant alone being answerable for their correctness; when the application is accompanied by a model, the copies of drawings must also be sent in, or at least drawings of such parts of the model as constitute the invention.

[NOTE.—A recent rule requires the drawings filed with the specification to be executed in India ink, on the smallest practical metrical scale. The prescribed sizes are: First, $5\frac{7}{8}$ inches by $7\frac{7}{8}$ inches; second, $7\frac{7}{8}$ inches by $11\frac{3}{4}$ inches; and third, $11\frac{3}{4}$ inches by $15\frac{3}{4}$ inches, according to the character of the invention. Drawings made to a larger scale than the officials deem necessary will be returned to the applicant for reduction, and in the meantime the application will be suspended.]

300. PETITION.—

[Stamp, cent. 50.]

To the Minister of Agriculture, Industry, and Commerce:

Mr. Annibale Ugazzi, born in Turin, and residing in Milan, [represented, as the case may be, by his special attorney, Antonio Arrisabini, of Bologna, and residing at Naples,] begs to apply for a patent of six years for his

invention, entitled [*machine for carding cotton*], with a view of acquiring the legal right of exclusively using his invention or industry, and also of exclusively manufacturing and selling the same.

[*Date of application.*]

[*Signature of applicant.*]

301. DESCRIPTION.—

[*Stamp, 50 cent.*]

Description of the invention entitled [*machine for carding cotton*].

[*Here follows description.*]

[*Signature of applicant.*]

The Secretary.

302. MEMORANDUM.—

[*Stamp, 50 cent.*]

Memorandum of the papers and objects delivered by Mr. Annibale Ugazzi, [*represented, as the case may be, by his special attorney, Mr. Alfonso Reccaboni,*] at the office of the secretary of the prefecture of _____ for the purpose of obtaining a patent for an invention entitled [*machine for carding cotton*].

1st. The application.

2d. Three copies of the description.

3d. Three copies of drawings in six sheets, or two copies of drawings in four sheets, and a model.

4th. The receipt for the due payment of the tax.

5th. The present memorandum.

[*If other documents are filed, state them.*]

[*Date of application.*]

[*Signature of the applicant.*]

XXVII. Jamaica.

SEC.

303. Law, date, and where recorded.

304. Kinds of patents.

305. Previous examination.

306. Documents required, and where to be left.

307. Working.

308. Duration.

SEC.

309. Assignments.

310. Specifications, inspection and copies of.

311. Penalty for use, or for imitation, or counterfeit without consent.

312. Government fees.

303. LAW, DATE, AND WHERE RECORDED.—The patent law amendment act, 1857. (See *Commissioners of Patents' Journal, vide supra* 71, No. 660.)

304. KINDS OF PATENTS.—Patents for invention or improvement and addition granted by the Governor to the true inventor or his attorney; disclaimer; patent for amended specification; caveats against disclaimers or alterations, entered at the Office of the Island Secretary.

305. PREVIOUS EXAMINATION.—By the Attorney General himself, or aided by other persons.

306. DOCUMENTS REQUIRED, AND WHERE TO BE LEFT.—Declaration in writing before a justice of the peace. Petition to the Governor. Written description or specification, drawings, and models, (if possible,) attested by two witnesses. Deposit of £5 by way of fee to the Attorney General. Notice to be given of application, with description in general terms, in the *Jamaica Gazette* and another newspaper, for at least four weeks. Letters patent to be applied for within three months after filing of petition, and in case of death of applicant within three months after his death.

307. WORKING.—Within two years.

308. DURATION.—Fourteen years. Foreign invention according to the term of the original patent.

309. ASSIGNMENTS.—Recorded in the Office of the Island Secretary and open to the public. Assignments of foreign patents (for a good consideration) recorded at the same place.

310. SPECIFICATIONS, INSPECTION AND COPIES OF.—Lodged, filed, and preserved in the Office of the Island, with proper indexes thereto, and all other documents. Copies (certified) to be evidence in all courts.

311. PENALTY FOR USE, OR FOR IMITATION, OR COUNTERFEIT WITHOUT CONSENT.—Treble damages, and for using the name of a patentee for the sale of an unpatented invention, £50; one half to Her Majesty, and the other to any person who shall sue for the sum.

312. GOVERNMENT FEES.—Letters patent, £5; petition, 1s. 6d.; declaration, 1s. 6d.; specification, 5s.; reference, certificate, or warrant of Attorney General, disclaimer or memorandum of alteration, 1s. 6d.; assignment, 10s.

XXVIII. Mauritius and Dependencies.

Sec.	Sec.
313. Law, date, and where recorded.	317. Specification, &c., copies.
314. Kinds of patents.	318. Duration.
315. Government fees.	319. Annulment.
316. Documents required.	320. Working.

313. LAW, DATE, AND WHERE RECORDED.—Ordinance, No. 11, of 1835, respecting letters patent. (See *Commissioners of Patents' Journal*, *vide supra* 71, No. 1,282, An., 1866.)

314. KINDS OF PATENTS.—Letters patent granted by the Government for home and foreign inventions and improvements.

315. GOVERNMENT FEES.—Duty to be fixed by Government, but not to exceed £100.

316. DOCUMENTS REQUIRED.—An application, with an exact description, drawings, and plans.

317. SPECIFICATION, INSPECTION AND COPIES OF.—To be published after the expiration of or annulment of patent.

318.—DURATION.—Term not to exceed fourteen years.

319. **ANNULMENT.**—Patents may be annulled for omission or unfaithful description; for previous discovery; for non-exercise of privilege; if patent should be obtained for the same object in a foreign country; if invention should appear to be dangerous.

320. **WORKING.**—Within two years of grant.

XXIX. Mexico.

SEC.	SEC.
321. Jurisdiction of patents.	323. Prolongation of patents.
322. Applications to Government or local authorities.	324. Fees.
	425. Who patentee may employ.

321. **JURISDICTION OF PATENTS.**—Patents for new inventions and improvements are granted for all the States of the Confederation. Patents for inventions shall be in vigor for ten years, and those for improvements for six years. Importers of any branch of industry, which the General Congress might think of great importance, may obtain an exclusive privilege by making an application through the Government to the Congress. (§ 1.)

322. **APPLICATION TO GOVERNMENT OR LOCAL AUTHORITIES.**—Application for patents may be made directly to Government or else to the local authorities. A precise description of the invention, with drawings, models, or whatever may be considered necessary for distinctly explaining the invention, is to be signed by applicant and delivered to the authorities. The petition is to be published three times in the gazette, to enable other parties to raise claims of priority. The patent may then be granted at the risk of the applicant as to the novelty and utility of the invention. (§ 2.)

323. PROLONGATION OF PATENTS.—Patents may be prolonged by application to Congress through the Government. (§ 3.)

324. FEES.—The patent fees vary between \$10 and \$300, (2 guineas and 60 guineas.) (§ 4.)

325. WHO MAY BE EMPLOYED BY PATENTEE.—Half the number of men employed by the patentee in mechanical works must be citizens of the United States of Mexico, if such may be had. (§ 5.)

XXX. The Netherlands.

SEC.	SEC.
326. Law, date, and where recorded.	332. Working and extension.
327. Kinds of patents.	333. Assignments.
328. Previous examination.	334. Annulment.
329. Duration	335. List of patents delivered.
330. Government fees.	336. Specifications published.
331. Documents, where to be left.	337. Proceedings to obtain patent.

326. LAW, DATE, AND WHERE RECORDED.—Decree of 25th January, 1817. (See *Commissioners of Patents' Journal*, *vide supra* 71, No. 289.)

327. KINDS OF PATENTS.—Patents of invention, improvement, or importation granted to natives or foreigners represented in the Netherlands. No guaranty as to priority or merit.

328. PREVIOUS EXAMINATION.—By the Commissioner General of Instruction, Arts, and Sciences, and sometimes also by the Royal Institute of the Netherlands.

329. DURATION.—Five, ten, and fifteen years. Foreign inventions according to the duration of the foreign patent.

330. GOVERNMENT FEES.—£12 10s., (150 fl.,) for five years; from £25 to £33 10s., (accordance to importance,) for ten years; from £50 to £62 10s., for fifteen years. To be paid to the Treasurer of the Province, at the delivery of the patent by the respective Governors. The remainder of taxes on patents annulled to be returned.

331. DOCUMENTS REQUIRED, AND WHERE TO BE LEFT.—A petition to the King. A specification and drawings. To be left with the Registrar of the States for the Commissioner General of Instruction, Arts, and Sciences.

332. WORKING AND EXTENSION.—Original term prolonged by applying to the Commissioner General of Instruction, Arts, and Sciences. To be worked within two years.

333. ASSIGNMENTS.—By authorization of the King. To be registered at the Record Office of the Province, and at the Ministry of Instruction, Arts, and Sciences. Fees, 15s.

334. ANNULMENT.—In case of, 1st, deficient or fraudulent specification; 2d, previous publication; 3d, not being worked within two years; 4th, obtaining a foreign patent at a posterior date; 5th, for reasons of public safety.

335. LIST OF PATENTS DELIVERED.—At the Ministry of Public Instruction, in the official gazette, in the *Commissioners of Patents' Journal*.

336. SPECIFICATIONS PUBLISHED.—At the expiration or annulment of patents, except there be political or commercial reasons for withholding such publication.

337. PROCEEDINGS TO OBTAIN A PATENT.—Application must be by petition, stating general object of the invention, giving applicant's name, domicil, &c., naming the

term for which the patent is demanded, with an exact and detailed specification, under sealed cover, annexed with the necessary drawings, &c. These shall be published at the expiration of the patent, unless the Government shall, for important reasons, postpone such publication.

The Commissioner General shall send patents of invention, importation, or improvement, granted and signed by the King, to the Governor of the Province where the applicant resides, the patent to be delivered to applicant on his proving that he has paid to the receiver of the Province the tax fixed by the tariff.

[NOTE.—The Dutch patent laws were repealed by the law of the 15th of July, 1869, enacting the abrogation of grants of exclusive rights for inventions and improvements of objects of art and industry. The law is as follows:

ART. 1. From and after the day of the promulgation of the present law, no more patents for inventions and improvements, or importation of objects of art and industry, will be granted, except such as may have been applied for previous to this date.]

(See *Commissioners of Patents' Journal*, *vide supra* 71, No. 1,643.)

XXXI. Newfoundland.

SEC.	SEC.
338. Law, date, and where recorded.	342. Specifications, copies of.
339. Documents required, and where to be left.	343. Assignments.
340. Duration.	344. Working.
341. Kinds of patents.	345. Government fees.
	346. Other legal provisions.

338. LAW, DATE, AND WHERE RECORDED.—An act to repeal the patent acts of this colony, and to make other provisions in lieu thereof, passed 12th May, 1856. (See *Commissioners' of Patents' Journal, vide supra* 71, No. 858, An., 1862.)

339. DOCUMENTS REQUIRED, AND WHERE TO BE LEFT.—Petition to the Governor, with description. Declaration as to novelty (in foreign parts before a British consul.) Drawings, models, (if not too costly,) or specimens of ingredients. To be left at the office of the Colonial Secretary. Notice, with description, in the royal gazette and one local paper.

340. DURATION.—Term not exceeding fourteen years. Extension seven years. Foreign patents according to original term.

341. KINDS OF PATENTS.—Letters patent for invention and improvements under the great seal of the Island. Disclaimer, reissue patents granted in England and extending to the colonies, to be filed or lodged (in copies) in the office of the Colonial Secretary for obtaining certificate thereof.

342. SPECIFICATIONS, COPIES OF.—To be obtained at the office of the Colonial Secretary.

343. ASSIGNMENTS.—To be recorded in the office of the Colonial Secretary. Real assignees of foreign inventors patented abroad may obtain letters patent.

344. WORKING.—Within two years.

345. GOVERNMENT FEES.—£5, besides the usual fees charged on documents issued under the great seal of the Island.

346. OTHER LEGAL PROVISIONS.—Infringers liable to forfeit and pay to the patentee a sum equal to three

times the actual damage sustained by him, together with costs.

XXXII. New South Wales.

<p>SEC. 347. Law, date, and where recorded. 348. Kinds of patents. 349. Government fees.</p>	<p>SEC. 350. Duration. 351. Documents required. 352. Proceedings to obtain a patent.</p>
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347. LAW, DATE, AND WHERE RECORDED.—Act of the Legislative Council, assented to 6th December, 1852. (See *Commissioners of Patents' Journal, vide supra* 71, No. 386, An., 1857.)

348. KINDS OF PATENTS.—Letters of registration for invention and improvement granted to inventors, their agents or assignees. Letters of registration may be repealed by writ of *scire facias*.

349. GOVERNMENT FEES.—£20, payable to Colonial Treasurer.

350. DURATION.—Not less than seven, and not more than fourteen years.

351. DOCUMENTS REQUIRED.—Petition to the Government by the inventor, agent, or assignees, with description and receipt from Colonial Treasurer.

352. PROCEEDINGS TO OBTAIN A PATENT.—The applicant for patents is to present a petition to the Governor, setting forth that he is the author or designer of a certain invention, or his agent, or his assignee, stating the particulars of the invention, and that he has deposited the patent fee with the Colonial Treasurer. The petition is then to be referred to one or more competent persons, and, their report being favorable, the letters of registra-

tion may be granted, the same to be registered within three days, at the supreme court, on pain of nullity.

XXXIII. New Zealand.

Sec.

353. Law, date, and where recorded.

354. Kinds of patents.

355. Duration.

356. Government fees.

Sec.

357. Documents required, where left.

358. Assignments.

359. Specifications, inspection, &c.

360. Other legal provisions.

353. LAW, DATE, AND WHERE RECORDED.—Patents act, 1860. (See *Commissioners of Patents' Journal*, *vide supra* 71, Nos. 861, 1639, An., 1862.)

354. KINDS OF PATENTS.—Letters patent; letters of registration (for foreign patents); disclaimer; memoranda of alteration; additional patent; royal prerogative saved.

355. DURATION.—Fourteen years. Patents of invention patented abroad according to the term of the foreign patent.

356. GOVERNMENT FEES.—£10 to be deposited with the Colonial Treasurer at the time of filing petition. Costs of examiners, if called in by the Government and in case of objections being raised, extra. Amended specification, 10s. Additions to former inventions, £10. Letters of registration for English or foreign patents, £10.

357. DOCUMENTS REQUIRED, AND WHERE TO BE LEFT.—A petition to the Governor. Specification in duplicate and drawings, or specimens of the ingredients or of the composition of matter, (for experiment.) Notice to be inserted in the Government gazette and in one local

paper. Objections to be raised within four months of said notice.

358. ASSIGNMENTS.—Assignments and licenses to be recorded within six months from the execution thereof, in the office of the Colonial Secretary. Fees 10s. More than twelve persons may have a legal and beneficial interest in letters patent.

359. SPECIFICATIONS, INSPECTION AND COPIES OF.—At the office of the Colonial Secretary. Certified copies received in evidence in all courts.

360. OTHER LEGAL PROVISIONS.—Letters patent may be repealed by writ of *scire facias*. Penalty for counterfeiting, £50. If in any action or suit a verdict or decree shall pass for the patentee, the judge may grant a certificate, which shall entitle the patentee, upon a verdict in his favor, to receive treble costs. Plaintiff in any action shall file with declaration notice of objections on which he means to rely at trial. Judge at chambers on summons may allow other objections at his discretion.

XXXIV. Portugal.

SEC.	SEC.
361. Law, date, and where recorded.	367. Working and prolongation.
362. Kinds of patents.	368. Assignments.
363. Previous examination.	369. Annulment.
364. Duration.	370. Other provisions.
365. Government fees.	371. Specifications, inspection and copies of, (models.)
366. Documents, where to be left.	

361. LAW, DATE, AND WHERE RECORDED.—Royal decree of 31st December, 1852. (See *Commissioners of Patents' Journal*, *vide supra* 71, No. 1026. An., 1863.)

362. KINDS OF PATENTS.—Patents of invention, improvement, and importation granted to natives and foreigners. Food, drugs, theoretical principles, and ornamentation excluded. Government may buy up patent rights by private contract. Patents subject to expropriation for public utility. Original inventors to have a prior right to patents of importation during one year.

363. PREVIOUS EXAMINATION.—No guaranty as to truth, priority, or merit. No opposition or forfeiture at the expiration of the first half of the term for which the patent was granted.

364. DURATION.—Fifteen years at most for patents of invention, five years at most for patents of importation; the latter granted by open competition. Term of patent to reckon from date of patent, priority from date of deposit.

365. GOVERNMENT FEES.—Five thousand reis per annum. To be applied to industrial improvements.

366. DOCUMENTS REQUIRED, AND WHERE TO BE LEFT.—Deposit at the respective Civil Governor of a description, (in Portuguese,) drawings on a metrical scale and in ink, models, and duplicate of the same, (all sealed;) the latter to be returned to the patentee. A petition to the Secretary of State for Commerce, or a certificate stating that no other similar patent has been recorded. A receipt for the Government fees.

367. WORKING AND PROLONGATION.—Within one year. Prolongation of five years for patents of invention only.

368. ASSIGNMENTS.—At the Ministry of Commerce.

369. ANNULMENT.—For reasons of public safety and for being contrary to law; for defective or false description;

for want of novelty; for not being worked within the prescribed time.

370. OTHER PROVISIONS.—Revivals of industrial processes lost sight of to be considered as discoveries. New means of producing known articles held to be an invention. Inventions known abroad or in Portugal not patentable in Portugal, but when not worked in Portugal at the time of application they may be protected by a patent of importation.

371. SPECIFICATIONS, INSPECTION AND COPIES OF, (MODELS.)—At the Ministry of Commerce. At the Museum of Industry.

XXXV. Prussia.

SEC.	SEC.
372. Law, date, and where recorded.	379. Assignments.
373. Kinds of patents.	380. Other legal provisions.
374. Previous examination.	381. Specifications, inspection and copies of.
375. Duration.	382. List of patents delivered.
376. Government fees.	383. Specifications published.
377. Documents required, and where to be left.	384. Proceedings to obtain a patent.
378. Working.	

372. LAW, DATE, AND WHERE RECORDED.—Royal ordinance of 14th October, 1815 and 18th September, 1828. Convention between the States of the Zollverein of 29th June, 1843. (See *Commissioners of Patents' Journal*, *vide supra* 71, Nos. 313, 329, and 231.)

373. KINDS OF PATENTS.—Patents of invention, improvement, and importation delivered by the Minister of Commerce and Public Works to Prussians and foreigners naturalized or represented by Prussians.

374. **PREVIOUS EXAMINATION.**—By the Royal Polytechnic Commission as to the novelty and peculiar character of the invention, without any consideration as to its utility and appropriateness, except in cases of patents for a real improvement of existing apparatus or methods. The Minister of Commerce may order a new examination to take place. No guaranty by Government. Parts of inventions already known not protected by patent. Patents are annulled whenever the supposition of the invention being new and peculiar is shown to be unfounded.

375. **DURATION.**—Six months at least and fifteen years at most.

376. **GOVERNMENT FEES.**—A stamp duty of 1s. 6d. (15 sgr.) besides the legal trade tax.

377. **DOCUMENTS REQUIRED, AND WHERE TO BE LEFT.**—An application to the respective Provincial Administration; a description, drawings, or models. Statement as to whether the patent is to be granted for the entire monarchy or not.

378. **WORKING.**—Before the expiration of six months, at the latest, from the day of the delivery of the patent.

379. **ASSIGNMENTS.**—To Prussian citizens.

380. **OTHER LEGAL PROVISIONS.**—Cases of infringement to be settled by the Provincial Administration of the place where the infringer resides, with option of appeal to the Minister of Commerce. Infringers to pay the costs of inquiry only, but not subject to confiscation of tools, &c., or damages, except in case of a second offense.

381. **SPECIFICATIONS, INSPECTION AND COPIES OF.**—At the Ministry of Commerce and Public Works.

382. **LIST OF PATENTS DELIVERED.**—A summary notice in the Prussian *Gazette*, and in the official provincial pa-

pers, within six weeks after the delivery of the patent. (Titles in the *Commissioners of Patents' Journal*.)

383. SPECIFICATIONS PUBLISHED.—In the *Verhandlungen des Gewerbe-Vereins* and other technical periodicals. Kept at the Public Free Library of the Patent Office.

384. PROCEEDINGS TO OBTAIN A PATENT.—Applications must be accompanied by a precise description and illustration by models, drawings, or writings, and, if possible, by all these three means. Applicants must state if the patent is required for the whole or only part of the kingdom, and for how long a period. Experts are to examine the applications, and report thereon to the Minister of Commerce and Public Works as to the object, the extent, and duration of the patent. This minister is to execute and deliver the patent, and to control the custody of models, drawings, and specifications. The shortest term for a patent is six months, the longest fifteen years.

XXXVI. Queensland.

385. (See *Commissioners of Patents' Journal*, No. 859.) No patent laws have been enacted in the Colony of Queensland since its separation from New South Wales, but the colonial act, (New South Wales,) 16 Vict., No. XXIV., (see No. 386 of the *Commissioners of Patents' Journal*,) was continued in force in the Colony by an order in Council of the 6th November, 1859.

XXXVIII. Russia.

Sec.	Sec.
386. Law, date, and where recorded.	389. Duration.
387. Kinds of patents.	390. Government fees.
388. Previous examination.	391. Documents, where to be left.

<p>Sec. 392. Working and prolongation. 393. Assignments. 394. Specification, inspection, copies.</p>	<p>Sec. 395. Lists of patents delivered. 396. Specifications published. 397. Proceedings to obtain patent.</p>
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386. **LAW, DATE, AND WHERE RECORDED.**—Statutes of the Russian Empire, vol. iv., book 1, part 3, chap. 3. (See *Commissioners of Patents' Journal, vide supra* 71, No. 334.)

387. **KINDS OF PATENTS.**—Exclusive privileges and patents of invention, improvement, and importation granted to natives and aliens.

388. **PREVIOUS EXAMINATION.**—By the Board of Manufactures, as to novelty, legal or technical forms, and public utility. No guaranty by the Government. Reasons for refusal published in the Moscow and St. Petersburg newspapers.

389. **DURATION.**—Three, five, and ten years at most from the day on which the patent has been signed. Six years at most for patents of importation.

390. **GOVERNMENT FEES.**—Patents of invention: 90 silver roubles for three years; 150 s. r. for five years; 450 s. r. for ten years. Patents of importation: 60 s. r. for one year; 120 s. r. for two years; 180 s. r. for three years; 240 s. r. for four years; 300 s. r. for five years; 360 s. r. for six years. (1 s. r. = 3s. 8d.) The surplus accruing from patent fees to be applied to the purchase of books, models, &c.

391. **DOCUMENTS REQUIRED, AND WHERE TO BE LEFT.**—A petition to the Board of Commerce and Trades; a description, (in Russian,) and, in case of a patent of importation, (also in the original language,) drawings and models. Payment of the fees. Defective specifications may be amended.

392. **WORKING AND PROLONGATION.**—No prolongation.

To be worked within the first quarter of the term specified. A certificate from the local administration to be sent to the respective ministry within six months of the working. No company to work patents without special grant of the Government.

393. ASSIGNMENTS.—To be reported to the respective department to which the patent belongs and published.

394. SPECIFICATIONS, INSPECTION AND COPIES OF.—At the respective ministry.

395. LISTS OF PATENTS DELIVERED.—In the Moscow and St. Petersburg papers.

396. SPECIFICATIONS PUBLISHED.—In the journal of the respective ministry, in the reports of the Senate, and the Moscow and St. Petersburg papers.

397. PROCEEDINGS TO OBTAIN A PATENT.—Applicants may apply personally, or through an agent authorized by power of attorney. Such agent is to undertake to pay the tax in case the privilege be granted.

Petitions for patents are examined by the Board of Industry, to ascertain whether a previous patent had not been granted for the same object; whether the description be full, clear, and exact; whether any public benefit be derivable from the invention; whether it contain anything injurious to human health and safety.

The invention being found free from these objections, the patent may be issued.

When two parties apply for a patent for the same invention, neither can obtain it without establishing by decree of a court of law his prior right.

When patents are refused the tax is refunded.

XXXVIII. Saxony.

<p>Sec. 398. Law, date, and where recorded. 399. Kinds of patents. 400. Previous examination. 401. Duration. 402. Government fees, stamps, &c. 403. Documents, where to be left.</p>	<p>Sec. 404. Working and extension. 405. Assignments. 406. Annulment. 407. Lists of patents delivered. 408. Specifications. 409. Proceedings to obtain a patent.</p>
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398. LAW, DATE, AND WHERE RECORDED.—Royal decree of 20th January, 1853. (See *Commissioners of Patents' Journal, vide supra* 71, No. 236.)

399. KINDS OF PATENTS.—Patents for new or unpublished (abroad or in Germany) inventions and improvements granted to natives, naturalized citizens of the German States, or foreigners residing or represented in Saxony. Drugs, food, and scientific principles excluded. Patent articles, other than machines or manufacturing tools, may be imported, used, and sold by third parties.

400. PREVIOUS EXAMINATION.—Technical examination.

401. DURATION.—Five years; extended to ten years by applying four weeks at the latest before the expiration of the original term.

402. GOVERNMENT FEES, STAMPS, AND TAXES.—£3 10s. for five years. £7 10s. on applying for extension to ten years. £1 4s. for technical examination on applying for patent. 12s. on applying for extension of time for working, besides the usual stamp duty (on papers.)

403. DOCUMENTS REQUIRED, AND WHERE TO BE LEFT.—An application to the Minister of the Interior; a speci-

fication and drawings or models, (all papers stamped;) the cost of technical examination.

404. **WORKING AND EXTENSION.**—Within one year from the date of grant; subject to trade regulations. Term extended, on showing good cause for delay, by applying to the Minister of the Interior four weeks at the latest before the expiration of the year.

405. **ASSIGNMENTS.**—To natives or naturalized citizens of Saxony or other German States.

406. **ANNULMENT.**—By the Minister of the Interior. For want of novelty, (partly or entirely;) false statement as to nationality, or being the original inventor or his assignee; defective specification; for not being worked in due time.

407. **LISTS OF PATENTS DELIVERED.**—In the *Leipzig Gazette* and in the *Commissioners of Patents' Journal*.

408. **SPECIFICATIONS.**—Published in the *Polytechnische Centralblatt* and other technical periodicals. Originals kept at the Ministry of the Interior.

409. **PROCEEDINGS TO OBTAIN A PATENT.**—Applications for the grant or extension of a patent must be made in writing, addressed to the Minister of the Interior, accompanied by a specification and drawings or models so distinct that any skilled person may work the invention by such instruction. The novel points must be clearly indicated. The tax No. 1 is to be paid at the same time. The applicant will then learn whether the application can be granted and when he is to pay the tax No. 2. The payment is immediately followed by the announcement of the grant of the patent.

XXXIX. Spain.

Sec.	Sec.
410. Law, date, and where recorded.	418. Assignments.
411. Kinds of patents.	419. Specifications, inspection and copies of.
412. Previous examination.	120. List of patents delivered.
413. Duration.	421. Originals of specifications (models.)
414. Government fees.	422. Proceedings to obtain a patent.
415. Documents, where to be left.	423. Form of petition to the king.
416. Working and extension.	
417. Infringements.	

410. LAW, DATE, AND WHERE RECORDED.—Royal decree of 27th March, 1826, 14th June, 1829, 23d December, 1829. (See *Commissioners of Patents' Journal*, *vide supra* 71, No. 328.)

411. KINDS OF PATENTS.—Patents for inventions and importations to natives and foreigners.

412. PREVIOUS EXAMINATION.—None as to novelty or utility.

413. DURATION.—Five, ten, or fifteen years for patents of invention; five years for patents of importation, prolonged to ten years. To begin from the date of the patent.

414. GOVERNMENT FEES.—1,000 reis for five years; 3,000 reis for ten years; 6,000 reis for fifteen years; 3,000 reis for patents of importation for five years, besides 80 reis on the delivery of the patent in addition to the above sums. (1 real=5*d.*)

415. DOCUMENTS REQUIRED, AND WHERE TO BE LEFT.—An application of inventor or his attorney to the Queen; a description and plan of model, (sealed,) with an annexed memorandum pointing out the chief claims of the inventor.

416. **WORKING AND EXTENSION.**—To be worked within and not to be interrupted for one year and one day.

417. **INFRINGEMENTS.**—Punishable by confiscation of machines, utensils, apparatus, and manufactured goods, and by a fine of three times their value, for the benefit of the patentee.

418. **ASSIGNMENTS.**—Registered at the Royal Conservatory of Arts within thirty days of date.

419. **SPECIFICATIONS, INSPECTION AND COPIES OF.**—Open to the public at the Royal Conservatory at the expiration of the patent.

420. **LIST OF PATENTS DELIVERED.**—In the *Madrid Gazette*; in a public register at the Conservatory of Arts.

421. **ORIGINALS OF SPECIFICATIONS, (MODELS.)**—At the Royal Conservatory of Arts.

422. **PROCEEDINGS TO OBTAIN A PATENT.**—Patents must be solicited by the applicant or his agent by means of a memorial (in Spanish) in the following form:

To the Governor of the Province of

N. domiciled [*or residing*] at , [*state profession*], begs respectfully to state, that for the purpose of securing the property of a machine [*instrument, apparatus, process, method*] invented [*imported*] by him for [*state object*], and conformably to the royal regulations, he presents to you the required memorial for his Majesty, and a closed and sealed packet, [*or case,*] and the following inscription [*copy of inscription.*]

I request you to sign the said packet [*or case*], to deliver the proper certificate to me, and to let me have the required official letter to his excellency the Secretary of State and of the Exchequer, that I may deliver the whole into his hands, according to the regulations.

[*Address and date.*]

[*Signature.*]

This memorial is to be accompanied by a petition to the King, on stamped paper, mentioning the object of the patent, whether original or imported, and its dura-

tion. Each application must not contain more than one object.

428. FORM OF PETITION TO THE KING.—

N. domiciled [or residing] at , [state profession], submits to your Majesty, with profound respect, that for the purpose of securing the property of a machine [instrument, apparatus, process, method] invented [imported] by him [state object], and conformably to the regulations made by your Majesty, he solicits from your Majesty the delivery of letters patent for years; and he will ever pray, &c.

[Signature.]

There must likewise be sent with the memorial and petition a plan or model, with the description and explanation of the mechanism or process, clearly and correctly, so that no doubt may ever arise of its object or particular nature, with a declaration that the invention has never been worked in that form before. Models must be in a sealed case and plans and descriptions in a sealed cover, both bearing the following inscription:

Application for letters patent presented by N. domiciled at , to the Governor of , for [insert title of invention, as mentioned in the petition to his Majesty, month, year, day, and hour.]

[Signature of Governor.]

[Name of the Applicant.]

[Number of Register.]

The petition, having been examined by the General Commission of Commerce, Money, and Mines, and approved, is granted, and letters patent are delivered on the production of a receipt showing that taxes have been paid to the Royal Conservatory of Arts.

After delivery of the patent the closed and sealed documents shall be deposited in a room of the Royal Conservatory of Arts, and shall only be opened in case of litigation, and by order of the judge. Grants of patent

are to be published in the *Royal Gazette*. A register of patents is to be kept open to public inspection.

A note is to be annexed to the description and explanation which accompany the petition for a patent, pointing out clearly, distinctly, and solely that part, mechanism, substance, or process which is the object of the patent and which the applicant desires to secure, and the letters patent shall apply only to the contents of the said note. This note is to be verified by the Council of the Exchequer.

XL. Sweden.

Sec.	Sec.
424. Law, date, and where recorded.	431. Assignments.
425. Kinds of patents.	432. Other legal provisions.
426. Previous examination.	433. Specifications, inspection, and copies of.
427. Duration.	434. List of patents delivered.
428. Government fees.	435. Specifications published.
429. Documents required and where to be left.	436. Originals of specifications, (models.)
430. Working and extension.	

424. LAW, DATE, AND WHERE RECORDED.—Royal ordinance, dated 19th August, 1856, in force since October 1, 1856. (See *Commissioners of Patents' Journal*, *vide supra* 71, No. 354, and for Norway, No. 655.)

425. KINDS OF PATENTS.—Patents of invention and improvement granted to the original inventor only, whether a native or alien, residing or represented in the country. No patents are granted for pharmaceutical preparations, or for invention contrary to existing laws, to public safety, or morality.

426. PREVIOUS EXAMINATION.—By the Chamber of

Commerce, as to the invention being contrary to existing laws, to public safety, or morality. Official publications of foreign inventions do not prevent grants of patents. No guaranty as to novelty or utility.

427. DURATION.—Three years at least, and fifteen years at most, according to the nature and importance of the invention. Patents for foreign inventions not to exceed the term granted abroad.

428. GOVERNMENT FEES.—None except the costs of publishing the specification in the "*Post & Inrikes Tidningar.*"

429. DOCUMENTS REQUIRED AND WHERE TO BE LEFT.—A petition to the Chamber of Commerce, (*Kommers-Kollegium*;) a declaration as to whether the invention be new or an improvement; a full description of the means of working the invention, drawings or models, (if required.) N. B. A month's time is allowed, if applied for, for delivering the complete specification.

430. WORKING AND EXTENSION.—To be worked within one, two, or four years of the date of patent, according to the nature and importance of the invention, such working not to be interrupted for one year.

431. ASSIGNMENTS.—To parties residing in the kingdom, by permission of the Chamber of Commerce.

432. OTHER LEGAL PROVISIONS.—Infringements punishable by a fine of from 100 to 200 rix-dollars (£23 to £46) for the first offense, and from 200 to 400 rix-dollars (£46 to £92) for the second offense; besides by damages, half of which belong to the patentee, and the other going towards the relief of the poor of the parish.

433. SPECIFICATIONS, INSPECTION, AND COPIES OF.—In the records of the Chamber of Commerce.

484. LIST OF PATENTS DELIVERED.—Placarded in the Hall of the Chamber of Commerce, and published in the "*Post & Inrikes Tidningar.*"

485. SPECIFICATIONS PUBLISHED.—Three times within two months of the grant, in the "*Post & Inrikes Tidningar.*"

486. ORIGINALS OF SPECIFICATIONS, (MODELS.)—In the records of the Chamber of Commerce, Stockholm.

XLI. Tasmania.

SEC.

437. Law, date, and where recorded.

438. Kinds of patents.

439. Duration.

440. Government fees.

SEC.

441. Documents required, &c.

442. Assignments.

443. Originals of specifications, &c.

444. Other legal provisions.

437. LAW, DATE, AND WHERE RECORDED.—Act 22 Vict., dated 5th November, 1858. (See *Commissioners of Patents' Journal*, *vide supra* 71, No. 860, An., 1862.)

438. KINDS OF PATENTS.—Letters patent and grants of privilege to the true and first inventor, under the seal of the colony; disclaimer and alteration; English patent granted before the 30th June, 1859, to be valid in the colony.

439. DURATION.—Fourteen years. Patents to expire at the end of the third or seventh year, if the required grant-fees are not paid. Letters patent for foreign invention not to continue after expiration of foreign patent. Extension for a term not exceeding fourteen years after the expiration of the first term.

440. GOVERNMENT FEES.—On depositing specification, £2 10s.; to the law officer for any appointment, £2 4s.

6d.; on obtaining letters patent, £2 10s.; at or before the expiration of third year, £15; at or before the expiration of seventh year, £20; to the law officer with particulars of objection, £2 4s. 6d.; on presenting petition for extension or confirmation, £2 10s.; every search and inspection, 1s.; entry of assignment or license, 10s.; certificate of assignment or license, 10s.; filing disclaimer or memorandum of alteration, £2 10s.; entering any caveat, £2 10s.; copy or extract of any writing, per common law folio, 1s.

441. DOCUMENTS REQUIRED AND WHERE TO BE LEFT.—Petition to the Government; declaration of being the first inventor, with annexed specification (and copy) of a certain size, and drawings, if any, for provisional protection of six months. Notice to proceed to be published in the Government gazette and two local papers. Warrant for letters patent issued by Attorney General after one month's notice. Letters patent bearing date of deposit of specification to be issued within three months after said warrant, and during the protection.

442. ASSIGNMENTS.—Registered as above, and legal copies thereof to be had.

443. ORIGINALS OF SPECIFICATIONS, DISCLAIMERS, DRAWINGS, &c.—To be filed at the end of six months, at a proper office, with indexes, registers, &c., for public inspection.

444. OTHER LEGAL PROVISIONS.—Letters patent may be repealed or withheld, and specifications canceled by writ of the supreme courts, in the nature of a writ of *scire facias* in England. Letters patent not to prevent the use of invention in foreign ships resorting to ports in the colony, (provided there be reciprocity in this

behalf.) Penalty for unauthorized use of word *patent*, £100.

XLII. Trinidad.

Sec.

445. Law, date, and where recorded.

446. Duration.

447. Government fees.

Sec.

448. Kinds of patents.

449. Documents required, &c.

450. Specifications.

445. **LAW, DATE, AND WHERE RECORDED.**—Separate ordinance. (See *Commissioners of Patents' Journal, vide supra* 71, No. 883, An., 1862.)

446. **DURATION.**—Fourteen years.

447. **GOVERNMENT FEES.**—On presentation of bill, \$50; government printer's charge, \$10=\$60, (£12 10s.)

448. **KINDS OF PATENTS.**—Bill for granting for a limited time the exclusive benefit of a certain invention.

449. **DOCUMENTS REQUIRED AND WHERE TO BE LEFT.**—Petition to the Government. Specifications to be delivered within six months after the passing of ordinance to the Registrar General.

450. **SPECIFICATIONS.**—Recorded in the office of the Registrar General.

XLIII. Victoria, (Australia.)

Sec.

451. Law, date, and where recorded.

452. Kinds of patents.

453. Previous examination.

454. Duration.

455. Government fees.

456. Documents, where to be left.

Sec.

457. Assignments.

458. Specifications and indexes.

459. Lists of patents delivered.

460. Penalties and fines.

461. Proceedings to obtain a patent.

462. Form of application.

451. **LAW, DATE, AND WHERE RECORDED.**—Act of the

Lieutenant Governor of the Colony of Victoria, Anno Decimo Septimo Victoriae Reginae. Assented to 31st March, 1854. Repealed 11th March, 1857, and superseded by act Anno Vicesimo Victoriae Reginae. Dated 11th March, 1857. (See *Commissioners of Patents' Journal*, *vide supra* 71, Nos. 186 and 359.)

452. KINDS OF PATENTS.—Letters patent for inventions and for imported inventions granted by the Queen to the true and first inventor of manufactures. Letters patent granted in the United Kingdom of Great Britain and Ireland, on or before the 31st December, 1857, to be also valid in Victoria. (N. B. Letters patent not to prevent the use of inventions in foreign ships resorting to ports in Victoria, except reciprocal rights be denied to British ships in such foreign ports as they belong to.)

453. PREVIOUS EXAMINATION.—By the Law Officer, and, if required, by one or more competent person or persons appointed by him, in case of opposition raised within one month of the notice to proceed, inserted in the Government gazette and two other papers, both applicant and opponent being present.

454. DURATION.—Original inventions fourteen years. Imported inventions according to the duration of the foreign patent, or, if more than one, according to the shortest duration. Letters patent may be repealed by *scire facias*. Extension of term, not exceeding fourteen years, by petition to Government six months before the expiration of the patent.

455. GOVERNMENT FEES.—On depositing specification, £2 10s.; to the Law Officer for any appointment, £2 4s. 6d.; on obtaining letters patent, £2 10s.; at or before the expiration of the third year, £15; at or before the expi-

ration of the seventh year, £20; to the Law Officer with particulars of objections, £2 4s. 6d.; on presenting petition for extension or confirmation, £2 10s.; every search and inspection, 1s.; entry of assignment or license, 10s.; certificate of assignment or license, 10s.; filing memorandum of alteration or disclaimer, £2 10s.; entering any caveat, £2 10s.; copy or extract of any writing, per common law folio, 1s.

456. DOCUMENTS REQUIRED, AND WHERE TO BE LEFT.—An instrument in writing (and copy) describing invention, (with drawing, if any,) and deposited at the office of the Chief Secretary at Melbourne for provisional protection for six months. Such specification, on parchment, twenty inches by fifteen, may be amended within said term. Notice to proceed within six months of deposit. Opposition open for one month, before the Law Officer appointed to hear applications and objections and to award costs. Warrant for letters patent issued by said Law Officer. Letters patent to be sealed within three months after the date of said warrant and during the term of provisional protection; said term may be prolonged for one month by the Governor. Disclaimer or memorandum of alteration entered with or without public notice.

457. ASSIGNMENTS.—Entered in the Register of Proprietors.

458. SPECIFICATIONS AND INDEXES TO SPECIFICATIONS.—Open to the public at all reasonable times. Certified copies to be evidence.

459. LISTS OF PATENTS DELIVERED.—Applications published in the Government gazette; also in the Registry of Patents and Proprietors, open to the public.

460. PENALTIES AND FINES.—Falsification or forgery of entries punishable as a misdemeanor by labor on the roads or other public works, for any term not exceeding five years, or by fine and imprisonment. Penalty for unauthorized uses of the word patent £100; one half to her Majesty and the other half, with full costs of suit, to any person who shall sue for the said penalty by action of debt.

461. PROCEEDINGS TO OBTAIN A PATENT.—The applicant is to deposit at the office of the Chief Secretary an instrument under his hand seal, a particular description of his invention, with a copy of the instrument, and of drawings, if any, by doing which he obtains six months' protection, with the privilege of letters patent for that period. The specification may be amended during the six months.

The specification is to be on skins of parchment, written on both sides, twenty-one inches long by fifteen broad, with a margin of an inch and a half on each side. The drawings may be on larger sheets of parchment, with a margin of an inch and a half. The copies of specification and drawings are to be on sheets of paper of the same size as the parchment.

After making a deposit of these documents he is to give notice, at the chambers of the Attorney or Solicitor General, of his intention to proceed for a patent, stating the title of the invention and date of deposit, and produce at the same time the certificate of the deposit. The Law Officer is then to give the applicant an appointment in due form, which he is to publish in the Government gazette and in some Melbourne newspaper, and twice in

some newspaper published at or near where the applicant uses the invention or resides.

The letters patent are to be issued by the Chief Secretary within three months after the Law Officer's warrant and during the protection; but if the sealing has been delayed by accident, and not by the willful neglect of the applicant, it may be done within one month after the expiration of the protection, with the sanction of the Governor.

462. FORM OF APPLICATION FOR PATENT.—

I, _____, of _____, [*state address and profession,*] send greeting. Whereas I am desirous of obtaining royal letters patent for securing unto me her Majesty's special license, that I, my executors, administrators, and assigns, and such others as I or they should at any time agree with, and no others, should, and lawfully might, from time to time, and at all times during the term of fourteen years, (to be computed from the day on which this instrument shall be left at the office of the Chief Secretary,) make, use, exercise, and vend, within the Colony of Victoria and its dependencies, an invention for [*insert the title of the invention*]; and in order to obtain the said letters patent I must, by an instrument in writing, under my hand and seal, particularly describe and ascertain the nature of the said invention, and in what manner the same is to be performed, and must also enter into the covenant hereafter contained. Now, know ye, that the motive of the said invention, and the manner in which the same is to be performed, is particularly described and ascertained in and by the following statement, that is to say, [*describe the invention.*] And I do hereby, for myself, my heirs, executors, and administrators, covenant with her Majesty, her heirs and successors, that I believe the said invention to be a new invention as to the public use and exercise thereof, and that I do not know or believe that any other person than myself is the true and first inventor of the said invention, and that I will not deposit these presents at the office of the Chief Secretary with any such knowledge or belief as last aforesaid.

In witness, &c.

XLIV. West Indies, (Dutch.)

Sec.	Sec.
463. Law, date, and where recorded.	469. Assignments.
464. Kinds of patents.	470. Annulment.
465. Duration.	471. List of patents delivered.
466. Government fees.	472. Specifications published.
467. Documents required, &c.	473. Originals of specifications, (models.)
468. Working.	

463. LAW, DATE, AND WHERE RECORDED.—Decree of 4th July, 1844. (See *Commissioners of Patents' Journal*, *vide supra* 71, No. 322.)

464. KINDS OF PATENTS.—Patents of invention, improvement, and of importation.

465. DURATION.—Five, ten, and fifteen years at most. Original term prolonged. Foreign inventions according to the duration of the original patent.

466. GOVERNMENT FEES.—£15 for five years; from £30 to £40 (according to importance) for ten years; from £60 to £70 for fifteen years. Inventions already patented in the Netherlands are subject only to the usual stamp duties. The remainder of taxes of patents annulled returned.

467. DOCUMENTS REQUIRED AND WHERE TO BE LEFT.—An application to the Governor General, at Paramaribe; a description and drawings, &c., (sealed;) an undertaking to supply the patent article within two years, and to take up the patent within three months of its date, and to pay the fees thereon.

468. WORKING.—Within two years from the date of patent.

469. ASSIGNMENTS.—By consent of the Governor General. Registration fee, £2.

470. **ANNULMENT.**—In case of—1. Defective or false specification; 2. Previous publication; 3. Not being worked within two years; 4. Obtaining patents abroad, except the Netherlands and their colonies; 5. Not supplying the patent article within two years at a moderate price; 6. For reasons of public safety; 7. For neglecting to register assignments.

471. **LIST OF PATENTS DELIVERED.**—In the *Surinam Courant*, and in a special register, open to applicants for patents.

472. **SPECIFICATIONS PUBLISHED.**—At the expiration or annulment of patents, unless it be found advisable to delay such publication.

473. **ORIGINALS OF SPECIFICATIONS, (MODELS.)**—At the Governor General's, at Paramaribe. A copy at the Colonial Ministry at the Hague.

XLV. Wurtemberg.

SEC.	SEC.
474. Law, date, and where recorded.	481. Assignments.
475. Kinds of patent.	482. Specifications, inspection, and copies of.
476. Previous examination.	483. Annulment.
477. Duration.	484. List of patents delivered.
478. Government fees.	485. Specifications published.
479. Documents required and where to be left.	486. Other provisions.
480. Working and prolongation.	487. Proceedings to obtain a patent.

474. **LAW, DATE, AND WHERE RECORDED.**—Royal decree of 5th August, 1836. Law of the 29th June, 1842. (See *Commissioners of Patents' Journal*, *vide supra* 71, Nos. 314, 995.)

475. **KINDS OF PATENTS.**—Patents of invention and importation granted to natives of Wurtemberg and of the Zollverein.

476. **PREVIOUS EXAMINATION.**—For novelty. No guaranty as to priority or utility.

477. **DURATION.**—Ten years at most. Prolonged by legislative act. Patents of importation become extinct at the expiration of the foreign patent.

478. **GOVERNMENT FEES.**—From 8s. 4d. to £1 14s. annually.

479. **DOCUMENTS REQUIRED AND WHERE TO BE LEFT.**—A petition of inventor or importer to the Minister of the Interior; a description, drawings, and models, or patterns. To be left with the magistrate of the district.

480. **WORKING AND PROLONGATION.**—To be worked within and not to be interrupted for two years, except patentee shows good cause for delay. Original terms prolonged to ten years, if applied for before the beginning of the last year, and in cases of importation before the expiration of the first half of the original term.

481. **ASSIGNMENTS.**—Published.

482. **SPECIFICATIONS, INSPECTION AND COPIES OF.**—By natives and by consent of the patentee in the last year of the legal term of the patent. Patents of importation in the latter half of their legal term. Free when expired. At the Ministry of the Interior.

483. **ANNULMENT.**—For want of novelty; for having been known or worked abroad or in Wurtemberg; for false statements and incorrect descriptions, whereby patentees, moreover, incur a penalty.

484. **LIST OF PATENTS DELIVERED.**—In the Wurtemberg *Gewerbeblatt*.

485. SPECIFICATIONS PUBLISHED.—In the *Wurtemberg Gewerbeblatt* and other technical periodicals.

486. OTHER PROVISIONS.—Parties using a patent process in complete ignorance of the patent right of a third party are liable to confiscation and damages. Patent articles may be imported without consent of the patentee.

487. PROCEEDINGS TO OBTAIN A PATENT.—Applicants must deliver a petition to the authorities of the district in which they reside or intend to carry on their works, with a complete and true specification, and the required drawings, models, or plans. Specifications must be under a sealed cover, not to be opened by the district authorities. The authorities are then to give to applicants a certificate stating the day and hour when the delivery took place, and forward the documents to the Minister of the Interior.

PART III.

PROCEDURE

IN THE

UNITED STATES PATENT OFFICE,

WITH

FORMS, NOTES, AND AUTHORITIES.

PROCEDURE IN UNITED STATES PATENT OFFICE,

WITH

FORMS, NOTES, AND AUTHORITIES.

I. Caveat.

SEC.	SEC
1. Requisites and term of caveat.	9. Omission to give notice.
2. Proceedings in case of an interfering application.	10. Effect of a caveat upon a subsequent patent.
3. When an alien may file a caveat.	11. Papers not to be withdrawn, copies.
4. No notice given of pending applications.	12. Caveat as evidence.
5. Renewal.	13. Notice to the Commissioner only.
6. Description.	14. Petition.
7. Drawings.	15. Description.
8. Purpose of caveat.	16. Oath.

1. REQUISITES AND TERM OF CAVEAT.—Any citizen of the United States who shall have made any new invention or discovery, and shall desire further time to mature the same, may, on payment of the duty required by law, (\$10,) file in the Patent Office a caveat, setting forth the design thereof, and of its distinguishing characteristics, and praying protection of his right until he shall have matured his invention; and such caveat shall be filed in the confidential archives of the office and preserved in se-

crecy, and shall be operative for the term of one year from the filing thereof. (*Act of July 8, 1870, § 40.*)

2. PROCEEDINGS IN CASE OF AN INTERFERING APPLICATION.—If application shall be 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 filing the caveat, who, if he would avail himself of his caveat, shall file his description, specifications, drawings, and model within three months from the time of placing said notice in the post office in Washington, with the usual time required for transmitting it to the caveator added thereto, which time shall be indorsed on the notice. (*Ib.*)

3. WHEN AN ALIEN MAY FILE A CAVEAT.—An alien shall have the privilege of filing a caveat if he shall have resided in the United States one year next preceding the filing of his caveat, and made oath of his intention to become a citizen. (*Ib.*)

4. NO NOTICE GIVEN OF PENDING APPLICATIONS.—The caveator will not be entitled to notice of any application pending at the time of filing his caveat, nor of any application filed after the expiration of one year from the date of filing the caveat. (*Patent Office Rules, July, 1870.*)

5. RENEWAL.—The caveator may renew his caveat at the end of one year by paying a second caveat fee of \$10, which will continue it in force for one year longer, and so on from year to year as long as the caveator may desire. (*Ib.*)

6. DESCRIPTION.—A caveat need not contain as partic-

ular a description of the invention as is requisite in a specification; but still the description should be sufficiently precise to enable the office to judge whether there is a probable interference when a subsequent application is filed. (*Ib.*)

It is to set forth the "design and purpose" of the invention and its "distinguishing characteristics;" but it is not necessary that it should explain the principle involved, or the modes in which it can be applied, nor how it is distinguished from other inventions. (*11 Opinions of Attorneys General, 65.*)

Nor is it necessary to accompany the caveat with specimens of ingredients, or compounds, or model. (*Ib.*)

It is not required to be specific in its terms, nor is it presumed to describe the whole invention of the party but is filed in the office rather as a warning that the inventor is in the exercise of due diligence in the pursuit and perfection of his discovery. (*Collins v. White, MS Appeal Cases, D. C., 1860.*)

7. DRAWINGS.—When practicable, the caveat must be accompanied by drawings or sketches. (*Patent Office Rules, July, 1870.*)

8. PURPOSE OF CAVEAT.—A caveat answers a double purpose: first, to give notice of the inventor's claim; and, second, to prevent a patent from issuing to another for the same thing. (*Allen v. Hunter, 6 McLean, 304.*)

Its office is to save the discoverer of an invention from the effect of the rule of law, that gives to the inventor who first adapts his invention to practical use the right to the grant of a patent; and if the Commissioner complies with the terms of § 12 of the act of 1836, as to giving the caveator notice of any interfering application,

it is to secure him against the effect of the rule. (*Phelps, Dodge & Co. v. Brown Bros.*, 18 How., Pr. 8.)

The effect of a caveat is to protect the claim of an inventor from all interfering applications made within one year after its filing, by requiring the office to notify him of such applications, that he may resist the interference if he chooses. But if, during the time which elapses between the filing of his caveat and his application, he allows his invention to go into public use, his caveat will not protect him. (*Bell v. Daniels*, 1 Fish., 372.)

9. OMISSION TO GIVE NOTICE.—If the Commissioner accidentally omits to give the caveator the notice required, his rights will not be prejudiced thereby. (*Phelps, Dodge & Co. v. Brown Bros.*, 18 How., Pr. 8.)

A patent should not operate to the prejudice of a subsequent applicant, if he had a caveat on file embracing the invention when the application was filed on which the patent issued. (*Hamilton v. Foster*, Commissioner's Decisions, 1869, p. 30.)

And if a conflicting caveat is in force when an application is filed, though the application is rejected, and the rejection is not set aside until after the caveat has expired, yet the caveator is then entitled to be notified. (*Kenney ex parte*, Commissioner's Decisions, 1869, p. 97.)

In the case of *Kenney ex parte* the Commissioner says:

“The application in this case was filed August 19, 1869, was rejected by the examiner and examiners-in-chief and allowed by the Commissioner. The examiner now reports ‘that a caveat covering the same device, apparently, was filed September 23, 1868.’ The year would, therefore, expire September 23, 1869, or thirty-five days after the filing of Kenney's application. No notice of

Kenney's application was given to the caveator. The act of July 4, 1836, § 12, provides that 'if an application be made by any other person (than the caveator) within one year from the time of filing said caveat, * * * it shall be the duty of the Commissioner to give notice to the person filing such caveat.'

"But it has not been the practice of the office to give this notice, unless the device presented was deemed patentable. In any other case the caveator would be put to unnecessary expense; for the office would not inform him in advance that the device was not considered novel. Such a notice would, in fact, constitute a preliminary examination.

"When the device is, *prima facie*, novel and patentable, the notice has been given, if an application has been filed even within the last moment of the prescribed year.

"The question presented by the examiner for consideration under the foregoing state of facts is, should notice now be given to the caveator, and three months be allowed him to complete his invention?

"It is obvious that at the time of the filing of Kenney's application the caveator was entitled to notice of it; for it is now decided that the invention was patentable. This made a clear case, under the statute, of an application made within one year from the time of filing said caveat. The fact that the three months' notice could not be given within the year was not material, for the language of the section is so unequivocal that, if an application were filed on the last day of the year, the caveator would be entitled to notice, and to three months for the purpose of completing his inven-

tion, although the effect would be to extend the protection given by the caveat to fifteen months instead of twelve.

“But it is said that when this application was filed it was not believed that the invention was patentable, and that, therefore, under the practice of the office, notice was properly withheld; that, meanwhile, the year has expired, and the caveat, not having been renewed or followed by an application, can now afford no protection, nor can notice be now given to the caveator. The answer is, that while the office practice of withholding notice until the question of patentability is determined is wise, yet that practice must not be used to work a wrong instead of a benefit to the caveator. When the question of patentability is finally determined in favor of the applicant, it relates back to the filing of the application. It is a determination that there was then a patentable subject-matter, and one that interfered with the caveat. It is a judgment that the case was one in which the caveator ought to have been notified when the application was filed.

“It must not be forgotten that the caveator is no party to the delay. He knows nothing of the interfering application, nothing of the disputed question of patentability. He is helpless, except as his rights are protected by the statute, which ought, therefore, to be liberally construed in his favor.

“If the application had been filed a few days after the caveat, and the question of patentability had been discussed for the remainder of the year, being finally determined only a few days after its expiration, it would be thought a very harsh rule that should deprive the cave-

ator of notice. He would be justified in saying that, if he had been notified at the time of filing the application, he would, under the spur of the interference, have completed his invention long before, and that the law, in providing for notice, and three months afterward for the completion of the invention, intended to give him the benefit of that spur.

“But the case is not relieved from any of its difficulty by the fact that the invention was filed just before the year covered by the caveat expires. On the contrary, the lapse of time increases the presumption that the caveator, and not the applicant, was the first inventor. At all events, whether first or second, he is entitled to the notice provided for by law, to which the practice of the office, however expedient, must always be subordinate.

“I am of opinion that the caveator in this case must be notified to complete his application within three months, and the case must be suspended to await his action.” (*Commissioner's Decisions*, 1869, p. 97.)

10. EFFECT OF A CAVEAT UPON A SUBSEQUENT PATENT.—
In the case of *Johnson v. Root* the ruling of Sprague, J., was as follows:

“It is contended, on the part of the defendant, that the caveat itself is conclusive evidence that the invention was not perfected. You will observe that the application, which is in the caveat before you, made to the Patent Office by Mr. Johnson for leave to file a caveat, sets forth that he has made a certain new and useful improvement in the sewing machine, and that he is then making experiments to perfect it, and he asks leave to file a caveat to secure it. The defendant insists that that application is of itself conclusive evidence that he has

not perfected it. We will look at it, gentlemen, and see. I do not instruct you that it is conclusive evidence, but it is evidence for you to take into view in connection with the other evidence, and in connection with the other parts of the same instrument, in which he begins by saying that he has made a new and useful invention in the sewing machine. Now, gentlemen, although a caveat is understood to be, and in this instance is, filed in order to allow the party to perfect his machine, yet if, in point of fact, the invention had been perfected in the eye of the law, as I have explained to you, then, if you are satisfied of that from the evidence, you may deem it, for the purposes of this trial, as perfected. Or it may happen that a person may choose to file a caveat while he is going on and making improvements upon an invention which he has already completed, so as to be of practical utility. Therefore, gentlemen, I would say to you that you will take into consideration the declaration of the plaintiff himself in the application, that he had made a new and useful improvement in sewing machines, and the further declaration that he is making experiments in order to perfect his invention, and the subsequent declaration that he has made a new and useful improvement, and the other evidence in relation to the case—that is, what is described in the caveat and the model made in 1848—and see if that exhibits to you a perfect machine; and then such further evidence as you have as of the actual operation of the machine that will be before you.

“Now, gentlemen, if he had perfected it, then he had a right to embrace it in a patent that he should afterwards take out. If he had not perfected it, then another

question will arise, and that is, had he invented the feeding mechanism at that time, and did he use due diligence to perfect that and put it into a perfect machine, so as to make it of some practical utility?

“If the invention was perfected, as I have already said, or, if not perfected, if Mr. Johnson used reasonable diligence to perfect it, then he had a right to have it incorporated into his patent, and to supersede those that had intervened between his first discovery and his subsequent taking out of the patent. If he had not perfected it, and did not use due diligence to carry it into effect, and, in the mean time, before he got his patent, some one else had invented and used and incorporated into a practical useful machine that mode of feeding, then he could not, by subsequent patent, appropriate to himself what was embraced in the former machine between his caveat and the obtaining of his patent.” (1 *Fish.*, 351.)

The fact that a patent is granted to one person while another has a caveat pending and in force will not of itself vacate the patent granted nor authorize the Commissioner to grant a patent to the caveator. (*Cochrane v. Waterman*, *MS. Appeal Cases*, *D. C.*, 1844.)

11. CAVEAT PAPERS CANNOT BE WITHDRAWN FROM THE OFFICE nor undergo alteration after they have once been filed; but the caveator, or any person properly authorized by him, can at any time obtain copies of the caveat papers at the usual rates. (*Patent Office Rules*, *July*, 1870.)

12. CAVEAT AS EVIDENCE.—A caveat may be resorted to to assist in construing a patent. (*Smith v. Downing*, 1 *Fish.*, 64.)

And it is evidence as to an invention, so far as it ex-

tends to the *description* of the invention and the machinery which was then constructed. (*Jones v. Wetherell, MS. Appeal Cases, D. C., 1855.*)

But a caveat is not conclusive evidence that an invention is not perfected. (*Johnson v. Root, 1 Fish., 351.*)

A filed a caveat in the Patent Office April 17, 1854. B made application for a patent for the same invention November, 1854. No notice was given to A of this application, but a patent was granted to B January 9, 1855. A patent was subsequently granted to A. In a suit of the assignees of B against the assignees of A, *held* that the omission to give notice to A might be set up as one of the defenses under § 15 of the act of July 4, 1836, as proof that B "had surreptitiously or unjustly obtained the patent for that which was in fact discovered by another," &c. (*Phelps v. Brown Bros., 1 Fish., 479.*)

13. CAVEAT NOTICE TO THE COMMISSIONER ONLY.—The caveat gives no notice to the world or even to the interfering applicant. It is notice to the Commissioner only. (*Hildreth v. Heath, MS. Appeal Cases, D. C., 1841.*)

But the Commissioner can perform no act upon a caveat but filing it, nor in consequence of it, except to give the caveator notice of a conflicting application when made. (*11 Opinions Attorneys General, 65.*)

14. FORM OF PETITION.—

The petition of Frank Foresight, of Brandenburg, in the county of Mead, and State of Kentucky, respectfully represents—

That he has made certain improvements in velocipedes, and that he is now engaged in making experiments for the purpose of perfecting the same, preparatory to applying for letters patent therefor. He therefore prays that the subjoined description of his invention may be filed as a caveat in the confidential archives of the Patent Office.

FRANK FORESIGHT.

15. DESCRIPTION.—

The following is a description of my newly-invented velocipede, which is as full, clear, and exact as I am able at this time to give, reference being had to the drawing hereto annexed:

This invention relates to that class of velocipedes in which there are two wheels connected by a beam, forming a saddle for the rider, the feet being applied to cranks that revolve the front wheel.

The object of my invention is to render it unnecessary to turn the front wheel so much as heretofore, and at the same time to facilitate the turning of sharp curves. This I accomplish by fitting the front and the hind wheels on vertical pivots, and connecting them by means of a diagonal bar, as shown in the drawing, so that the turning of the front wheel also turns the back wheel with a position at an angle with the beams, thereby enabling it easily to turn a curve.

In the drawing A is the front wheel, B the hind wheel, and C the standards extending from the axle of the front wheel to the vertical pivot *a* in the beam *b*, and D is the cross-bar upon the end of *a*, by which the steering is done. The hind wheel B is also fitted with jaws *c* and a vertical pivot *d*.

FRANK FORESIGHT.

Witnesses: ANDREW AXLE.

WILLIAM WHEELWRIGHT.

16. OATH.—No caveat can be filed in the secret archives of the office unless accompanied by an oath of the caveator that he is a citizen of the United States, or, if he is an alien, that he has resided for one year last past within the United States and has made oath of his intention to become a citizen thereof; nor unless the applicant also states, under oath, that he believes himself the original inventor of the art, machine, or improvement set forth in his caveat. (*Patent Office Rules, July, 1870.*)

The form of oath will be substantially that provided for original applications, except that, as a caveat can only be filed by a citizen, or an alien who has resided for one year last past in the United States, and made oath of his intention to become a citizen, the oath should be modified accordingly. (*Ib., vide infra, § 323.*)

II. Subject-Matter of the Application.

SEC.	SEC.
17. What may be patented.	31. Process.
18. Inventions patented abroad.	32. Machine.
19. Abstract principle.	33. Machines classified.
20. Application of a law of nature.	34. Form.
21. Effect.	35. Manufacture.
22. New application; double use.	36. Identity of principle.
23. Mechanical equivalents.	37. Composition of matter.
24. Mechanical skill.	38. Improvement.
25. Discovery.	39. Priority of invention.
26. Novelty.	40. Lost art.
27. Presumption of novelty.	41. Prior experiments.
28. Utility.	42. Prior publication.
29. Harmful inventions not patent- able.	43. Prior foreign patent.
30. Art.	44. Unity or diversity of invention.
	45. Division of the application.

17. WHAT MAY BE PATENTED.—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 have been abandoned, may, upon payment of the duty required by law and other due proceedings had, obtain a patent therefor. (*Act of July 8, 1870, § 24.*)

18. INVENTIONS FIRST PATENTED ABROAD MAY BE PATENTED IN THE UNITED STATES.—No person shall be debarred from receiving a patent for his invention or discovery, nor shall any patent be declared invalid by

reason of its having been first patented or caused to be patented in a foreign country, provided the same shall not have been introduced into public use in the United States for more than two years prior to the application, and that the patent shall expire at the same time with the foreign patent, or, if there be more than one, at the same time with the one having the shortest term; but in no case shall it be in force more than seventeen years. (*Ib.*, § 25.)

19. AN ABSTRACT PRINCIPLE NOT PATENTABLE UNLESS REDUCED TO PRACTICE.—A discovery of some new principle, theory, or elementary truth, abstracted from its application, is not a new invention, and cannot be protected by a patent. To entitle himself to a patent the applicant must reduce it to practice, must embody it in some practical machine or method of rendering it available or useful. (*Whitney v. Emmett, Bald.*, 311; *Evans v. Eaton, Pet. C. C.*, 341, 342.)

And when the discovery is reduced to practice by any means, old or new, resulting usefully, it is patentable, independent of the machinery by which the application is made. (*Foote v. Silsby, 2 Blatchf.*, 265.)

20. APPLICATION OF A LAW OF NATURE.—He who first discovers that a law of nature can be applied, and, having devised machinery to make it operative, introduces it in practical form to his fellow-men, is the inventor not merely of the mechanism, but of the force which operates through the mechanical medium. He may assert and establish his property not only in the formal device for which mechanical ingenuity can at once, as soon as the principle is known, imagine a thousand substitutes, but in the essential principle which his machine was the first

to embody and announce to mankind. (*Parker v. Hulme*, 1 *Fish.*, 44.)

Thus, where a patentee claimed the application of the expansive and contractive power of a metallic rod, by different degrees of heat, to open and close a damper which governs the admission of air into a stove, it was held, that it was a valid claim, not being for a principle, and that the patent was good. (*Silsby v. Foote*, 20 *How.*, 385.)

21. A PATENT CAN IN NO CASE BE FOR AN EFFECT ONLY, but for an effect produced in a given manner or by a peculiar operation. No patent can be obtained for the admeasurement of time or the expansive operations of steam, but only for a new mode or new application of machinery to produce these effects; and therefore if new effects are produced by an old machine in its unaltered state, no patent can be legally supported, for it is a patent for an effect only. (*Whittemore v. Cutter*, 1 *Gall.*, 480.)

The application of ether to surgical purposes was an effect produced by old agents, operating by old means upon old subjects. The effect alone was new, and was a mere discovery, which, however novel and important, is not patentable. (*Morton v. New York Eye Infirmary*, 2 *Fish.*, 320.)

An end to be accomplished is not the subject of a patent; only the new and useful means to accomplish it. (*Carver v. Hyde*, 16 *Pet.*, 519.)

But the discovery of the application of some property in nature never before known or in use, by which is produced a *new and useful result*, is the subject of a patent, independently of any peculiar or new arrangement of

machinery for the purpose of applying such new property. (*Foot v. Silsby*, 2 *Blatchf.*, 264.)

And the inventor has the right to use any means, new or old, in the application of the new property to produce the new and useful result, to the exclusion of all other means. (*Ib.*)

Where a result is in a greatly improved manufacture, it may become the test of invention, and from which invention may be inferred. (*Treadwell v. Fox*, *MS. Appeal Cases*, D. C., 1859.)

22. NEW APPLICATION; DOUBLE USE.—The application of an old thing to a new purpose is not patentable. The thing itself which is patented must be new, and not a mere application of it to a new purpose or object. (*Bean v. Smallwood*, 2 *Story*, 411.)

The inventor of a machine has made it for all the uses to which it is applicable, and no one can obtain a second patent for the machine by applying it to a new use. (*Woodman v. Simpson*, 3 *Fish.*, 98.)

But a new adaptation and *arrangement* of applying and using old articles for a certain purpose—for example, using old parts of a caster adapted to furniture in a manner before unknown—may be the subject of letters patent. (*Blake v. Sperry*, 2 *N. Y. Legal Obs.*, 251.)

And though a combination of machinery is not new in the abstract, yet it is patentable if used and applied in connection with the practical development of a newly discovered principle producing a new and useful result. (*Tatham v. Le Roy*, *MS. N. Y.*, 1849.)

Where the principle of the alleged invention has been discovered and applied before, the new application will

be what is called a double use. (*Blandy ex parte, MS. Appeal Cases, D. C., 1858.*)

The application of a thing already known to a new and useful purpose may be the subject of a patent, provided the new use is not analogous to the old, and requires the exercise of inventive faculties. (*Winans v. Schenectady and Troy Railroad, 2 Blatchf., 293.*)

If the patentee was the first and original inventor of the application and use of plaster of Paris to the filling of fire-proof safes, and this application produced a new and useful result, it cannot be doubted that it is a proper subject of a patent. (*Rich v. Lippincott, 2 Fish., 1.*)

An invention or arrangement of parts, though already used for a particular purpose, is patentable, if in the new use it performs any new function, or an old function in a better manner, or makes a better or cheaper manufacture. (*Newman ex parte, MS. Appeal Cases, D. C., 1859.*)

The substitution of a jewel in place of glass in a sewing machine to prevent friction in the passage of the thread is not patentable; it is but the double use of an old contrivance, with no new effect or result. (*Berry ex parte, MS. Appeal Cases, D. C., 1859.*)

The making of an instrument of india rubber and silver, if a useful effect is secured thereby, may be the subject of a patent, though such article may have before been made entirely of metal and also entirely of rubber. Such an invention is not a double use. (*Adams ex parte, MS. Appeal Cases, D. C., 1860.*)

23. MECHANICAL EQUIVALENTS.—The substitution of a known mechanical equivalent is not an invention within the patent law. (*Blanchard's Gun-Stock Turning Company v. Warner, 1 Blatchf., 278.*)

There are different well-known devices, any one of which may be adapted to effect a given result, according to the judgment of the constructor. The mere substitution of one of these for another does not belong to the subject of invention, but of construction. (*Foster v. Moore*, 1 *Curt.*, 291.)

By equivalents in machinery is usually meant the mere substitution of one mechanical power for another, or one obvious and customary mode for another, to effect a like result. (*Smith v. Downing*, 1 *Fish.*, 64.)

The term "equivalents" has two meanings, as used in patent cases. The one relates to the results that are produced, and the other to the mechanism by which these results are produced. (*Johnson v. Root*, 1 *Fish.*, 352.)

A mechanical equivalent, as generally understood, is when one thing may be adopted instead of another, by a person skilled in the art, from his knowledge of the art. (*Ib.*)

By an "equivalent" is meant something that does the same thing in substantially the same way. (*Cahoon v. Ring*, 1 *Fish.*, 397.)

When a party has discovered a result, as well as the machinery that produces it, he has a right to invoke the doctrine of equivalents in reference to infringers. (*Singer v. Walmsley*, 1 *Fish.*, 558.)

But where he is only the original inventor of a device, he can only recover against an infringer, if he shows that he has substantially copied his invention. In other words, being an improver himself, he cannot invoke the doctrine of equivalents to help him. (*Ib.*)

Where a patent is granted for a composition made of several ingredients, it covers and embraces known equiv-

alents of each of the ingredients. (*Matthews v. Skates*, 1 *Fish.*, 602.)

An equivalent of any substance is another substance having similar properties and producing substantially the same effect. (*Ib.*)

An equivalent device is such as a mechanic of ordinary skill in the construction of similar machinery, having the plaintiff's specification and machine before him, could substitute in the place of the mechanism described, and without the exercise of the inventive faculties. (*Burden v. Corning*, 2 *Fish.*, 477.)

In the case of *Foster v. Moore*, Mr. Justice Curtis charged the jury as follows: "The term 'equivalent,' gentlemen, has two meanings, as used in this class of cases. The one relates to the results that are produced, and the other to the mechanism by which those results are produced. Two things may be equivalent, that is, the one equivalent to the other, as producing the same result, when they are not the same mechanical means. Mechanical equivalents are spoken of as different from equivalents that produce the same result. A mechanical equivalent, I suppose, as generally understood, is where the one may be adopted instead of the other, by a person skilled in the art, from his knowledge of the art. Thus an instrumentality is used as a mechanism. You wish to produce a pressure downward; well, it can be done by a spring or it can be done by a weight. A machine is presented to a person conversant with machines. He sees that the force applied downward in the one before him is by weight; from a knowledge of his art he can pass at once to another force—the spring to press it downward; and these are mechanical equivalents. But,

gentlemen, there may be equivalents in producing the same results, each of which is an independent matter of invention, and in that sense they are not mechanical equivalents. To illustrate my meaning, suppose in early days the problem was to get water from a well to the surface of the earth: one man takes a rope made of grass and draws up a pail of water; another would see that, as a mechanical equivalent, a rope of hemp would accomplish the same result. But suppose that another person comes and for the first time invents a pump: that is equivalent in the result to bringing the water to the surface of the ground; in that respect it is equivalent, as producing that result, to hauling it up by a rope, but it is not mechanically equivalent; it brings into operation, as you know, different powers and forces, and would require invention to introduce it. (1 *Curtis C. C.*, 279.)

24. MECHANICAL SKILL.—There must be embodied in the invention, over and beyond the skill of the mechanic, that inventive element of the mind which is to be found in every invention that is the proper subject of a patent. (*Tatham v. Le Roy*, 2 *Blatchf.*, 488.)

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. (*Blandy v. Griffith*, 3 *Fish.*, 609.)

It is difficult to determine where ordinary mechanical skill ends and invention begins. The best practical principle is, that where the combination of known elements produces new and useful results to the public not before

attained, then the person who discovers and applies the combination is an inventor, within the true intent and meaning of the patent law. (*Smith ex parte, MS. Appeal Cases, D. C., 1860.*)

25. **DISCOVERY.**—Discovery is synonymous with invention, under the Constitution and laws of the United States respecting patents. (*Kemper ex parte, MS. Appeal Cases, D. C., 1841.*)

A patent cannot be granted for the discovery of a fact which long before existed; there is no invention, nothing contrived or produced. (*Ib.*)

In its naked and ordinary sense a discovery is not patentable. It is only when the explorer has gone beyond the mere domain of discovery, and has laid hold of the new principle, force, or law, and connected it with some particular medium or mechanical contrivance, by which, or through which, it acts on the material world, that he can secure the exclusive control of it under the patent laws. He then controls the discovery through the means by which he has brought it into practical action, or their equivalent, and it is then an invention, although it embraces a discovery. (*Morton v. New York Eye Infirmary, 2 Fish., 320.*)

A discovery may be the *soul* of an invention, but it cannot be the subject of the exclusive control of the patentee, or the patent law, until it inhabits a body, no more than can a disembodied spirit be subjected to the control of human law. (*Ib.*)

He who has discovered some new element or property of matter may secure to himself the ownership of his discovery, but the mental conception must have been embodied in some mechanical device or some process

of art. The patent must be for a thing, not for an idea merely. (*Vide supra*, p. 219; *Deimold v. Reeves*, 1 *Fish.*, 127.)

The discovery of a fact, that a given natural substance will, in appropriate methods of administration, produce a particular physiological or pathological effect on the human body, is not a thing patentable under any existing statute. (*Morton's Anæsthetic Patent*, 8 *Opinions Attorneys General*, 272.)

A new process is generally the result of discovery—a machine of invention. (*Corning v. Burden*, 15 *How.*, 267.)

26. NOVELTY.—As to the novelty of the invention, the rule is that it must be new as to all the world; not the abstract discovery, but the thing invented; not the new secret principle, but the manufacture resulting from it. (*Whitney v. Emmett*, *Bald.*, 309.)

The thing itself which is patented must be new, not merely the purpose to which it is applied. (*Bean v. Smallwood*, 2 *Story*, 411.)

The question is whether the thing has been known before. In case of a machine, whether it has been substantially constructed before; in case of an improvement of a machine, whether that improvement has ever been applied to such a machine before, or whether it is substantially a new combination. (*Earle v. Sawyer*, 4 *Mason*, 6, 7.)

The question is not whether the invention is better or worse than its predecessor, but whether it is new and useful, and different from anything before used or known. (*Blandy v. Griffith*, 3 *Fish.*, 609.)

The law does not require any degree of utility; it does not exact that the subject of the patent shall be better

than anything invented before or that shall come after. (*Hoffheim v. Brandt*, 3 *Fish.*, 218.)

A novelty in principle may consist' in a new and valuable mode of applying an old power, effecting it not merely by a new instrument or form of the machine, or any mere equivalent, but by something giving it a new or greater advantage. (*Hovey v. Stevens*, 1 *Wood & Min.*, 290.)

In the allowance of a patent the question of novelty should not be too rigorously questioned, but the benefit of any doubt should be given to the applicant, as, if his application is rejected and his invention have real patentable novelty, irremediable injury would be produced; but if the patent is allowed, the novelty can still be inquired into by a jury. (*Cole ex parte*, *MS. Appeal Cases*, *D. C.*, 1857.)

It was formerly necessary among us, as in England, that the whole of the improvements claimed as such should be new, and if the novelty of any one of them failed, though it might not be one used by the defendant, an action could not be sustained. But the law now provides (*ut supra*, p. 27, § 60) that the patent shall be deemed good and valid for so much of the invention or discovery as shall be truly and *bona fide* the invention or discovery of the patentee, if it is a material and substantial part of the thing patented, and definitely distinguished from the other parts which the patentee had no right to claim, notwithstanding the specification may be too broad, if it was so made without willful default. (*Curtis on Patents*, § 334.)

27. PRESUMPTIONS OF NOVELTY.—Presumptions of the novelty of a patented invention may arise from some or

all of the following grounds: 1. The oath of the patentee that he was the first and original inventor; 2. The action of the Patent Office in granting the patent after full examination; 3. Undisturbed enjoyment of all the benefits of the exclusive rights granted by the patent; 4. Direct adjudications, either at law or in equity, establishing the validity of the patent; 5. Injunctions granted to restrain infringement of the patent. (*Hussey v. Whitely*, 2 *Fish.*, 120.)

28. UTILITY.—The word useful is used in contradistinction to mischievous or immoral. All that the law requires is that the invention should not be frivolous or injurious to the well-being, good policy, or sound morals of society. Whether the invention is more or less useful is a circumstance of no importance to the public. It is sufficient if the invention has any utility. (*Lowell v. Lewis*, 1 *Mason*, 186; *Kneas v. Schuylkill Bank*, 4 *Wash.*, 12.)

The degree of the utility of an invention is not a subject for consideration in determining whether an invention is patentable. (*Seely ex parte*, *MS. Appeal Cases*, *D. C.*, 1853.)

It is the *duty* of the Commissioner to grant a patent, if in his opinion the thing is sufficiently useful and important. But the degree of usefulness or importance is not described or limited by the statute; nor is it material if the matter interferes with no prior right or claim and is in itself innocent. If good may be the result of granting a patent and evil cannot, it ought to be granted. (*Aiken ex parte*, *MS. Appeal Cases*, *D. C.*, 1850.)

But the invention must be, in some small measure at least, beneficial to the community. An invention for folding thread or cotton in a more ornamental manner,

by which the article would sell quicker and at a higher price, but which made no change in the article, is not a useful invention within the patent laws, although useful to the patentee. (*Langdon v. De Groot*, 1 *Paine*, 204, 206.)

The presumption on the face of a patent is that it is of some utility, for the applicant is obliged to swear that the invention is useful before he can secure a patent. (*Coleman v. Liesor*, MS., Ohio, 1859.)

29. HARMFUL INVENTIONS NOT PATENTABLE.—In the case of *George B. Morris and Samuel Watson ex parte* the Commissioner says: Applicants described in their original specification what they called “a new process for making butter, to be used in place of ordinary butter.” They say, “the nature of our invention consists in preparing ordinary butter, and combining it with milk and other ingredients, whereby it is increased in bulk and weight.” Again they say, “to prepare the *Western Dairy Butter* take say about ten pounds of ordinary butter, and wash the same as cold as it can be worked in clear lime water, in which about four ounces of lime to the gallon of water have been dissolved,” &c. They next warm the butter, and mix it with sweet milk and flour into a paste. They then color it with eggs, carrots, or anotta and tumeric, until at length the precious mess produces “about eighteen pounds of good solid butter, which may be printed in cakes or made into rolls or packed.” Subsequently applicants amended this application, by changing the title to a process for making “A Substitute for Butter;” but the remainder of the specification, the process itself, the title of “*Western Dairy Butter*,” and the statement of the nature of the invention, remain unchanged.

This application was rejected by the primary examiner, but was allowed by a majority of the board of examiners-in-chief on appeal. The examiner now presents the matter for the judgment of the Commissioner in person.

Fortunately the law vests the Commissioner with ample powers to protect the public against the advertisement of such mixtures under the sanction of this office.

Section 31, act of July 8, 1870, provides that "the Commissioner shall cause an examination to be made of the alleged new invention or discovery; and if on such examination it shall appear that the claimant is justly entitled to a patent under the law, and *that the same is sufficiently useful and important*, the Commissioner shall issue a patent therefor."

In the opinion of the Commissioner, this invention, whether regarded as a new process of making butter, which it is not, or as "a new process for making a substitute for butter," is not sufficiently useful or important to warrant the grant of letters patent for it. (*Commissioner's Decision, July 23, 1870.*)

The feasibility of an invention in point of expense is not for the office to consider; nor will an invention be condemned on the ground that it is too costly for use. (*R. A. Cheesborough ex parte, Commissioner's Decisions, 1859, p. 18.*)

30. ART.—In order to make a new process or method of working, or of producing an effect or result in matter a subject of a patent in England, a somewhat liberal construction of the term "manufacture" became necessary, by which an improvement in the art or process of making or doing a thing was made constructively to be represented by the term which, ordinarily, would mean only

the thing itself, when made or done. It was, doubtless, to avoid the necessity for this kind of construction that the framers of our legislation selected a term which, *proprio vigore*, would embrace those inventions where the particular machinery or apparatus, or the particular substance employed, would not constitute the discovery, so much as a newly-invented mode or process of applying them, in respect to the order, or position, or relations in which they are used. Thus, for example, in the art of dyeing or tanning, it is obvious that an old article of manufacture may be produced by the use of old materials, but produced by the application of those materials in new relations. In such cases it might not be practicable to claim the article itself, when made, as a new manufacture, for it might, as an article of commerce or consumption, differ in no appreciable way from the same kind of article produced by the old and well-known method; at the same time the new method of producing the article might be a great improvement, introducing greater cheapness, rapidity, or simplicity in the process itself. Again, other cases may be supposed, where the manufacture itself, as produced by a new process, would be better than the same manufacture produced by the old process, as in the different modes of making iron from the native ore; and yet the really new discovery in such cases could not well be described as a new "manufacture" or a new "composition of matter," without a figurative use of those terms, which it is desirable to avoid. This difficulty is avoided by the use of the term "art," which was intended to embrace those inventions where the particular apparatus or materials employed may not be the essence of the discovery, but where that

essence consists in using apparatus or materials in new processes, methods, or relations, so as to constitute a new mode of attaining an old result, or a mode of attaining a new result, in a particular department of industry, which result may not of itself be any new machine, manufacture, or composition of matter; or, finally, an entirely new process of making or doing something which has not been made or done before by an old process. (*Curtis on Patents*, § 9.)

The patent may be for a new and useful art, but it must be practical; it must be applicable and referable to something which may prove it to be useful. A mere abstract principle is unsusceptible of appropriation by patent. (*Vide supra*, p. 219, § 19.)

The applicant for a patent must show how the principle is to be used and applied to some useful purpose. (*Evans v. Eaton*, 1 *Pet. C. C.*, 341.)

Art, as the subject of a patent, is not art in the abstract, without a specification of the manner in which it is to operate as a manufacture or otherwise, but it is the art explained in the specification, and illustrated by a machine or model or drawing. It is the art so represented or exemplified, like the principle thus embodied, which alone the patent laws are designed to protect. In the English patent acts the word art is not used at all. (*Smith v. Downing*, 1 *Fish.*, 64.)

The word art means a useful art or a manufacture which is beneficial, which is required to be described with exactness in its mode of operation, and which can be protected only in the mode used to the extent thus described. (*Ib.*)

An *art* is entitled to protection as well as the machin-

ery or process which the art teaches, employs, or makes useful. (*French v. Rogers*, 1 *Fish.*, 133.)

A patent for "an improvement in the art of making nails, *by means* of a machine which cuts and heads the nail at one operation," is not a grant of an abstract principle, nor is it a grant of the different parts of any machine, but an improvement applied to a practical use effected by a combination of various mechanical parts to produce a new result. (*Gray v. James*, *Pet. C. C.*, 400, 401.)

An improvement in an art, as of casting iron by giving an angular direction to the tube which conducts the metal to the mold, so that the flog or drop will be thrown into the center instead of the surface, is patentable. (*McClurg v. Kingsland*, 1 *How.*, 209, 210.)

A mode or tabular form of keeping mercantile accounts, whereby a balance sheet and statement of assets is constantly shown, is not an invention of an art, machine, or composition of matter, and is not patentable. (*Dixon ex parte*, *MS. Appeal Cases*, *D. C.*, 1860.)

31. PROCESS.—A process *eo nomine* is not the subject of a patent under our laws, but it is included under the general term "useful art," and an art may require one or more processes or machines in order to produce a certain result or manufacture. (*Corning v. Burden*, 15 *How.*, 252.)

Where the result or effect is produced by chemical action, by the operation or application of some element or power of nature, or of one substance to another, such modes, methods, or operations are called "processes." The arts of tanning, dyeing, making water-proof cloth, vulcanizing india rubber, smelting ores, &c., are usually

carried on by "processes," as distinguished from machines. One person may discover an improvement in a process, irrespective of any particular form of machinery, and another may invent a labor-saving machine by which the operation or process may be performed, and each may be entitled to a patent—the first, for a process, but not for a machine; the second, for a machine, but not for a process. It is when the term "*process*" is used to represent some means or method of producing a result, that a process is patentable, and thus used the term includes all means which are not effected by mechanism or mechanical combinations. (*Ib.*)

A principle, so far embodied and connected with corporeal substances as to be in a condition to act and to produce effects in any art, trade, mystery, or manual occupation, becomes the practical manner of doing a particular thing. It is no longer a principle, but a process. Mr. Watts's invention was the discovery of a practical means of lessening the consumption of steam, by protecting the cylinder from the external air, and keeping it at a temperature not below that of steam itself. He thus brought a principle into practical application, by the invention of a process carried on by a newly-contrived machine. (*Curtis on Patents, § 5.*)

The application of an old process to the manufacture of an article to which it had never been before applied is not patentable. (*How v. Abbot, 2 Story, 190, 1842.*)

The inventor is entitled to separate claims for the process and the product which it produces; and while such claims may properly be embraced in one patent, it is a matter within the discretion of the Commissioner so to

include them, or to issue separate patents for each. (*Goodyear v. Wait*, 3 *Fish.*, 242.)

If the patentee be the inventor of a new composition of matter, not known or used by others before his discovery, his sole right to use, and vend to others to be used, is the new composition or substance itself. The product and process constitute one discovery. (*Goodyear v. The Railroads*, 2 *Wall.*, jr., 360.)

Where the specification showed that the invention was not merely an improved method or process, but a new product, fabric, or manufacture, *held*, that the patentee had a right to prohibit the sale or use of the composition, as the product and process both were new. (*Ib.*)

32. MACHINE.—Machines may be regarded merely as devices, by the instrumentality of which the laws of nature are made applicable and operative to a particular result. (*Parker v. Hulme*, 1 *Fish.*, 50.)

A machine is rightfully the subject of a patent whenever a new or an old effect is produced by mechanism new in its combinations, arrangements, or mode of operation.

If the subject of the invention or discovery is not a mere function, but a function embodied in some particular mechanism, whose mode of operation and general structure are pointed out, and which is designed to accomplish a particular purpose, function, or effect, it will be a machine, in the sense of the patent law. A machine is rightfully the subject of a patent when well-known effects are produced by machinery entirely new in all its combinations, or when a new or an old effect is produced by mechanism of which the principle or *modus operandi* is new. The word "machine" in the statute

includes new combinations of machines, as well as new organizations of mechanism for a single purpose. There may be a patent for a new combination of machines to produce certain effects, whether the machines constituting the combination be new or old. In such cases the thing patented is not the separate machines, but the combinations. A single instance of such a combination is presented by the telescope, in which a convex and concave glass of different refracting powers are combined to make the object-glass. (*Curtis on Patents*, § 21.)

The word "machine" in the statute includes new combinations as well as new organizations of mechanism, and hence there may be a patent for new combinations of machinery to produce certain effects, whether the machines constituting the combination be new or old. (*Wintermute v. Redington*, 1 *Fish.*, 240.)

Invention, as respects machines, is any new arrangement or combination of machinery, whether of old or new parts or materials, producing a useful result. (*McCormick v. Seymour*, *MS.*, *N. Y.*, 1857.)

A machine may be new, and the product or manufacture proceeding from it may be old. In that case the former would be patentable, and the latter not. The machine may be substantially old and the product new. In that event the latter, and not the former, would be patentable. Both may be new, or both may be old. In the former case, both would be patentable; in the latter, neither. The same remarks apply to processes and their results. Patentability may exist as to either, neither, or both, according to the fact of novelty, or the opposite. The patentability, or the issuing of a patent as to one, in nowise affects the rights of the inventor or discover in

respect to the other. They are wholly disconnected and independent facts. (*Rubber Company v. Goodyear*, 9 *Wallace*, 796.)

33. INVENTIONS PERTAINING TO MACHINES MAY BE DIVIDED INTO FOUR CLASSES.—1. Where the invention embraces the entire machine. Under such a patent, the patentee holds the exclusive right to make and use, and vend to others to be used, the entire machine; and if another, without license, makes, uses, or vends any portion of it, he invades the right of the patentee.

2. Those which embrace one or more elements of a machine. In patents of this class any person may make, use, or vend all other parts of a machine, and he may employ the same part or element of a machine, provided it be substantially different from that embraced in the patent.

3. Those which embrace both a new element and a new combination of elements previously used and well known. The property of the patentee in such a case consists in the new element and the new combination.

4. Those where all the elements of the machine are old, and where the invention consists in a new combination of those elements, whereby a new and useful result is obtained.

Most of the modern inventions are of this latter kind, and many of them are of great utility and value. (*Union Sugar Refinery v. Matthiessen*, 2 *Fish.*, 600.)

34. FORM, (*vide supra*, p. 225.)—A mere change of the form or proportions of any machine cannot, *per se*, be deemed a new invention. (*Lowell v. Lewis, Mason*, 190.)

There must be a substantial difference in the principle, and the application of it, to constitute such an improve-

ment as the law will protect. (*Smith v. Pearce*, 2 *McLean*, 178.)

But if by changing the form and proportion a new effect is produced, there is not simply a change of form and proportion, but a change of principle also. (*Davis v. Palmer*, 2 *Brock.*, 310.)

If an improvement in form and structure enables the operator to do the work in a better manner, or with more ease, or less expense, or in less time, it is a patentable improvement. (*Bain v. Morse*, *MS. Appeal Cases*, *D. C.*, 1849.)

35. MANUFACTURE.—The term “manufacture” was used in the English statute (21 *Jac.* I) to denote anything made by the hand of man; so that it embraces, in the English law, machinery as well as substances or fabrics produced by art and industry. It came by construction to include the process of making a thing, or the art of carrying on a manufacture; so that all the various objects which are now held in England to be the subjects of letters patent are included under this term, which alone saves them out of the prohibition of the statute of monopolies.

Our statute, however, having made an enumeration of the different classes of subjects which in England are held to be patentable, it is to be presumed that this term was used to describe one of these classes only, namely, fabrics or substances made by the art or industry of man, not being machinery. It may sometimes require a nice discrimination to determine whether one of these classes does not run into the other in a given case: as, for instance, when a tool or instrument of a novel or improved construction is produced, to be used in connection with

other machinery or to be used separately. As an article of merchandise, found and sold separately in the market, such a production would be a manufacture; but, regarded with reference to its use and intended adaptation, it might be considered as a machine or part of a machine. In determining in such cases how the patent for the article should be claimed, it would probably be correct to range it under the one or the other of these classes, according to the following test: if the article is produced and intended to be sold and used separately as a merchantable commodity, and the merit of it as an invention consists in its being a better article than had been before known, or in its being produced by a cheaper process, then it may properly be considered simply as a manufacture; but if its merit appears only after its incorporation with some mechanism with which it is to be used, and consists in producing, when combined with such mechanism, a new effect, then it should be regarded as a machine, or an improvement of an existing machine.

The fact that a result is a new and valuable article of manufacture affords ground to presume invention. (*Woodruff ex parte*, MS. Appeal Cases, D. C., 1859.)

A new manufacture, as the use of a new composition, which results in a new and useful article, is the proper subject of a patent, though the means employed to adapt the new composition to a useful purpose are old and well known. (*Hotchkiss v. Greenwood*, 11 How., 265.)

There is a wide difference between the invention of a new method or process, by which a known fabric, product, or manufacture is produced in a better and cheaper way, and the discovery of a new compound, substance,

or manufacture, having qualities never found to exist together in any other material.

In the first case, the inventor can patent nothing but his process; in the latter, both the process and composition of matter are patentable. (*Goodyear v. The Railroads*, 2 *Wall.*, jr., 360.)

Where the result or effect is a greatly-improved article of manufacture, it may become the test from which invention may be inferred. (*Treadwell v. Fox*, *MS. Appeal Cases*, *D. C.*, 1859.)

Where the claim was for a particular method of forming hoop-skirts, which rendered necessary the use of a former, it was held, the inventor had a right to claim the use of the apparatus as incidental and subsidiary to the practical purpose of the idea constituting his invention; and that therefore it was immaterial that the apparatus of the former was old. (*Mann ex parte*, *MS. Appeal Cases*, *D. C.*, 1860.)

36. IDENTITY OF PRINCIPLE.—The word *principle* means the operative cause by which a certain effect is produced, the combination of certain mechanical powers, the mode of operation, the mode or manner of operation; and hence there may be two structures, widely different in appearance or dimensions, which are yet identical in principle. Whatever is essential to produce the appropriate result of a machine, independent of its mere form, is a matter of principle. (*Latta v. Shawk*, 1 *Fish.*, 465.)

One machine or manufacture is not a violation of another, within the purview of the patent system, unless it is substantially the same. It need not be identical, but it must be similar in the principle or mode of operation. (*Smith v. Downing*, 1 *Fish.*, 64.)

The identity that is to be looked to in an action of infringement respects that which constitutes the essence of the invention, namely, the application of the principle. If the mode adopted by the defendant shows that the principle admits of the same application in a variety of forms, or by a variety of apparatus, such mode is a piracy of the invention. (*Wintermute v. Redington*, 1 *Fish.*, 239.)

But if the defendant has adopted variations which show that some other law, or rule of practice or science, is made to take the place of that which the patentee claims as the essence of his invention, then there is no infringement. (*Ib.*)

If the same result is produced by the defendant as by the patentee, but by means substantially different, there is no infringement, for a patent is not granted for a mere result; but, otherwise, if the defendant produces the result by contrivances substantially the same in principle. (*Morris v. Barrett*, 1 *Fish.*, 461.)

If the parts of two machines, having the same mode of operation, do the same work in substantially the same way, and accomplish substantially the same result, those parts are the same, although they may differ in name, form, or shape. (*Union Sugar Refinery v. Matthiessen*, 2 *Fish.*, 600.)

Two structures are "substantially" the same when they are of the same material, if material is important; of the same thickness, if thickness is important; or of the same form, when form contributes to the result.—(*Adams v. Edwards*, 1 *Fish.*, 1.)

The identity or diversity of two machines depends, not on the employment of the same elements or powers

of mechanism, but upon producing the given effect by substantially the same mode of operation or substantially the same combination of powers. One device cannot be said to be a well-known substitute of another, which cannot be used for it. (*Crompton v. Belknap Mills*, 3 *Fish.*, 563.)

Where a patent is for a combination of distinct and designated parts, it is not infringed by a combination which varies from that patented, in the omission of one of the operative parts and the substitution therefor of another part, substantially different in its construction and operation, but serving the same purpose. (*Eames v. Godfrey*, 1 *Wallace*, 78.)

“Substantial identity” excludes immaterial variations or fraudulent evasions. That is a substantial identity which comprehends the application of the principle of the invention. If a party adopts a different mode of carrying the same principle into effect, and the principle admits of a variety of forms, there is an identity of principle though not an identity of mode. (*Page v. Ferry*, 1 *Fish.*, 298.)

37. COMPOSITION OF MATTER.—The term “composition of matter” includes medicines, compositions used in the arts, and other combinations of substances intended to be sold separately. In such cases the subject-matter of the patent may be either the composition itself, the article produced, or it may be the mode or process of compounding it. Generally speaking the patent covers both, because, if the composition is itself new, the process by which it is made must also be new, and the law will protect both as the subjects of invention. (*Curtis on Patents*, § 28.)

It is no ground for the rejection of an application for a patent for a composition of matter that the thing invented is an imitation of a real existing substance or material, *e. g.*, artificial honey. (*Corbin & Martlett ex parte, MS. Appeal Cases, D. C., 1857.*)

It is not necessary, to render a composition patentable, that every ingredient or that any one ingredient used by the patentee in his invention should be new or unused before for the purpose intended. The question is, whether the combination of materials used by the patentee is substantially new. Each of the ingredients may have been in extensive common use, and some may have been used for the same purpose; but if they have never been combined together in the manner stated in the patent, but the combination is new, the invention of the combination is patentable. (*Ryan v. Goodwin, 3 Sumn., 518.*)

The inventor of a new compound, wholly unknown before, is not limited to the use always of the same precise ingredients in making that compound; and if the same purpose can be accomplished by him by the substitution in part of other ingredients in the composition, which have never been so used before, he is at liberty to extend his patent so as to embrace them also. Thus, where an inventor claimed as his invention the combination of phosphorus with chalk or any other absorbent earth or earthy material, or glue or any other glutinous substance, using the materials in the proportions substantially as set forth in the specification, in making matches, it was held, that the patent was not void as being too broad and comprehensive. (*Ib., 521.*)

The question is, not whether the compositions are iden-

tical, but are they substantially the same. (*Street v. Silver, Brightley*, 100.)

Where a patent is claimed for a discovery of a new substance, by means of chemical combinations of known materials, it should state the component parts of the new manufacture claimed with clearness and precision, and not leave the person attempting to use the discovery to find it out by "experiment." (*Tyler v. Boston*, 7 *Wallace*, 327.)

38. IMPROVEMENT.—Improvement, applied to machinery, is where a specific machine already exists, and an addition is made to produce the same effects in a better manner, or some new combinations are added to produce new effects. (*Fultz ex parte, MS. Appeal Cases, D. C.*, 1853.)

If the discovery be an improvement only, it must be an improvement on the principle of the machine, art, or manufacture, before known or in use. If only in the form or proportion, it has not the merit of discovery, which can entitle the party to a patent. (*Evans v. Eaton, Pet. C. C.*, 342.)

If a machine substantially existed before, and a person has made an improvement only thereon, he is entitled to a patent for such improvement only, and not for the whole machine. (*Woodcock v. Parker*, 1 *Gall.*, 439.)

Where a specific machine already exists, producing certain effects, if a mere addition is made to such machine, to produce the same effects in a better manner, a patent cannot be taken for the whole machine, but for the improvement only. The case of the watch is a familiar instance. The inventor of the patent lever, without doubt, added a very useful improvement to it, but his right to a patent could not be more extensive than his

invention. The patent could not cover the whole machine, but barely the actual improvement. The same illustration might be drawn from the steam engine, so much improved by Messrs. Watt and Boulton. In like manner, if to an old machine some new combinations are added to produce new effects, the right to a patent is limited to the new combination. (*Whittemore v. Cutter*, 1 *Gall.*, 480.)

On the other hand, if well-known effects are produced by machinery, in all its combinations *entirely new*, a patent may be claimed for the whole machine. (*Ib.*, 480.)

A slight alteration in the structure of a machine, or in the improvement of it, will not entitle an individual to a patent. There must be a substantial difference in the principle and the application of it to constitute such an improvement as the law will protect. (*Smith v. Pearce*, 2 *McLean*, 178.)

An improvement on a combination is the subject of a patent, but at the same time the improvement cannot be used without the consent of the original patentee. (*Foster v. Moore*, 1 *Curtis*, 293.)

An improvement in a process may be discovered irrespective of any particular form of machinery. (*Corning v. Burden*, 15 *How.*, 267.)

A man may improve a patented machine so as to entitle him to a patent for his improvement; but that will not give him the right to use the invention of the first patentee without his license. (*Foss v. Herberi*, 2 *Fish.*, 31.)

Because a substance may be an improvement upon a product previously patented, and may be patentable as an improvement, it does not follow that it can be made

and used without the permission of the owner of the prior patent. (*Goodyear Dental Vulcanite Company v. Evans*, 3 *Fish.*, 390.)

An improvement on a patented invention may entitle the party making it to a patent, but he cannot pirate the original invention. (*Goodyear v. Mullee*, 3 *Fish.*, 420.)

When the improvements claimed are only improvements upon a well-known machine, the patentee cannot treat as infringers others who have improved the previously existing organization by the use of a different arrangement or combination, which, though performing the same functions, does it in a different, simpler, or better manner. (*Seymour v. Osborne*, 3 *Fish.*, 555.)

When a man conceives a machine, no one knows except himself; when he describes it, no one knows except himself and those to whom he describes it. This is, from the nature of the case, the testimony upon which reliance must be placed. (*Sayles v. Hapgood*, 3 *Fish.*, 632.)

A patentee is not bound in a new patent to refer to his former one. All that is required is, that he shall not claim what is covered by a former invention. (*O'Reilly v. Morse*, 15 *How.*, 122.)

39. PRIORITY OF INVENTION.—If it appears that the plaintiff was not the original inventor, in reference to other parts of the world as well as America, he is not entitled to a patent. This point has been decided otherwise in England, in consequence of the expression in the statute of James I, which speaks of new manufactures within the realm. (*Reutgen v. Kanowers*, 1 *Wash.*, 170.)

The first inventor who has put the invention into practice, and he only, is entitled to a patent. Every sub-

sequent patentee, although an original inventor, may be defeated of his patent right upon proof of such prior invention put into actual use. The law in such case adopts the rule, *qui prior est in tempore, potior est in jure*. In order to defeat a subsequent patent, it is not necessary to prove that the invention has been previously in general use and generally known. It is sufficient if the same invention has been previously known and put in actual use, however limited the use or the knowledge of the invention might have been. (*Bedford v. Hunt*, 1 *Mason*, 302; *Whitely v. Swayne*, 1 *Wall.*, 685.)

The intent of the statute was to guard against defeating patents by setting up a prior invention which has never been reduced to practice. If it were the mere speculation of a philosopher or a mechanic, which had never been tried by the test of experience, and never put into actual operation by him, the law would not deprive a subsequent inventor, who had employed his labor and his talents in putting it into practice, of the reward due to his ingenuity and enterprise. But if the first inventor reduced his theory to practice, and put his machine or other invention in use, the law never could intend that the greater or less use in which it might be, or the more or less widely the knowledge or existence might circulate, should constitute the criterion by which to decide upon the validity of any subsequent patent for the same invention. (*Ib.*, 305.)

And though the patentee had no knowledge of the previous use or previous description, still his patent is void: the law supposes he may have known it. (*Evans v. Eaton*, 3 *Wheat.*, 514.)

By knowledge and use, referred to in the act, is meant

knowledge and use existing in a manner accessible to the public. (*Gayler v. Wilder*, 10 *How.*, 497.)

Prior machines relied upon to defeat a subsequent patent must have been working machines, which have either done work or been capable of doing it. (*Woodman v. Stimson*, 3 *Fish.*, 98.)

And if a prior machine were merely got up for the purpose of experiment, and was not practically tested, it would not constitute a practical invention. (*Swift v. Whisen*, 3 *Fish.*, 343.)

If a previous patent so far describes a machine covered by a subsequent patent that any mechanic of ordinary skill could, from the description in the first patent, construct or supply all essential parts of the mechanism described in the second patent, the latter is void. (*Woodman v. Stimson*, 3 *Fish.*, 98.)

Clifford, J., in delivering the opinion of the court in the case of *White v. Allen*, (2 *Fish.*, 444,) said: "Original and first inventors are entitled to the benefits of their inventions, if they reduce them to practice and seasonably comply with the requirements of the patent law in procuring letters patent for the protection of their exclusive rights. While the suggested improvement, however, rests merely in the mind of the originator of the idea, the invention is not completed within the meaning of the patent law, nor are crude and imperfect experiments sufficient to confer a right to a patent; but in order to constitute an invention in the sense in which that word is employed in the patent act, the party alleged to have produced it must have proceeded so far as to have reduced his idea to practice, and embodied it in some distinct form." (*Gayler v. Wilder et al.*, 10 *How.*,

498; *Parkhurst v. Kinsman*, 1 *Blatchf.*, 494; *Curtis on Patents.*, § 43.)

“Mere discovery of an improvement does not constitute it the subject-matter of a patent, although the ideas which it involves may be new; but the new set of ideas, in order to become patentable, must be embodied into working machinery and adapted to practical use.” (*Sickles v. Borden*, 3 *Blatchf.*, 535.)

“‘Whoever first perfects a machine and makes it capable of useful operation,’ says Judge Story, ‘is entitled to a patent,’ and he accordingly held, in *Reed v. Cutter*, (1 *Story C. C.*, 599,) ‘that an imperfect and incomplete invention, resting in mere theory, or in intellectual notion, or in uncertain experiments, and not actually reduced to practice and embodied in some distinct machinery, apparatus, manufacture, or composition of matter, was not patentable under the patent laws of the United States.’ Pursuant to that rule, the same learned judge also held, ‘that he is the first inventor, in the sense of the patent act, and entitled to a patent for his invention, who has first perfected and adapted the same to use, and that, until the invention is so perfected and adapted to use, it is not patentable under the patent laws.’” (*Washburn v. Gould*, 3 *Story C. C.*, 33; *Woodcock v. Parker et al.*, 1 *Gall. C. C.*, 121.)

Mr. Justice Nelson says, in *Winans v. New York and Harlem Railroad Company*, (*Franklin Journal*, 3 series, vol. 61, p. 322:) “The circumstance that a person has had an idea of an improvement in his head, or has sketched it upon paper, has drawn it, and then gives it up, neglects it, does not in judgment of law constitute, or have the effect to constitute, him a first and original inventor.

It is not the person who has only produced the idea that is entitled to protection as an inventor, but the person who has embodied the idea into a practical machine and reduced it to practical use. He who has first done that, is the inventor who is entitled to protection."

In *Ducheman v. Richardson*, (*Decisions*, April 7, 1870,) referring to the doctrine stated by Justice Clifford in *White v. Allen*, the Commissioner says: "On the other hand, there can be no doubt that the Patent Office has, in the main, accepted a lower standard of invention. Sketches, drawings, models, or machines of the crudest description, and mere conversations, have in some cases been held sufficient to constitute invention.

"The practice in the Patent Office has grown up from the perversion of a principle, which is referred to by Mr. Justice Clifford, in *White v. Allen*, as a limitation of the doctrine cited. He says: 'Taken as a general rule, no doubt is entertained of the correctness of the proposition as stated; but it must be regarded as subject to the qualification that he who invents first shall have the prior right, if, as is prescribed in § 15 of the patent act, he is using reasonable diligence in adapting and perfecting the same within the meaning of that provision.'" (*Reed v. Cutter*, 1 *Story*, 600; *Marshall v. Mee*, *Law's Dig.*, 426; *Bartholomew v. Sawyer*, 1 *Fish.*, 516.)

"Undoubtedly, where two men have hit upon the same idea, and are both diligently engaged in experimenting or in perfecting their inventions, it is proper to go back to the very beginning of the invention, to its first embodiment in any form, to determine which of them is prior in point of time. But where one of the parties has been negligent, or has not perfected the invention at

all, or the other party has not only perfected but has patented his device, then the rule as administered in the courts should prevail, and no evidence of priority should be received that falls short of a reduction to practice in working mechanism." (*Cahoon v. Ring*, 1 *Fish.*, 397; 1 *Clifford*, 592.)

40. LOST ART.—If any one should discover a lost art, and it was a useful improvement, he would be entitled to a patent; for, although not literally the original and first inventor, he would be the first to confer on the public the benefit of the invention. (*Gayler v. Wilder*, 10 *How.*, 497.)

41. INVENTOR MAY AVAIL HIMSELF OF PRIOR EXPERIMENTS.—If a prior inventor fall short of making a complete machine, practically useful, those who come after him may secure to themselves the advantages of his invention. To constitute prior invention, the inventor must have proceeded so far as to entitle himself to a patent. (*Howe v. Underwood*, 1 *Fish.*, 160.)

Thus, where a patent has been granted for improvements which, after a full and fair trial, resulted in unsuccessful experiments, and have been finally abandoned, if another person takes up the subject of the improvements and is successful, he is entitled to the merit of them as an original inventor. (*Whitely v. Swayne*, 7 *Wallace*, 685.)

42. PRIOR PUBLICATION.—A *bona fide* inventor in this country, and who believed himself to be the original and first inventor at the time of his application, is entitled to a patent for his invention, though the same invention may have been known or used in a foreign country, provided it had not been patented or described in any printed

publication. (*Parker v. Stiles*, 5 *McLean*, 61; *Swift v. Whisen*, 3 *Fish.*, 343.)

But it will be fatal to the right of the patentee if the thing invented or discovered has been described in any foreign publication. This goes upon the presumption, if such foreign publication has been made, the patentee may have acquired a knowledge of it. (*Allen v. Hunter*, 6 *McLean*, 313.)

Unless such publication was prior in point of time to the invention of the patentee it will not avoid the patent. It is not sufficient that such publication was prior to the application of the patentee for his patent. (*Bartholomew v. Sawyer*, 1 *Fish.*, 516.)

It must appear that the improvement which has been known in a foreign country has been so clearly described that the invention could be constructed by a competent mechanic. (*Judson v. Cope*, 1 *Fish.*, 615.)

An imperfect description would not be sufficient to defeat the American patent; and, in order to find a patented invention anticipated in a prior printed publication, the jury must find from the evidence that the description embodies substantially the same *organized mechanism*, operating substantially in the same manner as that described in the patent. (*Clark Patent Steam and Fire-Regulator Company v. Copeland*, 1862, 2 *Fish.*, 221.)

And the defendant in a patent cause may show that the thing patented, or some substantial part thereof, existed in a foreign country, and was known to the patentee before his application for a patent, and may have put to the jury the question, whether the patentee believed himself to be the original inventor, though such foreign invention had not previously been patented or

described in any printed publication. (*Forbush v. Cook*, 2 *Fish.*, 668.)

43. **PRIOR FOREIGN PATENT.**—A foreign patent, to destroy a patent granted in this country, must have been granted before the invention here, not merely before the application for letters patent. (*Howe v. Morton*, 1 *Fish.*, 586.)

An invention is not “patented” in England, within the meaning of the acts of Congress, until the specification is enrolled. The enrolled specification takes effect only from the date of its enrollment, and not from the date of the provisional specification. (*Ib.*)

In determining the proper reading of a disputed translation of a foreign patent, the following considerations are applicable: 1. Which translation is most literal; 2. The question should be examined in view of the other parts of the instrument not involved in any doubt; 3. Recurrence should be made to the nature of the invention, to see if it is consistent with either or both readings; and, 4. If it be found that one of the translations is repugnant to other parts of the instrument, and the other is consistent with the other parts, it will be safe to adopt the latter. (*White v. Allen*, 2 *Fish.*, 440.)

44. **UNITY OR DIVERSITY OF INVENTION.**—A single patent cannot embrace two machines, which are wholly independent of each other and distinct inventions for unconnected objects, nor for several distinct improvements upon different machines having no common connection or common purpose; but a single patent may be taken out for several inventions or improvements, if they conduce to the accomplishment of one and the same general end. (*Wythe v. Stone*, 1 *Story*, 288, *et seq.*)

In the case of *Atwood ex parte*, the Commissioner says:

“There would seem to be an obvious impropriety in allowing an inventor to make application and obtain a patent for some trifling improvement, and then come in at any time within two years, as suggested by counsel, and claim another patent covering broadly the machine improved and already described in the first patent, so that the first patent would become tributary to the second, and the unlucky purchaser of the first would become an infringer of the second in the hands of his grantor.

“The law gives ample facilities for patenting every improvement shown in an application. It provides a system of re-examinations and appeals before the patent goes out; and, even after the issue of a patent, it permits the owner to reissue it and to subdivide it, until nothing is left upon which to found a claim. All claims granted upon the thing described have a common origin—the original application. The monopoly founded upon them has a common duration—the lifetime of the original patent. This is just to the inventor, and it is just to the public. It is a sound practice, and the only safe one.

“I answer the questions of the examiner as follows: 1. The case of *Suffolk Company v. Hayden* in no way controls the practice in the Patent Office. 2. When an application is filed, every invention contained in that application must be patented under it, or under such divisions of it as the wishes of the applicant and the rules of the office may permit.” (*Commissioner's Decisions*, 1869, p. 98.)

45. THE QUESTION OF THE DIVISION OF AN INVENTION INTO SEPARATE PATENTS IS WITHIN THE DISCRETION OF THE COMMISSIONER.—It is difficult, perhaps impossible, to lay down any general rule by which to determine when a

given invention or improvement should be embodied in one, two, or more patents; some discretion must necessarily be left on this subject to the head of the Patent Office. It is often a nice and perplexing question. (*Bennett v. Fowler*, 8 Wall., 445.)

The case of *Hogg v. Emerson* (6 How., 483) has usually been relied upon as authorizing the union of several devices, machines, or improvements, under a single patent. In that case letters patent had been granted covering an improvement in a spiral propelling wheel and in a capstan. This was an extreme case, and the defendant contended that the patent was void. The court say: "The next objection is, that this description in the letters thus considered covers more than one patent, and is therefore void.

"There seems to have been no good reason at first, unless it be a fiscal one on the part of the Government when issuing patents, why more than one, in favor of the same inventor, should not be embraced in one instrument, like more than one tract of land in one deed or patent of land." (*Phillips on Pat.*, 217.)

"Each could be set out in separate articles or paragraphs, as different counts for different matters in libels in admiralty or declarations at common law, and the specifications could be made distinct for each, and equally clear.

"But, to obtain more revenue, the public officers have generally declined to issue letters for more than one patent described in them." (*Renouard*, 293; *Phillips on Pat.*, 218.) "The courts have been disposed to acquiesce in the practice, as conducive to clearness and certainty; and if letters issue otherwise, inadvertently, to hold them, as

a general rule, null. But it is a well-established exception, that patents may be united if two or more, included in one set of letters, relate to a like subject, or are in their nature or operation connected together." (*Phillips on Pat.*, 218, 219; *Barrett v. Hall*, 1 *Mason C. C.*, 447; *Moody v. Fiske*, 2 *Mason C. C.*, 112; *Wythe et al. v. Stone et al.*, 1 *Story*, 273.)

"Those here of that character, being all connected with the use of the improvements in the steam-engine as applied to propel carriages or vessels, and may therefore be united in one instrument."

In *Root v. Ball & Davis* (4 *McLean*, 179) the court say: "It is objected to the plaintiff's patent that two distinct things cannot be united in the same patent. This is true when the inventions relate to two distinct machines; and the reason assigned is, that it would deprive the officers of the Government of their fees, and in other respects would be inconvenient. But the same patent may include a patent for a combination and an invention of some of the parts of which the combination consists."

The doctrine of both of these cases seems to be, that while the rule which assigns distinct inventions to distinct patents is a proper one, and one which the Commissioner may properly enforce, yet, if the patent actually issue, the courts will sustain it. It is certainly nowhere asserted that it is the duty of the Commissioner to include two or more inventions in one patent, but it is evidently referred to his discretion. There are numerous cases in which it has been held, that a patent once granted is to be liberally construed; that it is to be presumed that public officers do their duty; that the court will not inquire into slight defects or mere informalities.

in the grant of letters patent, where there is a meritorious invention. Yet it would be a grave error to found upon such decisions a rule of action for the Commissioner; for it by no means follows, because a patent has been sustained, notwithstanding certain informalities in the issue, that every succeeding patent is to exhibit the same informalities. In *Tompkins v. Gage* (2 *Fish.*, 580) it was held, that the second claim of the patent under consideration was but a repetition of the first; but that "duplication of claim" did not affect the validity of the patent. It could hardly be gravely contended, however, that upon the authority of this decision the Commissioner should encourage or permit the granting of duplicate claims.

The whole question is one of discretion in the Commissioner.

It may be conceded that it is difficult to establish any general rule for the division of inventions into separate patents, which shall apply to all cases, or which shall not be subject to many exceptions. In both of the cases quoted, it is suggested that the union of many inventions in one patent would deprive the Government of its proper fees: This is a legitimate consideration. A fee of \$15 is now charged for examination into the novelty, utility, and patentability of an invention. This is a very reasonable charge, and is much less than it would cost to make the examination in any other way. Indeed, the fees for all services in the Patent Office are less than are charged in any other country, while the service performed for the applicant by the office is much greater.

It would be unjust to the Government, to the public at large, and to other inventors, to permit one of their number to present a batch of inventions for examination

under a single fee, for he would receive more of the time of the examiner than he had paid for. Another consideration, which is not less important, is found in the classification of the various subjects of invention, and the assignment of the different classes to different examiners. This division of labor is absolutely essential to the prompt and thorough examination of applications. It is adopted to facilitate the transaction of the public business, and the inventor himself is directly and immediately benefited by a strict adherence to it. Any union of inventions in one patent, that would seriously impair this classification, ought not to be permitted. Besides the delay and increased difficulty in making the examination, if the patent covers devices which enter into two classes, the drawing, which is single, must be deposited in the portfolio of the one class, and be wanting in the portfolio of the other. It may thus be overlooked in the examination of the next case.

It may therefore be said in general, that when two or more distinct inventions are united in one application that are capable of division, and which belong to different classes, or involve a double labor of examination, or have no community of operation, it is not only the right, but it becomes the duty of the Commissioner to require the application to be divided. (*Linus Yale, jr., ex parte, Commissioner's Decisions*, 1869, p. 110.)

III. Requisites of the Application.

SEC.	SEC.
46. Application made to Commissioner.	48. Clerical requirements.
47. Time to complete application.	49. Completion of the application.
	50. Rules of correspondence.

SEC.

51. Pending applications preserved in secrecy.
 52. Information furnished after a patent has been issued or the application abandoned.
 53. Inquiries not answered.
 54. Two years' use allowed.
 55. Public use, common use.

SEC.

56. Delays at the Patent Office.
 57. Abandonment within two years.
 58. Delay unimportant, unless evidence of abandonment.
 59. Continuing application.
 60. Commissioner may refuse a patent which would be sustained by the courts.

46. APPLICATION TO BE MADE TO THE COMMISSIONER OF PATENTS.—Before any inventor or discoverer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the Commissioner, &c. (*Act of July 8, 1870, § 26.*)

47. TIME TO COMPLETE AND PROSECUTE APPLICATIONS.—All applications for patents shall be completed and prepared for examination within two years after the filing of the petition, and in default thereof, or upon failure of the applicant to prosecute the same within two years after any action therein, of which notice shall have been given to the applicant, they shall be regarded as abandoned by the parties thereto, unless it be shown to the satisfaction of the Commissioner that such delay was unavoidable. (*Act of July 8, 1870, § 32.*)

48. CLERICAL REQUIREMENTS.—The application must be in writing, in the English language, and addressed to the Commissioner of Patents. The petition and specification must be separately signed by the inventor. All claims and specifications filed in this office (including amendments) must be written in a fair, legible hand, without interlineations or erasures, except such as are clearly stated in a marginal or foot note, written on the same sheet of paper; otherwise the office may require

them to be printed. All the papers constituting the application must be attached together. (*Patent Office Rules, July, 1870.*)

49. APPLICATION SHOULD BE COMPLETE WHEN FILED.—No application can be examined, nor can the case be placed upon the files for examination, until the fee is paid, the specification, with the petition and oath, filed, and the drawings and model or specimen (when required) filed or deposited. It is desirable that everything necessary to make the application complete should be deposited in the office at the same time. If otherwise, a letter should accompany each part stating to what application it belongs. (*Ib.*)

50. RULES OF CORRESPONDENCE.—All correspondence must be in the name of the "Commissioner of Patents," and all letters and other communications intended for the office must be addressed to him. If addressed to the Acting or Assistant Commissioner, chief clerk, examiners, or any of the other officers, they will not be noticed, unless it should be seen that the mistake was owing to inadvertence. A separate letter should in every case be written in relation to each distinct subject of inquiry or application, the subject of the invention and the date of filing being always carefully noted. (*Ib.*)

When an agent has filed his power of attorney, duly executed, the correspondence will, in ordinary cases, be held with him only. A double correspondence with him and his principal, if generally allowed, would largely increase the labor of the office. For the same reason the assignee of an entire interest in an invention is entitled to hold correspondence with the office to the exclusion of the inventor. If the principal becomes dissat-

ified, he must revoke his power of attorney and notify the office, which will then communicate with him. (*Ib.*)

Whenever it shall be found that two or more parties whose interests are in conflict are represented by the same attorney, the examiner in charge will notify each of said principal parties of this fact, and also the attorney. (*Ib.*)

All communications to and from the Commissioner upon official business are carried in the mail free of postage. (*Ib.*)

All business with the office should be transacted in writing. Unless by the consent of all parties, the action of the office will be predicated exclusively on the written record. No attention will be paid to any alleged verbal promise or understanding in relation to which there is any disagreement or doubt. (*Ib.*)

51. PENDING APPLICATIONS PRESERVED IN SECRECY.—After a second rejection, none of the papers can be inspected, save in the presence of a sworn officer, nor will any of the papers be returned to the applicant or agent. (*Ib.*)

Aside from the caveats which are required by law to be kept secret, all pending applications are, as far as practicable, preserved in like secrecy. No information will therefore be given those inquiring whether any particular case is before the office, or whether any particular person has applied for a patent. (*Ib.*)

Information in relation to pending cases is given so far as it becomes necessary in conducting the business of the office, but no further. Thus, when an interference is declared between two pending applications, each of the contestants is entitled to a knowledge of so much of his

antagonist's case as to enable him to conduct his own understandingly. (*Ib.*)

52. INFORMATION FURNISHED AFTER A PATENT HAS BEEN ISSUED OR THE APPLICATION ABANDONED.—Information is given in relation to any case after a patent has issued, or after a patent has been refused and the further prosecution of the application is abandoned or barred by lapse of time. (*Ib.*)

The models, in such cases, are so placed as to be subject to general inspection. The specifications and drawings in any particular case can be seen by any one having particular occasion to examine them, and copies thereof, as well as of patents granted, will be furnished at the cost of making them. Copies will be made on parchment, at the request of the applicant, on his paying the additional cost. (*Ib.*)

Even after a case is rejected, the application is regarded as pending, unless the applicant allows the matter to rest for two years without taking any further steps therein, in which case it will be regarded as abandoned, and will no longer be protected by any rule of secrecy. The specification, drawings, and model will then be subject to inspection in the same manner as those of patented or withdrawn applications. (*Ib.*)

53. INQUIRIES WHICH WILL NOT BE RESPONDED TO.—The office cannot respond to inquiries as to the novelty of an alleged invention in advance of an application for a patent, nor upon inquiries founded upon brief and imperfect descriptions, propounded with a view of ascertaining whether such alleged improvements have been patented, and, if so, to whom; nor can it act as an expounder of the patent law, nor as counsellor for individuals, except

as to questions arising within the office. A copy of the rules, with this section marked, sent to the individual making an inquiry of the character referred to, is intended as a respectful answer by the office. (*Ib.*)

54. TWO YEARS' USE PRIOR TO APPLICATION ALLOWED.—Inventors may permit the use of their inventions, by individuals, for a period of two years prior to the application for a patent, and still obtain a valid patent, notwithstanding such use. But if the use thus allowed extends over a period of more than two years prior to the application, or if it amounts to an abandonment of the invention to the public, whether for a longer or shorter period, the patent will be invalid. (*Curtis on Patents*, § 103.)

The statute (*ut supra*, p. 9, § 24,) is inflexible, as to the time when the patent is to be applied for, with reference to the prior use and sale of the invention. The neglect to apply within two years after such sale or use is invariably fatal. Whenever this fact appears, the patent falls. But beyond this the provisions of the statute are silent. (*Blandy v. Griffith*, 3 *Fish.*, 617.)

55. PUBLIC USE, COMMON USE.—A "public" use has been defined to be a use in public; and a single well-authenticated instance of a use in public by the inventor, or any one else, constitutes a legal public use.

A "common" use is a use by the public; and has been defined to refer to cases where the invention has become the subject of sale, known to the trade, or so situated that the public, or any portion thereof, can and does avail itself of the improvement at pleasure. (*Hormant v. Gilmore*, *Commissioner's Decisions*, 1870.)

It is not necessary that the use should have been a continuing use, extending over a longer period than two years

prior to the application, in order to render the patent void. It is sufficient if it be a public use or sale at any time, or for any length of time, occurring more than two years before the filing of the application. (*Sanders v. Logan*, 2 *Fish.*, 167.)

A fortiori if an inventor suffers his invention to get into general use it will have been in public use. But where the patentee alone makes the thing for the purpose of experiment and completion, without selling it to be used by others, the term public use is not applicable. (*Shaw v. Cooper*, 7 *Pet.*, 292.)

56. DELAYS AT THE PATENT OFFICE.—By application filed in the Patent Office the inventor makes a full disclosure of his invention, and gives public notice of his claim for a patent. It is conclusive evidence that the inventor does not intend to abandon it to the public. The delay afterwards interposed, either by the mistakes of public officers, or the delays of courts, where gross laches cannot be imputed to the applicant, cannot affect his right. (*Adams v. Jones*, 1 *Fish.*, 527.)

Such delays are sufficiently onerous to a meritorious inventor, if his patent is allowed to have full operation after it is granted. But it would be very great injustice to hold, that any delay which the inventor could not prevent should, under any circumstances, affect the validity of his patent. (*Dental Vulcanite Company v. Wetherbee*, 3 *Fish.*, 87.)

And if an earlier application by the inventor is for the same subject-matter as he afterwards patents, and if such application was not withdrawn by him, but the delay was caused by the conduct of the Commissioner of Patents in refusing to grant a patent, then the inventor should

not be considered to have abandoned his invention to the public, unless he abandoned it before the first application. (*Rich v. Lippincott*, 2 *Fish.*, 1.)

57. ABANDONMENT WITHIN TWO YEARS.—The mere use or sale of invention within two years will not alone or of itself work an abandonment. The use or sale must be accompanied by some declarations or acts, going to establish an intention on the part of the inventor to give to the public the benefit of the improvement. But the mere expression of an intention not to take out a patent, or the mere declaration of intention to dedicate an invention to the public, cannot be regarded as an actual dedication. Abandonment or dedication is in the nature of a forfeiture of a right, which the law does not favor, and it should be made out beyond all reasonable doubt. (*Pitts v. Hall*, 2 *Blatchf.*, 237.)

In the case of *Ransom v. The Mayor of New York*, Hall, J., charged the jury as follows:

“If the plaintiffs did not use reasonable diligence to perfect the invention patented after the idea of it was first conceived, and in the meantime other persons not only conceived the idea, but perfected the invention and practically applied it to public use before the invention of the plaintiffs had been so far perfected that it could be applied to practical use, the plaintiffs’ patent is void, because they were not the original and first inventors of the thing patented. And if the plaintiffs, after they had perfected their invention, unreasonably delayed their application for a patent, and other persons, before such application was made, actually perfected and applied the same invention to practical use and gave the knowledge thereof to the public, and the plaintiffs, after the knowledge

of such subsequent invention or discovery and its public use, failed to make objection and to apply without unreasonable delay for a patent for their invention, they cannot sustain their patent, because they failed to give the public the consideration for the grant of exclusive privileges, upon which all valid patents must be based; and if the plaintiffs, after their invention was perfected, knowingly allowed it to be used in public for more than two years before they applied for letters patent, it is conclusive of a dedication of such invention to the public, and their patent is void. And so also, if the plaintiffs, after their invention was perfected, acquiesced in its use in public for a less term than two years without applying for a patent, and the jury shall be satisfied, from such acquiescence and other facts of the case, that the plaintiffs in fact abandoned their invention, concluding not to patent, but to dedicate it to the public use, they could not recall such dedication or defeat such abandonment by a subsequent application for a patent, and their patent is therefore void." (1 *Fish.*, 273.)

58. DELAY UNIMPORTANT, UNLESS IT AMOUNTS TO EVIDENCE OF ABANDONMENT.—The statute does not limit any time in which the inventor must apply for a patent, nor does it declare a forfeiture by reason of any delay. Delay, therefore, is unimportant, unless it amounts to evidence of the abandonment of the claim. (*Hildreth v. Heath*, *Appeal Cases*, *D. C.*, 1841.)

But, although merely withholding an invention from the public does not amount to abandonment, it may, in connection with other circumstances, pile up difficulties, if too long continued, in the way of asserting and proving priority over another inventor who applies for a

patent. (*Babcock v. Degener, MS. Appeal Cases, D. C., '859.*)

59. CONTINUING APPLICATION.—If a party chooses to withdraw his application for a patent and pay the forfeit, intending at the time of such withdrawal to file a new petition, and accordingly does so, the two petitions are to be considered as parts of the same invention and as constituting a continuous application within the meaning of the laws. (*Godfrey v. Evans, 1 Wall., 317.*)

And where the patentee made public use and sale of his invention for less than two years before his original application for a patent, but subsequently, and more than two years after such public use and sale, withdrew such application and filed a second one, upon which a patent was granted, it was *held*, that the continuity of the application was not necessarily destroyed, and, in the absence of proof of abandonment or dedication, the patent was not avoided by reason of the public use and sale for more than two years before the final application. (*Howe v. Newton, 2 Fish., 531.*)

Where a patent was applied for May 3, 1856, and rejected August 30, 1856, amended specification filed September 22, 1856, and finally rejected, upon appeal to the Commissioner, June 15, 1857, but not withdrawn, a new application made May 26, 1858, and a patent granted August 3, 1858: *held*, that the last application was in the nature of a petition for review of the previous rulings and related back to the prior application; and that the action of the Commissioner was not original and independent, but a renewal and elongation of the former proceedings and a reversal of the former rejections. To an action of this revisory character the statute imposes no

limitation, and, under such circumstances, the public use to avoid the patent must be for two years before the first application. (*Blandy v. Griffith*, 3 *Fish.*, 609.)

Where an application was withdrawn and the withdrawal fee received back, and no further steps were taken for eight years, when a new application was filed, and in the meantime several patents had been granted in which the invention was incorporated, the latter application was held not to be a continuation of the former, and was rejected. (*J. W. Cochran ex parte*, *Commissioners' Decisions*, 1859, p. 30.)

After the withdrawal of an application, it is for the Commissioner to determine whether a second one is filed within a reasonable time, so as to constitute a continuance of the first. (*Ib.*)

And if, after an application is withdrawn, another is not filed in two years, it may reasonably be presumed that the applicant has no intention of renewing it. (*Ib.*)

60. THE COMMISSIONER MAY REFUSE A PATENT WHICH WOULD BE SUSTAINED BY THE COURT IF ISSUED.—When the patent has been granted, and its validity is called in question, a court may so far respect the action of the Commissioner and the grant of the Government as to adopt a rule to save and sustain the patent, which it would be very unwise and unsafe to adopt as the uniform practice in granting patents. The courts have held that the omission of the oath is not fatal. (*Crompton v. Belknap Mills*, 3 *Fish.*, 536.) And, doubtless, if the patent were actually issued, with but a single witness to the specification, or without a petition or the payment of a fee, these informalities would not avoid the patent; and yet he would be a bold Commissioner who should knowingly proceed

to issue patents without petition, witnesses, oath, or fees. In *Hogg v. Emerson* (6 *How.*, 437) it was held, that inventions very dissimilar might be united in the same patent; and in *Goodyear v. Wait* (3 *Fish.*, 242) it was held, that the process and the product might be separated, and claimed in two reissues, the court remarking that this was within the discretion of the Commissioner. So in the case of *Suffolk Company v. Hayden*, it was held, that an invention might be included in a subsequent patent which was described in a preceding one.

Yet in all these cases there can be no doubt that it is within the discretion of the Commissioner to say that each patent shall cover but one invention, or that the subject-matter of a reissue is incapable of division, or that all the inventions, or parts of an invention, described in an application, shall be included in one patent, or in divisions founded upon that application. (*L. J. Atwood ex parte, Commissioners' Decisions*, 1869, p. 100.)

IV. The Applicant and Petition.

SEC.	SEC.
61. Application to be by way of petition.	69. Assignment of incomplete invention.
62. Application by actual inventor.	70. Partial assignment.
63. Form of petition by a sole inventor.	71. Office to be requested to issue patent to assignee.
64. Joint inventors.	72. No appeal in case of refusal.
65. Relations subsisting between joint inventors.	73. Correspondence in the name of assignee.
66. Form of petition by joint inventors.	74. Recording assignment.
67. Assignment before patent.	75. Stamp required.
68. Assignment after rejection of application valid.	76. Legal formalities.
	77. Definition of the terms assignee, grantee, and licensee.

SEC.	SEC.
78. Form of petition for assignee.	85. Clause of substitution.
79. Legal representatives.	86. Associate attorney.
80. Form of petition by administrator.	87. Revocation.
81. Form of petition by executor.	88. Stamp required.
82. Attorneys.	89. Form of petition, with power of attorney.
83. Commissioner may refuse to recognize an attorney.	90. Form of power of attorney.
84. Correspondence held with attorney only.	91. Form of associate power.
	92. Form of revocation of power of attorney.

61. APPLICATION IS BY WAY OF PETITION.—The law (*ut infra*, p. 10, § 26) requires an inventor who desires to obtain a patent to “*make application in writing to the Commissioner of Patents,*” &c. This application in writing has, from the origin of the Government, been by way of petition, generally with the specification annexed and referred to, or accompanied by the specification, filed at the same time. The form of the petition is not material. When filed, it is to be presumed to adopt the specification or schedule filed at the same time, and to ask for a patent for the invention therein described. (*Curtis on Patents*, § 271; *Hogg v. Emerson*, 6 *How.*, 437, 480.)

62. THE APPLICATION MUST BE MADE BY THE ACTUAL INVENTOR, IF ALIVE, even if the patent is to issue or reissue to an assignee; but, where the inventor is dead, the application and oath may be made by the executor or administrator. (*Patent Office Rules*, July, 1870.)

63. FORM OF PETITION BY A SOLE INVENTOR.—

To the Commissioner of Patents:

Your petitioner prays that letters patent may be granted to him for the invention set forth in the annexed specification. JOHN SMITH.

64. JOINT INVENTORS.—Joint inventors are entitled to a joint patent; neither can claim one separately; but

Independent inventors of separate improvements in the same machine cannot obtain a joint patent for their separate inventions, nor does the fact that one man furnishes the capital and the other makes the invention entitle them to take out a joint patent. (*Patent Office Rules, July, 1870.*)

A joint patent may well be granted upon a joint invention. There is no difficulty in supposing, in point of fact, that a complicated invention may be the gradual result of the combined mental operations of two persons acting together, *pari passu*, in the invention; and if this be true, then, as neither of them could justly claim to be the sole inventor in such case, it must follow that the invention is joint, and that they are jointly entitled to a patent; but a joint patent cannot be sustained upon a sole invention. (*Barrett v. Hall, 1 Mason, 472.*)

And if the circumstances are such as to show that two parties contributed to an invention, so as to make them joint inventors, a joint patent should be taken out. (*Thomas v. Weeks, 2 Paine, 103.*)

For if the invention patented, as in a joint patent, is the sole invention of one of the patentees, and not the joint invention of both, the patent is void. (*Ransom v. Mayr, &c., of New York, 1 Fish., 252.*)

One of two or more joint inventors is not *the* inventor, within the meaning of the act; and if he applies for a patent the Commissioner is bound to refuse it. (*Arnold v. Bishop, MS. Appeal Cases, D. C., 1841.*)

The man who reduces to practice the theory of another, who assists in the reduction of it to practice, cannot be considered as the sole inventor of the machine; and if one suggest the mode of operation or the principle of a machine, and the other reduce it to practice, neither can

be considered as the sole inventor, but the invention is joint. (*Ib.*)

If one of two joint inventors, without the other relinquishing his claim to a joint interest in the patent right, obtains a patent in his own name, he will be deemed guilty of a fraud, and will, in equity, be considered as the trustee of the other. (*Reutgen v. Kanowers*, 1 Wash., 171.)

65. RELATIONS SUBSISTING BETWEEN JOINT INVENTORS. In the case of joint patentees, where no agreement or copartnership exists, the relation of copartners does not result from their connection as joint patentees; and when one joint owner of a patent transfers his undivided interest to a stranger, the assignee does not become the partner of his co-proprietor. In both cases the parties interested in the patent are simply joint owners, or tenants in common, of the rights and property secured by the patent, and their rights, powers, and duties, as respects each other, must be substantially those of the joint owners of a chattel. Part owners of goods and chattels are either joint owners or tenants in common, each having a distinct, or at least an independent, although an undivided, interest in the property. Neither can transfer or dispose of the whole property; nor can one act for the other in relation thereto, but merely for his own share, and to the extent of his own several rights and interest; and at common law the one had no action of account against the other, from his share of the profits derived from the common property. (*Pitts v. Hall*, 3 Blatchf., 201 206; *Story on Partnership*, § 89.)

One tenant in common has as good a right to use and to license third persons to use the thing patented as the

other tenant has. Neither can come into a court of equity and assert a superior equity, unless it has been created by some contract underlying the rights which belong to them as tenants in common; and, no such contract existing, one tenant in common cannot enjoin the other from use and sale. (*Clum v. Brewer*, 2 *Curtis C. C.*, 506.)

Some agreement becomes necessary to enable them to work the invention at their joint expense and for their joint benefit. (*Parkhurst v. Kinsman*, 1 *Blatchf.*, 496.)

If the partial owner is not a wrong-doer in exercising the rights secured by the patent, no property has been appropriated which belongs to the other proprietor of the patent, and the ground of damages fails. That this is the real relation of the parties, would seem to follow from their situation as tenants in common of a right to the exercise of the patent privileges. In respect to the disposal of the title to those privileges, they stand upon the same footing as tenants in common, or joint owners of other chattels, namely, each can dispose of his own share only. (*Curtis on Patents*, § 190.)

66. FORM OF PETITION BY JOINT INVENTORS.—

To the Commissioner of Patents:

Your petitioners pray that letters patent may be granted to them, as joint inventors, for the invention set forth in the annexed specification.

JOHN SMITH,

THOMAS BROWN.

67. ASSIGNMENT BEFORE PATENT.—Patents may be granted and issued or reissued to the assignee of the inventor or discoverer, the assignment thereof being first entered of record in the Patent Office; but in such case the application for the patent shall be made and the specification sworn to by the inventor or discoverer; and

also, if he be living, in case of an application for reissue, (Act of July 8, 1870, § 38.)

The patentee is not necessarily the inventor; for, whether an invention is or is not assignable at common law before any patent for it has been obtained, it has been deemed expedient to make it so assignable by statute. Accordingly, provision has been made for the issuing of a patent to an assignee of the inventor, provided the application is made and the specification duly sworn to by the inventor himself, and the assignment is duly recorded. When so granted, the exclusive interest is vested as a legal estate in the assignee, who thus becomes the patentee of the invention, and the inventor himself is divested of the legal title; but the assignee of the inventor, who has become such before the patent has issued, does not become the holder of the legal title to the patent until it has issued, although he becomes the holder of a right to obtain the patent. (*Curtis on Patents*, §§ 168, 169; *Herbert v. Adams*, 4 *Mason*, 15.)

68. ASSIGNMENT AFTER REJECTION OF APPLICATION VALID.—An assignment of an invention before patent issued is valid, although it is made after the rejection of the assignor's application by the Commissioner, and after his appeal to the chief justice of the circuit court of the District of Columbia from such decision. (*Gay v. Cornell*, 1 *Blatchf.*, 509.)

The thing to be assigned is not the mere parchment, but the monopoly conferred—the right of property which it creates; and when the party has acquired an inchoate right, an assignment of it is legal. (*Gayler v. Wilder*, 10 *How.*, 498.)

69. ASSIGNMENT OF AN INCOMPLETE INVENTION ONLY

VALID AS A CONTRACT.—But the statute which authorizes the assignment of an invention before patent embraces only the cases of perfected or completed inventions. There can, properly speaking, be no assignment of an inchoate or incomplete invention, although a contract to convey a future invention may be valid, and may be enforced by a bill for specific performance. The legal title can pass to another only by a conveyance, which operates upon the thing invented after it has become capable of being made the subject of an application for a patent; and a contract to convey a future invention cannot alone authorize a patent to be taken by the party in whose favor such contract was intended to operate. (*Curtis on Patents*, § 170; *Nesmith v. Calvert*, 1 Wood. & Min., 84.)

70. **PARTIAL ASSIGNMENT.**—The assignee has no legal claim to the patent if the assignment be only partial, though the part excepted is small. In such case it must be issued in the name of the inventor, and be held by him in trust for the use of the assignee, to the extent of the equities he has by virtue of his contract. (*9 Opinions of Attorneys General*, 403.)

Nor can patents issue jointly to the inventor as such and to the assignee of a partial interest; but they may issue to the assignee or assignees of the whole interest. (*4 Opinions of Attorneys General*, 401.)

71. **PATENT MAY ISSUE TO INVENTOR UNLESS THE OFFICE IS REQUESTED TO ISSUE IT TO ASSIGNEE.**—A patent will, upon request, issue directly to the assignee or assignees of the entire interest in any invention, or to the inventor and the assignee jointly, when an undivided part only of the entire interest has been conveyed. (*Patent Office Rules*, July, 1870.)

The language of the law (*ut supra*, p. 9, § 38) is "may be granted and issued," not "shall be," and it has been the constant practice of the office to issue patents to the inventor, unless otherwise specially requested by him. The mere facts of assignment and record do not impose upon the Commissioner the duty of issuing the letters patent to the assignee without further request, and the omission to do so is not therefore a mistake on his part. The rights of the assignee in the patent are precisely the same, whether the patent be issued to him or to the inventor, and whether it issue to the one or the other is a matter of form rather than of substance. (*Havemeyer ex parte, Commissioners' Decisions, February 10, 1870.*)

72. NO APPEAL LIES FROM THE REFUSAL OF THE COMMISSIONER TO ISSUE A PATENT TO AN ASSIGNEE, and a mandate from the appellate judge requiring it will not be regarded. The jurisdiction of the supreme court of the District of Columbia does not extend to the ministerial acts of the Commissioner. (*Whitely ex parte, Commissioners' Decisions, 1869, p. 79; but see 6 Wall., 522.*)

73. CORRESPONDENCE IN THE NAME OF ASSIGNEE.—The assignee of an entire interest in an invention is entitled to hold correspondence with the office to the exclusion of the inventor, and when the patent is to issue in the name of the assignee, the entire correspondence should be in his name. (*Patent Office Rules, July, 1870.*)

74. ASSIGNMENT MUST BE RECORDED FIVE DAYS BEFORE ISSUE OF THE PATENT.—In every case where a patent issues or reissues to an assignee, the assignment must be recorded in the Patent Office at least five days before the issue of the patent, and the specification must be sworn to by the inventor. (*Ib.*)

The receipt of assignments is not generally acknowledged by the office. They will be recorded in their turn within a few days after their reception, and then transmitted to the persons entitled to them. (*Ib.*)

75. STAMP REQUIRED.—A five-cent revenue stamp is required for each sheet or piece of paper on which an assignment, grant, or license may be written. (*Ib.*)

76. LEGAL FORMALITIES.—No particular form of words is necessary to constitute a valid assignment, nor need the instrument be sealed, witnessed, or acknowledged. (*Ib.*)

The statute prescribes no particular form of instrument. Any instrument in writing which evinces an intention to vest the whole interest in the assignee, and to authorize him to take the patent in his own name, is a sufficient conveyance. (*Curtis on Patents, § 171.*)

An assignee, by an assignment executed before patent issued, has the legal title, even though the patent issued to the inventor. (*Gayler v. Wilder, 10 How., 494.*)

77. DEFINITION OF THE TERMS ASSIGNEE, GRANTEE, AND LICENSEE.—An *assignee* is one who has transferred to him, in writing, the whole interest of the patent, or any undivided part of such whole interest, in every portion of the United States.

A *grantee* is one who has transferred to him, in writing, the exclusive right, under the patent, to make and use, and grant to others to make and use, the thing patented, within and throughout some specified portion or part of the United States; and such right must be an exclusive sectional right, excluding the patentee therefrom.

A *licensee* is one who, in writing or orally, has transferred to him a less interest than either the interest in

the whole patent or an undivided part thereof, or an exclusive sectional interest.

The terms assignee and grantee have separate and distinct meanings, and are not synonymous. (*Potter v. Holland*, 1 *Fish.*, 327.)

78. FORM OF PETITION BY AN INVENTOR FOR AN ASSIGNEE.—

To the Commissioner of Patents:

Your petitioner prays that letters patent may be granted to Joel Thomas, as his assignee, for the invention set forth in the annexed specification.

JAMES GREENFIELD.

79. LEGAL REPRESENTATIVES MAY MAKE APPLICATION.—

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 shall be 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. (*Act of July 8, 1870, § 34.*)

The statute contemplates a perfected invention or discovery, for which the inventor, if living, could have taken out a patent under the other provisions of the act. (*Curtis on Patents*, 177.)

If the inventor die before he has obtained a patent for his invention, no person other than his executor or administrator can apply for a patent for such invention, and the patent must be issued to such person in trust for the

heirs at law or devisees of the inventor. It need not, however, be expressed in the patent that it is issued to such executor in trust for those entitled to it. It will be sufficient that the patent set forth that it was issued to the grantee as executor. What the executor does in relation to the property of the devisor, he does in trust for those to whom such property is given by the will. (*Stimson v. Rogers*, 4 *Blatchf.*, 333.)

When the patent was granted by the Government to C. G., as executor, the suffix of executor signified the trustee character in which he assumed to act and in which he was recognized and dealt with by the Commissioner. The designation and the trust which it implied did not prevent the passage of the legal title or qualify the estate which accompanied it. It follows, from this view of the subject, that the grantee can sustain a suit on the patent in all respects as if he had been designated in it as trustee, instead of executor. (*Rubber Company v. Goodyear*, 9 *Wallace*, 792.)

80. FORM OF PETITION BY AN ADMINISTRATOR.—

To the Commissioner of Patents:

Your petitioner, William Davis, administrator of the estate of George Owen, deceased, (as by reference to the duly certified copy of letters of administration, hereto annexed, will more fully appear,) prays that letters patent may be granted to him for the invention of the said George Owens, set forth in the annexed specification.

WILLIAM DAVIS,
Administrator, &c.

81. FORM OF PETITION BY AN EXECUTOR.—

To the Commissioner of Patents:

Your petitioner, Samuel Wilson, executor of the last will and testament of Henry Somers, deceased, (as by reference to the duly certified copy of letters testamentary, hereto annexed, will more fully appear,) prays that letters patent may be granted to him for the invention of the said Henry Somers, set forth in the annexed specification.

SAMUEL WILSON,
Executor, &c.

82. **ATTORNEYS.**—Any person of intelligence and good moral character may appear as the attorney in fact or agent of an applicant upon filing a proper power of attorney. As the value of patents depends largely upon the careful preparation of the specification and claims, the assistance of competent counsel will, in most cases, be of advantage to the applicant, but the value of their services will be proportioned to their skill and honesty. So many persons have entered this profession of late years without experience that too much care cannot be exercised in the selection of a competent man. The office cannot assume responsibility for the acts of attorneys, nor can it assist applicants in making a selection. It will, however, be a safe rule to distrust those who boast of the possession of special and peculiar facilities in the office for procuring patents in a shorter time or with more extended claims than others. (*Patent Office Rules, July 8, 1870.*)

83. **COMMISSIONER MAY REFUSE TO RECOGNIZE AN ATTORNEY.**—For gross misconduct the Commissioner may refuse to recognize any person as a patent agent, either generally or in any particular case; but the reasons for such refusal shall be duly recorded, and be subject to the approval of the Secretary of the Interior. (*Act of July 8, 1870, § 17.*)

And for lesser offenses attorneys may be refused the privilege of oral interviews, and be required to transact all business with the office in writing. (*Patent Office Rules, July, 1870.*)

84. **CORRESPONDENCE HELD WITH ATTORNEY ONLY.**—When an agent has filed his power of attorney, duly executed, the correspondence will, in ordinary cases, be

held with him only. A double correspondence with him and his principal, if generally allowed, would largely increase the labor of the office. (*Ib.*)

85. **CLAUSE OF SUBSTITUTION.**—Powers of attorney must contain a clause of substitution, to authorize the attorney to substitute for, or associate with, himself a second agent; but such powers will not authorize the second agent to appoint a third. (*Ib.*)

86. **ASSOCIATE ATTORNEY.**—A power of attorney must be filed in every case, both by original and associate attorneys, before such attorney will be allowed to inspect papers or take action of any kind; but a revenue stamp need be affixed to original powers only. (*Ib.*)

87. **REVOCATION.**—If the principal becomes dissatisfied, he must revoke his power of attorney and notify the office, which will then communicate with him. (*Ib.*)

88. **STAMP REQUIRED.**—A stamp of the value of fifty cents is required upon each power of attorney authorizing an attorney or agent to transact business with this office relative to an application for a patent, reissue, or extension. The person using or affixing the stamp must cancel the same, by writing thereupon the initials of his name and the date. (*Ib.*)

89. **FORM OF PETITION, WITH POWER OF ATTORNEY.**—

To the Commissioner of Patents:

Your petitioner prays that letters patent may be granted to him for the invention set forth in the annexed specification; and he hereby appoints Solomon Sharp, of the city of Washington, District of Columbia, his attorney, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office connected herewith.

[50 cent revenue stamp.]

PETER PENDENT.

[If the power of attorney be given at any time other

than that of making application for patent, it will be in substantially the following form:]

90. FORM OF POWER OF ATTORNEY.—

To the Commissioner of Patents:

The undersigned having, on or about the 20th day of July, 1859, made application for letters patent for an improvement in a horse-power, hereby appoints Lawrence Legal, of the city of Washington, District of Columbia, his attorney, with full power of substitution and revocation, to prosecute said application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office connected therewith.

Signed at Brooklyn, county of Kings, and State of New York, this 27th day of July, A. D. 1869.

CHARLES CAUTIOUS.

[50 cent revenue stamp.]

91. FORM OF ASSOCIATE POWER.—

To the Commissioner of Patents:

SIR: Will you please recognize Solomon Sharp, of Washington, D. C., as my agent and associate in examining and amending the application of Peter Pendant for an improvement in horse-power, filed April 23, 1870, and address all communications in relation thereto to him. C. P. RUSSELL.

92. FORM OF REVOCATION OF POWER OF ATTORNEY.—

The undersigned having, on or about the 26th day of December, 1867, appointed Thomas Tardy, of the city of New York, New York, his attorney, to prosecute application for letters patent for an improvement in the running-gear of wagons, hereby revokes the power of attorney then given.

Signed at Richmond, Virginia, this 21st day of July, 1869.

RALPH WHITMAN.

V. The Specification.

Sec.	Sec.
93. Specification and drawing a part of the patent.	97. Object of the specification twofold.
94. Statute requisites.	98. Specification addressed to persons of competent skill.
95. Rules of the Patent Office concerning the specification.	99. What need not be stated.
96. Patent and specification construed together.	100. Variable proportions may be stated.

Sec.	Sec.
101. Office of the claim.	108. Fraudulent concealment, false suggestion.
102. Language employed.	109. Descriptive title.
103. Strictures upon the words "substantially as described," "as herein set forth," and the like.	110. Order of the specification.
104. How improvements should be set forth.	111. Object of the invention.
105. Implication in regard to parts not claimed.	112. Description of detail.
106. Invention should not be described as a mode, function, or abstract principle.	113. The claim.
107. Vagueness and ambiguity of description.	114. Form of specification for a machine by a sole inventor.
	115. Form of specification for a process by joint inventors.
	116. Form of specification of a composition of matter by an administrator.

93. SPECIFICATION AND DRAWING A PART OF THE PATENT.—A copy of the specifications and of the drawings shall be annexed to the patent, and be a part thereof. (*Act of July 8, 1870, § 22.*)

94. STATUTE REQUISITES OF THE SPECIFICATION.—Before any inventor or discoverer shall receive a patent for his invention or discovery he shall make application therefor, in writing, to the Commissioner, and shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding, and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same; and, in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim the part, improve-

ment, or combination which he claims as his invention or discovery; and said specification and claim shall be signed by the inventor and attested by two witnesses. (*Act of July 8, 1870, § 26.*)

95. RULES OF THE PATENT OFFICE CONCERNING THE SPECIFICATION.—The applicant must set forth in his specification the precise invention for which he claims a patent; and in all applications for mere improvements, the specification must distinguish between what is admitted to be old and what is described and claimed to be the improvement, so that the office and the public may understand exactly for what the patent is granted.

Two or more distinct and separate inventions may not be claimed in one application; but where several inventions are necessarily connected each with the other, they may be so claimed.

If more than one invention is claimed in a single application, and they are found to be of such a nature that a single patent may not be issued to cover the whole, the office requires the inventor to divide the application into separate applications, or to confine the description and claim to whichever invention he may elect.

The specification should describe the drawings, (where there are drawings,) and refer by letters and figures to the different parts; and, having fully described the art, machine, manufacture, composition, or improvement, it should particularly specify and point out the part, improvement, or combination which is claimed as the invention or discovery.

The specification must be signed by the inventor, or by his executor or administrator, and must be attested by two witnesses. Full names must be given, and all names,

whether of applicant or witnesses, must be legibly written. (*Patent Office Rules, July, 1870.*)

96. PATENT AND SPECIFICATION CONSTRUED TOGETHER.—The specification, under our law, occupies a relation to the patent somewhat different to the rule in England. In England the specification does not form a part of the patent, so as to control its construction; but the rights of the inventor are made to depend upon the description of his invention inserted in the title of the patent, and cannot be helped by the specification, the office of which is to describe the mode of constructing, using, or compounding the invention mentioned in the patent. But in the United States the invention is drawn up and filed before the patent is granted, and is referred to in the patent itself, a copy being annexed. It is, therefore, a settled rule in this country that the patent and specification are to be construed together, in order to ascertain the subject-matter of the invention, and that the specification may control the generality of the terms of the patent of which it forms a part. In like manner, drawings annexed to a specification, in compliance with the statute, are held to form a part of it, and are to be regarded in the construction of the whole instrument; and, when the term patent is used, it is understood to include the specification and drawings annexed to it. (*Curtis on Patents, § 221; Phillips on Patents, 223; Godson on Patents, 108; Hogg v. Emerson, 6 How., 437, 479.*)

The whole patent, including the specification and drawings, is to be taken into consideration; but we look to them only for the purpose of putting a proper construction upon the claim.) (*Pitts v. Wemple, 2 Fish., 10.*)

97. OBJECT OF THE SPECIFICATION TWO-FOLD.—The object

of the provisions of the statute requiring an inventor to describe his invention in as full, clear, and exact terms, as to enable a skillful person to construct it, is two-fold: first, that when the term has expired, and the invention becomes public property, such means of information will be accessible through the Patent Office as to enable others to avail themselves of its benefits; and, second, that while the patent is in force others may be informed of the precise claim of the patentee, and not ignorantly infringe his exclusive rights. (*Parker v. Stiles*, 5 *McLean*, 55.)

98. SPECIFICATION ADDRESSED TO PERSONS OF COMPETENT SKILL.—The law does not require that the specification should contain an explanation level with the capacity of every one, which would often be impossible. It allows the patentee to address himself to persons of competent skill in the art, and it requires him to use such full, clear, and exact terms as will enable that class of persons to reproduce the thing described from the description itself. If, therefore, clear ideas are conveyed to men of mechanical skill in the subject-matter, by which they could make or direct the making of the machine by following the directions given, the specification is good within the acts of Congress. (*Curtis on Patents*, § 253; *Lowell v. Lewis*, 1 *Mason*, 182; *Whitney v. Emmett*, *Bald.*, 319.)

In all descriptions of patented machines something must be left to the judgment and discretion of the mechanic who constructs the machine. It will, perhaps, rarely happen, even when the utmost vigilance and care are observed, that the machine or structure will be so accurately described as that the description can be literally and strictly followed in every particular. The skillful mechanic will see that in some particulars there is

some vagueness, and some discretion is required; but that fault will not invalidate the patent. (*Swift v. Whisen*, 8 *Fish.*, 343.)

The persons whose judgment is appealed to are not those who possess the highest degree of skill or knowledge in the particular art or science to which the subject-matter belongs, nor are they day laborers; they are practical workmen, or persons of reasonably competent skill in the particular art, science, or branch of industry to which the invention relates.

The description should be accommodated to the comprehension of persons of competent skill and knowledge, without taxing their genius or inventive powers, and should specify the means used so fully and exactly as to enable them, by using the means specified, without addition or subtraction, to produce the result described. (*Gray v. James*, *Pet. C. C.*, 401; *O'Reilly v. Morse*, 15 *How.*, 119.)

99. WHAT NEED NOT BE STATED.—The specification need not describe that which is within the ordinary knowledge of any workman having a competent knowledge of the work, who may be employed to construct the machine, nor is it necessary for the specification to describe the mode of making everything which is used, or detail known processes, or explain the terms appropriate to the particular art, or science, or branch of industry to which the invention belongs. (*Page v. Ferry*, 1 *Fish.*, 298; *Curtis on Patents*, § 260.)

Nor is it necessary in the description of a machine to state of what material every part should be made, unless a particular material be essential to its successful operation. (*Brooks v. Bicknell*, 3 *McLean*, 250, 261.)

Where the invention consists of a machine, the inventor must fully explain the principle and the several modes in which he has contemplated the application of that principle, by which it may be distinguished from other inventions; but he is not required to specify such well-known substitutes for any particular element of his invention as any constructor acquainted with the art fully understands is usually employed for the accomplishment of the same function. (*Union Sugar Refinery v. Matthiessen*, 2 *Fish.*, 600.)

In the case of *C. Rubens ex parte*, (*Commissioners' Decisions*, May 28, 1870,) the Commissioner says: "The mechanism employed by applicant is not new, aside from the combination of it with a spring dispensing with a fixed stop, and such a spring is covered by the letters patent of Adrian Philippe. Moreover, no such spring or mechanism is shown in the drawings of applicant or set forth in his specification, except by the reference to Adrian Philippe's patent. The language of the reference is: 'A mechanism, such, for instance, as shown in the patent of Adrian Philippe, of July 5, 1864, is used.'

"Two points have arisen in the discussion of this case which are worthy of consideration: First, whether the patented invention of another can form an element of a legitimate combination; and, second, whether a legitimate combination can be claimed which includes an element not shown or specifically described in the specification and drawings. The second question may be answered in the affirmative with entire confidence. A well-known form of mechanism may be incorporated into and become an element of a legitimate combination without a detailed description. The specification is addressed to

those skilled in the art to which the invention relates, and things well known to them need not be described, because the general public may not fully understand the details of the invention. The first point presents more difficulty. Undoubtedly there are many cases in which it would prove a great hardship to permit patents to issue for every combination in which an improvement previously patented might form a part. Instances are given in the cases *James Murphy*, (*Commissioners' Decisions*, 1869, p. 24,) and *Nathan Martz*, (*Commissioners' Decisions*, 1870, p. 18.) If, for example, an improvement be made in a feed-water heater, it would be an abuse of the doctrine of combination to apply it in turn to every species of boiler, and claim a patent upon every variation. In this way the patentee of the heater might be absolutely prevented from applying it to any boiler whatsoever.

“There is, however, another class of combinations, into which patented improvements may enter as elements, and of which they may form legitimate members. Such cases are those in which the patented device is itself improved or made more effective by the combination, or in which a new whole is produced by the union, or in which the combination does not lie in the legitimate and ordinary use of the patented improvement, but is so far out of the track of it as not to be obviously suggested by it, or in which the additional element is itself new, and could not have been, in the contemplation of the patentee, among the modes of using or applying his improvement.”

100. IN A SPECIFICATION FOR A COMPOSITION OF MATTER VARIABLE PROPORTIONS MAY BE STATED.—If in his specification the patentee gives a certain proportion as the

general rule applicable to the ordinary state of ingredients, he may, without risk of having his patent declared void by the court for vagueness and uncertainty, state other and variable proportions as exceptions to the rule, applicable to the varying states of the ingredients, although the precise proportions adapted to a given state of the ingredients, other than the usual state, can only be ascertained by computing it from the general rule, after the particular state of the ingredients is ascertained. (*Curtis on Patents*, § 259; *Wood v. Underhill*, 5 *How.*, 1, 3, 4.)

101. THE CLAIM IS NOT INTENDED TO AID THE DESCRIPTION, BUT TO ASCERTAIN THE EXTENT OF WHAT IS CLAIMED AS NEW.—The claim is not intended to be any description of the means by which the invention is to be performed, but is introduced for the security of the patentee, that he may not be supposed to claim more than he can support as an invention. It is introduced lest, in describing and ascertaining the nature of his invention and by what means the same is to be performed, the patentee should have inadvertently described something which is not new, in order to render his description of the improvement intelligible. (*Curtis on Patents*, § 227.)

A proposition to limit the claim made by the patentee to the Commissioner does not bind the patentee. (*Pike v. Potter*, 3 *Fish.*, 55)

In the case of *Owen Dorsey ex parte*, (*Commissioners' Decisions*, March, 1870,) the Commissioner says: "It is yet more strenuously urged that the terms in which the invention is defined are such as to bring it clearly in conflict with pre-existing machines. This objection derives much of its force from a misapprehension of the proper office of what are usually called 'the claims' in a

patent. It is quite commonly supposed that they constitute, as it were, an instrument by itself, distinct from the descriptive part, and are to be construed irrespective of the rest, unless express reference is made to it; that one portion is intended to make known how the invention is to be practiced, the other by itself to define and limit the monopoly. It has been even held that the patent law expressly requires a distinct section for that purpose in the grant. Such is not the import of the statute. The clause in it which is relied on is nothing more than an embodiment of the rule of the English courts, requiring that the patentee should point out in his specification what is new, and distinguish it from what is old. But the statute prescribes no mode of doing this. It is not unusual for British patents to dispense with any such section. It would clearly be sufficient in this country if each new device is declared to be such in the text where it is described. It is more convenient to do this, no doubt, in one passage at the end. But in so doing the object is merely to designate those, among the things which have been described, which the inventor claims were originated by him; not to formally describe them anew or define them otherwise than sufficiently to indicate which, among the articles described, are novelties. Accordingly, in *Kay v. Marshall*, (2 W. P. C.,) a strong intimation was given that nothing should be embraced in a claim which had not been previously set forth. And the cases are numerous in which the claiming passages have been interpreted and controlled by the descriptive portion of the specification, even when not referred to." (*Wyeth v. Stone*, 1 Story, 273; *Stone v. Sprague*, *Ib.*, 270; *Ryan v. Goodwin*, 3 Sumn., 514; *Davoll v. Brown*,

1 *Wood. & Min.*, 58; *Whitney v. Emmett*, *Bald.*, 303, 315; *Ames v. Howard*, 1 *Sumn.*, 482.)

102. LANGUAGE EMPLOYED.—It is not necessary that the language employed should be technical or scientifically accurate, although the patentee is bound to describe, with reasonable certainty, in what his invention consists and what his particular claim is, but he is not bound to use any precise form of words; and if the terms made use of will enable the court to ascertain clearly, by fair interpretation, what the party intends to claim, an inaccuracy or imperfection in the language will not vitiate the specification. (*Wyeth v. Stone*, 1 *Story*, 271, 286.)

The nature of a process for which a patent is asked must be learned from the specification, and not from the explanations aside from it. (*Lowry ex parte*, *Commissioners' Decisions*, 1869, p. 85.)

103.. STRICTURES UPON THE WORDS "SUBSTANTIALLY AS DESCRIBED," "AS HEREIN SET FORTH," AND THE LIKE.—The practice of allowing claims for inventions which can only be distinguished from those previously invented or patented by the construction to be given to such words as "substantially as described," "as herein set forth," &c., cannot be too strongly condemned. The claim should state all the elements of the combination intended to be patented, and if the parts are the same in name and number as in some prior machine, and the improvement consists in some modification of one or more of those parts, the claim should distinctly state that modification. It should not be concealed in ambiguous phrases. The words "substantially as described," and the like, have no fixed legal meaning. They may serve to expand or contract the claim. In general they are employed for the

latter purpose, so that a claim may appear to be broad upon its face, which in truth, by virtue of this mysterious phraseology, is exceedingly narrow. Sometimes they are added by inventors as a matter of course, by way of rounding off the claim, and have no particular meaning; and again, they are intended to signify that the patentee claims that which he describes and everything substantially like it. They are, at the best, ambiguous and dangerous phrases, and, however else they may be used, they must not be employed in the granting of letters patent to make a claim good that without them would be bad and unpatentable. (*Charles Rubens ex parte, Commissioners' Decisions*, 1869, p. 107.)

In the case of *Sickles v. Falls Company* the court say: "The patentee, after describing the nature of his improvement and the machinery for effecting it, claims as follows: 'Imparting a co-existing movement to two reciprocating catch-pieces in the operation of trip cut-off valves.' The claim, in terms, is for an effect—for an effect or function—and, therefore, not patentable." (2 *Fish.*, 202.)

A claim for "constructing and arranging the spring catches, to cause the attachment of the lamp to the lantern, by the operation of pressing the lantern down upon the spring catches," is not the subject of a patent, but a mere result from the arrangement and combination of the parts. (*Sangster v. Miller*, 2 *Fish.*, 563.)

In the case of *Simonds ex parte*, (*Commissioners' Decisions*, March 14, 1870,) the Commissioner says: "Applicant claims, 'producing in cutting presses a successive change in the point of contact of the cutting-block with the cutting-die.' This claim is for a result or effect, and

is bad. It is in the precise form condemned in *Sickles v. Falls Company* (2 *Fish.*, 202) and *Sangster v. Miller*, (2 *Fish.*, 563.)

“The whole *genus* of claims for ‘so constructing,’ ‘so combining,’ ‘producing,’ ‘determining,’ and so on, *ad infinitum*, through the whole range of present participles, are of the same character, and obnoxious to the same objection. Some of them have been saved in the courts as by fire, by the construction given to the words ‘substantially as described,’ and the like, but not one of them should have been granted by the office. The patent is for the means of producing a result, not for the result as produced.”

In the case of *Streeter v. Stodart*, (*Commissioners’ Decisions*, September 7, 1870,) the Commissioner says: “It is a pernicious fallacy to say that every change in the ‘arrangement’ of the elements of a combination may form the foundation of a legitimate claim. This matter is fully discussed in the cases of *Nathan Martz* (*Commissioners’ Decisions*, January, 1870, p. 18) and of *John Underwood*, (*Commissioners’ Decisions*, April, 1870, p. 24.) In addition to what is there said, it may be remarked, that the word ‘arrangement’ has been construed by the courts to be synonymous with ‘combination.’ (See *Smith v. Higgins*, 1 *Fish.*, 540; *Bell v. Daniels*, *Ib.*, 372; *Howe v. Morton*, *Ib.*, 589.) To make a claim good for the arrangement of parts, it is necessary that all the elements should exist which are necessary to constitute a valid combination of the same parts, to wit: A novel union of the parts, a co-operation of the parts united, and the exercise of the inventive faculty as distinguished from the skill of the mechanic.

“Thus, $A+B+C$ may constitute a legitimate combination when used in a certain relation. So, $A+C+D$ may constitute another legitimate combination, provided D be not the mere equivalent of B , or a substitute, the employment of which involves no invention. Now, if one discovers that by employing B in the first combination in a new and modified form, by the use of which a new and useful result, or a better result, is obtained than by the original combination, how shall we state the formula of his invention? Obviously, it is a combination of A with C and with B , as modified. If, therefore, we designate the new form of B by B' , the formula of the combination will be $A+B'+C$. But this same element may be further modified, not by change of form, but by change of location, by which the result is materially changed or a new result is attained. If we designate the element with the additional condition of the new location imposed upon it as B'' , the combination will now be $A+B''+C$.

“But it must be obvious that to constitute a patentable subject-matter, the elements designated as B' and B'' must differ from the original B in the same manner in kind as D differs from it in the second combination proposed; that is, they must not be mechanical equivalents for B , nor obvious substitutes for it, nor such modifications of it, either as to character or location, as belong to the skill of the mechanic rather than to the genius of the inventor.

“I do not mean to assert that a change of location may not enter as an element into a legitimate combination; but it is subject to the same conditions as any other element. It must be a new location, considered in the

light of the effect which it produces. It must require invention to adopt it, and when it has once been employed, no invention is involved in its use in any subsequent combination, except in those cases in which, to avail himself of it, the inventor is compelled to exercise further invention in the reorganization of his machine."

104. HOW IMPROVEMENTS SHOULD BE SET FORTH.—If a patent be for an improved machine, or an improvement on a machine, (the terms meaning substantially the same,) the patent must state in what the improvement specifically consists, in order, first, to enable the public to enjoy the full benefit of the discovery, when the monopoly has expired, by having it so described on record that it can be constructed; and, second, to put every citizen on his guard, that he may not, through ignorance, violate the law by infringing the rights of the patentee. (*Barrett v. Hall*, 1 *Mason*, 476; *Evans v. Hettick*, 3 *Wash.*, 425, 426.)

The object of the distinction between what is new and what is old is to show distinctly what the patentee claims as his invention. In order to make this distinction, the patentee is not confined to any precise form of words. The more usual form is to state affirmatively what the patentee claims as new; and if he makes use of anything old, to state negatively that he does not claim that thing. The former machine or other thing should be set forth sufficiently to make known what it is that the patentee engrafts his improvement upon; he should then disclaim the invention of the thing thus referred to or described, and state distinctly his improvement as the thing which he claims to have invented. (*Curtis on Patents*, §§ 232, 233; *Kneas v. The Schuylkill Bank*, 4 *Wash.*, 9, 14.)

105. IMPLICATION IN REGARD TO PARTS NOT CLAIMED.

When a patentee specifies what he claims as new, every mechanical part, principle, or combination which he mentions in his specification, but which are not included in his invention as claimed and limited, must, by necessary implication, be considered as admitted to be old or in use before; and the patent is not invalid because the patentee has not in express words particularly stated them to be old, nor described the particular manner of their construction. (*Winans v. New York and Erie Railroad Company*, 1 *Fish.*, 213.)

106. THE INVENTION SHOULD NOT BE DESCRIBED OR CLAIMED AS A MODE, FUNCTION, OR ABSTRACT PRINCIPLE.—Although the invention may be a patentable subject, it may be claimed in such a way as to appear a mere function or abstract principle. In drawing the specification, therefore, care should be taken not to describe the invention as a mode for producing an effect (*vide supra*, p. 220) detached from the machinery by which the effect is produced. A patent must be granted for the machine, and not for a “mode” of operation, principle, idea, or other abstraction. (*Barrett v. Hall*, 1 *Mason*, 476; *Burr v. Duryea*, 1 *Wallace*, 531; *Curtis on Patents*, § 242.)

107. VAGUENESS AND AMBIGUITY OF DESCRIPTION.—The degree of clearness and freedom from ambiguity required in the specification is necessary to enable the Commissioner of Patents to judge whether the matter claimed is new or too broad, and to enable the courts, if the patent should be afterwards contested, to form like judgment, and also to enable the public to understand what the patent is. (*Hogg v. Emerson*, 6 *How.*, 484.) If the specification is wholly ambiguous and uncertain, so loosely defined, and so inaccurately expressed, that the

court cannot, upon a fair interpretation of the words and without vague conjecture of intention, gather what it is, the patent is void for such defect. (*Ames v. Howard*, 1 *Sumn.*, 485.) The inventor should not be permitted to couch his specification in such ambiguous terms that its claims may be expanded or contracted to suit the exigency. (*Parker v. Sears*, 1 *Fish.*, 93.)

A claim may be saved by construction that ought not to have passed the Patent Office in such a form as to make construction necessary to its salvation. The Commissioner ought not to send doubtful claims to the courts. The law makes him the judge in the first instance, and he has no right to turn out his work upon the country botched and blundering, in the hope that some court will patch it up. Many patents never go into the courts, and all patents ought to be so drawn that honest men of ordinary business capacity need not be afraid to deal with them. (*Joseph Thorne ex parte*, *Commissioners' Decisions*, 1869, p. 76.)

The act of 1836, § 6, provided that the applicant should "deliver a written description of his invention or discovery, * * * avoiding unnecessary prolixity," &c. The act of July 8, 1870, § 36, prescribed that the specification shall set forth, "in full, clear, concise, and exact terms," the nature of the invention or discovery. These provisions are necessarily to be enforced by the Commissioner, whose powers are ample, from the nature and necessities of the case, to determine what matter in a specification is or is not essential to a "full, clear, concise, and exact" description of the invention claimed. (*D. M. Smyth ex parte*, *Commissioners' Decisions*, July 23, 1870.)

It certainly is the duty of the Commissioner of Patents

to see to it that, so far as this result is possible of achievement, none but unambiguous claims are sent forth from the office. It is not sufficient that the claim be such as by a bare possibility may be saved through a liberal construction by the courts. (*N. J. Simonds, Commissioners' Decisions*, 1870, p. 25.) The ideal claim is one which admits of but a single interpretation, and that of the most literal character. The closer the Commissioner approximates to this standard in the exercise of his discretionary power in the revision of claims, the more nearly will one prolific source of misunderstanding and controversy be entirely avoided. (*Continental Wind Mill Company ex parte, Commissioners' Decisions*, July 27, 1870.)

108. FRAUDULENT CONCEALMENT, FALSE SUGGESTION.—The statute enacts it as one of the defenses to an action on a patent, “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.” This defense will be made good where it appears that the patentee fraudulently concealed something that he knew to be material, or added something which he knew was not useful, material, or necessary at the time when he prepared his specification. If it was subsequently discovered not to be necessary, his patent will not be affected by it. (*Curtis on Patents*, § 250.)

109. DESCRIPTIVE TITLE.—While the specification is usually, and always ought to be, drawn with the assistance of learned and able counsel, the short descriptive title in the patent is usually suggested by the Commissioner

of Patents. (*Goodyear v. New Jersey Central Railroad*, 1 *Fish.*, 626.)

The title or description given to the invention in the grant is never expected to be specific, but only to indicate the nature and design of the invention. The specification, as its name indicates, must be searched for the exact description of what the patentee claims. (*Sickles v. Gloucester Manufacturing Company*, 1 *Fish.*, 222.)

110. ORDER OF SPECIFICATION.—The following order of the different portions of the specification should be observed: First, the statement of the object or purpose of the invention; secondly, the essence of the same; thirdly, the description of the detail; and, lastly, the claim. It is not absolutely indispensable to the order of the specification for the object and essence of the invention to form distinct sections therein, since they are both comprehended in the “nature” of the invention. (*Spence on the Specification*, 60.)

111. STATEMENT OF THE OBJECTS OF THE INVENTION.—It is usual in the specification, after reciting the title of the invention in the letters patent, to set out by stating its object or purpose. This is intended to show what desideratum the invention is designed to supply in the manufacture to which it refers. (*Ib.*, 61.)

The object or purpose of the invention being in this manner opened up, the natural course seems that it should be followed by a statement of the means which the invention supplies for carrying such object into effect; not a detailed description of such means, but the broad feature or principle involved therein. (*Ib.*, 64.)

This part of the specification forms a kind of epitome of the matter, which is afterwards treated more at length.

It states broadly in what the invention consists as to its practical character. It is here stated what particular construction and arrangement of machinery, or what combinations of materials or processes, are now organized and brought together for the first time in a useful manner. This, indeed, sets forth the essence of the invention, for the idea of a patented invention immediately suggests to the mind some mode of changing the existing machinery, or known materials, or processes by which a beneficial result is produced. (*Ib.*, 65.)

It is evident that great accuracy is here required, since the question, What is the invention? is answered by this part of the specification, taken in conjunction with the claim. While it is eminently desirable that the points here advanced should be strictly practical, it is at the same time highly important to guard against any undue narrowing of the object or purpose of the invention; but in endeavoring to guard against the evil of cramping the essence of the invention, care should be taken not to overstate its limits, which is an equally dangerous error. The right course lies between the two, and consists in a truthful disclosure of the exact nature, essence, or quality of the invention in its application to the object and purposes thereof. (*Ib.*)

112. DESCRIPTION OF DETAIL.—Next to a clear, broad statement of the invention comes a description of the detail, which exhibits the instrumental means of accomplishing the object or purpose of the invention. This description of detail should be adequate to meet the fullness of the expressions employed to characterize the essence of the invention, so that the latter may be clearly seen to have a real existence when carried into practice.

At the same time care should be taken not to cramp its extent as a principle, the object of the description of the detail being to show that the invention really contains an embodied, as distinguished from an abstract, principle. In this view, the machinery or apparatus described, as the instrumental means of carrying the invention into effect, ought to elucidate the structure of a body duly proportioned and adapted to perform its several functions in such a manner as to evince the vitality of the principle to which its action is (in the enunciation of the essence of the invention) alleged to be subservient: the main idea being that such detail presents to our view the organization of matter through which the principle or essence of the invention is realized or seen to act. All undue complexity of description should be avoided, since it may turn out to be more detrimental than mere surplusage, by its suggesting an interpretation, in reference to the subject-matter, foreign to or subversive of the real nature of the same. (*Ib.*, 72.)

113. THE CLAIM.—The claim may be said to be the most important part of the specification. It is here that the essence, principle, or spirit of the invention is stated in the most distinct terms. The whole of the foregoing matter is here summed up and resolved into its one idea. All the previous description of circumstances comes now to be seen only as affording a clue to the right interpretation of this final definition of the essential character of the invention. The claim, rightly understood, is in fact the specification; but, then, in order that it may be rightly understood, reference must be had to the antecedent matter, and it may indeed be said that the intelligibility of the whole specification greatly depends upon

the particular interpretation of the claim which is suggested by such reference. (*Ib.*, 91.)

It is well to calculate upon every objection being raised to the specification that human ingenuity can devise; and accordingly it may be foreseen that the true, distinct nature of the invention is left open to misconstruction by a mere statement of what it is, since it may appear to be not only that, but something more also; (probably of a prejudicial character,) unless guarded from such construction by a suitable negation. This course is particularly advisable when the patent is for a new combination of materials or processes which in their separate form are old or not open to be claimed. (*Ib.*)

114. FORM OF SPECIFICATION FOR A MACHINE BY A SOLE INVENTOR.—

I, William Woodworth, of Poughkeepsie, in the county of Dutchess, and State of New York, have invented certain improvements in planing machines, of which the following is a specification:

Nature and objects of the invention.

The first part of my invention relates to the combination of rotary cutters and feeding-rollers, in such a manner that the said feeding-rollers shall be capable of feeding the lumber to the cutters, and also of effectually resisting the tendency of the cutters to draw the lumber upward towards them; the object of this part of my invention being to reduce the lumber operated upon to a uniformity of thickness, and to give it a planed and even surface upon one side thereof.

The second part of my invention relates to the combination, with feeding-rollers and rotary cutters for planing one of the principal surfaces of the lumber, of rotary matching cutters, so as to form a tongue or groove, or both, upon the edge or edges of the lumber, at the same time that one of its principal surfaces is planed.

Description of the accompanying drawings.

Figure 1 is a side elevation of a machine embodying my invention.
Figure 2 is a plan of the same.

Figure 3 is an elevation, showing that end of the machine which is at the right hand in figure 1.

Figure 4 is a vertical transverse section, showing those parts of the machine which are at the right hand of the line *x x* drawn across figures 1 and 2.

General description.

A is the frame of the machine, which frame should be substantially constructed to resist the vibrations of the operating parts. B is the driving-pulley, which is hung on the main shaft C of the machine, from which latter motion is communicated to the operating parts. D is the shaft of the rotary cutters, by which the lumber is planed. This shaft is made flat upon two of its sides, between its bearings, for the reception of the cutters E E, which are firmly secured to it by bolts *a a*, the holes through these cutters for the reception of these bolts being elongated in the direction of the width of the cutters to allow the necessary adjustment of the cutters. The shaft D is hung in adjustable bearings, by which it may be elevated and depressed to regulate the thickness of the planed lumber. F is a pulley on the shaft D, which receives motion by a belt, G, from the band-wheel H, on the driving-shaft. I I and J J are the feeding-rollers, each pair of which is connected by finger-pinions *b b*, and the upper roller of each pair is hung in spring bearings, which allow it to yield slightly upward to pressure, to adapt it to any differences or inequalities in the thickness of the lumber. The lower roller of each pair is provided with a worm-wheel, *c*, which meshes into a worm or endless screw, *d*, on the shaft *k*, which is propelled by a bevel-wheel, *l*, on the main shaft, working into the bevel-wheel *f* on the shaft *k*.

L and M are cutters hung upon vertical shafts, N and O, one set of these cutters being adapted to form a groove, and the other to form a tongue, upon the edge of the board to be operated upon. These cutters are attached to the shafts in the manner already described with relation to the cutters E E.

The shafts N and O are provided with pulleys, *g g*, and rotation is communicated to them by belts, *h h*, from pulleys, *i i*, on the main shaft; rotation being given in the direction of the arrow to the driving-pulley.

The lumber to be planed is introduced from the end of the machine, which is shown at the right hand in figures 1 and 2, and being grasped by the rollers I I, is by them drawn forward to the cutters E E, which, being rapidly revolved towards the advancing lumber, plane it to the proper thickness; and as the lumber continues to advance, it is grasped by the rollers J J, which aid in the feeding motion and discharge the board after

it has passed the cutters. The upper rollers I and J, being hung in spring bearings, always exert a pressure on the top of the board, and thus prevent its being raised up by the action of the cutters E E.

When the lumber is designed for floors or ceilings, or other purpose for which it is required to be matched, a tongue is formed upon one edge of it and a groove in the other by the cutters L and M, which both revolve towards the advancing board; and these operations are performed at the same time that the upper surface of the board is planed, the whole being done at a single operation.

When the lumber is required to be matched, it should be first reduced to a uniform width, and guided in its introduction into the machine by a gauge, P, attached to the bed Q of the machine.

When the lumber is not to be matched, this gauge and the cutters L and M should be taken off and dispensed with.

Claims.

I claim as my invention:

First—The combination of the cutters E E and the feeding-rollers I I and J J, substantially as and for the purpose hereinbefore set forth.

Second—The combination with the cutters E E and feeding-rollers I I and J J of the cutters L and M, substantially as and for the purpose hereinbefore set forth.

WILLIAM WOODWORTH.

Witnesses: JETHRO WOOD.
OLIVER EVANS.

115. FORM OF SPECIFICATION FOR A PROCESS BY JOINT INVENTORS.—

We, Marion Ellsworth, of Chicago, county of Cook, and State of Illinois, and Joseph R. Shaw, of Indianapolis, county of Marion, and State of Indiana, have invented a certain process for separating smut and all impurities from wheat, of which the following is a specification:

Take of lime, newly slaked and while yet warm, one and a half pounds to each one hundred pounds of wheat. Mix the lime well with the wheat, let it stand one hour, then pass it through a smut-mill in the usual way, and it will be found that all the lime, smut, dirt, and other impurities attached to the wheat, of every kind, and which no smut-mill, without my liming process, will fully separate, will be entirely removed, and the flour will be as white and as sweet as though made from the best of wheat.

We do not claim the smut-mill, or any improvement thereon, or any new chemical quality of lime.

Claim.

We claim as our invention the process of applying lime, when newly slaked and warm, to wheat, before passing the latter through a smut-mill, so as to cleanse the wheat from all impurities, substantially as described.

MARION ELLSWORTH.
JOSEPH R. SHAW.

Witnesses: MAURICE JONES.
HENRY ELIAS.

116. FORM OF SPECIFICATION FOR A COMPOSITION OF MATTER BY AN ADMINISTRATOR.—

Benjamin Browning, deceased, late of Charleston, in the district of Charleston, and State of South Carolina, during his lifetime invented a certain compound called "wool oil," to be used instead of lard, rape-seed, or other oils, in the manufacture of wool.

The nature of the invention of the said Browning consists in mixing olive, lard, or rape-seed oil with a solution of oil of soap dissolved in hot water.

To prepare the wool oil, take a quantity of oil soap of any kind, provided the quality be good, and dissolve the same in hot water, say about thirty pounds of oil soap to thirty gallons of water, or a sufficient quantity of soap to saturate the water. Then take equal parts, by measure, of olive, lard, rape-seed, or any other kind of oil which can be used on wool in the process of its manufacture, and mix it with the preparation aforesaid, to wit, the soap solution, which, after such mixture, is ready to be used on the wool with as beneficial an effect as if pure oil only had been used. This wool oil will not decompose by age, because the oil of soap neutralizes the stearine in the oil; hence there is nothing to decompose. And for the same reason spontaneous combustion cannot be produced.

Claim.

I claim as the invention of the said Benjamin Browning the manufacture or preparation of a compound, which is denominated wool oil, of the ingredients, in the proportions, and for the purposes set forth.

EBENEZER WHITNEY,
Administrator.

Witnesses: JOHN M. THOMPSON.
ARTHUR BARTON.

VI. Drawings and Model.

Sec.	Sec.
117. Drawings attached to the patent as part of specification.	124. Dotted lines.
118. Rules concerning drawings.	125. Model.
119. Copies furnished by the office.	126. Specimen of ingredients.
120. Relation of drawings to the specification.	127. Commissioner may dispense with model.
121. Description of drawings.	128. Requisites of the model.
122. Letters.	129. Model returned in rejected and abandoned cases.
123. Order of letters.	130. Model as evidence.

117. DRAWINGS ATTACHED TO THE PATENT AS PART OF THE SPECIFICATION.—When the nature of the case admits of drawings, the applicant shall furnish one copy, signed by the inventor or his attorney in fact, and attested by two witnesses, which shall be filed in the Patent Office; and a copy of said drawings, to be furnished by the Patent Office, shall be attached to the patent as part of the specification. (*Act of July 8, 1870, § 27.*)

118. RULES OF THE PATENT OFFICE CONCERNING THE PREPARATION OF DRAWINGS.—Drawing must be on thick, smooth drawing paper, sufficiently stiff to support itself in the portfolios of the office. It must be neatly and artistically executed, with such detached sectional views as to clearly show what the invention is in construction and operation. Each part must be distinguished by the same number or letter whenever it appears in the several drawings. The name of the invention should be written at the top, the shortest side being considered as such. This drawing must be signed by the applicant or his attorney, and attested by two witnesses, and must be sent with the specification. Tracings upon cloth pasted on

thick paper will not be admitted. Thick drawings should never be folded for transmission, but should be rolled. (*Patent Office Rules, July, 1870.*)

The following rules must be observed in the preparation of the drawings, in order that they may be photolithographed:

The paper must be thin Bristol board or thick drawing paper, with a smooth or calendered surface. The outlines must be executed in deep black lines, to give distinctness to the print. Pale ashy tints must be dispensed with.

In shading, lines of black ink should be used, and such lines should be distinct and sharp and not crowded. Brush shadings or shadows will not be permitted.

All colors except black must be avoided in the drawings, lettering, and signatures; violet and purple inks must not be used.

No agent's, attorney's, or other stamp must be placed, in whole or in part, within the margin.

The sheet must not be larger than ten inches by fifteen, that being the size of the patent. If more illustrations are needed, several sheets must be used. (*Ib.*)

119. COPIES FURNISHED BY THE OFFICE.—Copies of drawings of patents issued after January 1, 1869, will be furnished to any one at the uniform rate of twenty-five cents per sheet of standard size. (*Ib.*)

Copies of drawings of patents issued prior to January 1, 1869, which can be photo-lithographed, will be furnished at twenty-five cents per sheet, when ten or more copies are ordered. Single tracings of such drawings, or less than ten, will be furnished at the cost of making them. One hundred copies or more will be furnished at \$10 per hundred. (*Ib.*)

The duplicate drawing to be attached to the patent will be furnished by the office without charge, and will be a photo-lithographic copy of the thick drawing. (*Ib.*)

Written or printed copies of any records, books, papers, or drawings belonging to the Patent Office, and of letters patent under the signature of the Commissioner or Acting Commissioner, with the seal of office affixed, shall be competent evidence in all cases wherein the originals could be evidence, and any person making application therefor, and paying the fee required by law, shall have certified copies thereof. And copies of the specifications and drawings of foreign letters patent, certified in like manner, shall be *prima facie* evidence of the fact of the granting of such foreign letters patent, and of the date and contents thereof. (*Act of July 8, 1870, § 57.*)

The officer intrusted to give copies of papers or drawings in patent cases has no concern with the purpose for which asked. The policy of the law rather requires than forbids that copies should be given when applied for. (1 *Opinions Attorneys General, 171.*) And it is the duty of the Commissioner of Patents to give authenticated copies to any person demanding the same, on the payment of the legal fees; and for his refusal an action will lie against him. (*Boyden v. Burke, 14 How., 583.*) But a demand accompanied by rudeness and insult is not a legal demand. (*Ib.*) A subsequent and proper demand cannot, however, be refused on account of prior misconduct or to enforce an apology. (*Ib.*) Copies cannot be taken by third parties; they must be taken by the proper officer and the fees paid therefor. (2 *Opinions of Attorneys General, 456.*)

120. OFFICE OF THE DRAWING AND ITS RELATION TO THE

SPECIFICATION.—The object of annexing drawings is to explain the mode of constructing the subject of the patent. It has been settled that the drawings constitute a part of the specification, when annexed thereto, and may be used to explain the otherwise imperfect description in the specification; so that the description may be partly in writing and partly in drawing; and if, by a comparison of words and drawings, the one will explain the other sufficiently to enable a skillful mechanic to perform the work, and to show that it is the invention claimed, the specification will be sufficient. (*Wilber v. Beecher*, 2 *Blatchf.*, 132.) The drawings need not be mentioned in the specification, but it is sufficient if the patentee puts them and written references on file with the specification. (*Emerson v. Hogg*, 2 *Blatchf.*, 1.) And a drawing, filed sometime after the recording anew of a patent, under § 1, act of March, 1837, is admissible in evidence, but is not to be deemed or taken as part of the specification, nor to be used for correcting any material defect therein. (*Winans v. Schenectady and Troy Railroad*, 2 *Blatchf.*, 299; *Curtis on Patents*, 262.)

If the drawings show an element of the invention which the patentee has not included specially in his claim, it is evidence, nevertheless, that it was a part of his invention, and he or his assignee has a right to incorporate that element in a reissued patent; and an ambiguity in the description may be removed by reference to the drawings, which may be examined to determine the dimensions of the parts, when dimensions become material. (*Swift v. Whissen*.)

The drawing may also be referred to for the purpose of adding something to the specification or claim not spe-

cifically contained or mentioned therein, *e. g.*, to describe or show the existence of rollers in a machine when they are not described in the specification. (*Washburn v. Gould*, 3 Story, 133.) But it need not delineate old machinery connected with the new invention when no change in such old machinery enters into the new invention. (*Emerson v. Hogg*, 2 Blatchf., 9.)

121. DESCRIPTION OF DRAWINGS.—If drawings are used, they should be referred to in the commencement of the specification. When they are disposed in several sheets, it is often advisable to number the “figures” consecutively throughout, and thus to avoid, in references, the use of double numbers, such as “fig. 2, sheet 1,” by enabling the reader to find the drawings from one reference. (*Macgregor, Language of Specifications*, 64.)

122. LETTERS.—The capitals, A, B, C, &c., are usually employed to mark the larger parts of the drawings, and the small letters, a, b, c, &c., are applied to more minute parts. (*Ib.*, 65.)

Parts which are similar in construction, and differ only in position, are frequently denoted by the same letter with an affix, as A¹, A², A³, representing, for example, the spokes of a wheel or pillars of a frame. (*Ib.*, 65.)

123. ORDER OF LETTERS.—With regard to the order of letters, it is not easy to lay down comprehensive rules, without incumbering those who would observe them by confusing restrictions. In some cases, where the actions of each part of the portion of the machine or process under description result immediately from another, and where no particular or lengthy description is required of one or other part in the nature of a digression, the nature

and working of the invention may be described simultaneously. (*Ib.*)

Thus we may describe a portion of a steam engine and the action of its parts as follows: "In fig. 4, A^1, A^2, A^3, A^4 , are the pillars supporting B, the frame. On B are fixed $C^1 C^2$, the bed-plates, carrying $D^1 D^2$, the bearings on which E, the cylinder, oscillates. F is the piston-rod, connected with G, the crank, which has a projection, g , that unlocks at each revolution of the catch h , and thus sets free the rod i and lever k , at the same time moving the eccentric H, so as to work the valve motion l ." (*Ib.*, 66.)

In other cases it is more conducive to a clear understanding of the invention to describe the parts separately first, and to begin another description afterwards, in which their mutual relation is set forth. Thus a brewing apparatus may be described: "In fig. 5, B^1 is one of the two vats and its accompanying parts. The other is similar. The vat holds from one hundred to one hundred and fifty gallons, and the height and diameter are nearly equal. The upper part is hooped by rings $k^1 k^2 k^3$, made of fine-tempered iron, about four inches distant from each other. l is a ball-cock, regulating the supply of liquor from the pipe m , which is turned in a siphon form, and dips into the heating trough n , so as to be covered with four or five inches of water," &c. And after thus describing all the parts we may begin again, thus: "The operation of the machine was as follows: The liquor flows from the pipe m through the trough n , by the ball-cock l , into the vat B^1 ," &c.

The first portion of such an explanation of the drawings is something like a descriptive catalogue of the

parts represented and of the use of such in relation to those immediately adjoining it, while the second portion omits such minute description, on the supposition that it is understood, and proceeds to show the relation of all the parts in the operation of the machine.

When there are many figures, it affords relief to the mind to state at once, in the commencement, what each figure represents, thus: "Figure 1 represents an elevation of my improved loom; fig. 2 is a vertical section of the same, by a plane perpendicular to the axis of the breast-beam; fig. 3 represents the shed when open; and fig. 4 the same when closed; figs. 5, 6, 7, and 8 represent the machinery at each corner of the woof; and fig. 9 the apparatus for inserting the wire, (on a larger scale.)" (*Ib.*, 67.)

124. DOTTED LINES.—Dotted lines are usually referred to when indicating parts represented as behind or covered by those nearer, as well as the paths of points when in motion. Great caution is required when it is endeavored to set forth particular parts of the machine as new parts, by distinguishing them in drawings. (*Ib.*, 68.)

It is to be recollected that the object of the specification is *not to describe the drawings*, but with the drawings *to describe the invention*. (*Ib.*, 68.)

125. MODEL.—In all cases which admit of representation by model, the applicant, if required by the Commissioner, shall furnish one of convenient size to exhibit advantageously the several parts of his invention or discovery. (*Act of July 8, 1870, § 29.*)

126. SPECIMENS OF INGREDIENTS.—When the invention or discovery is of a composition of matter, the applicant, if required by the Commissioner, shall furnish spec-

imens of ingredients and of the composition sufficient in quantity for the purpose of experiment. (*Ib.*, § 28.)

The Commissioner shall cause to be classified and arranged in suitable cases, in the rooms and galleries provided for that purpose, the models, specimens of composition, fabrics, manufactures, works of art, and designs which have been or shall be deposited in said office; and said rooms and galleries shall be kept open during suitable hours for public inspection. (*Act of July 8, 1870, § 13.*)

127. COMMISSIONER MAY DISPENSE WITH MODEL.—An applicant, upon filing his specification and drawings, may submit to the Commissioner the question whether he shall deposit a model or specimen of his invention; otherwise a model will be required in every case, except for designs, where the nature of the invention admits of such illustration. (*Patent Office Rules, July, 1870.*)

128. REQUISITES OF MODEL.—The model must clearly exhibit every feature of the machine which forms the subject of a claim of invention. (*Ib.*)

It must be neatly and substantially made, of durable material. It should be made as small as possible, but not in any case more than one foot in length, width, or height. If made of pine or other soft wood, it should be painted, stained, or varnished. Glue must not be used, but the parts should be so connected as to resist the action of heat or moisture. (*Ib.*)

A working model is always desirable, in order to enable the office fully and readily to understand the precise operation of the machine. The name of the inventor, and of the assignee, (if assigned,) and also the title of the invention, must be affixed upon it in a permanent

manner. When the invention is a composition of matter, a specimen of each of the ingredients and of the composition must accompany the application, and the name of the inventor and of the assignee (if there be one) must be permanently affixed thereto. (*Ib.*)

129. MODEL WILL BE RETURNED IF THE APPLICATION IS REJECTED OR ABANDONED.—The model, unless otherwise disposed of, will be returned to the applicant upon demand and at the expense of the applicant, in all cases, when an application has been rejected more than two years; and, in any pending case of less than two years' standing, upon the filing of a formal abandonment of the application, signed by applicant. (*Ib.*)

Models filed as exhibits, in interference and other cases, may be returned to the applicant, at the discretion of the Commissioner. (*Ib.*)

The Commissioner may restore to the respective applicants such of the models belonging to rejected applications as he shall not think necessary to be preserved, or he may sell or otherwise dispose of them after the application has been finally rejected for one year, paying the proceeds into the treasury, as other patent moneys are directed to be paid. (*Act of July 8, 1870, § 14.*)

130. MODEL AS EVIDENCE.—Under the word patent, used in reference to the description of the thing patented, is included the patent, the specification attached to it, and the model and drawing, which are to be taken together, as making up the description. (*Whitney v. Emmett, Bald., 314.*)

And the model may be resorted to for clearer information respecting the invention described in the specification. (*Hogg v. Emerson, 6 How., 485.*)

Models of machines, about which there is a question, are a kind of evidence which is entitled to the highest credibility, and which, like figures, cannot lie. (*Morris v. Barrett*, 1 *Fish.*, 461.)

Evidence superior to and unaffected by the interest or prejudice of partisans, or by the opinions (the reveries they may often be called) of experts. (*McCormick v. Talcott*, 20 *How.*, 409.)

VII. Oath of Applicant.

SEC.	SEC.
131. To what applicant is to make oath.	136. Papers not to be sworn to in blank.
132. Oath when invention has been patented abroad.	137. Oath not essential to the validity of the patent.
133. Oath by administrator or executor.	138. Oath extends to all described in the specification.
134. Oath in cases of assignment.	139. False suggestion.
135. Before whom oath may be taken.	140. Oath <i>prima facie</i> evidence.
	141. Form of oath by sole inventor.

131. TO WHAT APPLICANT IS TO MAKE OATH.—The applicant shall make oath or affirmation that he does verily believe himself to be the original and first inventor or discoverer of the art, machine, manufacture, composition, or improvement for which he solicits a patent; that he does not know and does not believe that the same was ever before known or used; and shall state of what country he is a citizen. (*Act of July 8, 1870, § 30.*)

The applicant is not required to make oath or affirmation that he is the original and first inventor, but that he believes himself to be so. He cannot know absolutely whether he first invented or discovered the thing for

which he claims a patent, but he may believe that he did; and it is only when he is willing to make oath that he so believes that the law grants him a patent. (*Curtis on Patents*, § 273.)

132. OATH WHEN INVENTION HAS BEEN PATENTED ABROAD.—When application is made for a patent for an invention which has been already patented abroad, the inventor will be required to make oath that, according to the best of his knowledge and belief, the same has not been in public use in the United States for more than two years prior to the application in this country. (*Patent Office Rules*, July, 1870.)

133. OATH BY ADMINISTRATOR OR EXECUTOR APPLYING.—When the application shall be made by legal representatives, the oath or affirmation required to be made shall be so varied in form that it could be made by them. (*Act of July 8, 1870*, § 34.)

134. OATH IN CASES OF ASSIGNMENT BEFORE PATENT OR REISSUE OF A PATENT.—Patents may be granted and issued or reissued to the assignee of the inventor or discoverer, the assignment thereof being first entered of record in the Patent Office; but in such case the application for the patent shall be made and the specification sworn to by the inventor or discoverer; and also, if he be living, in case of an application for reissue. (*Ib.*, § 33.)

135. BEFORE WHOM OATH MAY BE TAKEN.—The oath or affirmation may be made before any person within the United States authorized by law to administer oaths, or, when the applicant resides in a foreign country, before any minister, chargé d'affaires, consul, or commercial agent holding commission under the Government of the United States, or before any notary public of the foreign

country in which the applicant may be. (*Act of July 8, 1870, § 30.*) The oath being attested in all cases, in this and other countries, by the proper official seal of such notary. (*Patent Office Rules, July, 1870.*)

Where an act of Congress requires an oath to be administered, such oath, under the usage of a department, may be administered by a State officer having the power to administer oaths. (*9 Pet., 238; United States v. Winchester, 2 McLean, 135.*)

In all cases in which, under the laws of the United States, oaths or affirmations may be made before a justice of the peace, they may be made before any notary public, and, when certified under his hand and seal, shall have the same effect as if made before such justice. (*Act of September 16, 1850, § 1; 9 Statutes at Large, 458.*)

A seal of a notary may be an impression made by the seal on paper, without wax or any other tenacious substance. (*Orr v. Lacy, 4 McLean, 243.*)

The seal of a notary is recognized in all countries where the law merchant prevails, and it is only necessary that it should conform to the law of the place where the notary acts. (*Ib.*)

Commissioners appointed by any circuit court of the United States may administer oaths in all cases in which, under the laws of the United States, oaths may be made before any justice of the peace or notary public. (*Act of September 16, 1850, § 1; 9 Statutes at Large, 458.*)

136. AN APPLICATION WILL BE REJECTED IN WHICH THE SPECIFICATION IS MADE OUT ON PAPERS WHICH HAVE BEEN SIGNED AND SWORN TO IN BLANK.—In the case of *Reed v. Roberts*, the Commissioner says: "There is reason to believe that the practice of forwarding to clients, to

be signed and witnessed, blank sheets, upon which specifications are afterwards to be written by the agent, and to which the previously prepared petition and oath of the applicant are to be attached, is not yet abandoned by attorneys practicing before this office. It is scarcely necessary to say, that the inventor or applicant who would sign and swear to a piece of blank paper, upon which some one else is, without his supervision, to write a description of an invention, is guilty of an act of moral perjury; and that the attorney or agent who knowingly presents papers so prepared to the Patent Office is guilty of a fraud on the office and the Government. I know of few offenses that may more properly be characterized as 'gross misconduct.' No power of attorney can justify any man in presenting to a public officer a paper purporting to be signed and sworn to by a man who never saw it, and who, at the moment it is presented in his name, is absolutely ignorant of its contents." (*Commissioners' Decisions*, 1869, p. 88.)

In the case of *De la Mar v. Surens et al.* the Commissioner says: "It appears that in December, 1865, they applied to solicitors to make application for letters patent. Blank papers were presented, which they signed and made oath to in blank. Subsequently, in fact not until nearly two years afterwards, these blanks were filled by the preparation of the specification which forms the subject of this application. I have already had occasion to call attention to this practice as mischievous and immoral. It is to be hoped that honorable men will frown upon it and avoid it.

"If the application had remained in this condition after the disclosure of these facts, I should have refused a patent upon it. But the applicants have filed a substitute

specification, properly signed and sworn to. The law requires this to be done before the issue of the patent. It does not declare the application to be a nullity until the oath is furnished. On the contrary, it has been decided that, if the patent issue without any oath, it is not void. (*Whittemore v. Cutter*, 1 Gall., 433; *Crompton v. Bellknapp Mills*, 3 Fish., 536.)

“While such decisions do not authorize the Commissioner to dispense with the proper formalities, they clearly show that the defects may be cured at any time, and that the whole subject of amendment of applications is within his discretion.” (*Commissioner's Decisions*, 1869, p. 94.)

137. OATH NOT ESSENTIAL TO THE VALIDITY OF THE PATENT.—The taking of the oath in due form in an application for a patent is not a condition precedent to the validity of the patent; it is but a pre-requisite to the granting thereof. The statute is directory to the officer superintending the issue of letters patent, and in no degree essential to its validity. (*Whittemore v. Cutter*, 1 Gall., 433; *Dyer v. Rich.*, 1 Metcalf, 191.)

In the case of *Crompton v. Bellknapp Mills* the court say: “The respondent finds among the papers on file in the case at the Patent Office a blank form of oath, with the jurat not signed by any magistrate; and hence he argues the oath was not taken. But the oath may have been taken for all that; and this negative testimony cannot overcome the direct recital of the letters patent that the oath was taken, or the presumption that the requirements of the law were complied with in issuing the patent.

“But, suppose it were so; suppose the oath was not taken; would the patent be void on that account? It was held otherwise by Justice Story in the case of *Whit-*

temore v. Cutter, (1 *Gall.*, 429.) The taking of the oath, though to be done prior to the granting of the patent, is not a *condition precedent*, failing which, the patent must fail. It is the evidence required to be furnished to the Patent Office, that the applicant really believes he is the original and first inventor of the art, &c. If he take this oath, and it turns out that he was not the first inventor or discoverer, his patent must fail and is void. So, if he do not take it, and still he is the first inventor or discoverer, the patent will be supported. It is *prima facie* evidence of the novelty and originality of the invention until the contrary appear. (*Parker v. Stiles*, 5 *McLean*, 60.)*

“So the act says, on payment of the duty, that is, fees, the Commissioner shall make an examination, and, if the invention shall be found useful and important, shall issue a patent. Suppose the fees should not be required or paid; would the patent therefore be void? Yet the one requirement appears to be as much a condition precedent as the other; both directory, not to be dispensed with, but neither involving the validity of the patent when granted.” (3 *Fish.*, 536.)

138. OATH EXTENDS TO ALL IN SPECIFICATION.—The oath of inventor accompanying his application for a patent is to be considered as extending to all described in his specification, no less than the title of his invention. (*Hogg v. Emerson*, 6 *How.*, 482; *King v. Gedney*, *MS. Appeal Cases*, *D. C.*, 1856.)

139. FALSE SUGGESTION.—M, an alien, made oath that he was a citizen of the United States, and obtained a patent. Eight years afterward he surrendered his patent, made oath that he was a citizen of France, paid the

balance of the fee due the Patent Office, and obtained a reissue, which recited (among other things) that said original letters patent were "granted to him upon his belief that he was a citizen of the United States, which belief arose from an ignorance of the laws of the United States:" *Held*, That the original and reissued patents were both invalid: the first because of the false suggestion; the second from want of power in the Commissioner to grant it. (*Child v. Adams*, 1 *Fish.*, 189.)

140. OATH PRIMA FACIE EVIDENCE OF NOVELTY.—When the patent has issued, supported by the oath of the patentee, the burden of proof is cast upon the party who would object, to show that the grant has been improperly obtained by the patentee; because the law presumes, in the first instance, that the patent has been granted upon the proof which the statute requires to be laid before the officers of the Government, and that those proofs were satisfactory. (*Curtis on Patents*, § 472; *Philadelphia and Trenton Railroad Company v. Stimson*, 14 *Peters*, 458.)

The oath forming a part of the letters patent forms a legal ground for the presumption of the novelty and originality of the patentee's claim until the contrary is proved. (*Parker v. Stiles*, 5 *McLean*, 60.)

And a patent issued, grounded on the oath of the patentee, is *prima facie* evidence in an action of infringement. (*Fultz ex parte*, *MS. Appeal Cases*, *D. C.*, 1853.)

141. FORM OF OATH BY A SOLE INVENTOR.—

STATE OF NEW YORK, }
County of Albany. } ss:

Byron Rogers, the above-named petitioner, being duly sworn, (or affirmed,) deposes and says, that he verily believes himself to be the original and first inventor of the improvement in seed drills described in the foregoing specification; that he does not know and does not believe that the same

was ever before known or used; and that he is a citizen of the United States.

BYRON ROGERS.

Sworn to and subscribed before me this 13th day of March, 1889.

SIMON SHALLOW,

Justice of the Peace.

If the applicant be an alien, the sentence "and that he is a citizen of the United States" will be omitted, and in lieu thereof will be substituted "and that he is a citizen of the republic of Mexico," or "and that he is a subject of the King of Italy," or "of the Queen of Great Britain;" or as the case may be.

If the applicants claim to be *joint inventors*, the oath will read "that they verily believe themselves to be the original, first, and joint inventors," &c.

VIII. Classification of Subjects of Invention.

SEC.	SEC.
142. Classification and distribution.	160. Illumination.
143. Agriculture.	161. Leather manufactures.
144. Agricultural products, preparation of.	162. Mechanical engineering.
145. Builders' hardware.	163. Metallurgy.
146. Calorifics.	164. Metal working:
147. Carriages.	165. Navigation.
148. Chemical processes.	166. Paper making.
149. Civil engineering.	167. Philosophical instruments.
150. Clay manufactures.	168. Presses.
151. Compositions.	169. Printing and stationery.
152. Felting and hat making.	170. Railroads and railroad cars.
153. Fine arts.	171. Sewing machines.
154. Fire-arms.	172. Sports, games, and toys.
155. Glass manufacture.	173. Steam and air engines.
156. Grinding mills.	174. Stone working.
157. Harvesters.	175. Surgical apparatus.
158. Household furniture.	176. Textile manufactures.
159. Hydraulics and Pneumatics.	177. Wearing apparel.
	178. Wood working.

142. CLASSIFICATION AND DISTRIBUTION.—The subjects of invention comprised in applications filed in the Patent Office are divided into thirty-six classes, some of which are subdivided into sections, and are distributed for examination among twenty-two principal examiners, each of whom has charge of a particular class or classes. The classification adopted January 1, 1868, is as follows:

143. CLASS I. AGRICULTURE.—Implements and machines for working the soil, including sowing, planting, fertilizing, digging, and gathering roots, &c., grafting, and pruning. (*For Harvesting, see Class XV.*)

144. CLASS II. AGRICULTURAL PRODUCTS, PREPARATION OF.—Implements and machines for preparing produce for market, including threshing, winnowing, protecting, and preserving crops and produce; fences and gates, cribs, granaries, stack-covers, and barns; incubation, culture of bees, care of domestic animals and dairy implements.

145. CLASS III. BUILDERS' HARDWARE.—Door-locks and fastenings, hinges, bell-hanging, and the metallic trimmings of houses, &c., including furniture hardware.

146. CLASS IV. CALORIFICS.—Apparatus for heating, ventilating, and cooking. (*For Blast and Ventilating Fans, Bellows, &c., see Class XVII.*)

147. CLASS V. CARRIAGES.—The construction of wheeled vehicles, including trucks, sleighs, &c. (*For Railroad Cars, see Class XXVIII.*)

148. CLASS VI. CHEMICAL PROCESSES.—Instruments and methods of evaporation, distillation, dyeing, tanning, water-proofing, vulcanizing india rubber, &c., and the manufacture of acids, salts, starch, sugar, alcohol, vinegar, dyes, paints, gas, glue, fats and oils, soaps, manures, &c.

149. CLASS VII. CIVIL ENGINEERING.—The construction of canals, roads, bridges, wharves, docks, sewers, viers, dams, &c., and including military engineering, mining, architecture, masonry. (*For Blasting, &c., see Class XII.*)

150. CLASS VIII. CLAY MANUFACTURES.—The making of bricks, tiles, pottery, porcelain, and machines, tools, and kilns for manufacturing and enameling the same, including lime and cement kilns and peat machines.

151. CLASS IX. COMPOSITIONS.—Artificial substances formed by the mechanical or chemical combination of different ingredients.

152. CLASS X. FELTING AND HAT MAKING.—Methods and apparatus for felting wool, &c., and the making and finishing of hats, caps, &c., including implements and machines for the same.

153. CLASS XI. FINE ARTS.—Methods and applications of music, carving, sculpture, painting, graining, engraving, lithography, wood-cutting, &c., photography, bank-notes, &c., jewelry, including instruments and materials for the same.

154. CLASS XII. FIRE-ARMS.—Implements of war, offensive and defensive, including ammunition and its incidents, and blasting.

155. CLASS XIII. GLASS MANUFACTURE.—Glass furnaces; molding, blowing, cutting, grinding, and polishing glass, and implements and machines for the same.

156. CLASS XIV. GRINDING MILLS.—Machines for breaking, crushing, and grinding materials, including grain-cleaning, flour-bolting, &c. (*For Mill-gearing, see Class XX.*)

157. CLASS XV. HARVESTERS.—Implements and ma-

chines for harvesting and securing crops, &c. (*For Hand Hay-rakes and Pitchforks, see Class II.*)

158. CLASS XVI. HOUSEHOLD FURNITURE.—Articles, implements, and machines for domestic purposes. (*For Culinary Utensils, see Class IV.*)

159. CLASS XVII. HYDRAULICS AND PNEUMATICS.—Machines and apparatus for raising, conveying, and directing water and other fluids, including bottling, and apparatus for controlling and operating air, &c.

160. CLASS XVIII. ILLUMINATION.—Implements and devices for obtaining, preserving, and regulating artificial illumination.

161. CLASS XIX. LEATHER MANUFACTURES.—Machines and tools for working in leather, and the manufacture of boots and shoes, harness, trunks, belting, and including preparatory processes, cutting, splitting, &c.

162. CLASS XX. MECHANICAL ENGINEERING.—General mechanical movements, horse-powers, lifting jacks, hoisting apparatus, mill-gearing, &c. (*For Presses, see Class XXVI.*)

163. CLASS XXI. METALLURGY.—The preparation and treatment of ores, reduction and purification of metals, and processes for amalgamating, electroplating, and metallic coating.

164. CLASS XXII. METAL WORKING.—Methods, machines, and tools for shaping metals; construction of machines and articles of metal; manufactured articles of metal.

165. CLASS XXIII. NAVIGATION.—The construction of vessels, sails, rigging, propelling, and steering apparatus, life-boats, preservers, rafts, &c.

166. CLASS XXIV. PAPER MAKING.—The preparation

of vegetable pulp; and the manufacture of paper, papier maché, pasteboard, &c.

167. CLASS XXV. PHILOSOPHICAL INSTRUMENTS, including mathematical, optical, surveying, and nautical instruments; philosophical apparatus, scales, measures, and instruments of precision generally; registering, computing, signaling, telegraphing, and the application of electricity and magnetism.

168. CLASS XXVI. PRESSES.—Machines for compressing articles and materials. (*For Printing Presses, see Class XXVII.*)

169. CLASS XXVII. PRINTING AND STATIONERY.—Implements and machines for printing, type-setting, and distributing; type-founding and stereotyping, stamping, &c.; machines and tools for ruling, folding, and cutting paper, and for book-binding; labels, advertising cards, writing materials, &c.

170. CLASS XXVIII.—RAILROADS AND RAILROAD CARS. The construction of rails, chairs, switches, &c., and the rolling stock of railroads. (*For Engines of Locomotives, see Class XXXI.*)

171. CLASS XXIX. SEWING MACHINES.—Machines for sewing, stitching, embroidering, &c., and the incidents of such machines.

172. CLASS XXX. SPORTS, GAMES, AND TOYS.—Gymnastic apparatus, appliances for archery, fishing, skating, &c.; plays, games, diversions, and implements and devices for amusement.

173. CLASS XXXI. STEAM AND AIR ENGINES.—Machines for the application of vapor or gas as a motor; boilers and other apparatus for generating the same; governors, steam pumps, and feed apparatus, condensers, &c.

174. CLASS XXXII. STONE WORKING.—Machines and tools for hewing, cutting, and dressing stone, marble, granite, slate, &c.

175. CLASS XXXIII. SURGICAL APPARATUS.—Instruments and apparatus for the mechanical treatment of bodily infirmities, injuries, and diseases, and for assisting natural functions, including artificial limbs.

176. CLASS XXXIV. TEXTILE MANUFACTURES.—The treatment of cotton, flax, hemp, &c.; wool, hair, silk, &c.; and machinery for carding, spinning, cord and rope-making, weaving, knitting, lace-making, and braiding.

177. CLASS XXXV. WEARING APPAREL.—Articles of clothing and methods and machines for making the same, including articles for the toilet, &c. (*For Hats, see Class X; for Boots and Shoes, see Class XIX; for Sewing Machines, see Class XXIX.*)

178. CLASS XXXVI. WOOD WORKING.—Machines and tools for felling trees; hewing, sawing, planing, bending, turning, mortising, dove-tailing, and splitting wood; shingle and stave-cutting; comb-sawing; and the making of blinds, broom-handles, tree-nails, pegs, match-splints, &c.

IX. Examination and Amendment.

SEC.	SEC.
179. Examination of the application.	185. Information, copies, and drawings furnished.
180. Time to complete application.	186. Applicant may demand specific references.
181. Order of examination.	187. Number of amendments allowed.
182. Cases which have precedence.	188. Amendment after appeal to examiners-in-chief.
183. Cases not taken up out of turn.	
184. Reference given upon rejection.	

<p>Sec. 189. Amendment after appeal to the Commissioner. 190. Special amendments. 191. Requirements of amendment. 192. Division of the application may be required. 193. Correction of specification may be required.</p>	<p>Sec. 194. Specification will not be returned for amendment. 195. Attendance of applicant. 196. Examiner cannot decline to take jurisdiction, &c. 197. Executive, ministerial, and judicial functions of examiners. 198. Form of amendment.</p>
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179. **EXAMINATION OF THE APPLICATION.**—On the filing of an application and the payment of the duty required by law, the Commissioner shall cause an examination to be made of the alleged new invention or discovery; and if on such examination it shall appear that the claimant is justly entitled to a patent under the law, and that the same is sufficiently useful and important, the Commissioner shall issue a patent therefor. (*Act of July 8, 1870, § 31.*)

180. **TIME TO COMPLETE AND PREPARE APPLICATIONS FOR EXAMINATION.**—All applications for patents shall be completed and prepared for examination within two years after the filing of the petition, and in default thereof, or upon failure of the applicant to prosecute the same within two years after any action therein, of which notice shall have been given to the applicant, they shall be regarded as abandoned by the parties thereto, unless it be shown to the satisfaction of the Commissioner that such delay was unavoidable. (*Ib.*, § 32.)

181. **APPLICATIONS IN GENERAL EXAMINED IN REGULAR ORDER.**—All cases in the Patent Office are classified and taken up for examination in regular order; those in the same class being examined and disposed of, as far as practicable, in the order in which the respective ap-

plications are completed. (*Patent Office Rules, July, 1870.*)

182. **CASES WHICH HAVE PRECEDENCE.**—When the invention is deemed of peculiar importance to some branch of the public service, and when for that reason the head of some department of the Government specially requests immediate action, the case will be taken up out of its order. These, with applications for reissues and for letters patent for inventions for which a foreign patent has already been obtained, which cases have precedence over original applications, are the only exceptions to the rule above stated in relation to the order of examination. (*Ib.*)

183. **NO ORDER WILL BE GRANTED TO TAKE CASES UP OUT OF TURN.**—In the case of *Hewins v. Spooner* the Commissioner says:

“In the course of the testimony a letter from a solicitor of patents, and one of the parties named above, was put in evidence. I do not see that this letter is relevant to any of the issues of this case, and I have given no weight to it as testimony. I refer to it now, as the publication of this opinion affords me a convenient opportunity of expressing the view which I entertain of its contents.

“The letter was written in February, 1869, in relation to obtaining the second patent upon the Baldwin meter. In this letter the writer says: ‘I have a way now of obtaining the allowance of a patent in six hours after it reaches the Patent Office, by payment of \$75; and I intend to have large fees paid me in excess of this for accomplishing this sort of a thing.’

“The first remark which this statement demands is, that it is false in fact. No solicitor or any other person

has 'a way of obtaining the allowance of a patent in six hours after it reaches the Patent Office.' Cases are received, recorded, and examined in their regular order. They do not reach the examiner until a day or two after they are filed, since they must pass through other rooms, where the fees are received, the cases classified, the application completed, the files made up, and other formal matters attended to. The examiners, under the great pressure of the numerous applications submitted to them, cannot reach a new case under a week or two after it comes into their rooms; so that, under the most favorable circumstances, the thing asserted in this letter is simply impossible. No order is ever granted under the present administration of the office to take cases up out of turn, except as provided in the printed rules, even when inventors have come to Washington to attend to their own applications; and this because it is simply just that those who send their cases to the office, and trust to the operation of its rules, shall not be set aside at the demand of the clamorous few who choose to attend in person, or to demand special privileges by friends or attorneys. This rule is imperative, and it has been faithfully and rigidly adhered to.

"But the writer of this letter intimates that this just rule may be set aside by the payment of money. 'Cases may go through in six hours,' he says, 'by the payment of \$75;' and the advantage of knowing this secret he deems to be so great, that he intends 'to have large fees' paid to him 'for accomplishing this sort of thing.' This insinuation is also false. It is simply a libel upon the Patent Office—a libel which has not the slightest foundation in fact. The writer never had a patent allowed in

six hours after the application reached the Patent Office, and he never paid to the Patent Office or any officer thereof \$75 or any other sum to secure the allowance of cases out of their regular order. Inventors ought to know that if they are foolish and wicked enough to pay their money upon such pretenses, it will never reach the pockets of the Government officials for whom they suppose it to be designed. It goes no further than the unscrupulous attorney or agent, who, assuming to trade upon the supposed corruption of sworn officers, is willing to slander honest men, and destroy public confidence in the administration of public affairs, in order that he may enrich himself at the expense of his credulous client. Instances have come to my knowledge where money has been extorted from clients by agents after patents had actually been allowed, but not yet issued, upon the pretense that it was necessary to bribe the examiner. I know of no case where the money went beyond the solicitor. No practitioner can assert, with truth, that he possesses any facilities by which he is enabled to procure patents in advance of any of his competitors, beyond his knowledge of the forms and routine of the office and his skill and care in the preparation of his cases. To take money from his clients, under the pretense that it is to be used to procure such facilities, is to add theft to falsehood." (*Commissioners' Decisions, September 13, 1870.*)

184. REFERENCE GIVEN UPON REJECTION.—Whenever, on examination, any claim for a patent is rejected, for any reason whatever, the Commissioner shall notify the applicant thereof, giving him briefly the reasons for such rejection, together with such information and references as may be useful in judging of the propriety of renew-

ing his application or of altering his specification; and if, after receiving such notice, the applicant shall persist in his claim for a patent, with or without altering his specifications, the Commissioner shall order a re-examination of the case. (*Act of July 8, 1870, § 41.*)

185. INFORMATION, COPIES, AND DRAWINGS FURNISHED. Upon the rejection of an application for want of novelty, the applicant will be furnished with a specific reference (by name, date, and class) to the article or articles by which it is anticipated. If he desires a copy of the cases so referred to, or of the plates or drawings connected with them, they will be forwarded to him, if in possession of the office, on payment of the cost of making such copies.

When the rejection of an application is founded upon another case previously rejected, but not withdrawn or abandoned, the applicant will be furnished with all information in relation to the previously rejected case which is necessary for the proper understanding and management of his own. (*Patent Office Rules, July, 1870.*)

186. APPLICANT MAY DEMAND SPECIFIC REFERENCES.— In the case of *Ellis and Albertson ex parte*, the Commissioner says: "The applicants state that they have invented a new and useful improvement 'in hoes, rakes, and similar implements,' consisting of a mode of attaching hoes, rakes, and similar implements to their shanks, &c., 'whereby a very firm and secure attachment is obtained, and one which will admit of the hoe, rake, or other tool being set at any desired angle with the shank or handle,' &c. The examiner replies that the devices 'are old and well-known mechanical expedients, such as are employed by artisans in various branches of mechanical pursuits.

Carpenters and others use it for attaching center and other bits to braces; also for adjusting gauges *and other implements.*' This reference was general, and might, upon request of the applicant, have been made more specific. Unchallenged, however, it fully answers the claim." (*Commissioners' Decisions*, 1869, p. 8.)

In the case of *Schneider ex parte*, the Commissioner says: "Applicant claims 'a gilt beading or molding, either around the inner edge of a wooden frame or paper mat, or around the outside of the frame, when spun thereon from a flat metal band, for the purpose substantially as described.' This claim is somewhat awkwardly worded, but it sufficiently appears that the invention claimed is in substance a picture frame, with a metal bead spun upon the inner or outer edge from a flat band. The examiner does not assume to anticipate the invention precisely as claimed, but states the mode of spinning metal beads to be old in other branches of art, and affirms that a frame with a gilt bead is old. I do not understand the declaration of the examiner to go to the extent of declaring that the gilt metal bead is old as applied to picture frames. This construction of his language is expressly denied by the applicant, and if the examiner had taken exception to this denial, he should have furnished a specific reference.

"As the case is presented, I am of the opinion that a picture frame made in the manner described possesses patentable novelty as a new article of manufacture." (*Commissioners' Decisions*, 1869, p. 24.)

187. NUMBER OF AMENDMENTS ALLOWED.—The applicant has a right to amend, of course, after the first rejection; and he may amend as often as the examiner pre-

sents any new references. There must be two rejections upon the claim as originally filed, or, if amended, (in a matter of substance,) *upon the amended claim*, in order to close the case before the primary examiner, and render, in case further action is required, an appeal to the board of examiners-in-chief necessary. (*Patent Office Rules, July, 1870.*)

In the case of *Alice Appleton ex parte*, the Commissioner says: "The applicant complains that after her appeal to the board of examiners-in-chief the case was examined a third time, without her knowledge, and new references were given, which were considered by the examiners-in-chief in forming their judgment of the case. This complaint is sustained by the record, which shows that an appeal was taken to the board of examiners-in-chief January 24, 1868, on which day her counsel filed his brief; that on February 28, 1868, the examiner notified the applicant that the case had been re-examined, and gave new references, one to common household practices and another to the patent of C. E. Kilbourne, August 27, 1867, and that on March 9, 1868, the examiners-in-chief proceeded to judgment in the case.

"This course was undoubtedly irregular. After a first rejection, the applicant may insist upon his claim as presented. If the examiner reaffirms his former decision, without supporting it with fresh references, the rejection is final, and there is no remedy but appeal. But if the examiner gives new references, the applicant has a right to reply to them, or to amend his specification by reason of them, if he desires to do so. When he has appealed, the case is closed before the primary examiner, unless it be regularly remanded, with leave to amend or with di-

rections for further examination. If it be so remanded, the case is re-opened below, and cannot return to the appellate tribunal until the applicant has responded to the new examination, either by amendment or fresh appeal.

“The applicant in this case has therefore a clear right of amendment, in view of the references contained in the third letter of the examiner.

“As the case now stands, I understand the examiner to affirm that the mode already in use of connecting knit goods in common household practice is by a crochet stitch, substantially the same as that of applicant. This applicant does not deny upon the record, and as no means of comparison are furnished, the statement of the examiner must be accepted as true.

“The decision of the board of examiners-in-chief is affirmed, with leave to the applicant to move to remand the case to afford opportunity for amendment.” (*Commissioners' Decisions*, 1869, p. 8.)

188. AMENDMENTS AFTER APPEAL TO EXAMINERS-IN-CHIEF.—When the applicant has appealed the case is closed before the primary examiner, unless it be regularly remanded, with leave to amend, or with directions for further examination. If it be so remanded, the case is reopened below, and cannot return to the appellate tribunal until the applicant has responded to the new examination, either by amendment or fresh appeal; and after the *decision* of the board the primary examiner cannot reconsider the case without an order from the Commissioner. (*Duthie v. Casilear, Commissioners' Decisions*, September 15, 1870.)

189. AMENDMENTS AFTER APPEAL TO THE COMMIS-

SIONER.—When amendments are admitted while an appeal to the Commissioner is pending, the case should be again submitted to the examiner for investigation. (*Perry v. Lay, Commissioners' Decisions, 1869, p. 3.*)

In the case of *Cree ex parte*, the Acting Commissioner says: "So far, then, as the referénces go, it must be judged that applicant is entitled to a patent upon his peculiar bale. The present claim, however, is objectionable. There is no relation between this special construction of bale and the adjustable clasp around the neck of the bottle. The function of the two are entirely distinct, and they cannot properly be claimed in combination. For this reason the decision of the examiners-in-chief is affirmed, but with leave to applicant to amend his claim and specification before the primary examiner." (*Commissioners' Decisions, August 3, 1870.*)

190. SPECIAL AMENDMENTS.—After a second rejection, and at any time before the issue of the patent, the applicant may draw up special amendments and present the same to the Assistant Commissioner, who may, in his discretion, grant leave to make such special amendments, and allow a reconsideration by the examiner in charge. But such amendments shall first be submitted to the examiner, in order that he may indorse thereon his recommendation or objections. (*Patent Office Rules, July, 1870.*)

191. REQUIREMENTS OF THE AMENDMENT.—All amendments of the model, drawings, or specification, in the case of original applications, must conform to at least one of them as they were at the time of the filing of the application; and all amendments of specifications or claims must be made on separate sheets of paper from the original, and must be filed in the manner above di-

rected. Even when the amendment consists in striking out a portion of the specification or other paper, the same course should be observed. No erasure must be made by the applicant. The papers must remain forever as they were when filed, so that a true history of all that has been done in the case may be gathered from them. In every case of amendment the exact word or words to be stricken out or inserted should be clearly specified, and the precise point indicated where any insertion is to be made. (*Ib.*)

192. THE APPLICANT MAY BE REQUIRED TO DIVIDE HIS APPLICATION, (*vide supra*, p. 255.)—In the case of *Lehman ex parte* (*Commissioners' Decisions*, July 23, 1870) the Commissioner says: "Applicant files a specification of twenty-four pages, with nineteen claims, accompanied by four sheets of drawings, constituting an application for a combined agricultural implement, which consists of a combined sower, cultivator, hay-rake, and corn-planter. Some of the claims relate to the combination of these machines, and others to improvements in the individual machines, which have no reference to the combination, and which are capable of use upon any machines of their respective classes.

"Combined implements which use certain parts in common, and so save the expense of duplicating such parts, are becoming more and more common. They are useful, and, if new, are undoubtedly patentable. The combinations themselves, and all the parts which necessarily relate to such combinations, may, no doubt, be included in one patent, so that the subject-matter of the patent, and of all its claims, shall have reference to the *combined machine*.

“When, however, the applicant seeks to include in the same grant independent improvements in the individual machines composing the combination, which improvements have nothing to do with the combination, but are of general application, it is manifest that he is entitled to no more favor than if he attempted to patent improvements upon two independent and uncombined machines under one grant. To permit this would be a fraud upon the Government, and would utterly destroy all attempts at classification. This matter is fully discussed in *Linus Yale's Case*. (*Commissioners' Decisions*, 1869, p. 110.)”

193. EXAMINER MAY REQUIRE CORRECTION AND REVISION OF SPECIFICATION.—The specification, especially if the claim be amended, must be amended and revised, if required by the examiner, for the purpose of correcting inaccuracies of language or unnecessary prolixity, and of securing correspondence between the description of the invention and the claim. (*Patent Office Rules*, July, 1870.)

But the decision of the examiner upon such preliminary or intermediate questions, or refusals to act, twice repeated, or the determination of the questions of title, the number of amendments, the structure of the specification, the correspondence of the drawing with the model or the written description, and the accuracy and completeness of the description, will be re-examined, upon application, by the Commissioner in person, under the rule of the Patent Office which provides that “decisions of examiners upon preliminary or intermediate questions, or refusals to act, twice repeated, will be re-examined, upon application, by the Commissioner in person.” (*Patent Office Rules*, July, 1870; *Krake ex parte*,

Commissioners' Decisions, 1869, p. 100; *Smyth ex parte*, *Commissioners' Decisions*, July 23, 1870; *Lehman ex parte*, *Ib.*, July 23, 1870; *Nichols ex parte*, *Ib.*)

194. SPECIFICATIONS WILL NOT BE RETURNED FOR AMENDMENT.—The office will not return specifications for amendment; and in no case will any person be allowed to take any papers, drawings, models, or samples from the office. If applicants have not preserved copies of such papers as they wish to amend, the office will furnish them on the usual terms. (*Patent Office Rules*, July, 1870.)

195. ATTENDANCE OF APPLICANT NOT REQUIRED.—The personal attendance of the applicant at the Patent Office is unnecessary. The business can be done by correspondence or by attorney. (*Ib.*)

196. EXAMINER CANNOT DECLINE TO TAKE JURISDICTION ON THE GROUND THAT A CASE IS RES ADJUDICATA.—In the case of *D. M. Nichols ex parte*, the Commissioner says: "If the claims in the new application had differed from those previously considered by the board, there would be no doubt of the jurisdiction of the examiner. They were properly before him for some consideration. In the course of his examination he found them to be substantially the same as claims previously rejected by the appellate tribunal. They were not the same claims, but claims in effect the same. The examiner was, therefore, right in saying that the question of their patentability was *res adjudicata*. He should, therefore, have rejected the claims for lack of patentability on the authority of the former decision of the board. The question would then have been appealable to the board, to determine whether, in fact, their objections to the former claims

applied equally to these. I do not think the examiner could properly decline to take jurisdiction." (*Commissioners' Decisions, July 23, 1870.*)

197. EXECUTIVE, MINISTERIAL, AND JUDICIAL FUNCTIONS OF PRIMARY EXAMINERS.—The examiners and the Commissioner act continually in a double capacity. They are executive officers, having certain duties to perform, in relation to every application, of a purely executive character. Some of these duties are purely ministerial, and others, while strictly executive, require the exercise of discretion. Thus, the reception of the application and of the fee, the act of examination, the record of the patent, and the signing and the sealing, are ministerial; while the determination of the question of title, the number of amendments, the structure of the specification, the correspondence of the drawings with the model or the written description, and the accuracy or completeness of the description, are executive acts, although discretion is exercised in their performance. The judgments of the examiner, or of the Commissioner, upon what may be called the merits, the questions of patentability, of novelty, and utility, are judicial acts; and it is when sitting to determine these and questions of like character that these officers become *quasi* judges. The board of examiners-in-chief, on the other hand, act only in an appellate and judicial capacity. They are not, by law, vested with any executive duties, except as they may be included in "such other duties as may be assigned to them by the Commissioner." From the judicial acts of the examiner an appeal lies to the board; from his executive acts the appeal is to the Commissioner. An appeal from his decision upon the merits does not

carry with it his action upon executive matters. (*John A. Krake ex parte, Commissioners' Decisions, 1869, p. 100.*)

198. FORM OF AMENDMENT.—

WASHINGTON, D. C., July 20, 1869.

To the Commissioner of Patents:

In the matter of my application for letters patent for an improvement in wagon brakes, I hereby amend my specification, by striking out all between the ninth and twentieth lines, inclusive, on page 3, by inserting the words "*connected with*" after the word "*and*," in the first line of the second claim, and by striking out the third claim and substituting therefor the following:

3. The combination of the self-acting brake C, pin A, and slotted flanges D, substantially as described and for the purposes set forth.

HENRY RICHARDS,
By MILTON MEADOWS,
His attorney in fact.

X. Renewal of an Application upon which the Final Fee has not been Paid.

SEC.	SEC.
199. Consequence of neglecting to pay the final fee.	202. New specification, &c., not required.
200. Who may petition for renewal.	203. When an interference will be declared.
201. Renewed application to be made within two years.	204. Form of petition for renewal.

199. CONSEQUENCE OF NEGLECTING TO PAY THE FINAL FEE WITHIN SIX MONTHS FROM NOTIFICATION OF ALLOWANCE.—Every patent shall date as of a day not later than six months from the time at which it was passed and allowed, and notice thereof was sent to the applicant or his agent; and if the final fee shall not be paid within that time the patent shall be withheld. (*Act of July 8, 1870, § 23.*)

The final fee on issuing a patent must be paid within

six months after the time at which the patent was allowed and notice thereof sent to the applicant or his agent. And if the final fee for such patent be not paid within that time, the patent will be forfeited, and the invention therein described become public property, as against the applicant therefor, unless he shall make a new application therefor within two years from the date of the original allowance. (*Patent Office Rules, July, 1870.*)

200. WHO MAY PETITION FOR RENEWAL OF THE APPLICATION.—Any person who has an interest in an invention or discovery, whether as inventor, discoverer, or assignee, for which a patent was ordered to issue upon the payment of the final fee, but who has failed to make payment thereof within six months from the time at which it was passed and allowed and notice thereof was sent to the applicant or his agent, shall have a right to make an application for a patent for such invention or discovery, the same as in the case of an original application. (*Act of July 8, 1870, § 35:*)

201. RENEWED APPLICATION TO BE MADE WITHIN TWO YEARS FROM NOTIFICATION OF ALLOWANCE.—The second application must be made within two years after the allowance of the original application. But no person shall be held responsible in damages for the manufacture or use of any article or thing for which a patent, as aforesaid, was ordered to issue prior to the issue thereof. (*Ib.*)

202. NEW SPECIFICATION, &c., NOT REQUIRED.—It is not necessary for the applicant to file a new specification, oath, model, or drawing, on petitioning for the renewal of an application upon which the final fee has not been paid. The proper course will be to file a petition, stating

the date of the filing of the original application, and the date of the notification of allowance, and praying that the original specification, oath, drawings, and model be used as a part of the renewed application.

203. **WHEN AN INTERFERENCE WILL BE DECLARED.**—Upon considering the renewed application, if it be found that applications have been made, or unexpired patents have been granted, in which the device in controversy has been described or claimed, an interference will be declared between such applications or patents and such renewed application, in order that an opportunity may be given for the production of proof of abandonment or two years' public use, if either exist. (*Patent Office Rules, July, 1870.*)

204. **FORM OF PETITION FOR THE RENEWAL OF AN APPLICATION.**—

To the Commissioner of Patents:

Your petitioner represents that on May 8, 1868, he filed an application for letters patent for an improvement in churns, which application was allowed July 7, 1868, but that he failed to make payment of the final fee. He now makes renewed application for letters patent for said invention, and prays that the original specification, oath, drawings, and model may be used as a part of this application.

SIMON SLOTHFUL.

XI. Renewal of Withdrawn and Rejected Applications filed prior to July 8, 1870.

Sec.

205. Consequences of neglect to renew application.

206. New application, formal renewal.

Sec.

207. Applications in interference.

208. Intent of the act.

209. Petition to be accompanied by a demand for action.

205. **CONSEQUENCES OF NEGLIGENCE TO RENEW APPLICATION.** When an application for a patent has been rejected or

withdrawn prior to the passage of the act of July 8, 1870, the applicant shall have six months from the date of such passage to renew his application or to file a new one; and if he omit to do either, his application shall be held to have been abandoned. Upon the hearing of such renewed applications abandonment shall be considered as a question of fact. (*Act of July 8, 1870, § 35.*)

206. **NEW APPLICATION, FORMAL RENEWAL.**—The proper course will be, where the application has been withdrawn, to file a new application; and where it has been rejected but not withdrawn, to file a formal renewal, with or without amendment, as the status of the application with reference to previous action may require. (*Patent Office Rules, July, 1870.*)

207. **WHEN RENEWED APPLICATIONS WILL BE PLACED IN INTERFERENCE.**—Upon considering such renewed applications of either class, if it be found that applications have been made or unexpired patents have been granted in which the device in controversy has been described or claimed, an interference will be declared between such applications or patents and such renewed application, in order that an opportunity may be given for the production of proof of abandonment or two years' public use, if either exist. (*Ib.*)

208. **INTENT OF THE ACT.**—In the case of *Millspaugh ex parte* the Commissioner says: "In this case the attorneys for applicant file the following paper:

"In the matter of," &c., "filed September 20, 1869, and rejected by the board of examiners June 25, 1870, we beg leave to renew the same, in accordance with act of Congress relating to patents approved July 8, 1870, and to retain model, drawing, and papers heretofore filed, to

constitute the renewed application. The case is respectfully submitted to the board of appeal for their further action."

This paper is similar to a large number filed by various attorneys, except that the last paragraph is usually omitted. Some seem to suppose that the effect of such a request is to begin the case *de novo*, while others imagine that by filing such a paper they "keep the case alive" for two years, during which time they may or may not take or request further action. Both opinions are errors. The act of July 8, 1870, § 35, was intended for no such purposes. The sole intent of the second proviso of that section is, 1. To permit withdrawn cases to be refiled, in which case, of course, they begin *de novo*; and, 2. To permit rejected cases to be renewed, that is, to be revived and continued under the new law. (*Commissioners' Decisions, September 21, 1870.*)

209. PETITION TO BE ACCOMPANIED BY A DEMAND FOR ACTION.—"The prayer for renewal is a prayer for further action, and the effect of it is simply to demand such action as shall set the case in motion. Section 32 provides 'that all applications for patents shall be completed and prepared for examination within two years after the filing of the petition, and in default thereof, or upon failure of the applicant to prosecute the same within two years *after any action therein*, of which notice shall have been given to the applicant, they shall be regarded as abandoned by the parties thereto,' &c. It will be observed that the two years run, not from action by the applicant, but action 'of which notice shall have been given to the applicant,' *i. e.*, action by the office.

"The petition for renewal is but a part of the action nec-

essary on behalf of the applicant to revive his case. To complete that action and make it effectual his petition must be accompanied with a specific demand for such proposed action as the status of the case may require. Thus, if the case has been but once rejected, the petition for renewal must be accompanied by a demand for a second examination, or by an amendment. If it has been twice rejected, the petition will accompany the appeal or the prayer to the Commissioner for further leave to amend. If it has been rejected by the board, the petition must be filed with the appeal to the Commissioner. If it has been rejected by the Commissioner, there can be no renewal, unless an appeal to the supreme court of the District of Columbia has been taken.

“Petitions for renewal do not differ, in this respect, from the petition for an original or reissued patent, or for the renewal of an application upon which the final fee has not been made for an extension or for an appeal. In all of these cases action is proposed or requested, which it is expected the office will proceed to make with reasonable diligence.

“I hold, therefore, that the filing of a naked petition for the removal of a rejected application does not of itself renew the case; and that if such petition is not accompanied or followed up by a demand for the action appropriate to the next stage beyond that at which the renewal finds it, the case will, after January 8, 1871, be treated as abandoned.” (*Ib.*)

XII. Appeal to Examiners-in-Chief.

<p>Sec. 210. Duties of examiners-in-chief. 211. Résumé of the laws constituting the board. 212. Examiners to be governed by decisions of the Commissioner. 213. When applicant may appeal. 214. Judicial and executive acts. 215. Adverse decisions only revised. 216. No rehearing allowed except upon order of Commissioner. 217. Primary examiner cannot reconsider without Commissioner's order.</p>	<p>Sec. 218. Case may be remanded for further examination. 219. Delegated discretion. 220. Commissioner may withhold patent after favorable decision. 221. Petition to set forth reasons of appeal. 222. Form of appeal from examiner. 223. Form of appeal from examiner in charge of interferences.</p>
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210. DUTIES OF EXAMINERS-IN-CHIEF.—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; and, when required by the Commissioner, they shall hear and report upon claims for extensions, and perform such other like duties as he may assign them. (*Act of July 8, 1870, § 10.*)

211. RÉSUMÉ OF THE LAWS CONSTITUTING THE BOARD OF EXAMINERS-IN-CHIEF.—Examiners are first named in the act of 1836, in which provision is made for the appointment of one who is called “an examining clerk.” Their duties are nowhere mentioned in the law, except as they may be supposed to be alluded to in the seventh section of the same act, where it is said that “the Commissioner shall make, or cause to be made, an examina-

tion of the alleged new invention or discovery, and if, on any such examination, it shall not appear to the Commissioner, &c., if the Commissioner shall deem it to be sufficiently useful and important, it shall be his duty to issue a patent therefor."

Prior to the passage of the act of 1861, a board of appeal, consisting of three principal examiners, had been appointed by the Commissioner for the purpose of relieving him from the labor of hearing appeals, whose decisions, when affirmed or reversed by the Commissioner, became the action of the office. It was to make permanent provision for this board that the act of 1861 was passed.

That act provides: "That for the purpose of securing greater uniformity of action in the grant and refusal of letters patent, there shall be appointed by the President, by and with the advice and consent of the Senate, three examiners-in-chief, at an annual salary of \$3,000 each, to be composed of persons of competent legal knowledge and scientific ability, whose duty it shall be, on the written petition of the applicant for that purpose being filed, to revise and determine upon the validity of decisions made by examiners when adverse to the grant of letters patent; and also to revise and determine in like manner upon the validity of the decisions of examiners in interference cases and when required by the Commissioner in applications for the extension of patents, and to perform such other duties as may be assigned to them by the Commissioner; that from their decisions appeals may be taken to the Commissioner of Patents in person, upon payment of the fee hereinafter prescribed; that the said examiners-in-chief shall be governed in their action by

the rules to be prescribed by the Commissioner of Patents.”

Except as to the manner of their appointment, this is substantially the old appeal board. These new officers are made, by express provision of law, subordinate to the Commissioner; are required “to perform such other duties as may be assigned to them” by him, and are required to be governed in “their action,” upon all the subjects committed to them, both by the law and the Commissioner, “by the rules to be prescribed” by him. (*Hull ex parte, Commissioners' Decisions*, 1869, p. 68.)

212. EXAMINERS-IN-CHIEF TO BE GOVERNED BY THE RULES AND DECISIONS OF THE COMMISSIONER.—It follows, therefore, that the board of examiners, like all other examiners, are controlled in their action by the rules of the office, or any rules of practice announced by the Commissioner, or any construction of such rules or of the law, made by him, as may be of general application.

Indeed, in no other way can “uniformity of action” be secured. If the board are to affirm to-day and reverse to-morrow under the same state of facts—if they are to follow the Commissioner in this decision, and to differ from him in that—it is manifest that, so far from securing uniformity, they would soon plunge the office into inextricable confusion. Their true office is, while relieving the Commissioner of the mass of appeals which come from the primary examiners, so to deal with those appeals as to enforce upon the examiners his decisions and his administration of the office, and thus secure uniformity. They are not to make law for the Commissioner; but, both by the appeal allowed to him from

them, and by the express provisions of the act, he is to make law for them.

It will be noticed that appeals may be taken from the primary examiner to the board of examiners-in-chief from decisions "when adverse to the grant of letters patent." No such provision is made as to appeals to the Commissioner from the board. Such appeal is "from their decisions." In both instances the law is silent as to decisions either by the primary examiners or the examiners-in-chief, when such decisions are not adverse to the grant of letters patent.

Such decisions undoubtedly remain unaffected by the act of 1861. They remain, as they always were, under the control of the Commissioner, as the executive head of the office. He prescribes the duties of the examiners. He is himself an examiner, under the act of 1836, and by the terms of that act it is made his duty to "superintend, execute, and perform all such acts and things touching and respecting the granting and issuing of patents for new and useful discoveries, &c., as are herein provided for, or shall hereafter by law be directed to be done and performed." He countersigns the patent, and after the indorsement of the examiner upon it touching his examination, the Commissioner, or his agent, must authorize its issue, and cause the seal of the office to be affixed to it. (*Ib.*)

213. WHEN APPLICANT MAY APPEAL.—Every applicant for a patent or the reissue of a patent, any of the claims of which have been twice rejected, and every party to an interference, may appeal from the decision of the primary examiner, or of the examiner in charge of interference, in such case, to the board of examiners-in-chief, having

once paid the fee for such appeal provided by law. (*Act of July 8, 1870, § 46.*) But there must be two rejections upon the claim as originally filed, or, if amended, (in a matter of substance,) upon the amended claim. (*Patent Office Rules, July, 1870.*)

214. FROM THE JUDICIAL ACTS OF THE EXAMINER AN APPEAL LIES TO THE BOARD; FROM HIS EXECUTIVE ACTS THE APPEAL IS TO THE COMMISSIONER.—The examiners and the Commissioner act continually in a double capacity. They are executive officers, having certain duties to perform, in relation to every application, of a purely executive character. Some of these duties are purely ministerial, and others, while strictly executive, require the exercise of discretion. Thus, the reception of the application and of the fee, the act of examination, the record of the patent, and the signing and the sealing, are ministerial; while the determination of the question of title, the number of amendments, the structure of the specification, the correspondence of the drawings with the model or the written description, and the accuracy or completeness of the description, are executive acts, although discretion is exercised in their performance. The judgments of the examiner, or of the Commissioner, upon what may be called the merits; the questions of patentability, of novelty, and utility, are judicial acts; and it is when sitting to determine these and questions of like character that these officers become *quasi* judges. The board of examiners-in-chief, on the other hand, act only in an appellate and judicial capacity. They are not by law vested with any executive duties, except as they may be included in “such other duties as may be assigned to them by the Commissioner.”

From the judicial acts of the examiner an appeal lies to the board; from his executive acts the appeal is to the Commissioner. An appeal from his decision upon the merits does not carry with it his action upon executive matters. (*Krake ex parte, Commissioners' Decisions, 1869, p. 100.*)

Decisions of examiners upon preliminary or intermediate questions, or refusals to act, twice repeated, will be re-examined, upon application, by the Commissioner in person. (*Patent Office Rules, July, 1870.*)

In the case of *Wilkinson ex parte* the Commissioner says:

“This application was rejected by the examiner because, in his opinion, the device was ‘essentially deficient in patentable invention.’ Thereupon the applicant demanded a reference or a patent. The examiner gave no reference and refused a patent. Applicant reiterates his demand for a reference under rule 37, and appeals to the Commissioner in person under rule 45.

“He has mistaken both his rights and his remedy.

“Rule 37 provides, that ‘upon the rejection of an application for want of novelty, the applicant will be furnished with a specific reference,’ &c. The present application is not rejected ‘for want of novelty,’ but for want of ‘patentable invention.’ This objection may concede that the thing is new, but denies that invention was involved in its production. No reference is required either by rule or by law to establish this ground of rejection.

“But, if it were so, the remedy is by appeal to the board of examiners-in-chief, and not to the Commissioner in person. This is not a decision upon an intermediate question, nor is it a refusal to act. The examiner’s decision

goes to the merits of the application and is adverse to the applicant. If the examiner gives a general reference, and the applicant is entitled to a specific reference, and demands it, the remedy is by appeal to the board, who would then hold the general reference to be no reference, or an insufficient one, and reverse the decision of the examiner in rejecting the application. The case does not differ in principle from one in which a specific reference is given, which the applicant claims to be insufficient to form the basis of a judgment of rejection.

“The appeal is dismissed.” (*Commissioners’ Decisions, March, 1870.*)

215. ADVERSE DECISIONS ONLY REVISED.—The examiners-in-chief will consider the case as it was when last passed upon by the primary examiner, merely revising his decisions so far as they were adverse to the applicant. (*Patent Office Rules, July, 1870.*)

In the case of *Rockwell ex parte* (motion) the Commissioner says:

“In this case, which has been rejected by the board of examiners-in-chief, on appeal from the primary examiner, the applicant asks that the case may be remanded to the board, with instructions to reconsider their action.

“The grounds upon which this motion is based, as stated by the attorneys for applicant, are, 1. ‘That the action was not made according to law; and, 2. That an entire misapprehension existed in respect to the two articles. The examiner gave a reference which he considered to be an equivalent for our client’s invention, thereby affirming its patentability, but denying its novelty. The board, on the other hand, refuse the patent on the ground that the improvement lacked “inventive genius,” thereby

denying its patentability, which was not in controversy. It by this means reversed the affirmative, and not the adverse decision of the primary examiner, while it thus, of course, contravened the law entirely. (See case *Stephen Hull, Commissioners' Decisions*, 1869, p. 69.) Again, there is evidently a total misunderstanding with regard to the correspondencies which exist between the two devices.'

"The applicant mistakes the meaning of the words 'adverse decision,' as applied to the action of the primary examiner. He seems to suppose that these words are equivalent to 'reason for adverse decision' or 'adverse reason' of the examiner; whereas, in truth, they refer to the conclusion or action of the examiner, and not the reason which he gives for it. The decision of the examiner is, that one or all of the claims of the application are rejected. This is adverse to the applicant, as it denies his right to a patent. He appeals from the fact of rejection, not from the theory upon which it is based. That may be wrong, but the action itself may be right, and the board, seeing that what the examiner has done or decided is right, must necessarily affirm his decision, although they may be of the opinion that he could have given a much better reason for it.

"The appeal in this respect is analogous to the ordinary appeals in equity cases. Nothing is more common than for the court above to affirm the judgment of the court below, upon grounds quite different from those taken by the tribunal of original jurisdiction; sometimes, indeed, the appellate tribunal expressly repudiates the reasons for the decision rendered below, and yet affirms the decision or judgment itself.

“If, therefore, an appeal be taken to the board, it is from the decision, action, judgment, or order of the examiner, and not from his reasoning. The board will look into the case to see if upon the record the decision or action be right, although the reason assigned for it be utterly untenable. If, as in the present case, the application be rejected for want of novelty, and the examiners-in-chief find that the alleged invention does not involve a patentable subject-matter, they may properly affirm the decision of the primary examiner, which decision was, that a patent could not be granted.

“This rule, however, applies only to questions presented by the record which are appealable to the board, by which I refer to questions arising upon the merits of the application. The examiners-in-chief are not to make examinations for the purpose of procuring new testimony upon which to found new reasons, nor are they to reverse or affirm the decision of the primary examiner upon matters of executive detail. If, for example, the claims be rejected for want of novelty, and the board discover upon examination that no oath has been made, or that the specification is not witnessed, they are not to affirm the decision rejecting the application, especially if they find the merits of the case with applicant. The proper course, in such case, is to refer the case to the examiner, suggesting the informality, in order that it may be corrected before any decision is made upon the merits.

“As to the second ground upon which a reconsideration is asked, to wit, that the examiners-in-chief misapprehended the character of the application, or of the reference; that can only be reached by appeal to the Commissioner. That mode of review is expressly pro-