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BY

GEORGE S. ELY,
Principal Examiner, Division Thirty-one,
U. S. Patent Office

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GEORGE S. ELY,

Principal Examiner, Division Thirty-one,
U. S. Patent Office.

Perhaps it would be well to preface my remarks with the statement that some things I shall say are not, as far as I am aware, supported by any court decisions, and such things must be taken, therefore, as conclusions reached as the result of a long experience in dealing with the particular questions considered, rather than as dicta sanctioned by the authority of some judge.

The provision of the Constitution under which Congress was granted authority to enact the Patent Law, gave it the power to pass laws which should secure, for limited times, to authors and inventors, the exclusive rights to their writings and *discoveries*.

It is generally the practice to speak of the Patent Laws as designed to protect *inventions*, but the language of the Constitution refers to *discoveries*. Are the two terms synonymous? Or is there a distinction between them? As a matter of fact patents have been granted and rightly so, for both *inventions* and *discoveries*, and most writers have made no particular distinction between the terms. However, the two terms, "invention" and "discovery" have quite distinct meanings and should be distinguished.

Without attempting to define what constitutes an invention, it will be of interest to differentiate the two words, and I have found no writer who has so satisfactorily discussed the difference between the two words as Merwin in his "Patentability of Inventions."

"Most patents," he writes, "are granted for inventions strictly. The patentee has invented or created a device, contrivance or mechanism, which operates according to known laws,

or depends upon familiar properties of matter. He has found out nothing new in nature but he has created a new way of using or combining familiar materials, or has caused a force in common use to operate in a new situation or for a new purpose."

The discoverer, however, as opposed to this, has found out some new law of nature or some hitherto unknown property of matter which he applies to some useful purpose. If there be a discovery, there need be no inquiry as to how it was made or how much ingenuity was needed to embody the discovery in mechanism productive of a new and useful result.

The hot blast case, so familiar to every one, is in point. Upon the discovery that a hotter fire would be produced in a furnace if the blast of air to support combustion were preheated, no ingenuity whatsoever was requisite to devise some mechanism to make the discovery available for practical purposes. Or, to cite a later case, the courts held a celluloid top for a salt shaker involved something more than a non-patentable substitution of material, and the patent was sustained because of the *discovery* of the fact that a film of moisture does not attach itself to celluloid as it does to metal or glass, with the useful purpose that this hitherto unknown characteristic of celluloid prevented the caking of salt on the top so annoying in damp weather in the case of glass or metal tops. (Hogan vs. Westmorland Specialty Co., 163 Fed. Rep., 289.) It is of interest to note that this alleged property of celluloid on the strength of which the higher court sustained the patent, appears to have been the discovery of the plaintiff's attorney, long after the patent was granted. There is not the slightest hint of any such property of celluloid in the specification of the patent; as far as the record shows this peculiar property of celluloid was wholly unknown to the patentee. I shall have occasion to refer to this later.

The court said in *Colgate vs. Gold Stock Telegraph Co.*, 4 Banning and Arden:

"The gist of the invention is the *discovery* of the fact that gutta-percha is a non-conductor of electricity."

Mr. Justice Grier in *Corning vs. Burden*, 15 Howard, 252, said:

“A new process is usually the result of a discovery, a machine of invention.”

Again quoting from Merwin, in contrasting inventions and discoveries, he says:

“The courts never contrast ‘discovery’ as they do ‘invention’ with the ‘skill of the workman.’ ”

The determination of the patentability of an invention is often a troublesome matter and is one regarding which different minds do not agree. In *Pearl vs. The Ocean Mills*, Judge Shepley said:

“No more difficult task is imposed upon the court in patents cases than that of determining what constitutes invention and of drawing the line of distinction between the work of the inventor and the constructor.”

While, as stated, no attempt is made to define an invention, the distinction between the words “invention” and “discovery” is important because quite a considerable portion of the work in the chemical divisions of this Office relates to discoveries rather than to inventions. As before mentioned, if a patent be asked for a discovery, this Office need not concern itself with an inquiry as to the mental process by which the discovery was made. A discovery may be purely accidental, as when a certain manufacturer of nitroglycerine accidentally spilled some of it upon sand by which it was absorbed, which, to his surprise, exploded, upon the application of a flame, instead of burning, as he expected.

It is related that in the winter of 1861-62 a certain distiller of oil built a fire under his still and went off to dinner expecting to return in about half an hour. While at dinner he was taken with a fit, so that it was some four or five hours before he returned. To his great surprise, he found on his return, that the gravity of the distillate then coming from the condenser, was lower than it was before he left for dinner. This was the discovery of the

cracking process in the distillation of mineral oil, in accordance with which heavy oils can be broken up into lighter ones.

Again, a patentable discovery may be the result of a long, patient series of experiments, as when the charred fibre of the bamboo was found to constitute an excellent carbon filament for an incandescent electric light.

It seems that this discussion as to the difference between an *invention* and a *discovery* is not merely an academic one but on the contrary is of considerable importance in the decision as to whether or not a claim should be allowed.

If the Examiner is satisfied that a real discovery has been made and the means or method of making the discovery of service in the arts have been devised, the claim should be allowed, however obvious such means or method may have been, once the discovery has been made. There need be, as stated, no inquiry as to how the discovery was made, and it may be doubtful whether an apparent unimportance of the discovery would justify a rejection. It is impossible to foresee what may result from an apparently trivial discovery.

In those divisions of the Office which treat applications for patents concerned with chemical industries, a considerable proportion are purely mechanical in character: in such applications nothing is involved which is either distinctly chemical or physically chemical in character. Those applications which are purely mechanical in character, it is not the object of this paper to treat. The same questions come up for adjudication in them that occur in the mechanical inventions treated by other examining divisions. The purpose of this paper is to set forth, in a more or less desultory manner, some of the problems which are peculiar to applications for patents for chemical inventions or discoveries.

In the first place, it may be noted that a broad distinction exists between chemical discoveries and inventions which are wholly mechanical. The distinction, which is far-reaching in its effects, is this: No prophesy is possible in chemical discoveries such as is frequently possible in purely mechanical inventions. From an inspection of the drawings and a perusal of the speci-

fication in the majority of applications for purely mechanical inventions, it is often safe to say that the invention is operative. On the contrary, it is never possible to foretell with certainty, that any untried chemical process is operative. For example, it might be presumed that because caustic potash will give a certain result, it would be safe to infer that caustic soda would have the same effect, and would therefore be an exact equivalent. But such an inference would not be safe; an actual trial or demonstration would be necessary to prove the inference. In many cases the two would be equivalent but not in all. Both, for instance, will saponify fat but the one yields a soft soap and the other a hard soap.

One element or agent is never universally the equivalent of another. Whether two elements or agents are equivalents depends on the particular problem. This is true, though it is not always recognized in mechanics. A spring is often the equivalent of a weight but there are cases where they act so differently that the substitution of one for the other involves patentability.

The courts have repeatedly recognized the futility of an attempt to prophesy or foretell in chemical procedure. Thus in *Stevens vs. Keating*, 2 Webster, 181, the judge said:

“I may say that I do not quite go along with the doctrine of equivalents in chemistry, applied in the same way as in mechanics. . . . Although you can predict with confidence in mechanics, in some instances . . . in chemistry you almost entirely fail. You can not, because sulphuric acid will succeed, tell at all that nitric acid will succeed or that any other acid will succeed, until you have tried. . . . You can not anticipate the result.”

In *Tyler vs. Boston*, 7 Wallace, 327, the court said:

“Now a machine, which consists of a combination of devices, is the subject of invention and its results may be calculated, *a priori*, while a discovery of a new substance by means of chemical combinations of known materials is empirical.”

In *Hicks vs. Kelsey*, 18 Wallace, 670, the court said:

“And in some compositions of matter, a different ingredient changes the identity of the compound, whereas an iron bar in place of a wooden one and subserving the same purpose does not change the identity of the machine.”

To the same effect was the decision in *The National Filtering Co. vs. Arctic Oil Co.*, 8 Blatchford, 416, in which a patent for filtering Coal Oil or Petroleum through bone black was sustained, notwithstanding the fact that the same filtering agent had been employed in filtering other liquids, even vegetable oils.

The gist of the matter appears to be, as suggested in *Tyler vs. Boston* (supra), that many of the meritorious inventions in chemical lines are based upon discoveries. Patents granted thereon are founded on schemes that render the new discovery available for useful purposes, rather than upon an ingenious (or “surprising”) combination of mechanisms productive of some new mechanical result or of some old mechanical result in a new or improved manner.

If this is the fact, and if, as stated, it is impossible to foretell what will happen in a chemical procedure until it has been tried, why then, it may be asked, should not every applicant in chemistry be granted a patent unless the claims be exactly met? And does the doctrine of equivalents obtain at all in determining patentability in applications in chemical lines?

The best answer to these queries, and perhaps the only one, is based upon the doctrine of *reasonable expectation*. This doctrine is very well stated by Commissioner Duell in *Bender vs. Hoffman*, 85 O. G., 1737. The alleged invention involved in that case was for an alkylated dye stuff, and the decision, in substance was that the effect of alkylation on other dyes being so well known, there was good reason to anticipate what would be the result in any particular case. The decision of the German Patent Office was quoted with approval as follows:

“It has not been proved or pretended that through this process another technical result

would be obtained beside the known effect of the greater resistance to alkalies. . . . After so many precedents such a process of alkylation is no longer patentable, if by the same, a new technical result is not obtained."

It will be useful to consider, by way of example, some of the various factors which enter into the consideration of chemical procedures, or which may modify in one way or another the effects produced.

First, there are the materials, chemicals or ingredients involved, and under this—

- (a) The quantities or proportions;
- (b) The purity of the materials;
- (c) The condition of the materials, as solid, liquid or gaseous, or if metals, as being in the colloidal state, etc., etc.
- (d) The strength of solutions, if the agents are in solution;
- (e) The solvents employed.

Second, the conditions such as—

- (a) Temperature;
- (b) Pressure;
- (c) The nascent state;
- (d) Electrical conditions or other conditions which may effect molecular or atomic vibrations such as light, X-rays, etc.
- (e) The effect of catalyzers.

Third, The time factor.

No pretense is made that this list comprises all the factors or variables which may influence the results obtained in chemical procedures. Nor is there any possibility of discussing at any length these factors within the proper limits of this paper. But it may not be wholly without interest to consider a few examples of cases in which some of the factors or variables noted play an important part.

Chemical reactions are either reversible or irreversible. A reaction is said to be reversible when change of

conditions changes its direction. Quantities and temperatures are important in determining the direction of a reaction. As an instance of the effect of quantity or mass in a reaction, hydrogen sulfid will precipitate cadmium sulfid from solutions of cadmium chlorid, but cadmium sulfid dissolves in an excess of hydrochloric acid. As to temperature as a determining factor, if sal ammoniac be heated to 350°C it decomposes into ammonia and hydrochloric acid gas, but if the temperature be lowered, ammonium chlorid is reformed.

Prior to the invention of Adams in 1869, all attempts to electro-deposit nickel on other metals, as iron, had failed, because the solutions employed had not been sufficiently pure. Adams succeeded where others had failed and his patents were sustained. *The United Nickel Co vs. Harris et al.*, 17 O. C., 325.

Practically, the exact contrary to this is found in the generation of hydrogen resulting from the action of sulfuric acid on zinc. In this impurities play an important role. If the zinc be quite pure, it is scarcely attacked by the acid, due to a film of hydrogen forming on the zinc, protecting it from the acid. The zinc should contain certain impurities which are more electro-negative than zinc. Again the acid should be quite dilute.

The time factor is often very important. In the synthetical production of ammonia, as carried out in the works of the *Badische Anilin-und Soda Fabrik Gesellschaft*, it is important that the ammonia as produced be at once removed from the field of reaction. As opposed to this, in the old bark method of tanning, it was essential that the skins remain in the tanning bath a good part of a year.

Another illustration of variation of the factors will be instructive. Synthetical varnish resins or gums had been made by condensing phenols by the aid of aldehydes, certain temperatures and pressures being requisite. It had been demonstrated, however, that the process of condensation must not be carried too far, as otherwise compounds were formed that were insoluble in varnish solvents and so were unsuitable for the manufacture of varnishes. It occurred to Dr. Baekeland to experiment along this line, to see what he would obtain if he carried

the condensation further than others had done. As a result he produced a new substance which he called "Bakelite," a substance with which many of you are doubtless more or less familiar.

The conclusions to be drawn from these illustrations are obvious. If a variation of any of these factors results in a new and unexpected technical product, different in kind, patentable novelty must evidently be conceded. But on the contrary, if the variation gives only the same kind of result and the effect is what might reasonably be expected, then, generally speaking, no patentable invention has been made, as e. g., if the temperature be raised with nothing more than the expected result, that the reaction is correspondingly hastened.

Or, to put the proposition in somewhat different language; the variation to be patentable should be something *critical*. To illustrate what is meant by critical, it might be well to refer to certain mathematical curves, whose curvature gradually changes with a change in the value of the variables, until certain values are assigned to the variables, but when those values are assigned, the curvature suddenly and sharply changes, at a point called in mathematics, a cusp.

In the curve representing the solubility of sodium sulphate, there is such a cusp at 33°C. Below that temperature solubility increases with a rise of temperature, but at that temperature there is a sharp change and solubility decreases with a rise in temperature. The temperature of 33°C is therefore critical in the process of dissolving sodium sulphate in water.

One other illustration of the term *critical* will be given. Crude mineral oil consists of a mixture of a large number of different hydrocarbons having different specific gravities and different degrees of volatility. If such oil be carefully distilled it is possible to obtain different fractions which are only educts, that is to say, such fractions that the sum of them contains only what was in the original crude and in the same proportions. Such a process of distillation would be like an orange sorter in which oranges of various sizes are run over an inclined plate provided with circular holes of different diameters. But when a certain temperature is employed in dis-

tilling crude oil, there occurs a breaking up of some of the molecules of the heavier ingredients resulting in an increased yield of the more volatile distillates. The distillation of oil under such temperatures, a process of destructive distillation, is generally known as cracking. Owing to the increased demand for gasoline, there is great activity in inventions in this line. Evidently, a temperature which will crack oil is critical.

Chemistry is concerned with intra-molecular changes and chemical industries have to do with processes and apparatus by which man is enabled to control chemical affinities in such a manner as to produce new products resulting from intra-molecular changes.

The sciences of mechanics and physics are concerned only with changes outside of the molecules, while chemical industries relate to changes inside the molecule. In the former the essential characteristics of the material operated upon remains unchanged, but in the latter they are altered. This is, of course, elementary but is referred to here for the purpose of emphasizing the difference in the questions necessarily presented for adjudication in considering applications along chemical lines from those arising in purely mechanical inventions.

From the very nature of the problem presented to one who has made an invention or discovery in a chemical line, and from the fact previously stated, that prediction or prophesy is impossible in chemistry, and that slight changes in conditions may profoundly and critically alter the result (as has been illustrated) some important conclusions may be drawn.

One important conclusion is this: That the utmost exactness of detail should be given in describing the invention or discovery for which a patent is sought. Objection to this proposition has been made on the ground that if the procedure be too exactly described, the patent will be so limited as to be worthless. But a sufficient answer to this objection is that the applicant is not required to limit his claims beyond operative limits unless the state of the art is compelling. The exact procedure by which the best result has been obtained should be detailed and then the applicant should state how widely he has found that he can depart from the exact details recited.

One of the points in securing this necessary detail in description and on which sufficient emphasis is not always laid, is an insistence on accuracy of nomenclature.

In a recent case, an applicant stated that he employed amido-compounds, but each and every one of the chemicals specified was an amino-compound. On a requirement being made to change amido to amino, the applicant cited certain authorities to support his contention that the substances he employed were called by that name by some authorities. Thereupon the examiner replied that he was well aware that certain writers had used the terms indiscriminately, but that was no reason for not insisting that applicant use words with discrimination. In order that it may be known just what a patent does or does not cover, exactness in the use of language should be insisted upon.

The proposition has been made that a patent can not be generic unless it is more or less indefinite, and the apt reply to that is old. The boundaries of a thousand-acre farm may be just as well defined as of a one-acre farm.

In *Merrill vs. Yeomans*, 4 Otto, 568, the court said:

“The public should not be deprived of rights supposed to belong to it without being clearly told what it is that limits these rights.”

A not infrequent mistake in describing chemical processes consists in basing a generalization upon a certain characteristic which is wholly impertinent to the problem. As is familiar to every one all objects or materials have many characteristics, and any particular characteristic may be made the basis of a classification. The lexicographer selects the name of a substance as his basis of classification and puts together all objects the initial letter of whose name begins with any letter of the alphabet. But the lexicographer's scheme of classification evidently would be an absurd one to use in drawing claims. It would of course, be ludicrous for one who found that copper would do in a certain process to claim substances whose names began with the letter C.

More specifically, consider ordinary white granulated

sugar. It is white, it is granular, it is sweet to the taste, a solution of it has a certain effect on the polariscope, and chemically speaking it is a carbohydrate, i. e., a compound of carbon, hydrogen and oxygen in which there are twice as many hydrogen atoms in a molecule as there are oxygen atoms; thus it could be considered as a compound of carbon and water. Sugar has other characteristics, but those mentioned suffice to illustrate the point it is desired to make. Suppose in some particular process, the applicant were to use sugar, and in an effort to secure a broad generic claim, he covered carbohydrates. Then it should be made to appear from the inventor's researches or otherwise (as from the nature of the case) that sugar was effective because it is a carbohydrate and that carbohydrates generally would do. Suppose one were sweetening his coffee: Sugar will do it; many other carbohydrates, as starch, will not. Saccharin, which is not a carbohydrate but a coal tar product will do the work of sugar in sweetening coffee. However, saccharin could not be used as a substitute for sugar in the work of increasing the yield of alcohol when added to a liquor to be fermented.

It is evident then, that the question of equivalency must depend upon the particular problem. For drying air, strong sulfuric acid, anhydrous glycerin, strong alcohol, calcium chloride or carbide and hygroscopic salts generally might be equivalents. These substances, however, would probably not be equivalents for any other purpose.

It is clear, therefore, that one is able to generalize in phrasing claims for a chemical invention or discovery when, and only when, he thoroughly understands the principles involved and as a result of his own or other's experiments has ascertained what are equivalents, and as to equivalents, what are the common characteristics of two or more substances which make them equivalents for the particular purpose in hand.

In this connection, see *Matheson vs. Campbell*, 79 O. G., 686. It is interesting to note that the judge in that case spoke of the invention as a discovery. See, also, the cases, *In re Dosselman and Neymann*, 167 O. G., 983, and *In re Ellis*, 167 O. G., 981.

The courts have repeatedly stated (as in *Cahill vs. Beckford*, 1 Holmes, 48) that it is not essential to the validity of a patent that the inventor should have been sufficiently learned to have thoroughly understood or accurately stated the philosophy of a process which he has invented or discovered and reduced to practice.

This is true without doubt: it follows, however, from what has been said, that unless the inventor or discoverer does thoroughly understand the philosophy of a process of which he is the inventor or discoverer, he is wholly unqualified to know what are equivalents or how to draw broad claims.

The writer calls to mind a certain attorney of excellent standing before this Office who, it was related, stated that he did not pretend to undertake to understand fully the whys and wherefores of many of the inventions for which he solicited patents. He left that to the inventors, he said. It is submitted that that attorney or any other would be in position to serve his clients much better, because of the ability intelligently to draw broad claims, if he fully understood all of the principles involved in the applications he prosecuted before this Office.

If the attorney who prosecuted the application for a patent for a celluloid top for a salt shaker had understood the invention as the attorney who defended the patent in the higher court did, he would have drawn a claim for a top for a salt shaker made of material repellant to moisture.

The courts may, and sometimes do, give a patentee the benefit of unmentioned equivalents. Thus, in *Chadeloid Co. vs. De Ronde*, a patent was held to be infringed although the infringer replaced alcohol by acetone, even in the face of the fact that there was no hint of the equivalency of alcohol and acetone in the patent. It is believed, too, that no one could have foretold that they were equivalents in the particular case until tests had been made. So, too, in *Triebacher Chemische Werke Gesellschaft vs. The Roessler and Hasslacher Chemical Co.*, 209 O. G., 1689, for a pyrophoric alloy of cerium and iron, the court gave the patentee the benefit not only of an unnamed equivalent but of an

equivalent which the language of the claim would exclude.

But to rely upon the beneficence of the court is not very safe, in face of other decisions to the effect that a patentee is entitled to no more than he has described.

Speaking of the liberality of the courts, the writer may perhaps venture his individual opinion that in some cases, the courts have been extremely liberal in construing patents going further than equity demands, when it is remembered, as has been stated, that in chemical procedures, it is absolutely impossible to predict with certainty, or to say that any proposed operation will turn out as expected until trial has been made. It would not be surprising if a reaction along this line would occur sometime.

The patent system was inaugurated to promote the growth of the useful arts, and with all deference to the learned judges of our courts, it seems to the writer that, while the utmost care should be taken to make the measure of protection commensurate with the amount of advance in the art contributed by an inventor or discoverer, protection should not go beyond that point. To afford protection to an inventor or discoverer for something beyond or outside of his disclosure is to give him too much, more than his discovery deserves. To do so places a serious handicap upon subsequent meritorious inventors or discoverers.

This criticism would seem applicable to the decision of the court to which reference has already been made, viz., the celluloid salt shaker top case, in which a patent was sustained on account of a certain property of a certain substance, which property was not mentioned in the patent, and was apparently unknown to any one when the patent was before the lower court (where it was declared invalid) and was only discovered by plaintiff's counsel when the case was before the higher court. It might be said that the property necessarily resided in the particular substance whether it was known or not. The patentee did not in that case add anything to the sum of human knowledge. He made no advance in the art. Counsel for the plaintiff made the discovery in that case and the reward, should, if it belonged to any one, have

accrued to him. The true rule is stated in the decision in *re Sexton*, C. D., 1873, page 66:

“While a generous liberality should be shown to inventors, so as to afford ample protection for everything rightfully their own, an unwarrantable expansion of patents is a gross violation of lawful privilege, and the infliction of a great wrong upon other inventors and the public generally.”

There are numerous decisions to the effect that a discovery or bare principle is not patentable. What is patentable is the apparatus or process by which the discovery is made to subserve some useful purpose.

It follows from this that claims based upon a chemical invention or discovery should be drawn in mechanical terms, i. e., in terms of the mechanical steps actually taken to embody the invention or to execute the process. An inventor has no right to claim operations of nature. His claims should cover the steps or means by which he puts into operation, and governs the operation of the natural forces of which he is availing himself to produce the result aimed at. This is not, however, to be construed too strictly. An applicant might, of course, for example, cover, in his claims, the step of heating and need not, unless the state of the art or the nature of the particular work requires it, state whether he heats over a naked fire, by a jacket or steam coil, by injected steam or hot gas, or by an electrical resistance.

Sometimes an applicant argues against a reference because of a different theory of operation. But it is axiomatic that if two parties act upon the same substance by the same series of steps arranged in the same order they are bound to obtain the same result, however much their theories may differ as to the results obtained or the reactions involved. This consideration affords an additional reason for requiring an applicant to cover in his claims the steps that he takes; it is, however, often not only admissible but desirable to limit what he does by a statement of the result produced by the steps he takes as, for example, adding an acid until the solution is neutral to litmus paper, or heating iron until it becomes incandescent.

In this same line should be considered the cases of prior accidental production of a given result. Reference has been made to some of the variables or factors with which chemical procedures are concerned. The factors or variables are numerous and frequently a considerable number of them are independently variable. Let it be supposed that in the execution of a given process there are several independent variables and that a certain peculiar result was occasionally obtained when a wholly fortuitous group of values were given by chance to these several variables. But the one executing the process did not know just what particular set of values he ought to assign to his variables to produce this peculiar result whenever he wanted it. He only got it haphazard and by chance. The subsequent discoverer who ascertained the particular set of values he should assign to the variables in order to produce the peculiar result without failure and everytime he tried, would not be anticipated by such prior accidental production. See, *Tilghman vs Proctor*, 12 Otto, 707.

Speaking of the form which should be given to the claims drawn for a chemical discovery, it may be remarked that a common mistake made in drawing claims in such a case, is to make them fail to tell the story because of indefiniteness. A common form of indefiniteness is involved in the use of such words as "predetermined" or "desired." Neither the Office, nor the court which may be called upon to pass on the patent, possesses any means of searching the mind of the inventor to ascertain what is meant by such words. Sometimes an answer is made that the specification affords sufficient explanation; but the answer is not a good one. The statute requires that the claims point out what is conceived to be novel. In one case recently an applicant claimed substances "corresponding in properties to calcium hydroxide." This, when analyzed will be found to be wholly indefinite. In what properties did the substance correspond to calcium hydroxide? If in all, then it must be calcium hydroxide and nothing else. If it was not calcium hydroxide, it must have some properties different from those of calcium hydroxide. But the Office was not told in what respects it corresponded and in what it differed.

In another case an applicant claimed, "molasses or similar material," but failed to state the essential characteristics of the other material in which it was similar to molasses.

In the decision of the Commissioner in *ex parte* Adler, 65 MS, Dec., 337, the words "such as" in a claim were condemned.

Another thing should be said about claims. It sometimes happens that the character of an invention is such as to constrain the Examiner to allow a claim in a form which would be objectionable in other cases. If an invention has truly been made the inventor is certainly entitled to some sort of protection, and if a claim in one form can not be allowed, then it should be allowed in some other form. To illustrate, take the case of tanning a skin. After a skin has been properly prepared by the usual steps, it is tanned by immersion in a tanning liquor or ooze wherein it is allowed to remain until tanned, the strength of the tanning liquor being generally periodically increased. The process seems to be the same whatever the constitution of the ooze may be, and it would appear that a change in the composition of the ooze does not alter the process. Let it be supposed that the inventor has made a new composition of matter for tanning. He can secure protection by claiming the composition. There would be no trouble in that case, but apparently he should not be allowed a claim for a new process. The process would be simply the old one of immersion. But let it be supposed that the material used for tanning was old but had never been used for that purpose. Some one discovered that picric acid would tan skins. Evidently a patentable discovery was made and the discoverer was entitled to patent protection. But how was he to be protected? It does not seem that he would be entitled to claim the substance even with a limitation of the statement of the use. A claim for a tanning agent consisting of picric acid, is after all only a claim for picric acid and such a claim would simply amount to claiming an old substance under a new name. Thus it appears that the Examiner would be obliged to grant a patent on the process; there would be no other way of protecting the invention. Cir-

circumstances alter cases even in the matter of the form of claims to be allowed.

When an inventor or discoverer sets into operation certain forces acting on certain materials and so conditions the forces in action that their resultant produces a new product in consequence of intra-molecular changes, he has made a patentable invention. Inventions along these lines are sometimes of vast importance and present most dazzling dreams of wealth. These dreams are sometimes realized.

Consider again for a moment, the cracking of petroleum. Theoretically a heavy hydrocarbon of the paraffin series represented say, by the formula $C_{21}H_{44}$ might be broken up so that each molecule would yield three molecules each containing seven carbons. Could this be done exactly a gallon of heavy residuum, worth perhaps 2 or 3 cents, would yield about a gallon and a half of excellent gasoline, worth at the present writing at retail about 30 cents. As the annual consumption of gasoline in this country is in excess of two billion gallons, it is easy to see how an invention along such lines is well adapted to raise the hopes of the inventor to great heights.

Sometimes the inventor enters fields in chemical researches which are either wholly new or in which very little experimentation has been done. Let it be presumed, say, he makes an invention in the field of photochemistry, in which very little has been done except along the line of photography, or being concerned with any of the numerous problems which may arise in biochemistry, makes discoveries involving the action of enzymes, antitoxins or various micro-organisms. In such cases problems are presented to this Office which, from the very nature of the case, must be treated quite differently from the manner in which ordinary mechanical inventions are treated.

The Cameron Sewage purification patent affords an interesting illustration. In that case it was found that by exposing sewage in a septic tank (i. e., one from which both light and air were excluded) for a considerable time to the action of such anaërobic bacteria as would operated under such conditions, that all the solids in the sewage

would be liquefied. Afterwards the sewage was run over baffles in the air and exposed to light where aërobic bacteria (i. e., those flourishing in those conditions) served to purify the liquefied sewage. The result claimed for this process was that sewage was converted into a liquid that was quite pure, if not potable. This patent was sustained (Cameron Septic Tank Co. vs. Village of Saratoga, 159 F. R., 453).

What is the Office to do with such processes? And what should be the treatment accorded to apparently foolish inventions? A very old U. S. patent claimed that by putting an alcoholic liquid in a tower 80 feet high, the water and alcohol would stratify. This was, of course, nonsensical and equally nonsensical was an old English patent for making gold out of wheat straw. This Office frequently has to deal with an application which appears perfectly foolish.

The Office is, however, not justified in absolutely refusing a patent on some procedure which at first blush appears hair-brained. How many of the inventions now in daily use, as, e. g., wireless telegraphy, or locating a bullet in a man's body by X-rays, would have been regarded as the ravings of a hopeless maniac by our pilgrim fathers. Notwithstanding, the Office is entitled to some evidence, more than the oath which forms a part of the application, that what appears to be a crazy notion, is something more than the vaporings of a lunatic. It will be remembered that a man who has been declared insane by the courts is not thereby incapacitated from filing an application for a patent.

In this lines of cases, it appears that sometimes an actual demonstration may be demanded. In other cases other evidence may be accepted as good and sufficient. Not infrequently this takes the form of a properly verified showing by recognized, disinterested experts, who either have themselves witnessed a demonstration, or have themselves conducted experiments. Such evidence should be carefully scrutinized, first as to the qualifications of the experts and second as to the character of the experiments. Ordinarily, only facts should be set forth in the affidavits, giving exact data of experiments witnessed or performed, with results obtained,

and the necessary tests by which the results were ascertained to be what they were alleged to be. There should, of course, be nothing of a hearsay character in the evidence.

In one case, the Examiner received an affidavit from one of the best known chemists in the country, one justly having the reputation of knowing more about a certain chemical art than any other man in the country. In the affidavit, the affiant stated that in the particular experiment described a certain pipe was said to introduce a certain gas into the system and he believed it did. Such a piece of hearsay evidence, relying on what he said he had been told by some unknown person, of course, vitiated the affidavit. In the same affidavit, the affiant, after detailing the facts (as supported by the hearsay evidence) gave his conclusions. That was, it may be remarked, rather out of place. It is the province of the Examiner to draw his own conclusions.

Is the Office obliged to accept conclusions or to acknowledge the correctness of what is set forth in affidavits? Not at all. What is set forth in the affidavits may be persuasive but is not necessarily conclusive.

In one case which came before the writer, an applicant alleged that certain miscible liquids after being thoroughly mixed would stratify and could be separated by decantation, and he based claims thereon. The Examiner knowing that no such action could occur rejected the claims as inoperative, whereupon the applicant submitted affidavits from five different persons that the operation would take place. He might as well have submitted affidavits that a man could lift himself by pulling on his boot straps. Upon the Examiner giving a final rejection, a petition was taken to the Commissioner who was asked to instruct the Examiner—

“That an unsupported statement of theory by an examiner is not a sufficient answer to facts established by affidavits and exhibits.”

In his decision, on the petition, the Commissioner stated that an examiner—

“is not bound to accept affidavits as proofs unless he is satisfied of the truth of the allegations con-

tained therein. He may reject the conclusions stated in the affidavits when those conclusions are contrary to well-known scientific laws or facts."

Ex parte Davidson, 120 O. G., 2753.

Only one other point will be considered.

I have been speaking of applications which are concerned with inventions along paths that have been little trod and about which, therefore, little can be found either in patents or publications, and have thrown out a few suggestions about the treatment of such cases. I desire further only to state that in such cases, it appears that rather more should be required of the inventor in the way of describing his invention than in other cases. The statute requires that the specification shall be—

"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."

The case is supposed to be one in which there is no art or science before known and no nearly analogous art or science. Such cases are not very common but still they do occur. It seems clear that in such a case, the Office should require extremely explicit details, more than is necessary in other cases. Whether or not the Examiner should question the operativeness of the alleged invention or discovery in those cases, must depend upon how they appeal to him.

November 23, 1916.

Double Patenting

A paper read December 7, 1916, before the Examining
Corps of the United States Patent Office

BY

CHARLES H. SHAFFER,
First Assistant Examiner, Division Thirty-two,
U. S. Patent Office

WASHINGTON, D. C.

1917

Double Patenting

By

CHARLES H. SHAFFER,

First Assistant Examiner, Division Thirty-two,
U. S. Patent Office.

The bald statement that Double Patenting is contrary to the intent and purpose of the patent system may be made without fear of contradiction. When does Double Patenting occur is the question to be settled. Before attempting to answer the question it would be well to consider certain of the early decisions which have helped to shape the law into its present form.

Justice Story in 1819 (*Odiorne vs. Amesbury Nail Factory*; 2 Mason, 28; Fed. Cases 10,430) held a patent granted to F. Reed for a Nail Cutting and Heading Machine in 1810 invalid in view of a patent granted to the same inventor in 1807 for the same invention. The court stated the reason for this holding to be that the power to create a monopoly is exhausted by the first patent, and, moreover, the second and later patent for the same invention operates to prolong the period of monopoly beyond that allowed by law. This ruling, laid down in the first case on record in which the question of double patenting arose, has been uniformly followed, some courts basing their decision upon the first ground and the remainder, the majority, upon the second ground.

The next case on record (*Morris vs. Huntington*; 1 Paine, 348; Fed. Cases, 9831), decided in 1824, involved the validity of a patent granted in 1822 to Morris for a stopecock in view of a prior patent granted in 1816 to the same inventor. Both patents were for the same invention but the first patent failed to expressly point out the particular invention and was therefore held invalid by the court as too broad. The second patent was accordingly taken out to remedy this deficiency and thus

properly cover the invention. In holding the second patent invalid the court suggested that the inventor should have surrendered his first patent and have taken out the second for the remainder of the monopoly to which he was entitled by his patent of 1816. It is interesting to note that eight years later, in 1832, the Supreme Court of the United States in *Grant vs. Raymond* (6 Peters, 218) held this practice proper. The general practice of granting reissue patents was instituted by this decision.

The case of *Sickels vs. The Falls Co.* (4 Blatch., 508; Fed. Cases, 12,831) decided in 1861, involved the form of double patenting which most commonly arises today; that is, the relation between a patent having generic claims and a patent to the same inventor having specific claims upon a form of the same subject-matter. The application for the generic patent was filed *after* the specific patent was granted and the claims in the later patent were met by the structure shown and claimed in the earlier. The later patent was held invalid upon the ground of double patenting and the law on which the holding was based appeared to have been so well recognized that no application thereof was necessary.

In 1865 the Supreme Court placed its approval upon the rule against double patenting (*Suffold Co. vs. Hayden*, 3 Wall., 315). The case involved several patents granted to Isaac Hayden, of which only 18,742 and 29,971 are of interest to us. The application for the later patent was pending in the Patent Office when that for the earlier patent was filed. The court held that the patents were for separate inventions since, although both applied to an improved trunk to be used in cleaning cotton and other fibrous substances, the earlier claimed merely the interior arrangement of the trunk while the later claimed a trunk having such interior construction in combination with a machine for opening the cotton and blowing it through the partitions. In its decision the court stated that if both had been for the same invention the first patent would have been held valid and the second invalid since the date of issue, not of filing, determines the question of priority between patents issued to the same party on the same invention.

The first recorded Patent Office decision on this point

(Ex parte Atwood, 1869, C. D., 98) concerned an application filed by Lewis J. Atwood having a broad claim which dominated patent 73,488 to the same party for the same invention granted before the filing of the application. The Commissioner refused to allow the application and in his decision said:

"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. . . . 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."

This holding would have greatly simplified the Office practice but was found to work injustice to the inventor and was later modified.

The Supreme Court in *James vs. Campbell* (104 U. S., 356; 21 O. C., 337), when deciding that reissue 4,143 with generic claims of patent 38,175 with specific claims to Norton was invalid because prior patents granted to the same inventor showed the combination now claimed, said:

"It is hardly necessary to remark that the patentee could not include in a subsequent patent any invention embraced or described in a prior one granted to himself, any more than he could an invention embraced or described in a prior patent granted to a third person."

The Circuit Court of Vermont in 1884 (*Vermont Farm Machine Co. vs. Marble, Comm'r.*, 19 F. R., 307; 27 O. C., 621) construed the terms "embraced or described" in the above decision to mean that the inventor is not entitled to a patent for an invention previously *patented* and stated that mere description is not a bar. A decision two years later by the Supreme Court of the District of Columbia in *Hill vs. Comm'r of Patents* (4 Mackay, 266; 33 O. C., 757) upon the identical state of facts, held that by "embraced or described" was included that con-

dition of affairs by reason of which applicant must apply for a reissue and not an independent patent in order to cover certain matter not previously claimed. This uncertainty as to when matter is "embraced or described" led Commissioner Mitchell in *Ex parte Mullen and Mullen* (50 O. G., 837; 1890 C. D., 9) to lay down the following rules for treatment of related applications to be followed in the Patent Office:

1. Where the applications are based upon the same structure so that there can be no patentable line between the claims but merely a difference in scope only one patent may be granted.

2. Where the matter embraced or described but not claimed in the first application could have been claimed therein, the application claiming such matter must be copending with the first, or else no patent can be granted therefor because the grant of a patent on the first application amounts to a dedication to the public of such matter.

3. Where the matter embraced or described but not claimed in the first application could not have been claimed therein, an application therefor filed within two years after the grant of the patent on the first application may be allowed unless a bar has been created by public use or sale.

Before taking up a more detailed examination of the question of double patenting the following decisions of the Supreme Court which have had great influence upon the present view of the question, should be considered:

Miller vs. Eagle Mfg. Co., 151 U. S., 186; 66 O. G., 845; and
United States of America vs. American Bell Telephone Co., 167 U. S., 224; 79 O. G., 1362.

The first decision concerns patents 222,767 and 242,497 granted to E. C. Wright for an improvement in Cultivators. A spring in the cultivator was so arranged as to urge the beam downward when in action and upward when raised above operative position. As originally

filed the application contained claims to both functions, but because of an interference upon the lifting function a divisional application for the depressing function was filed and became a patent, followed after the termination of the interference by the patent upon the lifting function. The Circuit Court of the Southern District of Iowa had previously reviewed these patents (*Eagle Co. vs. Bradley*, 35 F. R., 295) and held both valid. The Supreme Court, however, held that while the patents differed in purpose they were directed to the same element and that only one patent can be granted upon a single element.

In the second decision the Supreme Court placed the seal of its approval upon the rule laid down in the lower courts that the delay of the first filed application, having generic claim, in the Office through no fault of the inventor, during which time an improvement patent upon a second filed application is granted, does not render the broad claims of the second patent invalid.

Certain general rules applying to different phases of double patenting while well known, are herein recited in order to cover the subject completely.

1. When two patents have been granted to the same inventor for the same invention, the second is void. (*Miller vs. Eagle Mfg. Co.*, supra.)

2. The date of issue, not of application, determines priority between patents. (*Suffolk vs. Hayden*, supra.)

3. In cases where both patents are issued on the same day, the courts generally have permitted the inventor to choose the patent to be held void. (See *Brush Electric Co. vs. Julian Electric Co.*, 41 F. R., 679; *Electrical Accumulator Co. vs. Brush Co.*, 52 F. R., 130, and *H. S. Johns Mfg. Co. vs. Robertson*, 89 F. R., 504; but see *Crown vs. Standard Co.*, 136 F. R., 841.)

4. In cases of true double patenting the question whether or not the patents are for the same invention must be determined by consideration of the *claims*, not of the *description*. (*Merrill vs. Yeomans*, 94 U. S., 94; 11 O. G., 970; *Mahn vs.*

Harwood, 112 U. S., 354; 30 O. C., 657; Adams *vs.* Stamping Co., 28 F. R., 360.)

5. "The first patent does not invalidate the second patent for a distinct, different and separable invention whether generic or specific; whether an original machine or process, or both, or an improvement thereon, which is not actually claimed or dedicated by the earlier patent." (Matthews *vs.* Flower, 25 F. R., 830).

6. The later patent although valid over the earlier is limited thereby. (McCaslin *vs.* Link Belt Co., 139 F. R., 393.)

7. The fact that two applications by the same inventor have been assigned to different parties does not affect the bearing of the rule against double patenting, and the grant of the first patent to one assignee is a bar to the grant of a second patent to a different assignee. (Ex parte Pearsall, 135 O. C., 221; 19 Cour., 40-21.)

After this preliminary consideration of the growth of double patenting and of the general rules laid down, during such growth, a more careful analysis of the decisions on this question is in order. These decisions may be roughly grouped as follows:

1. Where the question of patentable distinction is involved.
2. Where the question of generic and specific patents is involved.
3. Where the question of Office practice is involved.

It has unfortunately proved to be impossible to make any large collections of decisions upon the same point. In fact, the decisions appear in many cases to be at variance and thus the subject can not be so bounded that only the cases within the bounds will be held to involve double patenting. The conflict in the courts is well illustrated by the treatment accorded to patent 495,443 and the reissue 41,872 thereof. These patents granted to C. J. Van Depoele were directed to an improvement in an overhead switch and a contact device

for use therewith. While the application for the original patent was pending, a divisional application was filed and became patent 424,695, the earlier filed application being delayed by reason of an interference. The claims in the later patent covered the structure claimed in the earlier patent except that a certain pressure element was not included.

The decisions of the courts turned upon the consideration paid to the pressure element. This element was found to be essential and thus necessarily included in order that the first patent claim a complete structure and hence the second patent was held void under the rule against double patenting in:

Thomson Co. *vs.* Sterling Meaker Co., 171 F. R., 111 (C. C. of N. J.).

Thomson Co. *vs.* Hoosick Co., 82 F. R., 461; 80 O. G., 967 (C. C. A., 2d Cir.).

Thomson Co. *vs.* Union Co., 86 F. R., 636; 83 O. G., 597 (C. C. A., 2d Cir.).

Thomson Co. *vs.* Jeffrey Co., 101 F. R., 121 (C. C. A., 6th Cir.).

The original patent was sustained in Thomson Co. *vs.* Winchester Co., 71 F. R., 192; 730 O. G., 2155 (C. C. of Conn.), on the ground that it was delayed in the Office by interference through no fault of the inventor.

Since the weight of decisions was against patent 495,-443, the inventor applied for and obtained the reissue patent in which the pressure element was expressly disclaimed. The Circuit Court of New York (N. D.) in Thomson Co. *vs.* Black Co., 124 F. R., 495, held the reissue void since the claims could not be construed to cover the same invention as the claims of the earlier patent. Upon appeal the reissue was held valid as for a subcombination. Thomson Co. *vs.* Black Co., 135 F. R., 759 (C. C. A., 2d Cir.), but the same court later reversed itself and held the reissue invalid on the ground of laches and of undue breadth.

Thomson Co. *vs.* Western Co., 158 F. R., 813 (C. C. A., 2d Cir.).

PATENTABLE DISTINCTION.

This class includes the only cases in which true double patenting occurs--that is to say, in which the question is, whether or not both patents claim the same invention. The examination must be directed to the claims as pointed out above. The decisions falling hereunder have been analyzed and certain rules evolved from the analysis are laid down supported by one or more decisions.

a. Only a single patent may be granted for the same inventive idea.

- **(N.)* Odiorne *vs.* Amesbury, cited.
- (N.)* Morris *vs.* Huntington, cited.
- (N.)* Smith *vs.* Ely, cited.
- (C.)* Miller *vs.* Eagle Mfg. Co., cited.

The fact that the claims of the two patents for the same inventive idea differ in language does not prevent the operation of the rule above stated.

- (C.)* Underfeed Co. *vs.* American Co., 165 F. R., 65 (566,871, 595,837).

b. A valid patent can not be issued to an inventor for anything described in a former patent to himself if the application therefor was filed after the former patent had been issued.

- Matthews *vs.* Flower, cited.
- Barnes Co. *vs.* Walworth Co., 60 F. R., 605 (212,346, 233,393).

This is not the rule if the application was filed before the former patent had been issued.

- Wheeler *vs.* McCormick, Fed. Cases, 17,499.
- Fenton Co. *vs.* Office Co., 68 O. G., 1390 (437,833, 450,124).
- Anderson *vs.* Collins, 122 F. R., 451.
- Badische-Fabrik *vs.* A. Klipstein & Co., 125 F. R., 451.
- Hillard *vs.* Fisher Co., 159 F. R., 439 (554,874, 580,281).

**(C.)* Copending. *(N.)* Not copending.

c. Where no proper line is maintained between the claims in the two patents, only one is valid.

(N.) Thomson Elec. Co. *vs.* Western Co., 70 F. R., 69; 73 O. C., 1123 (223,659, 238,315).

(C.) Otis Co. *vs.* Portland Co., 127 F. R., 557 (359,551, 453,955).

(N.) American Co. *vs.* Economy Co., 162 F. R., 684 (433,686, 656,553).

d. A mere colorable variation of the combination claimed in the earlier patent is not sufficient ground upon which to base the grant of a second patent.

(N.) McCreary *vs.* Canal Co., 141 U. S., 467; 57 O. C., 1131 *Dieta* (125,684, 129,844).

e. A change of direction through which a device operates does not in itself involve invention.

(N.) Fassett *vs.* Mfg. Co., 62 F. R., 404; 64 O. C., 439 (347,338, 377,376).

f. A slight immaterial modification of the structure shown in the earlier patent does not amount to invention.

(N.) Root *vs.* Ry. Co., 42 F. R., 412 (193,757, 224,284).

If, however, the modification makes the device more nearly perfect a valid patent may be granted thereon.

(N.) Gilmore et al. *vs.* Vaughn, 216 F. R., 356 (943,759, 1,029,645).

g. The substitution for an element in the first patent of an element suggested as equivalent thereto in such patent or of an element known to be an equivalent thereto does not amount to invention.

(N.) Swift *vs.* Jenks, 29 F. R., 642 (255,353, 283,931).

(N.) *Ex parte Marsteller*, 18 Gour., 52-14 (785,562).

(C.) *Pieper et al. vs. Mfg. Co.*, 156 F. R., 672—*Dieta* (704,099, 721,229).

h. Adjustability of an element does not in itself involve invention.

(N.) *Doig vs. Machine Co.*, 122 F. R., 460 (276,639, 342,268).

i. Where the difference between the claims of the two patents is due solely to the recitation of function the second patent is invalid.

(C.) *Miller vs. Eagle Mfg. Co.* cited.
McComb vs. Brodie, Fed. Cases, 8708.

(N.) *Nat'l Co. vs. Interchangeable Co.*, 106 F. R., 693 (361,009, 480,194).

(C.) *Western Co. vs. Williams-Abbott Co.*, 108 F. R., 952 (309,617, 394,172).

If, however, the change in function is due to a slight change in construction both patents are valid.

(C.) *Western Co. vs. Empire Co.*, 131 F. R., 494 (392,386, 392,387).

j. A patent for an article produced by one process renders a second patent for the same article produced by a different process invalid.

(N.) *Reynolds vs. Paint Co.*, 68 F. R., 483 (348,995, 378,520).

k. Patents for the article, the process by which it is made and the machine by which the process is carried out are involved in three classes of decisions.

1. Articles and Process:

When the claims of the later process patent cover nothing more than the necessary or obvious

steps of effecting the article covered by an earlier article patent, the later process patent is void on the ground that the two patents are for the same invention, and the invention resides in the article rather than in the process.

(C.) *Mosler Co. vs. Mosler & Co.*, 127 U. S., 353 (281,640, 283,136).

(C.) *Oval Co. vs. Mfg. Co.*, 60 F. R., 285 (273,773, 278,828).

Ex parte Simonds, 44 O. C., 445.

A process patent, granted over two years prior to the date of application for a product patent, is a bar thereto.

(N.) *In re Griffith*, 187 O. C., 517 (580,344).

A comparison of these decisions would appear to show that the process patent becomes a bar if the two-year term has passed between the issuance of the patent and the filing of the product application and is thus viewed only as a printed publication.

2. Machine and Article:

A patent for the machine by which the article is made may or may not render the later article patent invalid according to the line of decisions the court elects to follow. The article patent is held invalid in

(C.) *McKay vs. Jackmann*, 12 F. R., 615 (20,775, 29,562).

(N.) *Needle Co. vs. Needle Co.*, 32 F. R., 221 (43,772, 110,594).

While both patents are held valid in

(C.) *McKay vs. Dibert*, 5 F. R., 587, 19 O. C., 1351 (20,775 *supra*, 29,562).

(N.) *Hatch vs. Moffitt*, 15 F. R., 252 (117,627, 129,338).

(C.) *Adrian Co. vs. Fence Co.*, 190 F. R., 195 (755,187, 774,210).

The last decision lays down the rule that where the article is not necessarily made by the machine both patents are valid. It would appear that this rule is a logical one and follows the one suggested above in connection with article and process patents.

3. Machine and Process:

In cases involving a machine patent and a later patent for the process, the weight of opinion appears to be that both patents are valid. As in similar cases the process application must be filed within two years from that date of issue of the machine patent.

The following hold both patents valid:

- (C.) McKay *vs.* Dibert, (20,775 *supra*, 29,561, cited).
- (N.) Eastern Co. *vs.* Standard Co., 30 F. R., 63; 41 O. G., 231 (231,642, 258,272).
- (N.) Eastern Co. *vs.* Nixon et al., 35 F. R., 752; 45 O. G., 1571 (231,642, 258,272, *supra*).
- (C.) Simonds Co. *vs.* Mfg. Co., 90 F. R., 201 (319,754, 419,292).

l. A single novel element can be made the basis for one patent only and a second patent thereon is invalid.

(N.) Davis Co. *vs.* Elevator Co., 135 F. R., 119 (555,640, 694,534, 694,535).

(N.) Washburn *vs.* Pin Co. (500,640, 517,084).

m. A patent having been granted for a certain novel element, a later patent for a combination, the novelty of which lies in the substitution of said element for another element in an old combination is invalid.

(N.) Holmes Co. *vs.* Metropolitan Co., 35 F. R., 254 (110,362, 120,874).

(C.) Underwood *vs.* Gerber, 149 U. S., 224; 63 O. G., 1063 (348,072, 348,073).

(C. & N.) Palmer Co. *vs.* Lozier, 90 F. R., 732 (489,714, 493,220; 495,975, 539,224).

(C.) American Co. *vs.* Mfg. Co., 109 F. R., 976 (233,969, 463,569).

(C.) Western Co. *vs.* Telephone Co., 148 U. S., 857 (574,006, 669,708).

n. A patent for a combination of a certain novel element with old elements is void in view of an earlier patent for the same novel element in combination with other old and well-known elements.

(C.) Industrial Co. *vs.* Wilcox Co., 112 F. R., 535 (263,467, 341,790).

(C.) Dey Co. *vs.* Syracuse Co., 152 F. R., 440 (522,784, 524,102).

o. Certain decisions which hold that two patents having for their point of novelty the same element, are both valid, appear to be at variance with the last three rules laid down and are taken up a little more in detail.

(N.) Oahn *vs.* Wong-On, 19 F. R., 424; 27 O. G., 299, in which the later patent claimed a combination of fewer elements than the earlier patent.

(C.) Palmer *vs.* Brown, 92 F. R., 925, in which patent 308,981 claimed the special use in a quilting machine of a specific mechanical movement claimed in patent 304,550.

(N.) Ryan *vs.* Newark Co., 96 F. R., 100, in which patent 251,630 claimed fewer elements than patent 237,586 and also claimed a new function for one of the common elements.

(C.) Spear *vs.* Keystone Co., 131 F. R., 879, in which patent 399,944 claimed a single element while 413,464 claimed the combination of that element with others to form a complete device.

(C.) *Dodge Co. vs. New York Co.*, 159 F. R., 976
(Dicta),

in which patent 688,111 claimed in addition to the novel element of patent 666,960 certain old elements in combination—this is squarely contra to Rule *m* and is based upon the ground that the claims were not co-extensive.

p. An inventive idea may be patented as a design or an article, but not as both.

(N.) *Cary Co. vs. Beal.*, 90 F. R., 725,

where article patent 450,753 was granted prior to design patent 28,142.

(N.) *Williams Co. vs. Neverslip Co.*, 136 F. R., 210,

where design patent 29,793 was granted prior to article patent 666,583. This last decision may be held to overrule.

(N.) *Collender vs. Griffith*, 2 F. R., 206,

based upon a similar state of facts wherein article patent 145,787 was held valid over design patent 4973 on the ground that the former patent was directed to structure and the latter to appearance.

GENERIC AND SPECIFIC PATENTS.

This class goes beyond the true idea of double patenting, as set forth in the first class, and is included under that subject upon the theory that the later patent if held valid would tend to extend beyond the statutory period, the monopoly to which the inventor is entitled. This theory appears unquestionably to be based upon strict justice and if followed in all cases would remove a great deal of doubt as to the validity of patents and obviate much litigation. The patents falling under this class may easily be divided into three groups according to the order in which the patents were issued, the order of filing being disregarded, as immaterial, except when the question of laches or fraud arises.

1. Where both patents are issued simultaneously. Here there would appear to be no question but that the only decision found correctly holds both patents valid.

Manhattan Co. vs. Helios-Upton Co., 135 F. R., 785.

2. Where the generic patent is issued before the specific patent. Here too the decisions found state what appears to be the only possible conclusion, that both patents are valid.

Victor Co. vs. American Co., 145 F. R., 350 (534,543, 564,586).

Welsbach Co. vs. Cohn, 181 F. R., 122 (638,004, 659,617).

Horton Co. vs. White Co., 213 F. R., 471 (863,120, 886,022).

3. Where the generic patent is issued after the specific patent. Here there is a great conflict of decisions. The courts have followed no fixed precedent but have considered each case independently. The result is therefore a lack of uniformity between the decisions of the same court upon different patents and of different courts upon the same patent.

The decisions in this class may be grouped into two subclasses: Those in which the generic claims of the later patent were held invalid and those in which the same were held valid; and each subclass separately considered.

The first subclass contains the three following decisions:

Siekels vs. Falls Co., 4,199, cited:

In this case the application for the generic patent was not filed until the specific patent had been granted.

Morse Co. vs. Link Co., 164 F. R., 331 (736,999, 757,762):

This decision was based upon a judgment of non-infringement and the suggestion of the court that the generic patent should be held invalid is mere dictum.

Union Co. vs. Smith Co., 181 F. R., 966 (470,990, 481,477):

The patent 470,990 was issued March 15, 1892. One week before the issue of the first patent the application for the second patent was filed and three months thereafter, Claims 37 and 38 were inserted in the second application which the court held were for the same subject-matter as was included in Claims 1 and 2 of the earlier patent, and could have been made in the earlier case. Claims 37 and 38 of the later patent 481,477 were held void. It was suggested that the applicant might secure Claims 37 and 38 by way of a reissue of the earlier patent, 470,990.

The second subclass in which the generic claims of the later patent are held valid includes a large group of decisions in which the application for the generic patent was delayed in the Patent Office by interference, while a later filed application for an improvement thereon becomes a patent. This practice laid down in 1870 has been consistently followed by the courts and as previously stated, has been approved by the Supreme Court. The following decisions have sustained the claims of the later patent on this ground:

- Singer vs. Braunsdorf*, 12,897 Fed. Cases (16,030).
Electrical Co. vs. Brush Co., 52 F. R., 130; 61 O. G., 886 (260,653, 337,298).
- Thomson Co. vs. Elmira Co.*, 71 F. R., 396; 74 O. G., 144 (397,451, 424,695).
- National Co. vs. Wheeler Co.*, 79 F. R., 432; 74 O. G., 1588 (402,610, 447,791).

- Thomson Co. *vs.* Ohio Co., 80 F. R., 712; 80 O. C., 654 (397,451, 424,695).
 Allington Co. *vs.* Glor, 83 F. R., 1014; 82 O. C., 189 (370,021, 403,362).
 Tesla Co. *vs.* Scott, 97 F. R., 588 (445,207, 555,190).
 Westinghouse Co. *vs.* Dayton Co., 118 F. R., 562 (416,193, 511,559, 511,560).
 Electric Co. *vs.* Buffalo Co., 120 F. R., 672 (337,299).
 Westinghouse Co. *vs.* Electric Co., 142 F. R., 545 (416,193, 511,559, 511,560).
 Thomson Co. *vs.* Illinois Co., 143 F. R., 534 (397,451, 424,695).
 Century Co. *vs.* Westinghouse Co., 191 F. R., 350 (416,193, 511,559, 511,560).

In addition to the above group certain other decisions are included in this subclass for which no common bond can be found. While in each decision the generic patent is sustained the reasons, given or assumed therefor, vary. The decisions are as follows:

McMillin vs. Rees, 1 F. R., 722; 17 O. C., 1222 (52,730, 63,917):

The court in this case construed the broad claim in the second patent so as not to cover or include the structure shown in the first patent.

Graham vs. Manufacturing Co., 11 F. R., 138; *Graham vs. McCormick*, 11 F. R., 859:

These decisions involve the same patents, i. e., 67,041 and 74,342. The generic patent held valid was granted on the second filed application. Originally the broad claims were in the first-filed application but were later transferred to the second application and the former became the limited patent.

Victor Co. vs. American Co., 140 F. R., 860 (534,583, 564,586):

The generic application was the second filed but issued before the specific patent. The court

held that a patent is not invalidated by the fact that the invention claimed was described but not claimed, in an earlier application by the patentee on which a patent was issued after the one in suit.

Washburn Co. vs. Beat 'Em All Co., 143 U. S., 275; 58 O. C., 1555 (150,683, 157,124):

There was no undue delay—about six months—and the broad claims had been in the first-filed application which became the second patent. The patents are directed to different inventions, the first to a wire stretcher for fences in which the fence invented by applicant is incidentally shown and the second to the fence itself.

Cleveland Co. vs. Detroit Co., 131 F. R., 853 (475,401):

The generic patent was delayed in the Office by reason of an appeal from the examiner's refusal to allow the claims. Although the applicant was responsible for the delay since he had instituted the appeal, the court held the patent valid apparently by analogy with the cases which come under the interference group referred to above.

OFFICE PRACTICE.

The various classes of double patenting having been reviewed in the light of the decisions wherein two patents are involved, the manner in which applications that may involve this question should be handled in the Patent Office is now to be considered.

1. There is no limit to the number of applications an inventor may file and keep pending in the Office showing and describing the same invention. If the claims overlap the Examiner should call the applicant's attention to the fact but take no further action until one application is in the issue or patented. When such a condition arises that application or patent may be used as a ground for rejecting overlapping claims or

claims for matter not patentably allowable over that claimed in the allowed application or patent. The copending applications must be either restricted or abandoned.

Ex parte Langlois, 14 O. G., 84.

Ex parte Gaboury, 37 O. G., 217.

Ex parte Feister, 53 O. G., 1089.

Ex parte Cahill, 63 O. G., 1815.

2. The second class of cases laid down by Commissioner Mitchell in *Ex parte Mullen and Mullen*, i. e., where there is a proper line between the claims of the application, the matter of which may be covered by the same or different patents, emphasizes the practice laid down in:

Ex parte Long, 25 O. G., 1189.

Ex parte Rohn, 25 O. G., 1190.

Marvin vs. Lillie, 27 O. G., 299.

Hill vs. Comm'r of Patents, 4 Mackey, 266;
33 O. G., 757.

The requirement that matter not claimed in the original application must be claimed in an application copending therewith or in a reissue is based upon the theory that the grant of a patent constitutes a dedication to the public of the matter embraced or described and not claimed therein, which dedication can only be rebutted in the ways referred to above.

The decisions in *Ex parte Derby*, 26 O. G., 1208, and *Vermont Co. vs. Marble*, Comm'r, cited,

which hold such matter claimable in a new application if filed within two years after the grant of the patent, as well as the decisions in:

Ex parte Cottrell, 9 O. G., 495,

Ex parte Arkell, 9 O. G., 1111, and

Ex parte Roberts, 40 O. G., 573,

which hold that such matter can not be claimed in a copending application but only in a reissue

of the patent are discordant notes finally silenced by Mullen and Mullen.

Subsequent to Mullen and Mullen, the practice has followed the rules laid down in

Ex parte Wellman, 86 O. G., 1986,
Ex parte Osborn, 92 O. G., 1797, and
Ex parte Davidson, 93 O. G., 191.

which hold that a rejection upon this ground is appealable to the Board of Examiners-in-Chief.

3. Where there is no patentable line between two sets of claims only one patent should be allowed.

Durham *vs.* Seymour, 6 App. D. C., 78.

Closet supported by floor rather than by wall:

Ex parte Creveling, 25 App. D. C., 530.

Claims in process case differ from those in machine case merely by use of "method" instead of "means."

Ex parte Holt, 29 O. G., 171.
Ex parte Barclay, 21 Gour., 56-23, 1909.

No line between copending applications.

Ex parte Ranson, 39 O. G., 119.
Ex parte Edison, 54 O. G., 263.

Later-filed case without proper line of division.

Ex parte Parker, 19 Gour., 3-10, 1907.

Mere substitution of one well-known form of gearing for another.

Ex parte Richards, 19 Gour., 40-23, 1907.

Element *per se* not patentable over combination depending thereon for novelty.

Ex parte Schoen, 20 Gour., 24-19, 1908.

Gear wheel not patentable over ear wheel made by same process.

4. Claims in a patent can not be inserted in an application by the same inventor.

Ex parte Barrett, 56 O. G., 930.

5. Where broad claims have been included in a patent, overlapping broad claims can not be inserted in an application by the same inventor although the applications were copending. The fact that the claims were inserted upon the suggestion of the Examiner has no bearing upon this holding.

Jones vs. Larter, 92 O. G., 383.

6. The above decision leads to a discussion of the practice to be followed when the question arises as to the treatment of a generic application, the claims of which dominate a specific patent granted to the same inventor upon a copending application. As indicated above in connection with generic and specific patents there are decisions both pro and con.

The following hold that the specific patent is a bar to the allowance of the generic application:

Ex parte Atwood, 1869, C. D., 98.

Ex parte Lowe, 1870, C. D., 39.

Gold vs. Gold, 187 F. R., 273.

In the first and third cases the applications were not copending; in the second case the claims in the application were so broad as to amount to claims for the principle of the machine already covered by the patent.

The specific patent is held no bar to the grant of the generic patent in,

Ex parte Emerson, 17 O. G., 1451; and

Ex parte Edison, 49 O. G., 1691.

In the first case the inventor was permitted to insert broad claims in an application after the specific application had become a patent on the ground that an inventor can not be required to claim in a single patent or a reissue thereof, each invention shown and described. This decision would appear to be bad law under the practice laid down in *Mullen and Mullen*. In the second case the generic application was delayed in the Office through interference, although filed prior to the application on which the specific patent was granted, and hence comes under the exception allowed in such cases as approved by the Supreme Court. The Commissioner in deciding this case took occasion to state that the delay was not the fault of the inventor but was due either to an inherent defect in the patent system or to a defect in the administration of the system.

An unpublished decision by Commissioner Spear, found in the file of patent 209,006 to W. G. A., Bonville covers a situation which seldom arises in connection with this question. The application for that patent which contained generic claims was filed in 1871 and later assigned. A later application by the same inventor for an improvement thereon was filed in 1873 and matured into patent 199,779 which was unassigned. After the grant of this patent the earlier application delayed by interference was rejected thereon since the patent showed the structure claimed in the application. The Commissioner reversed the Examiner and allowed the claims on the ground that such practice would result in unjustly depriving the assignee of his rights.

None of the above decisions squarely decides whether or not in the ordinary case the grant of a specific patent on one species constitutes a bar to the grant of a patent upon a copending application showing structure not covered by the claims of the specific patent but containing generic claims readable upon the form shown in the

patent. The Board of Examiners-in-Chief held that W. S. Elliott was entitled to broad claims in an application filed June 27, 1910, although an application filed February 10, 1910, had become a patent October 25, 1910, with specific claims. This holding was based upon the decisions in,

Ex parte Edison, 49 O. G., 1691; and
Thomson Co. vs. Ohio Co., cited.

In each of these cases the generic patent was first applied for and was delayed by interference in the Office while a later application for an improvement thereon became a patent. It would seem, therefore, that the conditions were not analogous. It may be of interest to note here that the courts have never definitely decided just what rights the public has to an expired specific patent which is dominated by an unexpired generic patent to the same party. No cases have been found in which the validity of the patent was decided on this point, although several courts have discussed the subject academically and reached different conclusions. In *Thomson Houston Co. vs. Ohio Brass Co.*, the court, by way of dicta, stated that apparently the public is not entitled to the subject-matter of the specific patent until the later generic patent had expired, while in *Thomson Houston Co. vs. Illinois Co.*, 143 F. R., 534, a motion for preliminary injunction on the specific patent was refused on the ground that the alleged infringing structure was the same as that disclosed in the expired specific patent, which the court seemed to assume was free to the public, although embraced by the claims of the unexpired generic patent, and also on the ground of implied license. The Circuit Court of Appeals (152 F. R., 632) affirmed this decision on the ground of implied license alone.

A careful review of the foregoing authorities would indicate that, where there are two or more copending applications disclosing the same generic invention, the generic claims, wherever practicable, should be in the first application filed and should be the first patented unless delayed in the office by reason of interference. If the generic claims are placed in a later-filed application,

such later-filed application must be the first one patented (see *Victor Co. vs. American Co.*, cited). This, as well as other departures from the rule set forth above, and apparently sustained by the courts in the cases cited, should not be sanctioned by the Office except upon a showing of good and sufficient reasons. For, as stated by Commissioner Fisher, in *Ex parte Atwood* (cited): "It must be remembered that when the patent has been granted, and its validity has been 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." Should the above rule be consistently followed, it would eliminate at least one factor in the problem of Double Patenting without sacrificing any of the rights of the inventor.

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Practice in Cases Involving Division.

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Corps of the United States Patent Office

BY

W. H. WHITTEN, Jr.,
First Assistant Examiner, Division Forty-two,
U. S. Patent Office.

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Practice in Cases Involving Division

By

W. H. WHITTEN, Jr.,

First Assistant Examiner, Division Forty-two,
U. S. Patent Office.

Although the practice in cases where the question of division is to be determined is rather simple and for the most part well settled, it seems well to gather into one paper the decisions touching that practice. It is not the purpose of this paper to indicate the principles which determine when division is properly required. It is, however, proposed to trace the course followed as an application, which presents the question of division, goes through the Office.

The first step in the treatment of such an application is the Examiner's requirement for division. Every action of this kind is counted and reported in the week's work under Order 2125. Rule 42 requires that, if the independence of the inventions be clear, the requirement be made and met before any action on the merits. Even this elementary principle has not always been the practice, for in some early cases the Commissioner criticized the Examiner for not making an examination at first where the case would have been as easy to treat in that way. (*Ex parte Sanders*, 1878, C. D., 66; *ex parte Knott*, 1875, C. D., 96.) The Office can not undertake to examine more than one invention in a single application, consequently the case must be restricted to one invention or be found to present but one before any examination should be undertaken. (*Ex parte Weston*, 1911, C. D., 218, and cases cited therein.)

Cases presenting a generic claim together with claims to different species form no exception (*Ex parte Worden*, 1902, C. D., 176), but under the older decisions an exception to this rule was made in the case of applications presenting claims to each of two inventions together

with claims to the alleged combination. Such cases were treated by rejecting the latter claims on the ground of aggregation without taking action on the merits of either separate invention. Then when the combination claims had been amended so as to be directed to one or the other invention the requirement for division would be made. This practice was changed in *ex parte* Mansfield and Hayes, 1902, C. D., 94, because it involved piece-meal action on the merits. The requirement for division should be made first and should indicate whether the combination claims may be included in the same case with one of the separate inventions or constitute a third group which if patentable at all must be embodied in a separate patent. The statement of the practice made in this decision is dicta, because the Commissioner reversed the Examiner on the ground that the application under consideration did not present independent inventions, but the practice has followed that dicta and has been sustained in later decisions. See *ex parte* Crain, 1907, C. D., 18, where the Commissioner pointed out that a requirement for division accompanied by a statement that certain claims are for aggregations is proper practice.

Where there are only two groups, namely, the combination claims and claims to a sub-combination and the Examiner is of the opinion that the combination claims are of the sort condemned under such decisions as *in re* Hawley, he should not require division but act on the merits of all the claims. (*Ex parte* Mumford, 1914, C. D., 84.)

If the requirement for division is not made in the first action the applicant, receiving action on the merits of several inventions, is benefited and not injured by the tardiness of the requirement. Consequently, that division was not required in the first action, is no reason for not making the requirement later. Rule 42 expressly provides that it may be made at any time before final action. (*Ex parte* Alminana, 1902, C. D., 293; *ex parte* Ramsey, 1909, C. D., 157.) The delay may arise through oversight, the Examiner failing to perceive that two independent inventions are involved, and it may be caused by the condition of the case as first presented, the claims being too indefinite to indicate

whether they cover independent inventions or not. In the latter case the proper practice is to first treat the claims until they are clear enough to make the question of division definite. (*Ex parte* Mayall, 1873, C. D., 134.) Neither of these circumstances goes to prove the dependence of the inventions and it has been repeatedly held that a requirement for division will not be set aside on account of the time when it was made. (*Ex parte* Lewis, 1904, C. D., 16; *ex parte* Benke, 1904, C. D., 63.)

When the claims had been stated to be allowable, but later, because of an amendment to Rule 41, division was required, the allowance of the claims was held no ground for waiving the requirement. (*Ex parte* Farquhar *et al.*, 1899, C. D., 205.)

Such tardy requirements are a cause of annoyance to attorneys and applicants and every effort should be made to make the first action completely cover the question of division whenever possible. Particularly annoying is a requirement for further division when the application has been once divided. Yet when the need for such further division arises the fact that it is a second requirement will not cause it to be set aside. (*Ex parte* Benke, *supra*; *ex parte* McHale, 1908, C. D., 185.)

The commonest cause of such a second requirement is failure to consult the Examiner who must handle the case after division is made. Accordingly when the independent inventions presented in one application are examinable in different divisions of the Office, the Examiner making the requirement for division should refer the case to the Examiner who has the class to which the divided case might belong, asking for a report. The Examiner to whom the case is thus referred will then indicate what, if any, lines of further division should be made. (*Ex parte* Brown, 1911, C. D., 111.)

A delay in making the requirement for division may under some circumstances be interpreted as indicating the existence of a doubt, and if a doubt exists it should be resolved in favor of the applicant. Thus, when a case has been allowed without requiring division and becomes forfeited, the requirement will not be sustained in the renewed application except in a very clear case. Even under these circumstances when the inventions are

clearly separate and independent, as where the articles are separately manufactured and sold, division will be insisted upon. (*Ex parte* Uhlig, 1903, C. D., 300.)

It is positively too late to require division when a patent is being reissued. (*Ex parte* Van Nostrand, 1913, C. D., 215.) This is because the Office is without authority either to require an extra fee or to issue a second patent without a fee. This reasoning would seem to indicate that the time when the right of the Office to raise the question of division terminates is upon payment of the final fee. The writer has not found, however, any case in which an attempt was made to withdraw a case from issue after payment of the final fee for the purpose of requiring division. The most delayed requirement for division which has been sustained of which the writer is aware occurred after an appeal on the merits and a decision thereon by the Commissioner. The requirement in that case was found to be in order because Rule 64 stated that matters of form will be insisted on only in cases presenting patentable subject-matter. (*Ex parte* Olan, 1897, C. D., 24.) The reasoning would not hold now, since not only has the rule been changed, but division is no longer regarded as a matter of form.

Although the Office may not require division in a re-issue application the applicant may of his own motion present his reissue application in several parts. When one of these parts is ready for issue it will be held to await the termination of the prosecution of the others except when the Commissioner shall otherwise order (Rule 89). Consequently the Examiner should decline to act on a division of a reissue application filed after the parent reissue application has been allowed. (*Ex parte* Bayles, 1912, C. D., 76.)

At one time a somewhat similar practice required that all divisional applications should issue simultaneously but this was changed by *ex parte* Drawbaugh, 1893, C. D., 85.

At whatever time the requirement for division is made it should be definitely and explicitly stated. The claims belonging to each group should be named by number and whether any two of the groups may be prosecuted in one application should be clearly indicated. The reasons

why division is necessary should be stated so fully and completely that if applicant should appeal to the Board the Examiner's statement need make no point which applicant has not before had an opportunity to consider.

If the reasons are obvious they need not be stated. (*Ex parte* Reid, 1901, C. D., 123.) Merely because certain claims are drawn to a process and others to the apparatus used in such process is not enough always to support a requirement for division. Consequently in such cases the Examiner should point out why the particular process is a distinct invention from the apparatus. (*Ex parte* Ament, 1905, C. D., 166.) If the reasons for division can not otherwise be made clear, the Examiner should "point out the specific language in the respective claims which restrict them" to independent inventions. (*Ex parte* Ljungstrom, 1905, C. D., 541.) It is not necessary to cite references but, if references are needed to make the position of the Examiner clear or as evidence that the inventions have become distinct and separate fields of inventive effort, they should be cited. (*Ex parte* Reid, *supra*.) Such a citation of references is rarely needed and is a different thing both from the usual citations to show the state of the art and from an action on the merits. References cited to show that the requirement for division is properly made may not be the nearest references and may not afford the best guide in making an election, consequently the Examiner should in addition thereto cite whatever is closer of which he knows or which he can find by a cursory examination. (*Ex parte* Stearnes, 1890, C. D., 49.) If the reasons are clearly stated by the Examiner his action will not be regarded as improper because applicant thinks the reasons insufficient. (*Ex parte* Wallace, 1905, C. D., 411.)

If in the same action with the requirement for division the merits be treated, the Office gives a search and report on each of several inventions which is more than applicant is entitled to. Other applicants are thus kept waiting and the manifest unfairness of this is one reason why an action on the merits at the same time as a requirement for division is unusual. It is also ordinarily undesirable because it so frequently results in no response to the requirement, applicant meeting the rejec-

tions and ignoring the question of division. Even if applicant waits the full year before taking this action his case does not become abandoned. (*Ex parte* Wright and Stebbins, 1899, C. D., 153.) Consequently, premature treatment of the merits may cause two years' delay in the actual disposal of the case.

If, on the other hand, the Examiner for any reason gives an action on the merits it is not improper practice. He should, however, act on all of the claims and not on only part of them. Moreover he should make very clear that all of the claims have been treated and not leave some unmentioned. If this course is not followed the rejection made at the same time as the requirement for division will not support a final rejection in the next action. (*Ex parte* Goldman, 1902, C. D., 238; *ex parte* Lantzke, 1910, C. D., 100.)

Even when no action is made on the merits applicant should be given whatever information the Office can readily supply which will assist him in making his election. This is usually done by citing several patents to show the state of the art. Applicant does not have a right to such citations. They are given as a courtesy and do not represent the result of a careful search such as precedes an action on the merits. It is sufficient that the Examiner cite such art as he knows of or can readily find. (*Ex parte* MacKaye, 1903, C. D., 112.) If the Examiner knows of no references it is not sufficient merely to state that fact. He should make some search, although not an exhaustive one, and whatever references can be readily found should be cited and his letter should show that such a search was made. (*Ex parte* Moorhead, 1908, C. D., 48.) Yet where the Examiner stated reasons why the claims are not patentable without making citations it was presumed that he knew of none and a petition that he furnish further information was denied. (*Ex parte* Albert, 1901, C. D., 66.)

The cursory search and the resulting citations or statement that no references are found should be made for each of the groups of claims even when the Examiner contends that the several inventions are so numerous and unrelated as to make their presentation in one case an obviously incorrect practice. (*Ex parte* Bratt, 1910,

C. D., 46.) Without this service applicant can not make an intelligent election. Yet the failure of the Examiner to cite the state of the art as to one of the several inventions will not permit a shifting after election because references then cited show the elected claims are not patentable. (*Ex parte* Randall and Luck, 1901, C. D., 47.)

Applicant's election is not facilitated however by an extended action on the form of all the claims or of all parts of the description and drawing. When all but one group of claims have been canceled, the parts of the application corresponding to the canceled claims should also be removed from the case. It would, therefore, seem that the work of criticizing such parts is outside of that which the Office ought to undertake in return for one fee and is frequently wasted. It is not unusual consequently to defer action on formal matters also until the division is accomplished. Yet this is not in accordance with Rule 64 as usually interpreted. (*Ex parte* Blake-man, 1902, C. D., 25.) However, the writer has not found any decision covering this point.

Another interesting question on which there seems to be no decision arises in those cases in which the Examiner omits to make the cursory search. It is usual for the applicant to then reply to the requirement for division by requesting information as to the state of the art. If the applicant should wait until the end of the year before making such request would he then have a second year in which to make his response to the requirement?

Applicant's response must either elect one of the inventions, or must traverse the Examiner's allegation that the inventions are independent. Any action which fails to accomplish one of these two results is not such as the condition of the case requires. Election is usually made by canceling all the groups of claims except the one representing the elected invention. When this is done the drawings and description ought to be restricted to correspond, but if applicant fails to so restrict them that of itself is not regarded as a failure to make proper response.

It is such a failure, however, to remove only the claims to some of the inventions and not all claims to all but

one invention. Thus when applicant had been required to divide into eight groups and in response canceled one group only and took no other action within the year his case was held abandoned. (*Ex parte Naef*, 1901, C. D., 230.) Not even the fact that applicant in good faith believed he had complied completely will save the case if the requirement and the lack of complete action in response are both clear. (*Ex parte Pietzner*, 1903, C. D., 142.)

An action which fails to cancel all but one group will not be unresponsive if reasons are presented why the requirement for division between the remaining groups is not good. Thus applicant may comply as to one line of division and traverse the requirement as to another line or request fuller statement of the second line without being unresponsive. (*Ex parte Naef*, 1902, C. D., 325.) Obviously applicant is entitled to have his arguments heard in this as in all matters affecting his interests and to have the question reconsidered in the light of such arguments. A refusal to divide will not of itself work an abandonment, because applicant is entitled to a reconsideration and a second action under Rule 67. In fact, an appeal from the requirement can not be considered until after such reconsideration. (*Ex parte Lovejoy*, 1901, C. D., 52.) But the refusal to divide must be accompanied by a statement of the reasons why the application should not be divided. The mere statement that division is not warranted is not enough. (*Ex parte Henri, Helbronner and Recklinghausen*, 1912, C. D., 201.) When the Examiner states no reasons in connection with the requirement and applicant makes no reply except a request for reconsideration without argument neither has fulfilled his duty. (*Ex parte Tyson*, 1902, C. D., 476.)

It has even been held that a request for reconsideration in a case where there was no possible room for doubt was an action obviously intended to prolong the prosecution of the case and therefore would not prevent abandonment. (*Ex parte Bassett*, 1902, C. D., 87.) It seems, however, doubtful whether another case can arise with circumstances showing so plainly that the action could not have been expected to advance the case. The

same Commissioner only six months later refused to follow *ex parte* Bassett in a clear case of claims to different species. The later decision is based on the ground that "there may well be a difference of opinion as to whether certain claims are limited to one species" and this is properly subject to reconsideration if applicant traverse the Examiner's position.

When the requirement for division is traversed and upon reconsideration the Examiner adheres to his former opinion he should refer the matter to the Law Examiner under Order 2145 and, if the Law Examiner approves, make the requirement final. Like any final action this should not be done when applicant has not had an opportunity to be heard, but a mere variation in the form of the requirement which does not alter the questions involved will not prevent making it final. Thus where the Examiner in stating the several groups into which division was required, failed to mention one claim but it was perfectly obvious with which group this claim belonged so that the failure to mention it did not act to the prejudice of the applicant, it was held that the Examiner properly made his requirement final in his next action. Applicant's contention that the requirement as to this one claim did not receive reconsideration was founded upon empty technicality. There was no new question to be considered in regard to this claim and so applicant had had his opportunity to present arguments on the questions involved. (*Ex parte* Tuttle, 1905, C. D., 274.)

That applicant does not make use of the opportunity to present the reasons for waiving the requirement for division will not prevent a final action thereon. So when the Examiner acted on the merits of the claims at the same time that he required division and the applicant responded with amendments to avoid the references and a merely perfunctory argument on the requirement it was held proper practice to make the requirement final. (*Ex parte* Chamberlain, 1902, C. D., 354.)

The requirement for division having been made final and applicant still wishing to traverse it, his next step is to appeal to the Board. Formerly this was not done but instead there was a petition to the Commissioner on the

theory that the question of division was not one of merits but of form. The right to an appeal was settled in *Steinmetz vs. Allen*, 1904, C. D., 703. The applicant in this case was required to divide under Rule 41 which required that process and apparatus be always separated. It was because the validity of this rule was attacked that the United States Supreme Court took jurisdiction. The rule was found to exceed the Commissioner's authority because it left no discretion. It is interesting to note in this connection that Commissioner Duell when he announced that it was proposed to amend Rule 41, stated the express ground that "this question should be removed from the domain of the discretion of the Office." (*Ex parte* Boucher, 1899, C. D., 133, see page 39.) The court in *Steinmetz vs. Allen*, thought it perfectly conceivable that there could be a case in which the process and apparatus were not separate inventions. The holding that old Rule 41 was invalid does not mean that division may not be required in cases where the two inventions are independent and even in cases of process and apparatus division should be required when it is proper. The requirement being subject to review by the Board. (*Ex parte* Frasch, 1904, C. D., 104.)

The court's conclusion that a requirement for division is in effect a rejection from which there is an appeal to the Board is based on an assumption that there was unity of invention in the case before it. Such assumption was made because the Commissioner did not deny such unity. It will not follow, however, that the change in Office practice resulted from accidental circumstances in the case before the court because the refusal of a well founded right of joinder would give rise to the same procedure as the assertion of a poorly founded one.

Whether the result of accidental circumstances or not *Steinmetz vs. Allen* has established the rule that requirements for division are appealable (*Ex parte* Emerson, 1904, C. D., 118; *ex parte* Crain, 1907, C. D., 18), and this conclusion has been confirmed by the Court of Appeals. (*In re* Frasch, 1906, C. D., 648.) This practice has been carried to the point where an applicant can not obtain a review by petition of such a requirement (*Ex parte* Strimban, 1912, C. D., 195), even by expressly

waiving his right to an appeal. (*Ex parte* Mumford, 1914, C. D., 81.)

Although the change in practice resulted from a case involving process and apparatus it applies to any case involving division such as one presenting two species. (*Ex parte* Creamer and Knowlton, 1904, C. D., 295.)

A petition has, however, been entertained which raised the question whether the Examiner had a right to require division or was estopped. In making this decision, however, the Commissioner explicitly stated that whether or not division was correctly required could be determined only by appeal. (*Ex parte* McHale, 1908, C. D., 185.)

The question of the independence of the inventions must be settled by appeal and not by petition even when it arises in some other way than by a requirement for division, as, for example, when applicant is required to cancel claims which constitute an attempt to shift after having made an election. (*Ex parte* Barnes, 1905, C. D., 69.)

The appeal to the Board covers all matters which go to the merits of the question of division. Thus, where a question of new matter was germane to the question of division, the Commissioner refused to decide on petition the question of new matter. (*Ex parte* Eadem and Berman, 1910, C. D., 87.)

From the Board an appeal on the requirement for division may be taken to the Commissioner (*Ex parte* Weston, 1911, C. D., 218), and from the Commissioner to the Court of Appeals. (*In re* Frasch, 1906, C. D., 618.) The court, however, will not disturb the finding of the Commissioner on the question of division except in cases of clear abuse. (*Steinmetz vs. Allen*, 1904, C. D., 703, see page 712.)

A petition under the old practice could obtain a review of the question for division even though it showed that the requirement was prematurely made final if the petitioner requested such review. (*Ex parte* Pickles, 1904, C. D., 75.) Now it would not be possible to question the propriety of making the requirement final and at the same time determine the necessity for division because the two matters are decided by different tribunals.

When the requirement for division has been made final applicant must either comply or appeal. If he attempts to take any other action his case is likely to become abandoned. (*Ex parte* Wallace, 1906, C. D., 461.) If he decides to comply he should cancel all claims and all disclosure not related to the elected invention. It is within the province of the applicant to decide which group of claims he will retain. Consequently the examiner may not require that specified claims be canceled unless applicant has already made an election. (*Ex parte* Butcher, 1904, C. D., 60.) In fact the Examiner may not make the selection when requested to do so. (*Ex parte* Tuttle, 1904, C. D., 537.)

It is quite usual to cancel the claims but retain drawings and description pertaining to the inventions not elected. The requirement that such matter be removed should be made in the Examiner's action responding to the cancellation of the claims. In a case of process and product applicant may not retain the non-elected matter on the ground that it is necessary to the understanding of the claimed invention because it discloses a good way of making the claimed article. The process being a different invention from the product its description in a patent for the product is prolixity. (*Ex parte* King, 1902, C. D., 158; *ex parte* Simonds, 1888, C. D., 89.)

When, however, the division is between one species and another and a generic claim remains in the case, applicant may retain all the figures on which such claim reads even though one species differs from the other by including elements which, if claimed, would cause the case to be differently classified. (*Ex parte* Garland, 1903, C. D., 414.)

The Examiner should particularly scrutinize the statement of invention because as originally drawn it is almost certain to be directed to more than the elected invention but the applicant seldom changes it when he divides. The title also frequently needs alteration as a result of division, yet seldom receives attention. None of these matters is, however, regarded as so essential a part of the act of dividing that the failure to attend to them constitutes an unresponsive action. Until the Examiner states the requirement for additional changes

all that the applicant needs to do is to cancel all claims not inconsistent with his election.

Such cancellation of claims is the usual way of indicating which invention is elected. Applicant may, however, before the question of division is determined indicate by express statement which group of claims is elected and have an action on the merits of that group. The other claims then merely remain in the case until the merits of the elected group are determined or their rejection has become final. Then both the question of division and the merits of the elected claims can be appealed to the Board in one action. (*Ex parte King*, 1913, C. D., 105.) This does not reverse entirely such decisions as *ex parte Pickles*, 1904, C. D., 126; because, although it permits the claims to remain in the case it does not require an action on the merits of more than one group. Action on the merits will not be made before division even though an appeal is to be had on the requirement (*ex parte Snyder*, 1904, C. D., 242) except under the practice indicated in *ex parte King*.

Applicant having indicated his election without acquiescing in the requirement for division will not be required to eliminate from the drawing and description the non-elected devices. Where the elected invention is examinable in a different division the case should be transferred in spite of the presence therein of claims and disclosure indicating a different classification. Such cases should, however, be called to the attention of the Commissioner for special directions. (*Ex parte Stemple*, 1913, C. D., 262.)

Election may be made also by claiming but one invention in the case as first filed. Later attempts to claim others should be met by requiring such claims to be canceled. (*Ex parte Moorhead*, 1911, C. D., 242.) Whether the requirement that such claims be canceled be correct depends on whether the Examiner's conclusion that the case presents two inventions is right, consequently, the requirement should be preceded by a consultation with the Law Examiner under Order 2215 and from the repetition of such a requirement an appeal lies to the Board. (*Ex parte Lawley*, 1904, C. D., 539.) If the original claims are generic there is no elec-

tion and applicant may later make narrower claims to whichever species he desires. (*Ex parte* Plimpton, 1902, C. D., 450.) In the consideration of the question whether the claims first presented were specific to one of the several inventions, applicant is to be given the benefit of every reasonable doubt, (*Ex parte* Cram, 1903, C. D., 1), but claims specific to one species constitute an election even though the case also contains claims broad enough to read on the other species. (*Ex parte* Maddux, 1903, C. D., 312.)

Again, election may be made by canceling claims to all inventions except one where no requirement for division has been made. The effect of such election is, however, as if made in response to a requirement and applicant may not later shift if the inventions are independent. (*Ex parte* Barnes, 1905, C. D., 69.)

An election, express or constructive, is the only way of obtaining an action on the merits before the question of division is disposed of but other ways have been attempted. One way consisted in canceling all but one group of claims and at the same time stating the intention to reinsert the canceled claims after action on the merits had been had. The Examiner met this by requiring that if the canceled claims were to be reinserted at all it be done at once. It was held that this requirement was proper but that the Examiner would also have been justified in regarding the action as an election, thus making it impossible ever to reinsert such claims. (*Ex parte* Scott and Deats, 1909, C. D., 182.)

Such a reinsertion will not be permitted to save an additional appeal. (*Ex parte* Fritts, 1903, C. D., 286.) Even where the applicant has been misled by the Examiner mistakenly stating that the claims of one group are allowable, he may not shift after election. (*Ex parte* Noble, 1898, C. D., 149.) When the Examiner wrongly required that certain claims be canceled when he should have given applicant a chance to elect and applicant did cancel the claims they may not afterward be presented in that application. (*Ex parte* Johnston, 1887, C. D., 64.) In the same way claims canceled by an associate attorney in response to a requirement for division may not be reinserted even though the principal's

judgment differ from the associate's. (*Ex parte Clausen*, 1899, C. D., 183.)

The reason why such reinsertion is not permissible is because in prosecuting one group of claims applicant receives from the Office all the service to which he is entitled in return for one fee. Consequently acts on his part which cause the Office to render such service, rather than acts which indicate his intent, determine whether election has been made. Thus to present claims to but one invention as the case is first filed will preclude the prosecution of claims to another invention in that case. If on the other hand claims are suggested under Rule 96 after the requirement for division has been made but before it has been complied with, to make the suggested claims and prosecute the interference is not to make an election. (*Ex parte Burk*, 1912, C. D., 338.) The interfering claims may even be admitted after an election although to a slightly different species (*Ex parte Priebe*, 1915, C. D., 39) and applicant should be required after the interference to again limit himself to one species but when the interfering invention differs widely from the elected one and the application has been allowed, insertion of such claims is refused. (*Ex parte Stimson*, 226 O. G., 699.) On principle it should constitute an election if applicant presented other claims to the interfering invention, either before the declaration of the interference or under Rule 109, but no such distinction is found in the decisions.

When applicant through mistake has made an undesirable election; he can, if he act before the Office treats the elected claims on the merits, shift to the other invention. (*Ex parte Zabel*, 1888, C. D., 35.) This curious result follows necessarily from the principle that the examination of one group of claims is what prevents a shifting to a second group.

Another rather surprising result comes from the same principle. If applicant's case originally presented three inventions A, B, and C, and in response to the requirement for division he canceled the claims to C he is not estopped to elect C when the requirement for division between A and B is repeated. As he never presented claims to a single invention he received no action on the

merits and consequently the Office has not rendered him service in return for his fee. He may therefore apply that fee to payment for the examination of claims to invention C. (*Ex parte Maxim*, 1888, C. D., 26.) A later decision, however (*ex parte Moorhead*, 1911, C. D., 242) holds that when applicant cancels one group of claims in response to a requirement for division he can not thereafter prosecute claims for that subject-matter in that application. There is also an old decision (*ex parte Wharton*, 1887, C. D., 88) which refuses the right to shift after no single invention had been elected but in that case the proposed new claims were to new matter.

The same principle gives rise to another line of cases that permits an apparent shifting of ground. An applicant sometimes insists on prosecuting his claims in the form of process claims when his case presents no true process but merely an article or perhaps a machine. When applicant has become convinced of his error he may present claims in the proper form even though it be after appeal and the claims are made in response to a recommendation by the Commissioner. (*Ex parte Trevette*, 1901, C. D., 170.) But if there is a genuine method in applicant's case in addition to the machine the prosecution of the method claims constitutes an election and applicant may not shift therefrom. (*Ex parte Feld*, 1904, C. D., 376.)

An attempt to shift after an election is not such an action as the state of the case requires and will not prevent abandonment. (*Ex parte Stroh*, 1912, C. D., 208.) It has been regarded, however, as an error which may be remedied by promptly presenting claims to the elected invention, particularly where the fact of shifting is not obvious. (*Ex parte McGenniss*, 1902, C. D., 422.) Also, if the Examiner overlooks applicant's change of ground and acts on the substituted claims there is no abandonment. (*Meden vs. Curtis*, 1905, C. D., 272.) When the oversight is discovered, however, the applicant will be confined to the elected invention.

To work an abandonment the attempt to shift must make no real progress in the prosecution of the case. Thus, where applicant rewrote and otherwise responded concerning a large number of claims to the elected inven-

tion and inserted one claim to a different invention it was held that the Examiner should treat the elected claims and require cancelation of the other without holding the case abandoned. (*Ex parte Gally*, 1908, C. D., 80.)

The proper treatment of an amendment presenting claims to an invention other than the elected one is to enter it and require that such claims be canceled. (*Ex parte Selle*, 1904, C. D., 221.) The older practice of refusing to enter the amendment became incorrect when *Steinmetz vs. Allen* settled that such questions should be reviewed by the Board. Even under the old practice if the amendment was (improperly) entered the applicant had an appeal to the Board from rejection on the ground of election. (*Ex parte Bailey*, 1890, C. D., 123.) The claims should not receive an action on their merits and should not be rejected and applicant should not be given a second chance to elect. The essence of the distinction between a rejection and a requirement that the claims be canceled is pointed out in *ex parte Miller*, 1905, C. D., 228. The requirement that claims be canceled under such circumstances is not reviewed on petition (*ex parte Weaver*, 1912, C. D., 80) and the same is true of a requirement that a claim be canceled to maintain a line of division between copending cases. (*Ex parte Pope*, 1912, C. D., 141.) When one of the copending cases is in interference it is particularly important that a clean line be kept between them. (*Burchartz vs. Nolan et al. vs. Christiansen*, 1912, C. D., 196.)

The requirement that a claim be canceled can not be met by adding an introductory clause to bring it into the same class as the elected claims because an introductory clause adds nothing to the claim. (*Ex parte Gally*, 1903, C. D., 480.)

It would seem that the question for the Board to decide upon an appeal from a requirement that claims be canceled is whether the claims are not to the elected invention, but *ex parte Gally* seems to indicate that a review of the correctness of the requirement for division may be obtained by reinserting the canceled claims. This would seem, however, to be incorrect because applicant having once accepted the Examiner's position that the groups of claims are to independent

inventions it would seem that this question had become *res adjudicata* as truly as if the decision were by the Board.

Possibly a review of the correctness of the requirement for division could be obtained by inserting in a divisional case claims from the parent case. *Ex parte Ayers*, 1915, C. D., 34, which indicates that when a case contains the statement that it is a division of a parent case it may be so amended as to make that statement correct, has been interpreted by certain high officials of the Office as indicating that anything contained in the parent case may be inserted in the divisional case. If *claims* were thus inserted and this interpretation is correct the requirement that they be canceled would automatically cause a reconsideration of the propriety of the original requirement for division.

The doctrine of *res adjudicata* applies only to the question actually raised and so when a requirement for division has been sustained, that act of the Board will not prevent a requirement for further division from being made. (*Ex parte McHale*, 1908, C. D., 185.) Such belated requirement should of course, be avoided whenever possible, as it adds to the annoyance which attorneys always feel when division is required.

This dislike for the requirement for division has given rise to many attempts to avoid it beside the straightforward ways of election and appeal. The most common form of such an attempt is the presentation of aggregation claims. Thus applicant having presented claims to A and claims to B and being required to divide, responds by amending the claims to B so that they are claims to A plus B. In the earliest published decision dealing with a case of this sort (*ex parte Franklin*, 1873, C. D., 116) the Examiner still insisted on division and the Commissioner sustained the requirement but at the same time commented adversely on the A plus B claims using the same reasoning as *ex parte McNeil*, 1902, C. D., 313, and *in re Hawley*, 1906, C. D., 576. At even this early date that reasoning had already been published about two years. (See *ex parte Eynon*, 1871, C. D., 239.)

The attempts to meet the filing of aggregation claims by some action which should separate the real inven-

tions present in the case gave rise to much confusion in the early decisions because division of an application was not always associated with a separation of the claims into groups. Thus we read in a decision concerning the oath that "should the Office decide that the combination is not a legitimate one, and require the applicant to divide" an oath made to the combination would not serve for the divisional cases. (*Ex parte Heginbotham*, 1875, C. D., 93.) Also we find an instance where the Examiner insisted upon division although the case contained but one claim. (*Ex parte Rice*, 1874, C. D., 44.) The relation of this source of confusion to the practice which grew up of first disposing of the question of aggregation is seen in *ex parte Bullard*, 1888, C. D., 169, where the applicant originally presented a claim to A and two other claims one to A plus specific B, and one to B plus specific A. After several actions in each of which the Examiner insisted that between A and B there was no combination the applicant appealed to the Board. The Commissioner directed that the appeal be forwarded because if the action against the A plus B claims was not a rejection it ought to have been one and said "if the action be affirmed on appeal, then division may be required between the elements" clearly indicating that a further prosecution before the Examiner after decision on appeal was contemplated.

The anomaly presented by this practice of making applicant appeal to the Board from a rejection of certain claims while other claims had received no action on their merits was defended in *ex parte Carter*, 1889, C. D., 100, where the Commissioner limited it to cases containing claims to A, B, and A plus B. The decision says that the presence of the A plus B claims prevents requiring division between the A claims and the B claims. Such a limitation of the decision was disregarded later, however, and it was declared proper practice to reject claims to A plus B before requiring division although the claims in the case included not only claims to A but also to C and D. (*Ex parte Tymeson and Borland*, 1898, C. D., 48.) This continued to be the practice until *ex parte Mansfield and Hayes* changed it in 1902.

Because aggregation claims were frequently treated

by the Office with a view to obtaining a separation of the inventions in the case, it occasionally happened that a rejection on the ground of aggregation was met by a petition to the Commissioner, that being formerly the method for obtaining a review of a requirement for division. The decisions are uniformly to the effect that an appeal to the Board was the only answer to any such rejection, as it was not a requirement for division. (*Ex parte Webber*, 1902, C. D., 93.)

Whether an applicant who presents aggregation claims has made an election must be determined by noticing whether he has obtained a search and an action on the merits on one of the inventions. Thus where applicant originally presented claims to A and other claims to A plus B and division was not required but later he canceled the A elements from the combination claims leaving them B claims the requirement that the B claims be canceled was sustained. (*Ex parte Mitchell*, 1913 C. D., 233.)

In another case applicant was required to divide between claims to A and a group of claims including claims to A plus B and claims to B and he responded by amending his A claims so that they became claims to A plus B. This amendment was made in the face of the warning that A plus B was not a good combination and not patentable for reasons stated in *ex parte Casler*, 1900, C. D., 5. The claims thus presented were rejected on the ground of aggregation, presumably no search or only a cursory one being necessary for this rejection. Applicant then removed the B element from the combination claims and canceled his B claims. The Examiner refused to enter this amendment but was reversed. The applicant never had an action on the merits based on a search and consequently might still claim that service in return for his fee. (*Ex parte Day*, 1903, C. D., 279.)

A case at first sight similar to this in which the decision was not published presents just the difference needed to illustrate this principle. In this case applicant presented claims to A and claims to B and division was required. He then substituted claims to A plus B and was rejected on the ground that the combination was old, references being cited to show that fact. After several

amendments the combination claims were finally rejected. Applicant then attempted to offer for appeal claims to A and the Examiner's refusal to admit the amendment was based on the ground of shifting after election as well as the ground that the claims applicant sought to present were not merely a better form of the finally rejected claims. The Commissioner sustained the refusal but did not indicate his grounds. It is evident from the preceding discussion that both grounds were good.

Attempts to add combination claims after division has been made are not necessarily a shifting of ground. The combination, if patentable, may or may not be a distinct invention from the element elected and only in the case where it is distinct may the requirement that it be canceled be made. If such combination claims are not to a different invention they must receive action on their merits. (*Ex parte Brownell*, 1901, C. D., 31.)

There are not many perplexities or close questions involved in the practice concerning division. The question of when a case ought to be divided is another and far more difficult matter which is left for some more able writer to present. If the foregoing gives a clear account of the course to be pursued in cases involving the question the object of this paper is accomplished.

The Office and Patent Validity

A paper read December 21, 1916, before the Examining
Corps of the United States Patent Office

BY

NELSON J. JEWETT,
First Assistant Examiner, Division Thirty-three,
U. S. Patent Office

WASHINGTON, D. C.

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The Office and Patent Validity

By

NELSON J. JEWETT,

First Assistant Examiner, Division Thirty-three,
U. S. Patent Office.

The patent system of the United States is founded upon Article I, Sec. 8, par. 8, of the Federal Constitution, which reads as follows:

The Congress shall have power to promote the progress of science and the useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.

The importance to the life of the nation of its progress in "science and the useful arts" is second to nothing—with the possible exception of progress in moral and spiritual life—and even the latter undoubtedly is affected by it. In the competition between nations in commerce, war, attraction of immigration, in all that marks the difference between a progressive and a decadent nation this progress is basic. The putting into effect of the only specific, definite provision for this fundamental need which was supplied by the makers of the Constitution rests with the officials and employees of the United States Patent Office.

It behooves us, upon whom this great responsibility rests, as intelligent men to appreciate the nation-wide character and importance of our work and to bear in mind the good effects of a careful, and the disastrous effects of a careless manner of carrying it out. Our thoughts should project beyond the four walls of the Office to the farthest boundaries of this great nation and we should realize that a monopoly granted at our hands extends over all this vast territory and for an extended period of time.

There are undoubtedly those, even in public life and in high office who have not a true appreciation of the place which the patent system holds in relation to our national well-being. If there exists an examiner in the Office who can issue a patent carelessly he must share in this lack of appreciation. For the benefit of any such it is desired to take a glance at the importance of the system, the magnitude of the interests involved and afterwards to consider how we should meet the responsibility which is placed upon us.

Speaking of the importance of the patent system, Mr. F. P. Fish says:

I do not believe that anyone who has given thought to the question can doubt that at the present time no great industrial progress can be expected in a country which does not offer patent protection to those who have it in their power to promote the progress of the useful arts, or fail to conclude that invention and the industrial development due to invention are in any country largely proportional to the extent to which the patent law of that country operates as an effectual stimulant. (Senate Doc. 225, 63rd Congress, 1st Sess., p. 9.)

It hardly seems necessary at this stage of industrial history to advance arguments in favor of an adequate patent system as an effectual, and as far as can be seen, the only practicable stimulant for the promotion of the useful arts that can be given by the community. For many generations it has been generally agreed that a definite and attractive reward was essential if inventions were to be made and introduced into use. Experience has demonstrated that no form of reward so fitted the achievement, was so productive of advantage to the community and was attended by so few disadvantages as the grant to an inventor of a monopoly of his invention for a limited time. While many other forms of reward have been suggested (such suggestions were made at the convention which adopted our National Constitution), they have nowhere been

adopted as a part of the machinery of society. Everywhere some form of exclusive control for a limited time has been recognized as the best way of dealing with the matter. (Ibid., p. 4.)

Mr. Fish's estimate of the importance of the system is well borne out by a glance at the following statistics for which we are indebted to the Bureau of Census.

The value of wealth produced on the farms of the United States in the year 1914 is given as \$9,872,936,000. In that year the value of the manufactured products in the United States is given as \$24,246,323,000, nearly two and one-half times as great as the total production of agriculture, while the value added to material by the act of manufacture was for that year \$9,878,234,000, a little greater than the entire value of agricultural products.

Practically the whole of the manufacturing industry of the United States is based upon patents. Either the product, the process or machine by which the product is produced, or all three of these are covered by patents at present in force or else the public has been taught all these things by inventors who have had their term of monopoly by letters patent now expired. Such is the course and speed of progress that a large part of this total value depends upon patents at present in force. Even the farm products depend largely upon patented machinery for their production.

The value of manufactures does not tell the whole story of the size of patent interests. Much value is created each year under patents that is not included under the statistical head of "manufactures," for instance—building structures of all kinds, bridges, dams, piles, pavements, irrigation works, tunnels, agricultural processes and animal industries, advertising, moving pictures, sanitation, etc. If the total value of all human endeavor in each of the fields carried out under patents could be known and added to the \$24,000,000,000 of manufactures in one year, it would be found that the combined interests affected by the Department of Agriculture, War, Navy, and the remainder of the Interior Department, exclusive of the Patent Office, would be

dwarfed. The latter statement would hold even if it be contended that the total value of the manufactures is a too liberal allowance to the credit of the patent interests since the value of patented enterprise which is not included under the census head of "manufactures" would very much more than compensate for any such discrepancy. In fact, if a person determined to have nothing to do with any article covered by living or expired patents, he would be compelled to leave all his modern clothing behind and go into a wilderness away from all works of man.

A statement of the size of the interests involved in patents does not exhaust this side of the question. Patents not only foster and encourage and improve existing industries but they create new ones. For instance, the value of automobiles, bodies and parts manufactured in the United States in 1914 was \$632,831,000. In 1897 this industry did not exist. In seventeen years, the life of a patent, it grew from nothing to the size stated. The moving picture industry dates from about the year 1898 and has had practically all its growth since 1904. In 1913, \$275,000,000 was paid in admissions. In 1915 the industry was estimated to be the second or third largest in the United States, a growth attained in eleven years, six years less than the life of a patent. Inventors under the patent system *created* these vast industries.

Nor is the question of dollars the most important consideration. That is merely the measure of the incentive which the makers of the constitution decided to offer for the purpose of bringing about "progress in science and the useful arts." The meat of the matter will be found when the convenience and utility of the electric light is compared with the tallow candle; the telephone, telegraph and railway with the pony post; the modern combined harvester and thresher with the sickle and cradle; the pullman palace car with the stage coach; and the automobile and the aeroplane with the ox-cart.

Advance in "science and the useful arts" is basic to the life of the nation and the patent system is basic to the advance. In view of the importance, let us consider what should be our course as intelligent patriots and patent officials.

The statute reads "any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter or any new and useful improvements thereof, not known or used, . . . not patented or described, . . . not in public use or on sale, . . . may obtain a patent." It is to execute this law that the examination system exists.

It is often said the "Office exists to grant patents." This is only a half truth and half truths are always dangerous. Much shoddy work may be laid to the charge of this epigram. A judge might as well say, "I sit to render decisions in favor of plaintiffs." The whole truth is that the Office exists as truly to refuse patents in improper cases as to grant them in proper cases. Otherwise our system would be a registration system.

It has been estimated that substantially one-third of the work of the United States Circuit Courts is made up of patent causes. In a very large majority of these cases the question of the validity of the patent is raised. In other words the judges are required, as a not small proportion of their duties, to pass upon exactly the same questions, as are the examiners in the Office. Is the standing of a judge of the circuit court ever determined by the *number* of cases he hears and decides? The question answers itself.

Incidentally, in connection with this phase of the subject, it is believed that the respect due an efficient man in any position should be measured by the nature of the service rendered to society. Is such a service any more valuable because rendered in a court room with advice of counsel on both sides of a question, than if rendered in an office where the judge must also fill the place of attorney for the public?

The difference between examiners as also the difference between judges is believed to be largely determined by the possession of that uncommon quality, common sense, coupled with respect for and interest in the work.

Upon appointment each patent official takes the following oath:

I do solemnly swear that I will support and defend the Constitution of the United States against all enemies, foreign and domestic; that I

will bear true faith and allegiance to the same; that I take this obligation freely, without any mental reservation or purpose of evasion; and that I will well and faithfully discharge the duties of the Office on which I am about to enter: So help me God.

With this solemn obligation upon him and with the statute before him which reads “. . . not known or used by others in this country . . . not patented or described in any printed publication,” etc., can anyone lightly say “I am here to grant patents,” and thereupon overlook the conditions precedent to the grant? Just what course of action can reasonably be expected from a conscientious official in the premises? Of course he can not be expected to exhibit clairvoyant powers and say surely that an invention has *never* been known or used. Nor can he be expected out of his salary to purchase all publications ever printed that he may make certain that the conditions of the statute are met. But can not he be presumed, when he says “I find that the matter set forth in these claims is new and falls within the statute,” to have searched all available sources open to him in which an anticipation might reasonably be expected to exist? Under his oath of office can an examiner do less? Has the statute above referred to been complied with otherwise? Have we as officials of the Office under the laws, any discretion left us to do otherwise than fulfill the statute according to its terms?

The statute, where it reads, “not patented or described in a printed publication” places the literature of an art on a parity with the patents relating to that art, as anticipation. In some arts the state of the art is pretty accurately reflected in the patents but in other arts this is not the case as, for instance, in the art of civil engineering. In such cases a lack of facilities for search of the literature or a failure on the part of the examiner to avail himself thereof is as bad as a failure to search the patents.

Each applicant pays a total fee of \$35 for the grant of a patent. Where, in the patent statutes, can be found any authority for giving the application of one invention

the benefit of two-thirds of the search necessary to determine its novelty and to another one-tenth of the necessary search. If there is no such discretion left us by the law, how can we say "this application is for an unimportant device—I will abbreviate the search"? The statute gives no such discretion, nor should it while all applicants pay the same fees and in view of the human impossibility of an accurate judgment as to the value or importance of an invention, since the small appearing are often of great importance and the large complicated machines are often of slight value as inventions.

Who would fancy that a patent for a hump inside a dress hook would be worth a million dollars? The revolutionary effect of the telephone on modern life is universally admitted now, but when the Bell application was filed it was regarded as an interesting scientific novelty and it is reported that a man prominent in public life was offered a one-sixth interest in it for \$10,000, but refused on the ground that he had no money to invest in toys. On the other hand, the Office is crowded with patents with voluminous specifications and many sheets of drawings, each describing machines of the most complicated nature which yet have been total commercial failures. As we have stated, the law gives the examiner no right to exercise judgment as to the relative importance of inventions and until we have an examining corps endowed with prophetic powers it should not do so.

It must be recognized that human beings are not infallible and that some patents even under ever so careful consideration, will be issued which are invalid for lack of novelty. Let us consider the possible effect of such cases.

A very notorious case is that of a patentee holding many patents on a type of structure used almost exclusively in public works. Of the patents up to January 1, 1916, only one claim had been definitely declared by a court to be valid, and this is true in spite of many suits and numerous "consent decrees." This patentee is reported to have stated that he has collected \$85,000 in one year in royalties. In other words, the public has had its necessary public works obstructed, has been mulcted in the sum of \$85,000 in one year in addition

to annoyance, because of the issue of patents which the results of litigation seem to indicate should never have been granted. Many other cases of improperly granted patents used as "clubs" might be cited and this phase of the patent situation goes very far to blind the eyes of the public to the very great benefits derived from the patent system. The best safeguard against this danger is care in *granting* patents.

There is another very unfortunate aspect to the grant of patents without due care, viz., the possible financial ruin of the inventor himself and his friends. Some years since, an application was filed upon an improvement in a process of casting concrete piles in situ. If a valid patent could be had it would be very valuable. The claims were allowed and an interference was declared which cost the applicant who established priority, all the capital he possessed. After the termination of the interference a substantially complete foreign reference was found in an entirely unlikely class in another division of the Office. The fact that no one was blamable in this instance did not prevent the financial ruin of the inventor.

No vivid imagination is required to appreciate the position of the inventor who receives a patent under the seal of the Office after due proceedings had under an examination system, and who puts all his worldly goods into a factory for manufacture under his patent, when it is found that the examiner, due to any cause whatever, has overlooked an anticipation. An examiner with a sense of responsibility can not view such a situation carelessly!

We have glanced at the effect upon the public and upon the inventor of a hasty grant of patents. There is still a third side to the question—the reaction upon the Patent System.

In connection with the autoclave patent for cement testing the Engineering Record editorially stated as follows:

On what basis the Office could grant the patent is difficult to imagine, for the fact that the high pressure steam test is not new is known to every one interested in cement testing. . . . To the

Wayman the granting of this patent is on a par with that for wet concrete, which the wisdom of the Office saw fit to grant.

Eng. Rec., Vol. 69, No. 7, p. 178.

Again:

“The conclusions one must draw from the conditions above cited are a severe condemnation of the Patent Office. There are, however, certain extenuating conditions, which should be borne in mind and which will be found discussed editorially in this issue. To any one acquainted with the art there is no doubt that these patents have been granted contrary to the intent of the patent law.”

Eng. Rec., Vol. 69, No. 20, p. 552.

In connection with a suit on the Melber patents in which the defendant won, the Eng. News, Vol. 76, No. 14, p. 668, states as follows:

This case is illuminating in many ways. It shows what may happen to the innocent bystander in the person of an unoffending contractor when a patent suit bomb explodes. These contractors were put to the expense of thousands of dollars because the United States Patent Office did some clumsy work in granting a patent to a man for things that were described, and even patented in the United States, long before he made application for his patent.

A patent to Bone on a retaining wall was sustained in many court decisions and large sums collected by the owner until the subject was carefully investigated, and of this the Engineering Record says:

In spite of the fact that the evidence of prior art introduced by Professor Hatt has, of course, been in existence all the time, previous cases were decided in favor of the plaintiff, apparently ignoring these facts entirely. Assuming that the

essential requirement of patentability is the proof that the device is new and based on a new idea, the existence of prior designs or prior art based upon the same idea, as shown in the new evidence introduced in this case, certainly raises the question whether the lawyer-controlled system of judging the validity of engineering patents is not inherently weak, to say nothing of the apparent mistakes in the United States Patent Office itself in the issuance of patents, due to a lax system of investigation.

Eng. Rec., Vol. 73, No. 8, Feb. 19, 1916,
p. 237, ed.

Many more quotations could be supplied to illustrate the extreme criticism to which the Office is subjected by anything savoring of careless work; in fact, nothing else could be expected in view of the disastrous effect of such work upon the financial condition of inventors as well as upon the public.

It is believed to be true that *no examination* prior to grant of a patent would be preferable to a poor one. If the Office seal did not presuppose a search no encouragement would be held out to the patentee that the patent was good, without an investigation of the matter at his expense. Should, therefore, the examination system be abolished? It appears certain that the present plan of examination can make careful searches and reach a degree of certainty as to novelty, at less expense than the same work could be done by privately hired attorneys, since the salaried examiner has no lost time and is enabled to become better acquainted with one art than a general practitioner could hope to do.

Should the patent system be abolished entirely? Both Holland and Switzerland in modern times have essayed to do without a patent system and their experience seems to show that no satisfactory industrial progress is possible without such a system.

Commissioner Butterworth has said:

But for the Patent System only an infinitesimal part of the triumphs of inventive genius, which crowd about us in such numbers that we are

wholly unable to appreciate their extent and magnificence, would have been accomplished, and if we would cut the ground from beneath the material prosperity of the age, there is no way in which it could be so effectively done as by a repeal of our patent laws.

P. 386, Patent Centennial Celebration, 1891,
Proceedings and Addresses.

The first portion of the present paper attempts to show the basic relation to the progress and therefore the life of the nation, of the patent system. If the point is well taken, if Mr. Fish is correct in his estimate, if the experience of Holland and Switzerland referred to is a guide, the patent system must stand.

If then, we have established that the system must stand, that the examination system is preferable to the registration system, and if an imperfect examination is as disastrous as we have attempted to show, the only course open to us as officials would seem to be one of exceeding thoroughness and careful scrutiny of claims prior to grant of a patent.

By inquiry among the older men in the Office, the writer is assured that the policy of the Office for at least twenty-five years has been to judge an examiner's work by the number of actions made rather than by his thoroughness. This paper is an attempt to make a case for the opposite policy. The matter is set forth more from the standpoint of a patriotic citizen of the United States than that of an official of the Office and is written with a sense of deep conviction of the seriousness and importance of the matter.

December 21, 1916.

Building Structures as “Manufactures”

A paper read December 21, 1916, before the Examining
Corps of the United States Patent Office

BY

FREDERICK F. MASON,
Third Assistant Examiner, Division Thirty-three,
U. S. Patent Office

WASHINGTON, D. C.
1916

Building Structures as "Manufactures"

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The purpose of this paper is to consider the question whether such structures as buildings and parts of buildings fall within the term "manufacture" as used in Sec. 4886, Revised Statutes. Robinson in his work on Patents defines a manufacture to be—

"an instrument created by the exercise of mechanical forces and designed for the production of mechanical effects, but not capable, when set in motion, of attaining by its own operation to any predetermined result."

As he points out, a manufacture possesses no inherent law which compels it to perform its functions in a given manner, and in this absence of principle lies the distinction between a manufacture and a machine.

A building, or part of a building, such as a wall, roof, floor, etc., is believed to fall well within the above definition of a manufacture. They are created by the exercise of mechanical forces, are clearly designed for the production of mechanical effects, and are not capable, when set in motion, of attaining to any predetermined result by their own operation.

Robinson, in Vol. 1, footnote to page 249, states that:

"A distinction is necessarily drawn by the courts between a plan or project for doing something and the method by which it is to be physically effected. The former, if the ideas or mode of delineation are new, may be protected by copyright, not by patent since the plan or project though capable of being carried out by the use

of means is not in itself a means. Thus, an architectural plan for the building of a house, though new and original, is not an art or any other form of invention,"

and cites *Jacobs vs. Baker* (1868), 7 Wall, 295.

One question that presents itself from the above is, what is meant by the expression "a plan or project," in the statement—

"a distinction is necessarily drawn by the courts between a *plan* or *project* for doing something and the method by which it is to be physically effected."

Of course, it is obvious that as far as the *plan* of a building or jail, in so far as it appears on paper in the form of a drawing, is concerned, it could only be protected by copyright, since when the drawing or plan is completed the result is merely a sheet of paper with numerous straight and curved lines thereon. But how about the completed building and component parts thereof after they are actually constructed? It appears to be equally obvious that *they* would not be the subject-matter for copyright.

An inspection of the *Jacobs vs. Baker* case, *supra*, reveals that there were four patents sued upon, the first of which claimed "a secret passage, or guard-chamber" arranged in a certain way, and the fourth of which was for constructing and arranging cells in jails with spaces therebetween and one above the other, while the claims of the second and third patents were for the specific structure of the wall and the joint between the plates thereof. Mr. Justice Grier in delivering the opinion of the court said:

"Now a jail can hardly come under the denomination of 'a machine'; nor, though made by hands, can it well be classed with 'manufactures'; nor, although compounded of matter, can it be termed a 'composition of matter,' in the meaning of the patent act."

Nor did he appear to think that it would come under the head of an "art."

From the subject-matter of the four claims as outlined above, it can be readily seen how those of the first and fourth patents could not be classified under the head of "manufactures," for the reason that they recite no structure whatever, but merely the arrangement of things in space; but when the second and third claims are considered, it is not at all clear how the learned judge could hesitate for a moment to classify the subject-matter thereof under "manufactures," since what these two claims recite is the specific structure of a wall and of the joints between the plate sections of such wall. Such structures clearly would not be properly classifiable under either "art," "machine" or "composition of matter"; however, on the other hand, if they can not properly be called a "manufacture" then a large part of the work in Divisions 33 and 29 (including a great volume of existing patents) must be considered as outside of the provisions of the patent statutes, to wit, for an "art, machine, manufacture, or composition of matter, or any new and useful improvements thereon," and such patents accordingly invalid. This, however, is not believed to be the case, and it is thought that such wall and joint structures are properly classifiable under the term "manufactures" whether claimed as being in a jail, a dwelling house, or piece of cabinet work, the latter of which Webster's Dictionary cites as an example of a "manufacture."

The *Jacobs vs. Baker* case, however, was not decided on the above question of law, but it was decided on the issues of fact, the evidence showing that the plaintiff Jacobs was not the first inventor. The reason for devoting so much discussion to this case is because it has been accepted in subsequent cases, such as the *American Disappearing Bed Co. vs. Arnaelsteen*, 182 Fed., 324, the *International Mausoleum Co. vs. Sievert et al.*, 197 Fed., 936, and *Fond du Lac County vs. May*, 137 U. S., 395, as settling the above question.

The structure covered by the patent sued upon in the case of the *American Disappearing Bed Co. vs. Arnaelsteen*, supra, before the Circuit Court of Appeals, Ninth Circuit, was a number of rooms, in an apartment house, so arranged that a recess was formed between two of them, into which recess a bed was to be rolled with the

foot of the bed so designed that it would close the mouth of the recess. In arguing the question as to whether or not the invention in this case came within the meaning of that part of the patent statute which states that patents may be obtained for a new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement thereof, it was contended that it should come within the term manufacture, when that term was given the liberal construction which accords with the genius and purpose of the patent laws. Mr. Justice Gilbert, however, was of the opinion that it would be an undue expansion of the word "manufacture" to hold that it includes the construction of a house, or of any room or recess in a house; that as used in the patent laws, the term "manufacture" comprises articles or implements made by human agency from raw or prepared material; and that it would be a gross misuse of the word to say that a house or a room in a house is manufactured. The court then cited the *Jacobs vs. Baker* case, *supra*, in support of this view.

In the lower court, Judge Wellborn cited the following definition (among others) of the word "manufacture" as given by Webster: "anything made from raw materials by the hand, by machinery, or by art, as cloths, iron utensils, shoes, cabinet work, saddlery, and the like," and then stated, "These definitions as illustrated by the examples given, obviously do not include a building." He also cited one definition of the word "manufacture" as taken from the *Century Dictionary* to be, "Anything made for use from raw or prepared materials; collectively, manufactured articles; figuratively, anything formed or produced; a contrivance," and also concluded that this definition did not include a building.

The plaintiff in the lower court called the court's attention to the following paragraph from *Walker on Patents* (4th Ed.), pages 12 and 13, section 17:

"The word 'manufacture' has a much narrower signification in the American patent laws than it has in those of England. In the latter it includes everything made by the hand of man; and also includes processes of manufacture. According to the former, processes are patentable because

they are arts, while some of the things made by the hand of man are patentable as machines, and some others are patentable as compositions of matter, and some others are patentable as designs. Whatever is made by the hand of man, and is neither of these, is a manufacture, in the sense in which that word is used in the American patent laws. The term should be held to justify a patent for the invention of a new and useful human habitation, or a new and useful improvement of such a structure. This statement is ventured, notwithstanding the facetious obiter dictum of Judge Grier in the jail case."

Judge Wellborn, however, in dealing with the above quotation from Walker, stated in his decision:

"If 'manufacture' were held to include everything made by the hand of man, not only would its popular meaning be disregarded, but at least two classifications found in the patent statute would be useless, since manufacture would then comprehend all that is included, either in the word 'machine,' or the expression 'composition of matter.' Furthermore, the text above quoted, notwithstanding the high respectability of its author, is met by the case which he himself refers to as out of line with the statement he ventures, namely, *Jacobs vs. Baker*" (which is the "jail case").

The patent in the above case was held void, on the ground that the subject-matter was not within the patent law.

In considering the term "manufacture," it is believed that the extensive use of the word "article" in connection therewith, as in the expression "an article of manufacture," has possibly had much to do with creating an idea in the minds of some that an object in order to be a "manufacture" must possess portability, and be capable of being made in a factory and placed on the market as a thing which can be readily moved and handled. That this is not the true test, however, is apparent from the

many classes and subclasses in the U. S. Patent Office classification to the contrary, such as Bridges, Masonry and Concrete Structures (under which may be found massive integral column and floor structures, large chimneys, silos, foundations, stairs, arches, etc.), Wooden Buildings, Paving, Ships, and Hydraulic Engineering (with its massive retaining walls and dams). It is obvious at a glance that the above named structures are not built in a factory, but are built *in situ*, the buildings, pavements and the like in their permanent resting place on land, and the ships in dry docks, or on ways. To be sure the smaller component parts may be made in a factory, but can it be said that when these parts are patented nothing further remains to be patented? Clearly not, in view of the endless number of decisions on combinations. Further, if such structures as named above are clearly not within the purview of the patent statutes, is it not readily supposable that in the present endeavor to catch up with the work, the Office would direct that all applications for such structures be at once rejected, without further search, as not falling within the classes of the patent statutes and thus make available the time of more examiners and assistant examiners on other lines of work.

It is generally conceded that a button-hook and a telescope come within the term "manufacture," yet can we say that the former is such, more so than the latter because of its size? Again, where would there be any line of difference in this respect between the small spy glass and the massive astronomical telescope? Would it be with the three-inch stand telescope at the street corner, with the six-inch instrument, or where? Again, would the small pocket revolver be any more a "manufacture" than the hunting rifle, or the mammoth modern cannon with its complex disappearing carriage? In the opinion of the writer, a building, a dam, a bridge, or the like is a "manufacture" just as much as the button-hook, revolver, telescope or cannon.

In support of the contention that a building or a part of a building is properly classifiable under the head "manufactures," the following decisions will be discussed:

In the case of International Mausoleum Co. *vs.*

Sievert et al. (Circuit Court of Appeals, Sixth Circuit, March 3, 1914), reported in 213 Fed., 225, the structure involved was a mausoleum in the form of a community crypt, having a hallway or lobby of sufficient size to accommodate the funeral attendants, and protect them, during the services, from the weather. The catacombs were arranged in vertical rows, tier upon tier, were separated by partitions of cement, and provided with valved-ports which communicated with the air spaces in the outer walls. This structure was clearly a building, and the second claim read as follows:

“A burial crypt comprising a structure with a reception hall-way, seamless catacombs located therein and spaced from the walls thereof whereby an air passage is formed, said catacombs being provided with valve-controlled ports at their rear ends which communicate with said air passage, said passage being provided with an outlet at or near the top of the structure, also valve-controlled ports at the front ends of the catacombs through which the air may be exhausted therefrom after the same are sealed.”

The lower court, following *Jacobs vs. Baker*, *Fond Du Lac County vs. May*, and *American Disappearing Bed Co. vs. Arnaelsteen*, supra, held the patent involved to be for a building and therefore void as for a subject-matter not within the patent laws. This was reversed, however, in the upper court, by Judges Denison, Knappen and Cochran; the court saying:

“It seems clear that the making of the various parts of the mausoleum would be manufacture. The subject, in our opinion, does not lose its nature from the mere fact of the bringing of the parts together in a complete whole. . . . We think an improvement in mausoleum construction, aimed at securing convenience, preservation of the body, and sanitary conditions, should be classed as a manufacture under the patent statute.”

In *Johnson et al. vs. Johnston*, 60 Fed., 618, Judge Acheson stated:

“The term ‘manufacture,’ as used in the patent law, has a very comprehensive sense, embracing whatever is made by the art or industry of man, not being a machine, a composition of matter, or a design.”

This was quoted with approval in *Traction Co. vs. Pope*, 210 Fed., 443, *Mausoleum Co. vs. Sievert*, 213 Fed., *supra*, and *Riter-Conley Co. vs. Aiken et al.*, 203 Fed., 699.

In the latter case the Aiken patent No. 718,044 was for a roof structure designed for use on large manufacturing buildings. In holding this to be patentable subject-matter the court said:

“To us it is clear that as building is embraced in the inclusive scope of ‘useful arts,’ and as buildings, both as a whole and in their constituent parts of wood, brick, glass, iron, etc., are manufactured products, and not natural objects, they fall within the broad terms ‘manufacture’ of the act of Congress and ‘useful arts’ of the Constitution. . . . To say that a roof falls within the domain of architecture is not to decide the question; for the question is not whether a roof construction is included in architecture, which of course, it is, but whether the roof section here in question is, in view of its several constituents and cooperating elements, a manufacture. We must not be misled by the factors of size and immobility. The pyramids, by reason of their bulk and solidity, are none the less a manufacture, as distinguished from a natural object.”

Attention is further called to this case, and the decision in the lower court found in *Aiken et al. vs. Riter Conley Co.*, 205 Fed., 531, and the cases cited thereunder, as containing an interesting discussion of this question.

Robinson, in Vol. 1 of his work on "Patents," section 183, says, in discussing the subject of "Manufactures":

"The species of inventions belonging to this class are very numerous, comprehending every article devised by man except machinery upon the one side, and compositions of matter and designs upon the other."

That an arch of a bridge or like structure is a "manufacture" within the meaning of the patent law, see *Thacher vs. Mayor and City Council of Baltimore*, 219 Fed., 909.

In *Turner vs. Quincy Market Co.*, 225 Fed., 41, the Turner patent, No. 985,119 for an improvement in steel skeleton concrete construction in structures erected at least in part of reinforced concrete, was held to be for a "manufacture," within the meaning of the patent law.

In conclusion, it is believed that a consideration of the foregoing cases establishes the fact that the weight of authority is clearly to the effect that a building, or part of a building, is properly classifiable under the term "manufacture," and therefore constitutes patentable subject-matter; and that the Patent Office is not in error in granting patents for this class of structures.

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Identity of Invention in Applications for Reissue

A paper read December 21, 1916, before the Examining
Corps of the United States Patent Office

BY

ROLAND C. REHM,
Third Assistant Examiner, Division Thirty-three,
U. S. Patent Office

WASHINGTON, D. C.
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Identity of Invention in Application for Reissue

By

ROLAND C. REHM,

Third Assistant Examiner, Division Thirty-three,
U. S. Patent Office.

GENERAL STATEMENT.

Section 4916, Revised Statutes, so clearly implies what subject-matter an application for reissue may cover, that there is hardly room for judicial construction.

The purpose of reissue is the amendment of an imperfect, existing patent so that it may properly disclose and define the invention which it was the purpose of the original patent to secure. Inasmuch as a reissue is the correction of an imperfect patent for an actual invention and not the grant of a new patent, it can cover nothing which was not intended and attempted to be disclosed and claimed in the original.

There must have been an actual invention comprising a conception and a reduction to practice or its equivalent in such a form that it was capable of being understood by those skilled in the art to which it belonged. The inventor must have perceived the character of his invention to such an extent that he was capable of conferring it on the public and he must have made a bona fide effort to describe and claim his invention in his application for a patent. These are prerequisites to the granting of any patent. If no invention in this form existed at the time of granting of the original patent, no reissue can be granted for something which the inventor subsequently perceives may be the subject-matter for a patent. A reissue may not be granted in those—

“cases in which it is sought to make over an old patent, and by ingenious afterthought, either

with the assistance of new matter or by a new version of old matter, put into a patent what was not there before."

Caldwell-Gilford Co. et al. vs. Stafford Co.,
197 Fed., 518.

What a reissue may include is stated by Robinson, Section 604, in the following words:

"A reissue may embrace whatever was suggested or substantially indicated in the original specification or drawings as belonging to the invention actually made and embodied in the original patent."

This rule provides a means for determining identity of invention or, in other words, whether the reissue is for the "same invention" as required by Section 4916, Revised Statutes.

The first case in which it was necessary for the court to determine what a reissue might contain, was *Knight vs. Baltimore and Ohio R. R. Co.*, 3 Fisher, 1, decided in 1840. The court said:

"The plaintiff was not entitled to the patent of 1834, except for the purpose of giving a more perfect description of the invention *intended* to be claimed by him in the patent of 1829."

The familiar case of *Parker and Whipple Co. vs. Yale Clock Co.*, 123 U. S., 87, probably best states the rule that a reissue must be for the same invention as that intended to have been secured in the original. At any rate, it is the case most frequently cited on this point.

Many other cases state the rule in practically the same way. Indeed, it is somewhat surprising in view of the reasonableness of the rule and the logical development of it from a consideration of the purpose of reissue and from the statute itself, that any decisions can be found which state a different rule. Some decisions state that an inventor may embrace in his reissue his entire actual invention. Others go even farther by stating that the

reissue may include whatever was substantially disclosed in the original or whatever might have been claimed in the original.

A recent case in the court of appeals in the seventh circuit arrives at the opposite extreme in determining identity of invention. This case is not followed by the Patent Office nor in all of the circuits. The case referred to is *McDowell vs. Ideal Concrete Mach. Co.*, 187 Fed., 814, decided in 1911. The court used the following language:

“One condition is that, on the surrender of the original patent, a new patent ‘for the same invention’ shall be issued,

“For example if, in a patent for improvements in an old art, the drawings fully exhibit a complete and operative machine made up of twenty elements; the specification (apart from the claims) clearly explains the machine, its working principle and the best mode in which the patentee has contemplated applying that principle, and also particularly points out that the patentee’s contribution to the art consists (a) of the combination, in the machine, of elements 1, 2, 3 and 5, (b) of elements 2, 3, 4 and 6, (c) of elements 5, 6, 7 and 9, and (d) of elements 6, 7, 8, and 10 (all in accordance with Section 4888, Revised Statutes, and claims distinctly cover (a), (b) and (c)—then there would be a basis for an application for a reissue by showing, say, that claim (d) had been drafted but had been inadvertently omitted by a copyist. Conversely, if claims (a), (b), (c) and (d) were in the original and by mistake some part of the description of the machine had been omitted, or there had been a failure in the statement of invention to include (d), there would be grounds for a reissue. In the first example the patent (partly operative) would be inoperative to protect a part of the invention, described but not claimed; in the second, claimed, but not explained and described. In both there would be a defective or insufficient patent which was inoperative to secure fully to

the inventor a monopoly of the subject-matter disclosed in the patent as his invention or inventions.

“Continuing the illustration suppose that the original patent, after describing the machine as aforesaid, and particularly pointing out that the invention or inventions consisted in (a), (b), (c), and (d), had distinctly claimed (a), (b), (c), and (d). In what respect is the patent inoperative or invalid? True, the drawings and description showed a machine of twenty elements. But anyone on reading the patent would have the right to believe and to act on the belief, so far as the owner of the patent is concerned, that elements 11 to 20 and every combination thereof, were open to free use, and that elements 1 to 10 were open, and also every combination of them except (a), (b), (c), and (d). Now, if the truth was that the inventor in constructing the machine had made new and useful combinations among elements 11 to 20 and also broader inventions than those described and claimed among elements 1 to 10, it would seem from his point of view they were all one and the same invention, or group of inventions. But if enlargement is to come, not from evidence contained in the original patent (or in the proceedings to obtain it) but from what the inventor subsequently says (truthfully or untruthfully) was in his mind prior to filing the original application, a region of danger, of temptation to fraud and deception, would be opened wide which Congress has commanded should be kept closed. For the reissue must be limited to the same invention that the inoperative patent discloses as the invention.”

The rule laid down by this decision is too harsh and if followed would prevent the reissue of many patents fully disclosing the invention but improperly claiming it.

The application to specific cases of the rule for determining identity of the invention is not so simple, in view of the fact that in many cases more than a single inven-

tion is disclosed. It does not follow from the rule stated that the claims in the reissue must be confined to the particular invention or combination claimed in the original. It is probably safe to say that in the reissue application the inventor may claim all the combinations and subcombinations necessary to secure to himself the benefits of the invention disclosed and intended to be covered in the original—provided that all such subsidiary inventions are dependent upon the principal invention, and do not violate any of the rules governing the joinder of inventions. And provided also that there is nothing in the original patent or in the proceedings to obtain it which would estop the inventor from asserting a claim to such subcombination or element.

COMBINATIONS.

It is doubtful whether the mere omission of one element of a combination from a claim in a reissue would invalidate the claim, especially if the cooperative law under which the elements were associated remained the same.

A patent for a combination of elements can not be reissued to cover the same combination to which is assigned a different cooperative law. In *Idealite Co. vs. Protection Light Co.*, 103 Fed., 973, the following claim appeared in the reissue:

(1) In a hydrocarbon burner, the combination with the burner outlet orifice, a valve, a cylindrical sizing and cleaning stem carried by the valve, and adapted to extend through said orifice and clean the same, said stem having a diameter equal to that of the orifice.

In the original "the sizing and cleaning stem" was assigned merely the function of a valve stem guide. The claim was held invalid because for a different invention.

Certainly all non-essential elements and unimportant limitations may be omitted from the claim in the reissue.

Parham vs. The American Button-hole, etc., Co.,
4 Fisher, 468.

Battin vs. Taggart, 17 How., 74.

McWilliams Mfg. Co. vs. Blundell, 11 Fed., 419.

But where, as in *Johnson vs. Railroad Co.*, 105 U. S., 539, 1882, C. D., 336, the patentee omitted from the claim in his reissue elements which were described as essential in the original, the claim was held invalid because for a different invention.

In *Russell vs. Dodge*, 93 U. S., 460, 1877 C. D., 163, the patent was for a process of treating bark-tanned lamb or sheep-skin by means of a compound in which heated fat liquor was an essential ingredient. The claim in the reissue, however, was not limited to the use of heated fat liquor. The specification stated merely that it was desirable that the liquor should be heated. The reissue was held invalid on the ground that the patentee claimed a different invention. See also:

- Huber et al vs. Nelson*, 63 O. C., 311 (Sup. Ct.).
- U. S. Whip Co. vs. Hassler*, 134 Fed., 398.
- McMurray vs. Mallory*, 111 U. S., 97.
- Fetherstone vs. Cycle Co.*, 57 Fed., 631.
- Gill vs. Wells*, 22 Wall., 1.
- Jenkins vs. Stetson*, 32 Fed., 398.

COMBINATION AND SUBCOMBINATION.

A combination may be reissued to include claims to subcombinations which are a part of the principal invention, in order to adequately protect an invention.

In *Odell vs. Stout*, 22 Fed., 159, the original claim covered the combination in a roller mill for crushing or grinding grain of means for simultaneously adjusting the crushing or grinding rolls to or from each other, and controlling the spouts or channels which admit the grain to the feed rolls. It was reissued to cover two subcombinations, one combination consisting of a machine for controlling the gates of the spouts, and the other for controlling the rolls. The court held the claims valid because they were necessary to protect the patentee's invention. See also *Gage vs. Herring*, 107 U. S., 640, *Jenkins vs. Stetson*, 32 Fed., 398.

It follows that a patent for a combination which fails to properly protect the invention because it claims only the entire combination, may be reissued with claims for certain elements of the combination.

In *Wheeler vs. Clipper Mower Co.*, 29 Fed. Cases,

page 881, a patent which claimed a mowing machine as an entirety was reissued in five divisions with claims for various elements of the machine because it was discovered that the original claim for the combination did not protect the various elements of the machine.

PROCESS AND PRODUCT.

When the invention of a process necessarily involves the invention of the product, the process may be reissued to include the product.

In *Asbestos Shingel, Slate and Sheathing Co. vs. H. W. Johns-Manville Co.*, 184 Fed., 620, the original patent was for a process of producing artificial stone plates. It was reissued to cover not only the same process but the product of the process, in the following claim:

A product of the invention hereinbefore set forth, being a composition containing hydraulic cement which has been rendered colloidal,

the court held that the foregoing claim was valid and "that the product" was "the same invention as the process itself."

See also—

Tucker vs. Dana, 7 Fed., 213.

Washburn and Moen Mfg. Co. vs. Haish, 4 Fed., 900.

But where the invention of the process does not involve the invention of the product, a process reissued as a product is void.

In *The Giant Powder Co. vs. California Powder Works*, 98 U. S., 126, a process of exploding nitro-glycerine was reissued to cover a composition of nitro-glycerine and gun powder. The reissue was held invalid because the invention of the process did not involve the invention of the composition.

PROCESS AND APPARATUS.

The question whether a patent for a machine may be reissued as a patent for a process has been decided both ways.

In *James vs. Campbell*, 104 U. S., 336, a patent for a

device or a stamp for cancelling postage stamps was reissued to include a claim for the process of making a postmark and cancelling a postage stamp by a single blow. The court, in considering the question of the identity of invention, said:

“A patent for a process and a patent for an implement or a machine are very different things. . . . Where a new process produces a new substance the invention of the process is the same as the invention of the substance, and a patent for the one may be reissued so as to include both, as was done in the case of Goodyear’s vulcanized rubber patent. But a process and a machine for applying the process are not necessarily one and the same invention. They are generally distinct and different. The process or act of making a postmark and cancelling a postage-stamp by a single blow or operation as a subject of invention is a totally different thing in the patent law from a stamp constructed for performing that process.”

Unless the invention of the machine is also the invention of the process, a patent for a machine can not be reissued for the process performed by the machine. Cases in which the same inventive act creates both process and apparatus are necessarily rare, because ordinarily a process must be capable of contemplation apart from the particular apparatus for performing it, and, since the machine or apparatus and the process are usually distinct inventions, the apparatus can not be reissued for the process.

In this class of cases the decisions confuse the question of identity of invention with the question of changing the scope and laches. They state that a machine can not be reissued for a process because the latter is much broader in scope than the former. If both were the same invention, their respective scopes would be immaterial.

Thus, in *Conroy vs. Penn Electrical and Mfg. Co.*, 173 Fed., 299, the original patent was for a method of shaping the edges of glass articles, which consisted in removing by blows at successive points closely adjacent

to the edge, the edge and a portion of the opposite side of the article. It was reissued to cover a machine for chipping the edges of glass articles, comprising a support for the glass and a movable carrier provided with projecting means arranged to strike the glass an angular glancing blow at a point adjacent its edge.

In a previous suit, 155 Fed., 423, the method claim was held invalid because it was old, the court stating that the patentee's contribution to the art was a machine for performing the method. The court was probably influenced by the fact that the reissue for the machine narrowed the scope of the invention. If the patent had been for the machine and had been reissued for the method the court probably would have held the patent invalid because it broadened the scope of the monopoly.

However, In re Heroult, 127 O. G., 3217, a patent for an electric furnace was reissued to cover both the furnace and a process for obtaining soft metals. The peculiar circumstances surrounding this case may have justified this decision of the court. It is believed that the decision does not go so far as to establish any general rule.

Although the language quoted from *James vs. Campbell*, supra, was probably mere dictum and not necessary for the decision of the case, it is believed that in that case the court correctly stated the rule relative to the reissue of apparatus for process, and vice versa.

CONCLUSION.

A division of the subject along the foregoing lines is for convenience only. The important thing to be determined in an application for reissue is whether the invention which the applicant is seeking to protect is the invention which he attempted and intended to protect in the original. If this question is answered in the affirmative, the manner in which such invention was claimed in the original and the manner in which it is claimed in the reissue would seem to be immaterial. The applicant should be permitted to claim his invention in the manner best adapted to secure to himself the benefits thereof. The only restrictions placed upon his freedom to claim the "same invention" as he sees fit are those of laches, intervening rights, and estoppel.

December 21, 1916.

Patents—Commercial and Otherwise

A paper read December 28, 1916, before the Examining
Corps of the United States Patent Office

BY

GEORGE R. SIMPSON,
Principal Examiner, Division Thirty-four,
U. S. Patent Office

WASHINGTON, D. C.
1917

Patents—Commercial and Otherwise

By

GEORGE R. SIMPSON,

Division Thirty-four, United States Patent Office.

Patent assets in corporation balance sheets have been in the past and are today generally regarded with distrust. The larger the item the greater the distrust and criticism. If a search is made through the annual reports of those corporations whose business is based largely on patent monopoly, but few will be found that attempt to itemize their patents in dollars and cents. Some of the larger and more successful of such corporations have in the past issued annual reports containing substantial items charged to patents, running up into the millions, and have been subjected to such criticism by the large banking and bond houses that in subsequent annual reports they have written off large percentages of the patent valuation at the expense of the net earnings for the particular year. Other corporations have bunched their patent items with other forms of property so that the report was worthless for reaching any idea of the estimated value of the patents. Still another form of report made no mention of patents as a portion of the assets.

Patents are property, and property of such an important nature in this country, that it should not be considered as a laudable financial policy by any corporation armed with patents *cap-a-pie* to belittle, secrete or omit them in an annual report.

Proper valuation of a patent is an intricate problem. The elements that enter into the solution of such a problem are the state of the particular art, past and present, the probable demand or field of exploitation for the subject-matter of the patent, and the length of term it has to run. The future state of the art and the

public demand or field for the article or process can only be known as the future develops into the present.

The life of a patent is limited to 17 years. However, with many forms of patentable subject-matter the improvements made upon it before the expiration of the life of the basic patent, in this progressive age, are such that a hold on the larger market of the future may practically be ensured by patents on the improvements, and a keen lookout will add to it the patent-control of new developments or side issues relating to the field of the basic patent. Patent property which can be built up and developed in this manner is independent of the life of a particular patent.

Those corporations whose business is based upon patented subject-matter and whose net earnings largely or wholly arise from such subject-matter are usually protected by a group of patents. The assumption is then made that the owner of a monopoly in the industrial arts, after the actual introduction of the particular art or improvement so that it is a money-earner, will at least secure 50 per cent over the net earnings that would be possible if no monopoly existed, i. e., one-third of the net earnings are due to patent protection.

An estimate will be based on a life of 17 years for a single patent with the cessation of manufacturing and total loss of the original investment at the end of the term. Capital will be satisfied with an annual dividend of $12\frac{1}{2}$ per cent for 17 years without the return of the original investment which would be equivalent to an annual interest rate of slightly over 10 per cent under normal conditions; a 10 per cent net income annually may be considered as a fair return for a manufacturing business. Adding $6\frac{1}{4}$ per cent to the $12\frac{1}{2}$ per cent for a 17-year period, which is the 50 per cent increase for the patent monopoly, makes $18\frac{3}{4}$ per cent as a fair rate of return on a manufacturing business with patent protection for 17 years under normal conditions and as a general average for such business in this country.

The value of the patent protection at any specified time would be the present worth of an annuity, on say a 6 per cent basis, for the unexpired portion of the 17-year period, said annuity being one-third of the net earnings and fixed charges.

The outline just given furnishes the basis for a rough estimate of the value of a patent which is obtained by taking the net earnings plus fixed charges for one year, multiplying the same by the number of years the patent still has to run, and dividing the product by 5. Obviously, if a corporation has no debts the fixed charge item will be absent.

In case a corporation should maintain practically a continuous patent protection its value would be roughly equal to $3\frac{1}{2}$ times the net earnings plus fixed charges for one year.

It seems remarkable that the existence of the vast amount of wealth represented by patents for inventions should be kept so far in the background. Patent protection exerts its controlling influence on all the industrial arts, to their minutest ramifications, exacting tribute from all. The aggregate of the tribute thus collected would be an amount stupendous to contemplate. At first blush it would appear that the patent system of levying in the industries of the country would hamper and impoverish them to such an extent that commercial depression would result. On the contrary the effect has been to give a stimulus to our industries such that our patented specialties form some of the large items of our export trade, and patent protection has enabled us to obtain a firmer grip on the trade of the world.

In order to get a general idea of how the leading industrial corporations of this country treat their patents in their annual reports in the enumeration of their assets I searched carefully through Moody's "Analysis of Public Utilities and Industrials," for the year 1916.

I find 386 corporations that probably have patents or licenses under patents. Fifty-six of these corporations report their patents or patents and trade-marks as independent items in their balance sheets. Forty-four corporations bunch good-will, patents and trade-marks in single items. Fourteen corporations specify patents and include the same with their general property item.

The following is a list of the 56 corporations with the amounts they have charged up to patents in the manner specified below as given by Moody:

<i>Corporations</i>	<i>Dollars</i>	<i>Title of Items</i>
Ajax Rubber Co.....	1	Patents.
American Brass Co.....	1,000	Patents.
American Cyanamid Co.....	3,543,475	Licenses, Patents, etc.
American Rolling Mill Co.....	1,350,000	Patents, Licenses, etc.
American Wringer Co.....	100,000	Patents, Trademarks.
Avory Co.....	98,869	Patents.
Atlas Tack Co.....	1,493	Patents and Trade- marks.
Bemis Bros. Bag Co.....	3,998	Patent Rights.
E. W. Bliss & Co.....	1,023,341	Patent Rights.
Boston Woven Hose & Rubber Co.	1	Patents.
J. I. Case Threshing Machine Co.	1,036,027	Patents, Designs, De- vices, etc.
Casoin Co. of America.....	4,555,168	Patents.
Donnison Mfg. Co.....	13,418	Patent Rights.
Diamond Match Co.....	2,000,000	Patent Rights.
Draper Co.....	100,000	Patents, etc.
Electric Storage Battery Co.....	11,000,000	Patents, Trademarks and Agreements.
Emerson Phonograph Co.....	1,000,500	Patents.
Fairbanks & Co.....	3,142	Patents.
Ford Motor Co.....	64,339	Patents.
General Motors Co.....	413,500	Patents, Agreements, etc.
Gillette Safety Razor Co.....	900,000	Trademarks, Patents, etc.
Goodyear Tire & Rubber Co.....	1	Patents, Trademarks and Designs.
Groy & Davis, Inc.....	307,748	Trademarks, Patents, etc.
Hall Mfg. Co.....	238,282	Patents.
Hood Rubber Co.....	1,000	Patents.
Ingersoll-Rand Co.....	683,000	Patents, etc.
International Rubber Co.....	15,142	Patents.
International Button-Hole Sew- ing Machine Co.....	325,301	Patents and Machines on lease.
Jeffery Mfg. Co.....	193,856	Patents.
Keystone Steel & Wire Co.....	78,672	Patents, Drawings, etc.
Lanston Monotype Machine Co....	4,372,046	Rights, Franchises, Im- provements and Pat- ents.
Lee Tire & Rubber Co.....	400,800	Patents, Trademarks, etc.
Link-Belt Co.....	50,000	Patents.
Mergenthaler Linotype Co.....	4,000,000	Rights, Privileges and Franchises.
Miller Rubber Co.....	125,000	Trademarks and Pat- ents.
Ohmer Fare Register Co.....	925,000	Patents.
Packard Motor Car Co.....	1	Rights, Franchises, etc.
Page Woven Wire Fence Co.....	1,000,000	Patents, Franchises, etc.
Pennsylvania Salt Mfg. Co.....	5,275	Patents.
Plymouth Rubber Co.....	100,000	Patents and Trade- marks.

<i>Corporations</i>	<i>Dollars</i>	<i>Title of Items</i>
Reeco Button-Hole Machine Co....	882,307	Patents.
Reading Hardware Co.....	500,000	Trademarks and Pat- ents.
Sherwin-Williams Co.....	67	Patents and Trade- marks.
St. Louis Car Co.....	507,915	Patents and Patterns.
Standard Motor Construction Co.	1,716,388	Patents.
T. H. Symington Co.....	1,102,667	Patents.
Submarine Signal Co.....	1,263,394	Patents.
Union Switch & Signal Co.....	1,025,725	Patents.
United Shoe Machinery Co.....	400,000	Patent Rights.
United Drug Co.....	9,974,213	Trademarks, Patents and Formulas.
U. S. Bobbin & Shuttle Co.....	2,482	Patents and Patterns.
Utica Knitting Co.....	16,000	Patents.
Ward Baking Co.....	6,000,000	Patents and Trade- marks.
Warren Bros.....	2,000,000	Patents.
Waltham Watch Co.....	4,502,000	Patent Rights.
Westinghouse Elec. & Mfg. Co...	4,852,648	Charters, Franchises, Patents, Insurance.
Yale & Towne Mfg. Co.....	2,000,000	Patent Rights and Trademarks.

The following is a list of the 44 corporations which include as a single item good-will, patents and trade-marks:

<i>Corporations</i>	<i>Dollars</i>
Advance-Rumely Co.....	14,172,305
American Can Co.....	6,907,287
American Cotton Oil Co.....	11,635,886
American Chicle Co.....	8,155,896
American Graphophone.....	1,500,000
American Pneumatic Service.....	7,243,597
American Piano Co.....	3,790,723
Brown Shoe Co.....	4,966,365
Butterick Co.....	9,786,065
Central Foundry Co.....	5,623,094
Chicago Railway Equipment Co.....	750,000
Crex Carpet Co.....	550,000
Davis Sewing Machine Co.....	88,765
Driggs-Seabury Ordnance Co.....	1,370,388
Emerson-Brantingham Co.....	4,641,403
Fisk Rubber Co.....	8,000,000
Robt. Gair & Co.....	1,575,000
General Acoustics Co.....	536,101
General Electric Co.....	1
General Railway Signal Co.....	3,000,000
Griffin Wheel Co.....	6,950,000
Harrison Bros. & Co., Inc.....	250,000
Herring-Hall-Marvin Safe Co.....	290,000
International Motors Co.....	6,153,266
Kellog Switchboard & Supply Co.....	1,000,000
Library Bureau.....	1,500,000

<i>Corporations</i>	<i>Dollars</i>
Locomobile Co. of America.....	5,319,746
Massachusetts Breweries Co.....	2,276,765
Maxwell Motor Co.....	26,500,000
Poorloss Truck & Motor Corp.....	3,707,660
Pottibono-Mulliken Co.....	7,451,448
Pneumatic Scales Corp.....	827,724
Pyrono Mfg. Co.....	1,002,450
Shredded Wheat Co.....	6,500,000
Springfield Body Corp.....	1,511,554
Stafford & Co.....	1,203,854
Studebaker Corp.....	19,807,277
Submarine Boat Corp.....	7,332,337
Underwood Typewriter Co.....	7,995,720
U. S. Radiator Corp.....	4,000,000
Victor Talking Machine Co.....	2
Westinghouse Air Brake Co.....	2,790,515
Willys-Overland Co.....	14,059,932
Worthington Pump & Machinery Co.....	7,567,073

The 14 corporations named below specify patents in their general property item:

Auto Electric Co.
 Auto Sales Gum & Chocolate Co.
 Chicago Pneumatic Tool Co.
 Chevrolet Motors Co.
 E. I. du Pont de Nemours & Co.
 Federal Sign Co.
 General Manifold Printing Co.
 Kelly-Springfield Tire Co.
 National Candy Co.
 Remington Typewriter Co.
 Richmond Radiator Co.
 Safety Car Heating & Lighting Co.
 Sears, Roebuck & Co.
 Weyman-Bruton Co.

Moody's digest does not give a list of all industrial companies and corporations doing business in this country. Many of those he lists apparently are not actually engaged in manufacturing. Many of them refused to give him any information as to the status of their business. It is probable that there are at least 1,000 companies and corporations in this country having patents, or licenses under the same, actively engaged in the manufacturing business. There are also probably an equal number of such corporations and companies

which for numerous reasons are not actively engaged in business.

The world-wide significance of the protection afforded under our patent laws is clearly brought out in an article from the New York Times of November 12, 1916, which I quote below:

“It may be, now that there is no occasion to overstate or underestimate things because of partisanship, that more rational views will prevail as to the supposed greater efficiency abroad than in this country. As an aid in this direction it may be well to call attention to certain undisputed facts. Quite recently delegations from Australia and France have started for this country with a view to learning the secrets of American efficiency in various lines of manufacture. Such delegations have also come here in times past from Japan, China, Great Britain, Germany, and elsewhere. In consequence of such visits, orders have been put in from these various countries for machinery of American make, and manufacturers here are still engaged in supplying equipment for foreign mills, factories, mines, and farms. The older countries are much more conservative than is this in adopting new devices, and are also much slower in sending to the scrap-heap antiquated machinery. The result has been, in past years, that they have kept on using older forms of mechanism after they have been discarded here for newer ones that called for less manual labor. Even the Germans have usually been a few years behind this country in this respect. By the time they had installed some new American machinery it had already been superseded in this country by something newer. No other country has yet shown the inventive ingenuity which this country has, and upon this reliance can safely be placed in the future.”

William Hard, the well-known writer for the Metropolitan Magazine and the Chicago Herald, after a ten weeks trip, recently said:

“I see new American machines all over Great Britain. I also see something a great deal more important than new American machines, and that is new American ideas—ideas about the layout of machines in the factory room, ideas about the using of unskilled labor efficiently by planning all the work out before hand in the brains of staff specialists; ideas, in short, of scientific management. I have met young engineers in Scotch shipyards who were filled to the teeth with the writings of Frederick Taylor and Harrington Emerson and all our other important efficiency engineers.”

Mr. Hard further makes an interesting comment on the British situation as to the labor unions versus labor-saving machinery. He says:

“The Government has given its word to labor that working conditions in British factories after the war will be put back just where they were from the standpoint of labor before the war. But everybody, including the labor leaders, knows that this is impossible. You can't take all these hundreds of thousands of new labor-saving machines and throw them away. Therefore, some new deal must be made. The pledge to labor has to be redeemed, but redeemed in a different way. Labor can not be given the thing it was promised.”

James Keely, editor of the Chicago Herald, referring to Mr. Hard's remarks, says:

“Mr. Hard has judged the situation expertly, and, as no such combination of national forces is in prospect in the United States, the greatest lesson I can see over here is that these European belligerent countries, unless we act quickly, will be ahead of us instead of behind us in organized national industrial strength.”

During the past decade a great hue and cry has been raised as to conservation of the natural resources of this country. By legislation vast sections of territory have been set aside as forest reserves. Large amounts of public lands supposed to contain oil, gas or coal deposits have been withdrawn from that portion of the public domain open to private or corporate ownership. We read about these things on the front page of the newspaper. It appears, however, that a large amount of credit for the conservation of the natural resources of this country should be given to the inventor and patent laws. Mr. Samuel Insull of Chicago, in his address before the engineering societies on April 5, 1916, at New Haven, Conn., showed that the Commonwealth Edison Co. of Chicago had dropped the coal consumption per kilowatt-hour from 7 pounds in 1901 to 2.7 pounds in 1915.

As to the saving of coal Mr. Insull says:

“I think that while a great many of our well-intentioned friends have been shouting about the conservation of natural resources, the steam-turbine inventors and the designing engineers of the great power companies using steam as a prime source of power have probably done more to conserve the natural resources of this country, in so far as fuel is concerned, than has been done by all the agitation that has taken place upon the general subject of conservation.”

“It is interesting to note that the saving in Chicago per unit for the fourteen years from 1900 to 1915, was equivalent to a saving for the year of 1915 of 2,472,400 tons, or 58,000 carloads of coal per year, or fourteen loads of forty cars each per day.”

The main purpose of this paper is to emphasize the importance of our patent system in the commercial and industrial activities not only of this country but of the whole world, and to urge upon the Office the necessity of taking a broadgauge view of its work. I have long had the opinion that there was great danger of a Patent Office Examiner becoming too narrow and restricted in his views.

Vigilant search for missing reference characters and lead lines on the drawings, errors in punctuation, spelling and grammar in the specification, and the many technicalities as to the form of claims must have a tendency to dwarf his general outlook as to the large and important features of the patent business.

The danger of becoming too deeply engrossed along a single highly specialized line was illustrated in the case of an old friend of mine, Mr. D., long since dead, who spent nearly half a century trying to perfect a divided car axle and to induce the railroad officials to give it a tryout. After a life's work on the divided axle he finally got the Union Pacific to equip one freight car with his axles. The freight car was sent out on the road; the only information Mr. D. ever could get from the Union Pacific was that the car had disappeared and they couldn't find it. In his latter days Mr. D. became almost totally blind. About once a year he made me a visit at the Office. He would get some one to bring him over to my room and would talk about his divided axles until the Office closed and then I would take him back to his room. He would then insist on my coming back and spending the evening with him further to discuss the divided axle, which I frequently did. I was never enthusiastic about the possibilities of the divided axle. Any suggestions I made of some possible difficulties in the practical use of it were always brushed aside as trivialities with a shade of annoyance.

In my university reunions I have frequently met Government employees whose life work was on some exceedingly technical or scientific line and when I tried to start up conversation with them on general topics I found it made them weary and that they had nothing much to say. I would then inquire what their special work was and lead them along to give me a lecture on their technical branch of work, and I must say usually to my profit and interest. However, the meeting of these technical experts led me to resolve strenuously to avoid getting as deeply in the rut of routine work as they were.

When I used to hunt ruffed grouse I frequently had to smile at my dog who would be excitedly creeping along a hot trail with his nose close to the ground while

I already had his birds covered with my gun waiting for a rise. The joke was on the dog for the reason that he had his nose too close to the ground.

My advice to any one at work in a highly specialized line is to take up some other specialty of a radically different character and try to work up an interest in it equal to that he has in his specialized line of work. This will give a person a better mental balance and incidentally broaden his views. This advice is not intended for a person who has no particular interest in his specialized line of work.

In an examination of an application the Patent Office seldom presses the question of utility very far. The Patent Office has not facilities for determining the utility of a device. With equipments such as are possessed by the Bureau of Standards, the Chemical branch of the Agricultural Department, or the shops of the Navy Yard, something might be accomplished toward determining the practical commercial possibilities of a device. But even with such equipments no definite results could be reached in a large percentage of the cases filed in this Office. The Office therefore takes the broadest possible view of the term utility as meaning operativeness to perform some useful function.

Undoubtedly, a considerable percentage of the patents issued are commercially impossible. The Office has been frequently criticised for issuing patents that persons skilled in the particular art would stamp as impossible from a commercial standpoint. Reflection has been made upon the Examiners as though in the allowance of such cases they had in some way approved the device as a practical commercial possibility. Personally in the examination of applications the first thing I do is to classify the subjects-matter of the applications into three classes: First, commercial possibilities; second, doubtful cases; and, third, commercial impossibilities. Obviously the first class merits the most careful attention on the part of the Office, the second class a lesser degree of attention, and the third class is easy.

I have noticed that new Assistant Examiners as soon as they have become familiar with the commercial field of their work act along the lines above indicated. An Assistant Examiner who does not take a live interest

in what is doing commercially along the line of his specialty should be put on a line of work that has no commercial field.

All patents do not represent wealth. No form of property requires the use of higher technical knowledge, more legal acumen, or sound judgment in reaching an estimate of its value than a patent. The technical knowledge required is of that character which lies on the borderland of possibilities in the industrial fields, between the common methods of the present and the unknown of the future. An able law professor has happily termed patent law the metaphysics of the law. The subtleties and refinements of patent law are such that it forms a branch of the law by itself. It therefore behooves the inexperienced in patent matters not to venture into investments of this class unless they can avail themselves of the services of those skilled in such matters or feel assured that the patent property is in hands competent to manage it.

Early in my Office career I learned that there was nothing like getting alongside the inventor in his workshop to get a clear and broad idea of the problems that confronted him and the extent to which he had solved them. I was sent to Port Richmond in the suburbs of Philadelphia to see what was being done by a prominent inventor in the way of unloading, storing and reloading anthracite coal in the Philadelphia & Reading R. R. yards. The yards covered six or eight acres, were covered with tracks and surrounded by a high board fence. Normally, a small army of men with shovels and wheelbarrows attended to the loading and unloading of the cars. The coal was scattered all over the yards. It cost the P. & R. 50 cents a ton to handle the coal delivered in the yards. The men struck for higher wages. Armed guards were put in charge of the yards, but no coal could be handled. Several weeks went by. The opportunity was ripe and the inventor went to the railway officials and made the proposition to handle all the coal in the Port Richmond Yards more rapidly than before for ten cents a ton, with the further suggestion that they could sell about three-quarters of the yard acreage for the reason that it would not be needed for the storage

and handling of the coal; furthermore that the handling of the coal would only require about one-half a dozen men. This sounded like an Aladdin's lamp tale to the Philadelphia & Reading people, but they said "go ahead and try it." When I went into the yards and climbed upon a conical pile of coal seventy feet high and watched the machinery in operation it came upon me with full force how different this was from reading applications descriptive of the apparatus by which these results were accomplished. The coal-handling apparatus proved a complete success and a year or two ago a Philadelphia paper rated the inventor as one of their most highly esteemed citizens and a millionaire. One of the method patents affording probably the best protection the inventor received included claims very accurately descriptive of the action of the wind in forming sand dunes or snow banks and also the action of rivers in forming sand bars. However, the action of forces in nature did not constitute valid references.

About a quarter of a century ago I had the pleasure of making a visit to Mr. Nikola Tesla and the following are some of the notes I made at that time:

The letter of introduction was taken in and presently the "wizard" himself came out to receive us, and a most cordial greeting we received. We were ushered into his laboratory and he at once proceeded to show us some of his apparatus and to explain what he was at in the most enthusiastic manner.

Our attention was first called to a device for "striking an electric blow," *i. e.*, a blow similar to that due to the action of an induction coil. The pole pieces were set about four inches apart and on turning on the current a stream of sparks passed between the poles. Mr. Tesla then stepped to a blackboard and drawing a diagram of an induction coil consisting of the primary and secondary coils, with the interrupter and condenser arranged in parallel. He stated that he found the arrangement in parallel entirely unnecessary and that the same results could be attained by the arrangement of the coils, condenser and interrupter all in series. By this means he could make a small machine costing not more than thirty-five or forty dollars, which was capable of producing all

the results of an induction coil which would cost twelve hundred dollars.

At the front of the room resting on the floor was an immense coil about $3\frac{1}{2}$ feet high and $4\frac{1}{2}$ feet in diameter. This coil was insulated and had no connection with any circuit outside of itself. The pole pieces of this coil projected upward from it and were about a foot apart. When the attendant turned a switch at the back part of the room, a rapid noisy discharge took place between the poles. The current in this coil was caused by the rapidly alternating electric waves from the circuit or machine at the rear of the room at least thirty feet away, the entire space of the room being alive with energy in the form of alternating waves of electric force changing with a speed of about 12,000 per second. Although standing in the center of the room I was not conscious in any way of the great distribution of power taking place through the space of the room, except as it was manifest through its effect on the circuits in the coils. It appears, as Mr. Tesla stated, that the coils must be made of just the right sized wire, of the proper length, and having the proper resistance in order to be able to respond to a series of waves of a particular force and having a particular number of alternations per second. To show this more clearly, Mr. Tesla took a small coil in his hand. This coil appeared like a light hoop about $2\frac{1}{2}$ feet in diameter with a tiny incandescent lamp in its circuit. The attendant at the rear of the room again moved the switch and the tiny lamp began to glow through the responsive action of the coil in the hoop, while the larger incandescent lamp in the circuit of the large coil on the floor was unaffected. The rapidity and strength of the electric waves had been changed by the attendant in the rear of the room.

Mr. Tesla requested us to now join hands with him in the circuit of the small hoop. By slowly turning one of the handles in the hoop circuit the current gradually increased until my wrists and elbows began to jerk.

Mr. Tesla now produced a metallic hoop formed of a single wire about $\frac{1}{4}$ inch in diameter. This wire hoop had inserted in it at one side a tiny electric lamp. This hoop did not appear to be affected in any way until it

was placed in the same plane with and concentric with the responsive hoop above referred to, when the tiny lamp at once began to glow. The current in the single wire hoop was evidently caused by induction from the concentric surrounding hoop.

Our attention was now invited to the "oscillator" which is shortly expected to make its *debut* in the commercial world. The "oscillator" rested on a brick foundation with a furnace space in it which contained a lot of ashes, although I do not recollect noticing any chimney passing away from the furnace, if it is so intended. At one side of the room a steam pipe passed to the floor and to the "oscillator" which received the steam and converted it into electricity, but how, I was not informed. Mr. Tesla said that no steam packed pistons were used. I did not form any clear idea as to the possible operation of the "oscillator," but was under the impression that a slotted space about $2\frac{1}{2}$ inches wide, which passed transversely across the machine near its middle and at the end of a twin cylinder arrangement was adapted to contain the oscillating part.

The attendants next turned out all the lights and a switch was thrown when a magnificent discharge of miniature purple tinted lightning was to be seen and it was accompanied by a loud cracking noise. These discharges radiated in all directions through the air from the pole piece, some of the discharges being four or five feet long. Mr. Tesla stated that he could make these discharges one hundred feet long, but that the discharges we witnessed were as large as were consistent with safety in the room.

Mr. Tesla's latest idea is that of manufacturing fertilizer for land by the use of power. He has discovered how to separate nitrogen from the air and how to combine it with hydrogen, and thus he claims to be able to form ammonia, which, if it can be done economically, would appear to settle the fertilizer question. If this idea should prove fruitful, the question of food production, and real estate values, will undergo a most decided change in the future.

Mr. Tesla lamented the burning up of his laboratory sometime ago for the reason that he had been experimenting with photographs taken with what he then

called "phosphorescent light." In one of these photographs, for example, in his profile view half of his nose appeared to be gone. He thought at first that there was something wrong with the sensitized plates, but was assured that they were all right; then came the report of Professor Röntgen's discovery. It would thus appear that Tesla had produced the Röntgen ray photographs, but owing to other pressing problems and the subsequent destruction of his laboratory by fire, he had not appreciated the reason for the apparent defects of his photographs by the "phosphorescent light."

Mr. Tesla said that in 1882 he was in college with Röntgen and Padrewski, at Strasburg, I believe, and that he feared unless he accomplished more than he had already done, his early comrades would surpass him on the checkerboard of life.

I call attention to this visit to make it clear that the inventors and manufacturers are glad to have the Patent Office Examiners visit them. I only recall two occasions on which I did not appear to be welcome. One to old locomotive works at Providence, R. I. The manager declined to allow me to go through the works but failed to give the real reason for his refusal. The works were closed up, but at the time I was not aware of it. The second case was at a zinc smelting plant in Jersey City. It appears that a great many smelting concerns are in constant fear that some outsider will get in and steal some of their ideas. It is something like the Washburn-Pillsbury mills at Minneapolis who welcome all visitors except millers who are not allowed to inspect the mills.

I am glad to say that Commissioner Ewing heartily believes in the members of the examining corps availing themselves of ever proper opportunity to visit manufacturing plants in the line of their work.

It is to be hoped that in the near future some arrangements may be made whereby a considerable number of the examining corps may be enabled to visit the manufacturing plants of this country. While at the Master Car Builders' convention I noted the registration of 21 employees of the Interstate Commerce Commission.

The almighty dollar is usually supposed to be back of the patent business. That's what keeps the Examiners

here and that is what the inventor is usually after. I have, however, run across a few inventors who apparently were not after prospective wealth. One inventor who has been dead for many years always insisted he was working entirely from philanthropic motives. His big idea was conservation of supplies of food products for times of famine and future generations and his great ambition was to accomplish something along that line so that his name would go down in history as one of the great men. The most crushing blow of his life came from the poor people whom he was so anxious to help. At the cost of \$20,000 he had constructed a pneumatic lighter for unloading wheat from vessels at Buffalo. The stevedores would not allow it to be used.

A Kansas man wanted a patent for the reason that it might improve the social status of his family and incidentally strengthen him in his campaign for the mayoralty at the next election.

A friend of mine formerly employed as a draftsman in the Navy Department took out some patents with the idea of giving him a better standing as an expert on naval construction.

A clergyman in Mississippi urged the allowance of his application for a car coupler on the ground that its adoption by the railroads would save many valuable lives and he would thus have further opportunity to save their souls.

Some patent attorneys have urged the allowance of their cases because they needed the money. One New York attorney insisted that his case should be allowed in order to save his life. The attorney had promised the Italian applicant a patent on a near-kin to a perpetual motion machine for turning a peanut roaster and said he was afraid of a stiletto if he didn't get a patent. His life was saved.

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Considerations Appertaining to the Institution of Interferences

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Corps of the United States Patent Office

BY

MELVIN H. COULSTON,

Law Examiner,
U. S. Patent Office.

WASHINGTON, D. C.

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Interference proceedings in the Patent Office are authorized by Section 4904, Revised Statutes. The first sentence of that section provides that:

Whenever an application is made for a patent which, in the opinion of the Commissioner, would interfere with any pending application, or with any unexpired patent, he shall give notice thereof to the applicants, or applicant and patentee, as the case may be, and shall direct the primary examiner to proceed to determine the question of priority of invention.

Three facts referable to this provision are worthy of special notice. These are: (1) That the statute leaves it entirely to the judgment or "opinion" of the Commissioner to determine when an interference exists, without assigning any condition, suggestion or rule for his guidance; (2) that the Commissioner is given no authority to declare an interference unless he shall first be of the "opinion" that an interference does exist; and (3) that whenever the Commissioner is of the "opinion" that an interference exists the statute is mandatory that he shall declare it and he is left without discretion to take any other course.

Ewing, Commissioner of Patents, *vs.* U. S. ex rel.
The Fowler Car Co., 226 O. G., 700.

Acting under this section of the statute, different Commissioners at different times and in different ways

have expressed their views as to when an interference exists. These views are to be found in the Rules of Practice and Commissioners' Decisions. The Court of Appeals of the District of Columbia, which has appellate jurisdiction over final decisions of the Commissioner of Patents in interference cases, has also at various times announced its views as to the conditions under which the Commissioner of Patents should be of the opinion that an interference exists. Finally, the various Federal courts of the country have in a number of decisions in patent interferences arising under Section 4918, Revised Statutes, and in several decisions in equity suits brought under Section 4915, Revised Statutes, set forth their ideas of what constitutes an interference.

With regard to the relationship of interferences arising in the Office to those arising in the courts, Commissioner Duell, in his noted decision of *Hammon vs. Hart* (83 O. G., 743; 1898 C. D., 52), made the following statement:

The courts have clearly held that the interference proceedings intended and carried on under former Section 16 of the act of 1836, now Section 4918 of the Revised Statutes, is the same as the proceeding contemplated in Section 8 of the same act, now Section 4904 of the Revised Statutes. (*Gold and Silver Ore Separating Co. vs. U. S. Disintegrating Ore Co.*, supra.) The difference between the two simply rests in the fact that the forum is different. The Examiner or Commissioner treating the question of interference should put himself in the place of a judge of the United States circuit court. He should in deciding whether or not an interference should be declared treat the applications or the patent and the application the same as though they were both issued patents pending before the court.

There is, however, one difference in the manner in which interference proceedings arising in this Office under Section 4904, Revised Statutes, on the one hand, and those arising in the courts under Sections 4915 and 4918, Revised Statutes, on the other hand, are handled.

This difference, to which I shall presently call further attention, was brought about by a decision of the Court of Appeals of the Sixth Circuit in the case of Palmer Pneumatic Tire Co. *vs.* Lozier (90 Fed. Rep., 732), written just after the decision of Hammon *vs.* Hart.

The Patent Office definition of an interference is given in Rule 93 of the Rules of Practice. The first sentence of that rule reads:

An interference is a proceeding instituted for the purpose of determining the question of priority of invention between two or more parties **claiming substantially the same patentable invention.**

This definition prescribes three important conditions, all of which are essential to the existence of an interference. These conditions comprise the tests of interference and they are: (1) That the parties shall disclose *substantially the same invention*; (2) that this invention common to all shall be *patentable*; and (3) that the parties shall all be *claiming it*.

I desire to notice these three conditions in turn, beginning with the last.

CLAIMS.

The decision of Hammon *vs.* Hart, *supra*, was written for the express purpose of emphasizing and impressing upon the Office the importance of the condition that all parties shall be *claiming* the same invention before being put into interference. The specific facts of that case were that neither party had made the claims in issue and that all of the claims that one party had made were under final rejection.

From the time of that decision to the present there has been no abatement from the requirement that all parties included in an interference must have claims corresponding to the issue.

A perusal of the decisions in priority cases arising under Sections 4915 and 4918, Revised Statutes, develops the fact that the courts of the country in determining the question of interference, follow the same standard as the

Office in so far as the requirement that the parties shall be claiming the same invention is concerned. In *Gold Ore Separating Co. vs. U. S. Disintegrating Co.* (6 Blatch., 307), cited above, the court said "two patents interfere within the meaning of Section 16, Act of 1836, only when they claim, in whole or in part, the same invention." Substantially the same statement is made in *Stonemetz Printers' Machinery Co. vs. Brown Folding Machine Co.*, 1893 C. D., 478; 64 O. G., 1135, and *Nathan Co. vs. Craig*, 1892 C. D., 280; 58 O. G., 1093. The ruling in *Donner vs. The American Sheet & Tin Plate Co.*, 160 Fed. Rep., 971, shows how insistent the courts are upon the fact that there shall be claims to the same invention. In that case the structure common to the parties comprised spaced sets of rolls with plate matching mechanism intervening. One party claimed two sets of rolls spaced sufficiently from each other to allow the bars or sheets to be matched between them; the other claimed the same two sets of rolls with matching mechanism in the space between them. Both parties, as above stated, had matching mechanism between their roll sets. The court held that the respective claims of the parties did not *interfere*, but that the broader claim was *infringed* by the construction of the party having the narrower claim.

PATENTABILITY.

The second test or condition of interference prescribed by Rule 93 is that the claims which interfere must cover a *patentable* invention. This condition imports into the subject of interference the question of patentability. As Section 4904, Revised Statutes, is applied by the Patent Office and the Court of Appeals of the District of Columbia, the question of patentability is treated as one which must be settled at least by interlocutory proceedings before testimony is taken as to priority. In the Office this question is considered after the declaration of an interference when raised by motions for dissolution (Rule 122), or motions to amend the issue (Rule 109) or by the primary examiner calling attention to some newly discovered ground of lack of patentability (Rule

128), or by the tribunals of the Office having jurisdiction of an interference calling attention to some ground, which has come to their attention, denoting lack of patentability of the issue or some part of it (Rule 126), and also upon appeals from rulings made under such circumstances (Rule 124). At and after final hearing before the examiner of interferences the parties, however, may not argue the general question of patentability or urge the non-patentability of the issue to one party, as a basis for an award of priority. *Aufiero vs. Ewing* (223 O. G., 1717; 44 App. D. C., 328); *Rotter vs. Hodgkinson* (213 O. G., 1118; 43 App. D. C., 254) and cases cited; *Norling vs. Hayes* (166 O. G., 1282; C. D., 1911, 347; 37 App. D. C., 169) and cases cited.

The Court of Appeals refuses to entertain the question of patentability at all (*Hisey vs. Peters*, 6 App. D. C., 68, 1895 C. D., 349; *Slingluff vs. Sweet and Spinasse*, 230 O. G., 659) and denies that it is a jurisdictional question. *Johnson vs. Mueser* (145 O. G., 764, 29 App. D. C., 61, 1909 C. D., 437). That the jurisdiction of the Court of Appeals is a somewhat limited one in patent matters has been recognized by other courts. See *Bernardin vs. Northall*, 77 Fed. Rep., 849.

Unlike this practice, however, the other Federal courts of the country when called upon to pass upon questions of priority under Section 4915, Revised Statutes, or in patent interferences under Section 4918, Revised Statutes, consider the question of patentability of the subject-matter in issue so fundamental that they frequently raise it themselves and where the claims in issue are deemed unpatentable they refuse to pass upon the question of priority. Examples of such rulings in cases arising under Section 4915, Revised Statutes, are *Leslie vs. Tracy*, 100 Fed. Rep., 475; *Hansen vs. Slick*, 230 Fed. Rep., 627; *Hill vs. Wooster*, 132 U. S., 693. In the latter case Hill had a patent and he had won a judgment of priority in the Patent Office over Wooster. Wooster brought suit under Section 4915, Revised Statutes, to obtain a patent notwithstanding. The answer like the bill set out that the invention was patentable. Both parties were willing that the question of patentability

should be ignored and the case disposed of on a question of priority alone. The Supreme Court of the United States, however, declined to accede to this on the ground that such a determination in favor of the applicant, carrying with it as it does authority to the Commissioner to issue a patent to him for claims of the interference would necessarily give the sanction of the court to the patentability of the invention involved. The invention there in contest was a milk cooling apparatus built very much on the plan of an ordinary family refrigerator. The court of its own motion held the claims in contest to be unpatentable and ordered the bill dismissed.

Consideration of the question of patentability in patent interferences arising under Section 4918, Revised Statutes, was first sanctioned by *Foster vs. Lindsay* (3 Dill., 126) where the question was raised by the pleadings. The practice approved by that decision was shortly thereafter disapproved in the case of *Pentlarge vs. Pentlarge* (19 Fed. Rep., 817) on the ground that the fact of patentability is immaterial to the question of priority which alone is raised by a bill under Section 4918. The decision in the *Pentlarge* case was followed in many cases down to December, 1898, when the Court of Appeals of the Sixth Circuit reversed the practice of this entire line in the case of *Palmer Pneumatic Tire Co. vs. Lozier*, mentioned above. This latter decision reaffirmed the old practice of *Foster vs. Lindsay* and has since been followed. See *Nikola Tesla Co. vs. Marconi Wireless Telegraph Co. of America* (227 Fed. Rep., 903).

The decision in *Palmer Pneumatic Tire Co. vs. Lozier, supra*, says that in a suit in equity under Revised Statutes 4918, to obtain an adjudication between interfering patents, the court is not limited to the question of priority of invention between the interfering patentees. The statute, says the court, necessarily presupposes a patentable invention as the subject-matter of the litigation and if it should appear that neither of the patents in suit is valid, for want of such patentable invention the court is not required to perform the useless task of adjudicating priorities between them, but should dis-

miss the bill and deny the relief prayed for by both parties. And again the decision says:

We think the court is bound to determine whether, upon identifying the subject-matter of the interfering patents, the invention therein stated is patentable.

It thus appears that a somewhat different view of the question of patentability is taken by the Court of Appeals of the District of Columbia in priority contests arising under Section 4904, Revised Statutes, from that taken in the courts of the country in similar cases arising under Sections 4915 and 4918, Revised Statutes.

SAME INVENTION.

The remaining condition of interference prescribed by Rule 93 is that the patentable subject-matter which the parties are claiming must constitute *substantially the same invention*. This condition carries into the question of interference the subject of *identity* of invention.

Upon this subject Walker in paragraph 180a says in effect that the rule for ascertaining the identity of the invention or inventions of a plurality of resembling original patents granted to a plurality of inventors is the same as the rule for ascertaining the identity or non-identity of the invention or inventions of a plurality of resembling original patents granted to one inventor, and depends upon whether the claims are coextensive or not coextensive.

Claims are coextensive, Walker says, which cover the same combination of the same number, of the same parts, with the same features, though the functions mentioned in the claims are not coextensive.

Miller *vs.* Eagle Co., 151 U. S., 186; 66 O. G., 845.

Claims are not coextensive, he says, which specify different combinations of parts of a process, machine or manufacture even where some of the parts are in each of the combinations; because the claim which specifies the fewest of those parts may be infringed by what will not infringe any claim specifying more of those parts

(Suffolk *vs.* Hayden, 3 Wall., 315). And two claims are not coextensive where one of them specifies all the features of any or all of the parts of its subject while the other omits one of these features, because the latter may be infringed by processes or mechanisms which lack that feature while the former can not.

Ryan *vs.* Newark Spring Mattress Co., 96 Fed. Rep., 100 (1899).

It is plain that this statement substantially makes the rule applied in double patenting cases the rule to be applied for determining *identity* of inventions.

Commissioner Duell in Williams *vs.* Perl (1899 C. D., 108; 87 O. C., 1607) held that generic and specific claims do not interfere even when based upon the same "species" and the decision in Stonemetz Printers' Machinery Co. *vs.* Brown Folding Machine Co., 1893 C. D., 478; 64 O. C., 1135; 57 Fed. Rep., 601 (1893), is of similar purport.

On the other hand, Commissioner Allen held in *Ex parte* Thompson (98 O. C., 227; 1902 C. D., 6) that

. . . the Office . . . might properly declare an interference upon an issue which is the claim of one of the parties upon the ground that the corresponding elements in the other party's claim are equivalents, if it were not possible to bring the claims into such form as to avoid all controversies upon the question of equivalency.

The procedure thus suggested as proper has been actually followed in a number of cases where one of the parties has been a patentee, as for example in Read *vs.* Scott (14 Gour., 3-4, Jan.-Feb., 1902), where the broad claim of an application was made the issue and held to interfere with the claim of a patent which differed from it only in that it defined the specific form of an element generically defined by the issue claim and whose full mechanical equivalent was found in the structure of the application upon which the issue claim was based.

In a paper prepared by Examiner Nixon and read at one of these meetings seven cases are specified in which

parties are considered to have claims so far identical as regards subject-matter covered as to meet the requirements of Rule 96, which provides for the suggestion of claims for interference purposes. The essential characteristic of every case is that no party is considered within the rule unless he has in an application or a patent a patentable claim which either reads exactly upon a corresponding claimed disclosure of another party or fails of such reading only by virtue of the inclusion of immaterial limitations.

What constitutes an "immaterial limitation" must in the nature of things depend upon the circumstances of a particular case and be left for determination to the sound judgment of the Examiner. However, Commissioner Allen, in *Ex parte Thompson* (98 O. G., 227; 1902 C. D., 6) quoted from his own decision in *Braucht vs. Murdock* (71 MS. Dec., 492) the following helpful rule:

An element included in one claim can not be held to be immaterial where there is no corresponding element in the other claim, but where there is a corresponding element, the question whether they are mechanical equivalents must be determined. Where the elements are well known mechanical equivalents in the combination the structures are under the law regarded as substantially the same and there is an interference in fact.

This ruling is entirely consistent with Mr. Duell's decision in *Wolfenden vs. Price* (83 O. G., 1801; 1898 C. D., 87) wherein he clearly recognized that it may be proper to suggest claims with a view to the institution of an interference when the claims presented by the parties themselves are not so drawn as to literally interfere. In that decision he said:

I do not think that the Patent Office, any more than the courts, is competent, in declaring an interference, to say that an element which an applicant or a patentee has placed in his claim is an immaterial one. A claim may be patentable in the opinion of the Examiner which does not

contain certain limitations, and I think it is within the province of the Examiner when he believes it is necessary for him to declare an interference to indicate to the parties a patentable claim as the issue of the interference which shall omit immaterial elements, and thereby make it unnecessary for the Office to hold that the issue and the claims are different from what they read. . . . I do not mean to be understood as expressing the opinion that identical language must be employed in the claims to every party to the interference; but when different words are employed they must mean and refer to the same things.

The determination of by far the greatest number of questions of identity depends upon what meaning shall be ascribed to the language employed in a claim. There are numerous decisions of the Office and the Court of Appeals of the District of Columbia dealing with this phase of the subject, to a few of which I invite attention.

Commissioner Moore said in the interference of *Junge vs. Harrington* (131 O. G., 691; 1907 C. D., 340):

. . . . In general while applications are pending in this Office the claims thereof will be construed as broadly as the ordinary meaning of the language employed will permit, for reasons stated in . . . decisions in *ex parte* Cutler (C. D., 1906, 247; 123 O. G., 655), *Briggs vs. Lille vs. Cooke vs. Jones and Taylor* (C. D., 1905, 168; 116 O. G., 871), *Podlesak and Podlesak vs. McInnerney* (C. D., 1906, 265; 123 O. G., 1989), and *Lovejoy vs. Cady* (C. D., 1906, 245; 123 O. G., 654).

The Cutler decision by Commissioner Allen contains an exceptionally clear statement of what I understand to be the Office practice. As it is comparatively brief and the subject is of great importance, I quote the entire decision:

This is a petition that the Primary Examiner be directed to declare an interference.

The case is on its face an extraordinary one. It has been considered here and action taken for the purpose of correcting, so far as possible, what seems to be clear and serious error in the issue and proposed issue of the patents upon certain applications without interference. The petitioner is an applicant for patent. He has made claims found in a patent which was granted to another party upon an application filed during the pendency of the petitioner's application. The Examiner eventually held that the claims were allowable in the petitioner's application, but he has refused to declare an interference, stating that the terms of the claims mean different things in the different cases and that there is no interference in fact.

The Examiner's position as set forth in his letters to the applicant and statement upon the petition has been fully considered and is thought to be untenable. He has construed the plain broad terms of the common claims in view of different specific structures shown by the parties and in view of different specific purposes dwelt upon in their specifications and has imposed upon these claims in the different cases specific meanings which are not required by the language of the claims themselves. The devices of the parties are of the same general character, and the terms of the claims refer to corresponding parts, having to some extent corresponding functions in each case. The claims when properly read are undoubtedly generic to the two disclosures, and an interference should be declared.

I have had occasion in a previous case to condemn the practice of imposing upon claims by construction meanings which are not clearly set forth by their terms. (*Briggs vs. Lillie vs. Cooke vs. Jones and Taylor*, C. D., 1905, 168; 116 O. G., 871.) In this Office a claim which is broadly drawn will be broadly read. If a narrow meaning is desired, it must be secured by limitation expressed in the claims. No better method is

known for securing the benefits of uniformity and certainty in the construction of claims and at the same time giving effect to the undoubted intention of the parties drawing them than to give invariably to each claim the broadest meaning which can be imposed upon it without violence to the language used therein.

Regarding the proposed issue of two patents with the same claims, which has been proposed here as perfectly proper, I am of the opinion that such a course would be improper, even if the claims had, as the Examiner believed, different meanings in the two cases. The statutes require that parties shall distinguish their inventions from the inventions of others and that they shall particularly point out and distinctly claim their inventions. The definition of the invention and the distinctions between it and the inventions of others should be carried into the claims. Where different parties have the same claims and each has proper foundation for them in his application, either the inventions which these claims represent in the different cases are the same or each party has failed to distinguish his invention from that of the other party. In the latter event the claim is indefinite and ambiguous in each case and should be rejected.

The Examiner is directed to reconsider his action refusing to declare the interference in accordance with the principles set forth herein. The petition to this extent is granted. (123 O. G., 655; 1906 C. D., 247.)

In a recent decision in the case of Kirby *vs.* Clements (216 O. G., 1319; C. D., 1915, 163; 44 App. D. C., 12) the court said:

In an interference proceeding we must give to claims the broadest interpretation which they will reasonably support, and we are not at liberty to import limitations therein to meet the exigencies of a particular situation. (Miel *vs.* Young, C. D., 1907, 561; 128 O. G., 2532; 29 App. D. C., 481;

Lindmark *vs.* Hodgkinson, C. D., 1908, 540; 137 O. G., 228; 31 App. D. C., 612.) The reasonable presumption is that an inventor intended to protect his invention broadly and, consequently, the scope of a claim in an interference proceeding should not be restricted beyond the fair and ordinary meaning of the words. The issue here is that of priority under the claims as drawn, and not of priority under other and different claims.

This ruling was made notwithstanding the fact that in that case the examiners-in-chief had held that the claims in issue would be unpatentable if as broadly construed as the court seems to have construed them. The Court of Appeals has in other cases refused to construe a claim in interference narrowly even to preserve its validity. See Johnson *vs.* Martin (201 O. G., 267; 41 App. D. C., 502); Lacroix *vs.* Tyberg (1910 C. D., 263; 150 O. G., 267; 33 App. D. C., 586).

In an earlier case, Miel *vs.* Young (128 O. G., 2532; C. D., 1907, 561; 29 App. D. C., 481) specific differences of structure and alleged differences of function gave rise to a contention as to the meaning of the word "removable" in a claim calling for a removable reinforcing means in a stone saw. The Court of Appeals said:

This claim should be given the broadest interpretation which it will support and we should not strive to import limitations from the specification to meet the exigencies of the particular situation in which the claim may stand at a given time. Although Miel is a patentee, if the terms of his claim do not in their ordinary and natural meaning define his invention according to his intent he may apply for a reissue.

The decisions in Miel *vs.* Young, Kirby *vs.* Clements, and *Ex parte* Cutler undoubtedly set forth the practice which should be followed in formulating and selecting claims which are to be suggested under Rule 96 and made the issues of interferences. That the same practice should be followed throughout interference contests, whenever

a question as to the meaning of a claim in issue arises for determination, seems to be a logical conclusion and a fact fairly well settled by decisions both of the Office and the Court of Appeals. However, as will presently appear, the decisions of the Office and that court are not entirely uniform on that subject.

In this connection may be noted the decision of the Court of Appeals of the District of Columbia in *Rotter vs. Hodgkinson* (213 O. G., 1118; 1915 C. D., 103; 43 App. D. C., 254). In that case the question arose as to the proper construction to be placed upon the term "controlling" as used in claims calling for a governor "controlling" certain valves. In Rotter's device the governor exercised a direct control over the valves; in Hodgkinson's device the governor indirectly controlled the valves by controlling a flow of steam which in turn directly controlled them. The court expressed its own views by remarking that:

There is no ambiguity in the claims and they are capable of a broad construction, and the court will not read into them a limitation not expressed therein. Had the appellant desired to limit his construction he should have done so in making his application for a patent.

The court, however, declared itself satisfied with the reasoning found in a statement of the decision of the Assistant Commissioner reading in part as follows:

In such (a) case the proper way to determine whether it was unduly expanding the meaning of the word "controlling" to apply it to Hodgkinson is to find out whether there is any prior art that would limit its meaning. If there is such prior art, such limitation should be put upon this word "controlling" as would free the count from the prior art, but if not, the broadest possible construction should be put upon this word. Of course, as there is no prior art, the rule is to put the broadest construction on this word, and when this is done the counts clearly read upon Hodgkinson.

If the statement last quoted can be reconciled with that of the court in the same case and the other decisions I have mentioned, it is, I believe, nevertheless too broad in that it does not seem to be limited to the use of prior art *of record* for the purpose stated. A patent is a contract. Its claims are the specific articles of agreement upon which the minds of the *parties* to it, *i. e.*, the applicant or his representative and the official of the Office who allows the claims, are supposed to meet. The language employed in the claims is the instrument selected by the parties as a means of defining the matters about which they are in accord. When the language employed is vague, indefinite, or ambiguous or otherwise fails to make plain these matters, and it is too late to amend the fault, it is a natural and proper thing to endeavor to ascertain what the parties using the faulty language understood it to mean. This is common practice in construing all kinds of contracts. In the case of a claim the language of the specification and other claims and the prior art known to those responsible for the language employed may be considered as having a bearing upon the question as to what they had in mind but it is not clear how prior art unknown to these parties can be regarded as having any bearing upon that question.

There is also one decision by the Court of Appeals which comes very near to supporting the above discussed statement of the Assistant Commissioner, read in its broadest aspects, in that the construction and meaning of a claim in interference is made to depend upon the question of the patentability of the claim over prior art which formed no part of the record of the patented application from which the issue of the interference was drawn. In *Rice vs. Shutte* (180 O. C., 604; 38 App. D. C., 175) the court said:

The invention is defined broadly by the issue. Courts will narrow the construction of a claim where it is necessary to preserve its validity and in this proceeding we must assume that the issue is patentable—but limitations not called for can not be read into a claim to save it from destruction. Although the devices of the respective parties are specifically different, they are

generically the same. The language of the issue, while broad, we think can be applied specifically. The only question in the case is whether the means for causing the dropping of appellee's device can be termed a "breakdown connection."

The court then goes on to point out that the appellant first used the term "breakdown connection" and that it aptly defines his invention which is specifically quite new, while the term reads with more difficulty on the appellee's device, which is specifically very similar to three prior patents, none of which were mentioned in appellant's application. The court concludes its opinion by saying:

To read the issue . . . on to appellee's device, where the question of patentability is exceedingly close, would be to give him something strongly anticipated; while confining it to appellant's invention, we have an easy application of the issue to a device distinctly novel . . .

and they award priority to the appellant for that reason.

An investigation of the decisions of the courts of the country in priority cases arising under Sections 4915 and 4918, Revised Statutes, convinces me that there is no real difference of standard followed from that recognized by the Office and its Court of Appeals in determining questions of *identity* of invention in interference contests. There are relatively few court decisions going into this subject. Of these the leading ones under Section 4915 are *Butler et al. vs. Shaw* (21 Fed. Rep., 321) and *Christie vs. Seybold* (55 Fed. Rep., 69). Under Section 4918 there are *Adamson vs. Dedrick* (Fed. Cas. No. 74), *Gold Ore Separating Co. vs. Disintegrating Co.* (6 Blatch., 307), *Simplex Railway Appliance Co. vs. Wands* (115 Fed. Rep., 517), *General Chemical Co. vs. Blackmore* (156 Fed. Rep., 968), *Holliday et al. vs. Pickhardt et al.* (29 Fed. Rep., 853), *Donner vs. The American Sheet & Tin Plate Co.* (160 Fed. Rep., 971) and *Palmer Pneumatic Tire Co. vs. Lozier* (90 Fed. Rep., 732). Perusal of these decisions will show that there is a uniform tendency to see to it that the parties have and claim

in substance the same subject-matter and that the courts talk rather more about prior art and equivalency than do the decisions of the Commissioners and the Court of Appeals, but if the facts of the cases decided be carefully examined, it will be found that the rulings made run closely parallel to those made by the Office and its Court of Appeals.

Rules of Construction Applied in Infringement and Interference Cases Not Identical.

In infringement suits the courts sometimes follow rules of construction which they will not themselves apply in interference contests. Such rules are ill-suited to interference practice in the Patent Office. In *Donner vs. American Sheet and Tin Plate Co.*, *supra*, p. 4, there was a bill asking that a patent be canceled under Section 4918, Revised Statutes, because it interfered with another patent and also praying that the latter patent be held infringed by the construction covered by the former. The court said:

To make out a case under Section 4918 of the Revised Statutes . . . there must be actual conflict and not mere infringement. . . . And in determining whether there is an interference within the meaning of the statute the court can not go beyond the claims as to which this is charged, so as to consider the patent as a whole. . . . Critically analyzed, Donner simply calls for a matching pass or space in which to match while Bray declares . . . for matching mechanism or means for effecting the matching, without more. However closely they (the claims) may thus approach each other, patentably considered they are not the same, the one being directed to a place where matching may be done and the other to the means for bringing it about. It may be that, having regard to the scope as disclosed by the specifications, matching mechanism is to be read into Donner's claim. . . . But taking it as it stands, as at present we must, while the fact of matching is no doubt involved in it,

the same as in the claims of Bray, each is concerned with a different phase which on an application to cancel is to be regarded as distinct.

It was in reference to such a rule that Commissioner Ewing said, in *Fend vs. Miggelt* (223 O. G., 649):

If an infringer's use includes a specific feature which is essential to patentable novelty and is not recited in the claim, the defect is sometimes cured by construction. (*Fowler & Wolfe Mfg. Co. vs. McCrum-Howell Co.*, 215 Fed. Rep., 905.)

In interference proceedings, however, more exact definition is demanded. Where an independent inventor copies a claim from a patent, the patentee may not rely upon a difference of structure not recited in the claim to escape a judgment of priority. If he were permitted to do so, he might win an interference proceeding on a narrow construction and yet would be free in suits upon his patent to contend for a broad construction.

Another familiar rule constantly applied by the courts in infringement suits is seldom, if ever, applied in interference contests in the Patent Office and the Court of Appeals of the District of Columbia. This is the rule that the range of equivalents accorded protection under a patentable claim is determined not alone by the scope of the terms of the claim but also by the state of the prior art at the date the invention is made. If a court in ruling upon an infringement suit finds that the result attained by the invention is a wholly novel one, never having been attained before, the invention is regarded as a pioneer, the terms employed in defining it are given a liberal construction and a relatively wide range of equivalents is accorded. If the result is old but has been attained in a radically new way, a decidedly narrower range of equivalents than in the preceding case, but one pronounced by the court to be fairly liberal, is accorded. If, however, the invention happens to be a mere improvement upon a previous invention for attaining an old result, the range of equivalents accorded is

extremely narrow and frequently little or nothing beyond the specific device, although the claim construed may be fairly broad in terms.

In the Patent Office and the Court of Appeals of the District of Columbia the rule of construction previously discussed prevails, viz., that a claim broadly drawn will be broadly read under all circumstances, including interference. This is entirely consistent with the theory under which claims are presented, examined and allowed. It is the practice of applicants to demand as broad claims as they can possibly hope to obtain and a whole line of decisions, of which *Ex parte Weaver* (81 O. G., 967; 1897 C. D., 165) is one, announces the doctrine that:

It is the policy of the Office to allow applicants to claim their inventions as broadly as possible in view of the state of the art.

The result is that in the Office every claim is construed and regarded as if it covered a pioneer invention to the extent that it defines patentable novelty. The language and history of an application and the known prior art determine the terms of a claim before it is allowed and the terms of a claim determine the range of its equivalents after allowance. This rule at once affords a simple key for ascertaining the meaning of a claim and the most reliable means for fixing upon a claim the meaning it is intended to permanently carry. It tends to make every claim express in plain language exactly what it covers, as every patent claim ought to do. However, the usefulness of this rule depends upon the ability of the Office to restrict it within the limits prescribed, viz., that the reasonable, natural, unrestrained meaning shall be ascribed to terms employed. It is occasionally charged that the application of this rule, unmodified in its effects because unaccompanied by an application of the somewhat arbitrary rule of range of equivalents as applied by the courts in infringement cases, has resulted in throwing into interference parties whose specific inventions are so different, and of so limited a character, in view of the state of the prior art, that no court would rule that the party who prevails is entitled to hold the defeated party an infringer.

Generally speaking, the resources of the officials of the Office have sufficed to avert situations of that character. An Examiner, who has before him a claim couched in terms so broad as to read fairly upon two or more forms of invention which are specifically so different that he believes that under the circumstances no one of them would be held to be an infringement of the claim if patented to cover the other, can, with the aid of the prior art, force a requisite limitation into the claim, and thereby render a distinct service to the parties, the Office and the public.

But there are many cases where it is extremely uncertain whether a claim will be infringed by another construction. The answer can not be surely given in advance of an actual trial. Here the allowance of a claim to be followed by interference seems the only satisfactory course. In a recent case of this kind where the issue was a broad "means" claim, there was an earnest contention that the inventions of the parties were so different that the interference should be dissolved. Commissioner Ewing in an unpublished decision, which may be found in 120 MS. Dec., 369, refused to dissolve the interference saying:

Doubtless no interference should be declared excepting with respect to subject-matter which, in a suit on one of the patents, would be held to be an infringement. But it is believed that the practice of the Office will never be in entire accord with this theory, for the question of prior inventorship, while closely analogous to the question of infringement, is not identical with it; and an attempt on the part of the Office to grant patents without giving notice to rival claimants, on holdings that the patents, when granted, would necessarily be so limited by construction of the claims that no infringement would be found, would, I feel sure, meet with general condemnation.

**INSTITUTION OF INTERFERENCES WITHOUT
ERROR NOT ALWAYS A SIMPLE MATTER--
SERIOUS CONSEQUENCES OF AN ERROR
ILLUSTRATED.**

Despite the utmost precaution, interferences which prove to be unwarranted are sometimes instituted. Law Examiner Henry, with feelings ill-concealed, tells me about them only too frequently. For the close of this paper I have reserved a single illuminative example which arose so long ago that no one now living is likely to have had anything to do with it. I shall state it at some length because it illustrates a number of points to which I have referred and also the serious consequences of a mistake in starting an interference. The case is that of *Butler et al. vs. Shaw* (21 Fed. Rep., 321), hereinbefore mentioned. It was a long and bitterly contested interference in the Office, afterwards carried into the Federal Courts under Section 4915.

The inventions of both parties related to milk and cream separators.

Shaw had a can with a long telescopic tube extending up inside it from a stop-cock controlled exit near the bottom. By means of a graduated scale, an indicator and a sight glass Shaw could adjust the height of his interior tube so that all the cream could be drawn off, leaving only the milk in the can.

Butler had a can with a faucet rotatably mounted about an arbor or center pin near the bottom and a sight glass running along the side whereby he could ascertain the depth of the cream and adjust the discharge opening of the faucet accordingly so that all the milk could be drawn off, leaving only cream in the bottom of the can.

Shaw had a patent for his device with the following claim therein:

The herein described milk-can, *a*, for raising cream, in combination with the telescopic tubes, *d*, *f*, the graduated scale, *g*, and the indicator, *h*, as and for the purpose set forth.

Butler had an application for his device and claim 1 therein read as follows:

A milk vessel, having an adjustable faucet that can be set to automatically discharge any pre-determined quantity of milk, to leave in the vessel a certain quantity of cream, and provided with a glass pane to ascertain the degree or place of adjustment of the faucet.

The Examiner rejected Butler's claim on Shaw's patent. Butler asked for an interference and the Examiner instituted it upon the following claim as an issue:

A can for milk and cream separation, having an adjustable automatic discharge faucet, and a transparent pane by which the place or degree of faucet adjustment may be determined.

No question was raised as to the propriety of reading this claim upon both devices.

At the suggestion of the Examiner (Shaw having died) Mrs. Shaw filed an application for reissue of the Shaw patent, and inserted a new claim in the words of the interference issue. The interference was then continued and decided in favor of Shaw by the Examiner of Interferences. On appeal, one member of the Board concurred with the decision below, but the majority held that the reissue application had materially enlarged the scope of Shaw's claim, and had brought in objectionable new matter to make a conflict when none existed in fact, between the two devices; that Shaw's other claims covered his real invention and all that he was entitled to; that Butler's first claim was limited to the device which he had invented, and in no way trenched upon the invention of Shaw; that Shaw's device was for separating cream from milk, leaving the milk in the can, and could not be used to draw off the milk and leave the cream; and Butler's device was for separating milk from cream by drawing off the milk at the bottom, leaving the cream in the can, and could not be used to draw off the cream and leave the milk; that the two devices were mechanically different, having no feature in common, except the glass panes and the indicators, which were well known, and

not patentable by either; that an interference had been declared and the parties had been contending, on a matter which one had not claimed and which neither was entitled to; and therefore recommended that the interference be dissolved and the case remanded to the Primary Examiner, with instructions to reject Shaw's new claim and allow the parties to take patents on their other claims, unless some good reason could be shown for rejection on further examination.

From this decision, Mrs. Shaw appealed to the Commissioner, who said in part:

Priority of invention is the only question to be determined. While it is true that the devices of the respective parties are different, in principle they are the same, and both are within the terms of the issue.

He awarded priority to Shaw.

At that time there was no appeal to a court from the decision of the Commissioner in interference cases. Consequently, in view of his decision, the reissue was granted to Mrs. Shaw containing the new claim which had been the issue of the interference. Butler's original claim above quoted which the Examiner had held to interfere with the issue claim was rejected in view of the decision of the interference adverse to Butler. Butler asked for reconsideration and amended his application by adding for the first time a claim in the words of the claim of the issue of the interference. Both of Butler's claims were now finally rejected. On appeal by Butler the Board said:

We will *pro forma* affirm the action of the Examiner, and let the matter go before the Commissioner for disentanglement and adjudication.

On appeal to the Commissioner, the Acting Commissioner took the case and held that:

The questions presented by these claims are . . . *res adjudicata*, and can not be reopened in an *ex parte* proceeding upon the suggestion of the defeated party. The applicant must there-

fore be finally rejected, upon reference to the adjudication in the interference case of *Butler vs. Shaw*.

Butler thereupon filed a bill in equity under Section 4915, and the court said:

The proofs before us clearly show that Butler was the first inventor of the device described in his first claim for drawing off the milk, leaving the cream in the can; that Shaw's invention was limited to the device which he described for drawing off the cream, leaving the milk; that the two inventions differed in mechanical construction and in practical operation; and that neither was broad enough to include both.

The court further expressly held that the proceedings in the Patent Office had been erroneous in at least four respects: (1) the original rejection of Butler's claim on Shaw's patent; (2) the declaration of the interference between Butler and Shaw on an issue broader than either had theretofore pretended to claim, or was entitled to claim; (3) the final decree of the Commissioner awarding priority to Shaw upon that issue; and (4) the reissue of Shaw's patent with a corresponding claim.

The final result was that Butler was held entitled to a patent on his original claim, but not entitled to a patent on the claim in interference, while Shaw was shown to have vainly acquired a reissued patent which, at most, was valid only as to the claims of his original patent and invalid as to the claim corresponding to the issue of the interference.

The entire difficulty was due to the fact that the Examiner had instituted an interference on an issue which was unpatentable because broader in scope than any invention either party had made.

As one reads a decision of this kind he is pretty certain to speculate on how the interference came to be instituted and perchance he may think that he would never make as clear a mistake. Yet he will lose some of his confidence when attention is drawn to the fact that in that particular case a Primary Examiner, a member of the

Board, and a Commissioner of Patents all thought that the interference had been properly declared and that the Examiner of Interferences made no recommendation for its dissolution. These were erring men of another day, but observation of the interference work of the Office during a number of years, coupled with an opportunity to share in it, convinces me that most of us who are their successors have a liberal inheritance of their genius for error.

Realizing the seriousness of this branch of our duties, we shall continue, I trust, even more in the future than in the past, to give to interference problems that careful consideration and patient study which experience proves them to merit.

Familiarity with the rules and decisions bearing on the subject will do much toward ensuring right conclusions in particular cases, and it will always be found that it especially pays to bear in mind those two great unwritten rules which are the implied *addenda* of all other rules. I refer to the golden rule and the rule to use one's common sense.

January 11, 1917.

**An Applicant's Statutory Remedies
from Adverse Decisions**

A paper read January 18, 1917, before the Examining
Corps of the United States Patent Office

BY

WEBSTER S. DRUCKMAN,
Principal Examiner, Division Thirty-seven,
U. S. Patent Office

WASHINGTON, D. C.

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An Applicant's Statutory Remedies From Adverse Decisions

By

W. S. RUCKMAN,

Principal Examiner, Division Thirty-seven,
U. S. Patent Office.

An applicant's remedies from adverse decisions are many. They comprise, in succession, an appeal from the decision of the Primary Examiner or the Examiner of Interferences to the Board of Examiners-in-Chief, to the Commissioner and to the Court of Appeals of the District of Columbia, which may then be followed by a bill in equity under section 4915, Revised Statutes, in one of the United States district courts and an appeal to the proper circuit court of appeals.

The reasons and circumstances which caused the enactment of laws providing for this elaborate system of remedies are interesting.

The first statute providing an appeal from a decision in a patent application is contained in the Act of 1836, but a brief survey of our patent system as it existed prior to 1836 is instructive and will assist in understanding the system of appeals finally established.

The Act of 1790, creating the patent system of the United States, authorized the "Secretary of State, the Secretary of the Department of War and the Attorney-General, or any two of them, if they shall deem the invention or discovery sufficiently useful and important, to cause letters patent to be made out in the name of the United States, to be tested by the President of the United States." Thomas Jefferson was the Secretary of State while this act was in force. He is said to have inspired it, to have taken great pride in it and to have given personal consideration to every application. It

is related that when an application for patent was filed, he would summon Henry Knox, Secretary of War, and Edmund Randolph, Attorney-General, and that these three distinguished officials would examine the application with great care.

The granting of a patent at this time was quite an event in the history of the State Department where the clerical work of issuing the patent was performed. The law was construed to give this tribunal authority to refuse a patent if the invention did not come up to its standard of usefulness and importance. This tribunal was absolute in its authority and there was no appeal from its decisions. It is recorded that its members scrutinized the specifications and claims so critically and rigidly that most of the applications were rejected. Only three patents were granted during the first year and the total issue before the act was repealed in 1793 was only fifty-five. The severity of their examination and their lack of sympathy with inventors caused great dissatisfaction.

The Act of 1793, repealing the Act of 1790, took away this power of rejection and confided in the Secretary of State, alone, the duty of issuing patents. The certificate of the Attorney-General, however, was required as to the correctness of the forms and the signature of the President of the United States was still necessary. The patent issued as a matter of course if the application was in proper form and the required fee was paid. In other words, the issuing of patents was placed upon a recording or registration basis. This act also created a Board of Arbitration to pass upon interfering applications, one member of which was chosen by each of the applicants and one by the Secretary of State. Their decision was final and if either party refused to go into the arbitration, his opponent was given the patent.

It is recorded that for the twelve years prior to 1802, the entire work of the Patent Office was performed by a single clerk in the State Department and that all of the records filled but a dozen pigeon holes.

In 1802 Dr. Thornton was appointed a clerk in charge of the issuing of patents. Later he was given the title of "Superintendent." He was a man of scientific attainments and is one of the interesting characters connected

with the early history of our patent system. He exercised autocratic control over its affairs for twenty-six years.

Under the Patent Act of 1793 no investigation was made as to the novelty or utility of the invention, the oath of the applicant that to the best of his knowledge the invention was new, being accepted as sufficient. Under this practice, the patentee received his patent with only such assurance as to its validity as he might gain from his own investigation. Necessarily, the patent was of small commercial value. The total number of patents issued prior to 1836 was only nine thousand nine hundred and fifty-seven (9,957).

The Act of 1836 reorganized the Patent Office and inaugurated practically the present system of granting patents only after examination has shown the invention to be new and useful. This change in the patent system introduced by the Act of 1836 is referred to in the Patent Office Report for 1848, page 84, as follows:

Perhaps the most important feature of this law is that which relates to the examination to which applications are required to be subjected. Prior to its passage the examinations consisted merely in a comparison of the specification, drawings and model, to ascertain that they agreed together and with the claims made; but the law of 1836 required the examination to enter into the questions of novelty, utility, and priority of invention—a provision which largely added to the labors and responsibility of the office.

The Act of 1836 made the Patent Office a separate bureau of the State Department and provided a head therefor, designated the Commissioner of Patents. It provided also for a chief clerk, an examining clerk, two other clerks, one of whom was to be a competent draughtsman, a machinist and a messenger.

Section 7 of the Act of 1836 provides, *inter alia*, that when an application is filed

the commissioner shall make, or cause to be made, an examination of the alleged new invention or discovery; and if, on any such examination,

it shall *not* appear to the commissioner that the same had been invented or discovered by any other person in this country prior to the alleged invention or discovery thereof by the applicant, or that it had been patented or described in any printed publication in this or any foreign country, or had been in public use or on sale with the applicant's consent or allowance prior to the application, if the commissioner shall deem it to be sufficiently useful and important, it shall be his duty to issue a patent therefor. . . .

The words "sufficiently useful and important" are the identical words that were contained in the Act of 1790. In this respect it is, therefore, a return to the practice under the original Patent Act of 1790. It indicates that if the practice under the latter act had been unsatisfactory, the practice under the Act of 1793 had proved even more unsatisfactory. Instead of the three secretaries of departments, however, it is now the newly created official, the Commissioner of Patents, who was to pass upon the applications. Moreover, to prevent an arbitrary exercise of power certain restrictions were placed upon the authority of the Commissioner and an appeal was provided from his decisions. The system inaugurated by the Act of 1836 remains our system today with but few changes in its essential features. The machinery for carrying it into effect has been expanded and improved in an endeavor to keep pace with the enormous growth of business.

Section 9 of this act fixed the application fee for citizens of the United States and aliens who had resided here for one year, at \$30; for subjects of Great Britain, \$500, and for all other persons, \$300. No further or final fee was required and a rebate of \$20 was given if the application was withdrawn after rejection. Section 12 of the Act of 1837 fixed the amount returned to the applicant under these circumstances at two-thirds of the application fee. This schedule of rates remained in force until the Act of 1861 when the discrimination in favor of citizens of this country was abolished and the present schedule of fees was established.

APPEALS FROM ADVERSE DECISIONS OF THE COMMISSIONER.

The Patent Act of 1836 (5 Stat., 117) providing for a Commissioner of Patents and for an examination as to the novelty and utility of the invention, also provided for an appeal from the adverse decision of the Commissioner to a board of examiners. This board was to consist of three disinterested persons appointed by the Secretary of State, one of whom at least, was to be selected "if practicable and convenient, for his knowledge and skill in the particular art, manufacture or branch of science to which the alleged invention appertains." The applicant was required to pay a \$25 appeal fee. Each member of the board was to receive in each case a compensation not to exceed \$10. Section 8 of the act provided for interference proceedings between pending applications, or a pending application and an unexpired patent, and an appeal from the decision of the Commissioner on priority on like terms and conditions to those mentioned above.

The Act of 1839 (5 Stat., 353) substituted in place of this board of examiners, as the appellate tribunal, the Chief Justice of the District Court of the United States for the District of Columbia who was to be paid annually out of the Patent Fund in consideration of such duties, the sum of \$100. The reason for this change in the appellate tribunal is set forth in the report of the Commissioner of Patents for 1860, as follows:

But this board, temporary in its nature, its members being appointed for each occasion, and their services inadequately remunerated, experience proved to be an entire failure; and hence, by the eleventh section of the Act of 1839, it was abolished, and the appellate jurisdiction transferred 'to the chief justice of the District Court of the United States for the District of Columbia.' This was a step in advance. It was a decided improvement upon the original tribunal, and gave rise to no complaint, until the year 1850, when Chief Justice Cranch announced to this office that he was unable by reason of the infirmities of age, to discharge the duties imposed upon him by the acts of Congress.

Under the law of 1839 it was the duty of the Chief Justice, after a hearing of the case, to return the papers to the Commissioner together with a certificate of his proceedings and decision which the act directs shall be entered of record in the Patent Office and shall govern the future proceedings in the case.

The Act of 1852 (10 Stat., 75) provided that appeals from the Commissioner of Patents "may also be made to either of the assistant judges of the Circuit Court of the District of Columbia," and further provided "that in case appeal should be made to the said Chief Judge or either of the said assistant judges, the Commissioner of Patents shall pay to such Chief Judge or assistant judge, the sum of \$25 required to be paid by the appellant into the Patent Office." This act, giving concurrent jurisdiction to the assistant judges was passed by Congress on account of the infirmity of the Chief Justice.

As stated above, Chief Justice Cranch notified the Patent Office in 1850 that he was unable to hear any patent appeals on account of the infirmities of age. This continued until his death in 1855. The injurious consequences resulting from this state of affairs are set forth in the Commissioner's Report for 1860. It appears that in *ex parte* appeals, the appellant was unable to have his case heard, while in *inter partes* cases, the defeated party by an appeal was able to hold up indefinitely the issuance of the patent to the successful party. Even after the Act of 1852, the defeated party was able to do this by taking his appeal to the infirm Chief Justice. Commissioner Hodges attempted to prevent this injustice by ordering that where appeals had been taken to the Chief Justice, the appellants should transfer them to one of the assistant judges and that all appeals thereafter should be taken to one of the latter judges. Attorney General Cushing, however, held that the Commissioner had no authority to do this and that Congress alone had power to remedy the evil (6 Opinions, Attorney General, 39).

The reason for the change made by the Act of 1852 in the compensation allowed the judges from a hundred dollars a year to twenty-five dollars in each case is not clear. The evil resulting therefrom, however, is set

forth in the annual report of the Secretary of the Interior for 1857, as follows:

The appellant not only selects the judge who shall try the case, but also pays the fee of twenty-five dollars allowed him. The amount of compensation thus received will depend upon the number of cases brought before him; that number will inevitably be influenced by his course of decision. The judge is thus placed in a position of embarrassment, if not of humiliation, alike to be deplored by himself and the country.

This matter is again referred to by Commissioner Fisher in his annual report for 1869 where he recommends doing away with appeals to the court from decisions of the Commissioner of Patents and advances ten reasons in support of his recommendation. The fourth and eighth of these reasons read as follows:

(4) The allowance of a fee of twenty-five dollars for each appeal has a tendency to encourage appeals. When there are frequent reversals of the Office, attorneys are inclined to appeal from every decision; and the more frequent the appeal, the larger the aggregate of fees paid to the judge; in this connection, as a simple matter of fact, it may be mentioned that during the administration of my immediate predecessor, forty-two cases were appealed from him to one of the judges, and of these, thirty-eight were reversed and only four affirmed.

(8) Nine-tenths of the cases appealed involve mere questions of fact, upon which the judgment of the primary examiner is as likely to be correct as that of the Commissioner or judge.

Commissioner Fisher took a conspicuous part in framing the Act of 1870 and it was undoubtedly largely due to his recommendation that the appellate practice from the Commissioner's decisions, while not entirely abolished, was modified by that act.

Section 48 of the Consolidated Patent Act of 1870 (16 Stat., 198) provides:

And be it further enacted, That if such party, except a party to an interference, is dissatisfied with the decision of the commissioner, he may appeal to the Supreme Court of the District of Columbia, sitting in banc.

It should be noted that this act eliminated the appeal from the decision of the Commissioner in an interference case and provided for the hearing of the appeal in *ex parte* cases by the Supreme Court of the District of Columbia, sitting in banc, or general term, this court being the successor of the old Circuit Court of the District of Columbia.

Section 4911 of the Revised Statutes approved June 22, 1874, reads the same as section 48 of the Act of 1870.

The last change in the appellate tribunal having jurisdiction of appeals from decisions of the Commissioner is contained in the Act of February 9, 1893, creating the Court of Appeals of the District of Columbia (27 Stat., 434). This act vested in the above-mentioned court the determination of appeals from the Commissioner formerly vested in the general term of the Supreme Court of the District of Columbia. It also restored the appeal from the decision of the Commissioner in an interference case, which, as noted above, existed prior to the Act of 1870, by providing that "in addition any party aggrieved by a decision of the Commissioner of Patents in any interference case may appeal therefrom to said Court of Appeals."

This court construes the statute as permitting appeals from the decision of the Commissioner in interferences only in cases where there has been a final determination of priority, and holds that its jurisdiction is limited strictly to the question of priority. In numerous decisions it has refused to consider the patentability of the issue in an interference case or to entertain an appeal from a Commissioner's decision on any preliminary or interlocutory matter arising in the interference.

In *ex parte* cases the court holds that the right of appeal is confined to those cases in which an application

for patent has been finally denied by the Commissioner.

The jurisdiction of this court in patent applications is set forth succinctly in its decision, *In re Fullager*, 138 O. G., 259; 32 App. D. C., 222, as follows:

The jurisdiction of this court to entertain appeals from decisions of the Commissioner of Patents, in proceedings relating to patents, is limited to two classes of cases. The first is where the claims of an applicant for a patent, or the reissue of a patent, after having been twice rejected, have been finally rejected on an appeal to the Commissioner in due course of procedure. The second is where on an appeal to the Commissioner in an interference proceeding there has been a final decision of priority in favor of one of the parties thereto (R. S., secs. 4909, 4910, 4911; *Westinghouse vs. Duncan*, C. D., 1894, 170; 66 O. G., 1009; 2 App. D. C., 131, 132; *Allen vs. Lowry*, C. D., 1905, 643; 116 O. G., 2253; 26 App. D. C., 8, 17, 26; *Union Distilling Co. vs. Schneider*, C. D., 1907, 613; 129 O. G., 2503; 29 App. D. C., 1).

Examination of this decision shows that Fullager was involved in an interference with one Emmet; that in said interference a decision had been rendered by the Commissioner affirming the decision of the lower Patent Office tribunals dissolving the interference upon the ground that Fullager had no right to make the claims of the issue, since his verified showing was insufficient to warrant granting him a reissue patent. From the decision of the commissioner, Fullager attempted to appeal *ex parte* and the court held that it has no jurisdiction to entertain an appeal from a decision of the Commissioner on a motion to dissolve an interference under such circumstances.

In passing upon the question of its jurisdiction the court considers the effect rather than the form of the Commissioner's order or decision from which appeal has been taken. This is set forth in *Moore vs. Heany* (149 O. G., 831; 34 App. D. C., 31), where the court was considering whether an appeal would lie from a

Commissioner's order striking an application from the files, as follows: "A court would look to the substance, the necessary effect and operation of the order rather than to its formal recital merely."

Examination of a few cases will show how this principle has been applied by the court. These cases also show that although the court has indicated in the case of *Pullager, supra*, that its jurisdiction does not attach until after the case has been appealed in succession from the Examiner to the Examiners-in-Chief and to the Commissioner, decisions in the case by the tribunals below the Commissioner have not been uniformly insisted upon.

In the case of *In Re Selden* (164 O. G., 741; 36 App. D. C., 428), the claims had already been allowed by one primary examiner, and the application was ready for issue, subject to some slight amendments. Upon compliance by the applicant with these suggestions the successor of the first primary examiner called the case to the attention of the Commissioner and stated that he proposed to reject three of the twenty-four claims as not patentable. The Commissioner, upon consideration of the application, held it abandoned for lack of sufficient prosecution within the statutory period of two years.

An appeal from the Commissioner's decision was entertained, the court holding that the action of the Commissioner was in effect a rejection of the claims.

A similar holding was made by the court in the case of *Mattulath* (179 O. G., 833; 38 App. D. C., 497) where the Examiner's holding that an application was abandoned was affirmed by the Commissioner on petition from the Examiner's ruling.

In *Cosper vs. Gold and Gold* (151 O. G. 194; 34 App. D. C., 198), the court dismissed an appeal taken from a decision of the Commissioner dissolving an interference because one of the parties had no right to make the claims of the issue, upon the ground that the decision of the Commissioner was interlocutory and not a final award of priority. After the return of the case to the Commissioner, he set aside his decision dissolving the interference and entered an award of priority. Upon an

appeal from that judgment the court entertained the same and passed upon the question of priority, notwithstanding no decision on the question of priority had ever been rendered by the Examiner of Interferences (*Cosper vs. Gold and Gold*; *Cosper vs. Gold*, 168 O. G., 787; 36 App. D. C., 302).

Townsend vs. Thullen (142 O. G., 1116; 32 App. D. C., 575), was a case where the Primary Examiner granted a motion to dissolve the interference as to certain counts on the ground that Townsend had no right to make them. His decision was affirmed by the Examiners-in-Chief and by the Commissioner. An appeal was taken to the court and was entertained, the court holding that the necessary result of the Commissioner's action was an award of priority to Thullen.

In the *New Departure Manufacturing Company, vs. Robinson* (188 O. G., 1056; 39 App. D. C., 504), the Examiner of Interferences directed the attention of the Commissioner to a prior interference and the Commissioner dissolved the interference upon the ground that the question of priority was *res adjudicata* by reason of the final decision in the prior interference. An appeal to the court was entertained, notwithstanding no decision in the proceeding had been rendered by any of the tribunals subordinate to the Commissioner.

In the case of *Moore vs. Chott* (192 O. G., 520; 40 App. D. C., 591), the Examiners-in-Chief reversed the action of the Primary Examiner rejecting the claims of the application. The Commissioner took up the case under his supervisory authority and refused the patent. The Court of Appeals of the District of Columbia held that the Commissioner acted within his authority and that the applicant's remedy was by regular appeal and not by a writ of mandamus. An appeal to the United States Supreme Court was dismissed for lack of jurisdiction (*Chott vs. Ewing*, 215 O. G., 1264; 237 U. S., 197).

In *Mann vs. Brown* (214 O. G., 1026; 43 App. D. C., 457) where an interference was appealed to the Commissioner and he dissolved the interference in view of a reference that applied to the party Mann and entered an order in his application refusing him a patent and

Mann appealed, the court held that the proceeding can not be changed from one statutory class to another and dismissed the appeal.

In *Carlin vs. Goldberg* (236 O. G., 1222) a motion to dissolve on the ground that Carlin's structure was inoperative had been granted by the various Patent Office tribunals. On petition of Carlin the Commissioner changed his decision to one awarding priority to Goldberg on the ground that Carlin had no right to make the claims. The court held that the Commissioner had no jurisdiction to convert an appeal on the motion to dissolve into an appeal on priority. It attempted to distinguish from the *Cosper vs. Gold* case, *supra*, by stating that in the latter case the interference had been tried and was ripe for an award of priority and that the issue of priority turned upon Cosper's right to make the claim, but that in the case at bar a reversal of the Commissioner would operate as a grant of priority to Carlin and Goldberg would be deprived of his day in court on that issue.

No appeal lies from the decision of the Court of Appeals of the District of Columbia on an appeal from the Commissioner of Patents (*Frasch vs. Moore*, 137 O. G., 230; 211 U. S., 1; *Johnson vs. Muesser*, 145 O. G., 767; 212 U. S., 283; sec. 250 of the Judicial Code, and *Chott vs. Ewing*, 215 O. G., 1264; 237 U. S., 197).

APPEALS TO THE EXAMINERS-IN-CHIEF AND TO THE COMMISSIONER.

The first statutory provision for appeals within the Patent Office is found in the Act of March 2, 1861, which provides for an appeal from the Primary Examiners to the Examiners-in-Chief and from the Examiners-in-Chief to the Commissioner. The reasons and the conditions in the Patent Office which led to the enactment of this statute legally creating the lower appellate tribunal and providing for appeals to the Examiners-in-Chief and to the Commissioner may well be considered together.

At the time of the passage of the Act of 1836 creating the Patent Office as a separate bureau of the State Department and for a long time thereafter, the amount of

business transacted by the Office was small and did not require the establishment of an appellate tribunal within the Office although, as heretofore noted, the act did provide an appeal from the decision of the Commissioner. For example, the number of applications filed in the year 1840 was 765 and the number of patents granted, 473. In fact, the establishment of the Patent Bureau by the Act of 1836, with an office force of seven persons, as stated above, was generally regarded as extravagant. At that time the number of applications was so small that the Commissioner was presumed to examine them himself or to have the examinations made directly under his eye by the examining clerk. For a long time thereafter, the amount of work was not too great for the Commissioner personally to supervise it.

The number of examiners did not exceed four until the year 1848, when the force was increased by the addition of two principal examiners and two assistant examiners. During this year the number of applications was 1,628 and the number of patents granted 660. The entire Patent Office was, therefore, about the size of one of the present forty-three examining divisions and the relation of the Commissioner to his examining force at that time is comparable to that existing at present between the principal examiner of a division and his assistant examiners.

The Patent Office was transferred from the jurisdiction of the State Department and made a bureau of the Interior Department upon the establishment of the latter in 1849. For a number of years prior to the establishment of the Agricultural Bureau, the Commissioner of Patents had charge of the collection of agricultural statistics and some of the Patent Office reports in the forties are filled principally with matter relating to agriculture. For some years the duty of registering copyrights was also added to the other duties of the Commissioner of Patents.

By 1853 the number of applications filed annually had increased to 2,673, and the Rules of Practice of the Patent Office for that year, page 16, states:

It is not often that the Commissioner is able to investigate a case in person, and only in very especial circumstances can he undertake it.

In the Rules of Practice issued February 20, 1854, first appeared the following rule:

114. Should there be--notwithstanding these reasons--a second rejection, the applicant may in person, or by his agent, or in writing, as above contemplated, bring the matter before the commissioner, who will, if possible, examine the case in person; but should he not be sufficiently at leisure, it will be referred to a board of examiners.

The decision attained in either of these modes will be final, so far as the action of this office is concerned. The only remaining remedy will be by appeal in those cases allowed by law.

Up to about this time apparently the Commissioner had endeavored to exercise a personal supervision over the actions of the examiners whether they were favorable or adverse to the grant of a patent. The annual report of the Commissioner of Patents for the year 1855, however, contains the following statement:

The multiplicity of business in the office renders it wholly impossible for the Commissioner to exercise a personal supervision over the decisions in each of the numberless cases presented for official action. When the Examiner reports in favor of granting a patent it is issued without further question or examination.

This annual report for 1855 contains the first suggestion of "the appointment of an examiner-in-chief, whose sole duty would be to review the actions of the present examiners with a view to introducing correctness and uniformity of decision."

Rule 114 of the Rules of Practice of 1854, quoted above, indicates that at this time the business of this Office had become so heavy that it was impossible for the Commissioner personally to review the actions of examiners in all cases brought to his attention and that he instituted a board of examiners to relieve him of some of this work. This board, which was the forerunner of

the board of examiners-in-chief, is referred to in the annual report of the Commissioner of Patents for 1857, as follows (pp. 7-8):

Whatever might be the capabilities of the Commissioner for physical and mental labor, it would be impossible for him to discharge the administrative duties of his office, and hear, in person, all the appeals brought before him from the decisions of examiners. The usage has hence grown up of referring the investigation of most of these appeals to a board constituted for the occasion, consisting of two or more examiners, who make their report to the Commissioner. As these boards lack permanence, and from necessity, indeed, have been constantly changing without a critical examination of each report by the Commissioner—which is not practicable—uniformity in action and in the assertion of principle can not be maintained. To prevent in future that conflict, which has been so often deplored in the past, it has been recommended that there shall be appointed a permanent board of three examiners-in-chief, who shall be charged with the duty of hearing and determining upon all appeals from the judgment of the primary examiners. Such a tribunal would, no doubt, attain the end sought, and the members of it—should their appellate duties not fully occupy their time—could, by the Commissioner, be assigned labor in the classes requiring such assistance with much advantage to the public service.

In the Patent Office Report for 1858, the Commissioner states (p. 5):

Since the month of November, 1857, a board temporarily organized, and consisting of three examiners, specially detailed for this duty, have been occupied in the examination of appeals from the decisions of the primary examiners to the Commissioner. During the past year they investi-

gated and disposed of 535 cases, in most of which they have submitted elaborately prepared reports. The results of their action have been eminently satisfactory, and have commanded, it is believed, the entire confidence of the country.

This matter is again referred to in the Commissioner's annual report for 1860 (p. 6), as follows:

Previous to the month of December, 1857, it was the practice of the Commissioner to hear appeals in person from the adverse action of the examiners; but it was soon found, from the natural increase of the business of the Office, that this was becoming a physical impossibility; and hence was adopted the alternative of deputing temporary boards of examiners, which, in some measure, relieved the Commissioner of the burden thrown upon him. But the plan soon developed its own imperfections. Each board had its own principle of action, and, in many instances, this differed from the rules prescribed by the Commissioner. As a corrective, it was at length determined by Commissioner Holt to establish a permanent board of appeal within the Office, whose members, three in number, should be taken from the examining corps, and whose duty it should be to examine all *ex parte* rejected cases, and submit their report and recommendation, as to their final disposal, to the Commissioner for his approval. This board has now been in existence for over three years, and the wisdom of its creation is a matter placed beyond all doubt.

The volumes of the Commissioner's Manuscript Decisions shows that the action of this board was in the form of a report which if satisfactory to the Commissioner, was approved and adopted by him.

The above excerpts from various reports of the Commissioner show that prior to 1861 the matter of ap-

peals to the Commissioner and later the reference of them largely to a board was not provided for by statute, but was a matter of usage or practice that gradually developed in the Office due to its growth and to the consequent inability of the Commissioner to attend in person to all the duties imposed upon him.

The repeated recommendations of the Commissioners finally produced the desired result and Congress provided for the board of examiners-in-chief and for appeals within the Office in section 2 of the Act of March 2, 1861 (12 Stat., 246) which reads as follows:

And be it further enacted, That for the purposes 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.

Section 10 of the act fixed the fee for an appeal from the examiners-in-chief to the Commissioner at twenty dollars but no fee was required on an appeal from the examiners to the examiners-in-chief.

The report of the Commissioner for 1865 contains the following recommendation for a ten-dollar fee on appeal to the examiners-in-chief:

The Act of March 2 1861, provided for the appointment of a board of examiners-in-chief, whose duty it should be to revise and determine upon the validity of decisions made by examiners when adverse to the grant of letters patent. An experience of five years has fully confirmed the wisdom of the enactment, but it has at the same time demonstrated the necessity of additional legislation upon the subject. While a fee of twenty dollars is charged upon an appeal from the examiners-in-chief to the Commissioner, no charge is made for an appeal from the examiners to the board. It results from this that appeals are taken in many cases without a shadow of ground, and, in contested cases, merely for the purpose of delay. During the year 1865 there were 495 appeals taken to the board, of which number 166 remained undisposed of at the close of the year. If a fee of ten dollars were charged on appeals to the board it would check the number of frivolous appeals, and would be gladly paid by those inventors who are confident of the justice of their claim, as they would recognize it as securing them an early decision in place of the delay of months to which they are now so generally subjected.

After consultation with many inventors, and with solicitors in extensive practice, I am satisfied that the proposed amendment would be received with almost universal favor.

This recommendation resulted in the Act of June 27, 1866 (14 Stat., 76) fixing the fee for such appeal at ten dollars.

The Act of 1870 and the Revised Statutes contain similar provisions and no material change appears until last year when Congress increased the number of examiners-in-chief from three to five (Act of Feb. 15, 1916).

BILL IN EQUITY UNDER SECTION 4915, REVISED STATUTES.

An applicant has still another remedy from an adverse decision; namely, by bill in equity. Provision for this remedy is first found in section 16 of the Act of 1836 which contained certain of the provisions now embodied in sections 4915 and 4918 of the Revised Statutes.

The first portion of section 16 of the Act of 1836 reads:

And be it further enacted, That whenever there shall be two interfering patents, or whenever a patent on application shall have been refused on an adverse decision of a board of examiners, on the ground that the patent applied for would interfere with an unexpired patent previously granted, any person interested in any such patent, either by assignment or otherwise, in the one case, and any such applicant in the other case, may have remedy by bill in equity.

At this time it will be recalled, the appellate tribunal to the Commissioner was a "board of examiners." The Act of 1839, which substituted for this tribunal the Chief Justice of the District of Columbia, also changed and enlarged the remedy by bill in equity. Section 10 of the Act of 1839 provides—

And be it further enacted, That the provisions of the sixteenth section of the before-recited act shall extend to all cases where patents are refused for any reason whatever, either by the Commissioner of Patents or by the Chief Justice of the District of Columbia, upon appeals from the decision of said Commissioner, as well as where the same shall have been refused on account of, or by reason of, interference with a previously existing patent; and in all cases where there is no opposing party, a copy of the bill shall be served upon the Commissioner of Patents, when the whole of the expenses of the proceeding shall be paid by the applicant, whether the final decision shall be in his favor or otherwise.

The provisions of this act are substantially the same as those of section 52 of the Act of 1870 and of present section 4915 of the Revised Statutes, except for the substitution of the "Supreme Court of the District of Columbia" in the latter in place of "Chief Justice of the District of Columbia" in the former. Since the Act of 1893, it is the refusal of the patent by the Court of Appeals of the District of Columbia that entitles the applicant to a remedy by bill in equity.

The remedy provided by bill in equity under section 4915, Revised Statutes, is not an appeal from the decision of the Commissioner or the decision of the court rendered on appeal from the Commissioner's decision, but is an original proceeding in which new or additional testimony may be taken and the case determined upon a new record. Referring to section 4915, Revised Statutes, the United States Supreme Court states in *Butterworth vs. Hoe* (112 U. S., 50; 1884, C. D., 429):

It is thereby provided that the applicant may have remedy by bill in equity. This means a proceeding in a court of the United States having original equity jurisdiction under the patent laws, according to the ordinary course of equity practice and procedure. It is not a technical appeal from the Patent Office, like that authorized in section 4911, confined to the case as made in the record of that office, but is prepared and heard upon all competent evidence adduced and upon the whole merits.

It appears to be settled that a bill in equity under section 4915, Revised Statutes, can not be maintained until the complainant has exhausted his remedy by appeal (*Kirk vs. Com. of Pats.*, 37 O. G., 451; *Prindle vs. Brown*, 136 F. R., 616; *Walker on Patents*, p. 118). It is not clear that there are now any cases in which a bill in equity to obtain a patent can be maintained until after an appeal has been taken from the decision of the Commissioner to the Court of Appeals of the District of Columbia. Between the years 1870 and 1893, however, the statutes did not provide an appeal from the decision of the Commissioner on priority in an interference case

and the defeated party's only remedy was by this bill directly from the Commissioner's decision. Walker (p. 118) states that "where the Commissioner withholds a patent by virtue of his general supervisory authority, the remedy now under consideration is the only one to which the applicant can resort, for no appeal lies to the Court of Appeals of the District of Columbia," citing in support thereof *Hull vs. Com. of Patents*, 7 O. G., 559; 8 O. G., 46. In the recent case of *Moore vs. Chott*, 192 O. G., 520; 40 App. D. C., 591, where a patent had been refused by the Commissioner under his supervisory authority even after it had been allowed by the examiners-in-chief, the Court of Appeals of the District of Columbia held that the applicant's remedy was by direct appeal to that court from the decision of the Commissioner.

In view of this case and of the court's decisions in the cases of *Selden* and *Mattulath*, *supra*, where appeals were entertained from the holding of the Commissioner that the applications were abandoned, and of the case of *Heany* and others, heretofore cited, in which the court indicated it had jurisdiction by appeal from any holding of the Commissioner that had the effect of denying an applicant a patent, it appears that the above statement of Walker is not now correct and that the portion of section 4915, Revised Statutes, providing that an applicant may have remedy by bill in equity "whenever a patent on application is refused, either by the Commissioner of Patents or by the Supreme Court of the District of Columbia" is a dead letter so far as the reference to the Commissioner is concerned.

The remedy by bill in equity is a part of the application for the patent and is governed by the rule of section 4894, Revised Statutes, as to laches. In other words, unless the bill is filed within one year from the decision of the Court of Appeals of the District of Columbia, it must be shown to the satisfaction of the court that the delay was unavoidable (*Gandy vs. Marble*, 39 O. G., 1423; 122 U. S., 432; *Westinghouse Electric & Mfg. Co. vs. Ohio Brass Co.*, 186 F. R., 518).

The complainant in the suit may be the applicant or the assignee (*Smith vs. Thompson*, 177 F. R., 721; *Wende vs. Thompson*, 191 F. R., 620).

If there is a party whose interests are adverse to those of the complainant, such as an opponent in an interference, he should be made the defendant and the bill filed in the federal district court for the judicial district of which that party is an inhabitant. Where there is no opposing party, the bill must be served on the Commissioner of Patents and filed in the Supreme Court of the District of Columbia unless he consents to accept service and appear elsewhere (*Butterworth vs. Hill*, 31 O. G., 1043; 114 U. S., 129; *Illingworth vs. Atha*, 51 O. G., 803; 42 F. R., 141).

Where the defeated party in an interference proceeding seeks remedy by bill in equity, the question of the patentability of the claims may be raised and will be considered by the court (*Hill vs. Wooster*, 50 O. G., 560; 132 U. S., 693; *Richards vs. Meissner*, 155 F. R., 135; *Hansen vs. Slick*, 216 F. R., 164).

The court is without authority under section 4915 to enjoin the Commissioner from issuing a patent to the successful party in an interference proceeding (*Illingworth vs. Atha*, 42 F. R., 141), and it is the practice of the Patent Office not to withhold the patent to the successful party pending the determination of a suit in equity under section 4915, Revised Statutes (*Sargent*, 12 O. G., 475; *Wells vs. Boyle*, 43 O. G., 753; *Dunbar vs. Schellenger*, 128 O. G., 2087; *McIntyre vs. Perry*, 169 O. G., 943).

An appeal lies from the decree of the Supreme Court of the District of Columbia to the Court of Appeals of the District of Columbia or from a federal district court to the Court of Appeals of the same judicial circuit in cases under section 4915, Revised Statutes, as in other equity cases. Formerly an appeal could be taken to the United States Supreme Court as shown by the fact that that court entertained jurisdiction in *Gandy vs. Marble*, 39 O. G., 1423; 122 U. S., 432; *Hill vs. Wooster*, 50 O. G., 560, 132 U. S., 120, and *Morgan vs. Daniels*, 67 O. G., 811; 153 U. S., 120. In *Durham vs. Seymour*, 74 O. G., 1731; 161 U. S., 235, the Supreme Court held that the Acts of March 3, 1891, and of March 3, 1885, respectively, did away with appeals of this kind from the circuit courts and the Supreme Court of the District of Columbia.

The Judicial Code, Act of March 3, 1911, continues the practice of *not* permitting appeals in such cases to the United States Supreme Court.

As shown by this elaborate system of remedies, the patent laws are, as stated in one court opinion, supremely indulgent to the claims of inventors. Various Commissioners, and others, have recommended doing away with some of these remedies and appeals, both within and without the Office.

In view of the expense to which a defeated party in an interference proceeding may subject the successful party and of the length of time during which it is possible to prevent him from receiving his patent; also of the long period an applicant may keep his rejected application alive, much may be said in favor of limiting the number of remedies. A discussion of the subject, however, would unduly extend this paper.

January 18, 1917.

DOUBLE PATENTING

With Relation to Co-Pending Applications

A paper read January 25, 1917, before the Examining
Corps of the United States Patent Office

BY

ROY F. LOVELL,

**Second Assistant Examiner, Division Thirty-five,
U. S. Patent Office**

WASHINGTON, D. C.

1917

Double Patenting

By

ROY F. LOVELL,

Second Assistant Examiner, Division Thirty-five,
U. S. Patent Office.

When an inventor has two or more co-pending applications disclosing patentable subject-matter, the Office must be careful not to allow two applications to go to issue, both claiming the same invention.

In 1894 the Supreme Court held two patents to be for the same invention in *Miller vs. Eagle Mfg. Co.*, 151 U. S., 186, 66 O. G., 845; and after reviewing numerous decisions laid down the following broad rules relating to this class of cases:

“The result of the foregoing and other authorities is that no patent can issue for an invention actually covered by a former patent, especially to the same patentee, although the terms of the claims may differ; that the second patent, although containing a broader claim, more generic in its character than the specific claims contained in the prior patent, is also void; but that where the second patent covers matter described in the prior patent, essentially distinct and separable from the invention covered thereby, and claims made thereunder, its validity may be sustained.

“In the last class of cases it must distinctly appear that the invention covered by the later patent was a separate invention, distinctly different and independent from that covered by the first patent; in other words, it must be something substantially different from that comprehended in the first patent. It must consist in something more than a mere distinction of the breadth and scope of the claims of each patent. If the case comes within the first or second of the above classes, the second patent is absolutely void.”

As will be later noted, the foregoing rules were much broader than required by the case under consideration.

However, the rule is clear and definite, not ambiguous or subject to two interpretations. The court definitely stated that no patent can issue for an invention, actually covered by a former patent, especially to the same patentee, although the terms of the claims may differ; that the second patent, although containing a broader claim, more generic in its character than the specific claims contained in the prior patent, is also void. It must consist in something more than a mere distinction in the breadth and scope of the claims of each patent.

The cases to be discussed may be divided into the following classes: (1) Where the patents contain claims that cover the same invention, but are not in the same form, as process or method and apparatus or article claims. (2) Where the claims are in the same form, but differ in scope. (3) Where the claims in one patent are combination claims and the claims in the other patent are drawn to an essential element of that combination.

Mosler Safe & Lock Co. vs. Mosler, 127 U. S., 354, is an example of the first class of cases. In this case the applicant obtained a patent for an article and later, on a co-pending application, obtained a patent for a method of making the article. The Supreme Court held the article claims in the first patent and the method claimed in the second patent to be for the same invention, and said:

“After a patent is granted for an article described as made by causing it to pass through a certain method of operation to produce it, the inventor can not afterwards, on an independent application, secure a patent for the method or process of producing the identical article covered by the previous patent, which article was described in that patent as produced by the method or process sought to be covered by taking out the second patent.”

In *Dayton Fan Motor Co. vs. Westinghouse Electric & Mfg. Co.*, 118 Fed. Rep., 562, C. C. A., two applications were filed the same day—one for a method and the

other for the apparatus. Later an application was filed for a special means for carrying out the method disclosed in the method application. The court held that the last filed application which was first to issue, did not invalidate the later issued patents, and that the method and apparatus patents were not for the same invention and both were valid. It is noted that as applicant had filed two applications each disclosing a different means for carrying out the method that the method disclosed could result from more than one form of apparatus. Therefore the first patent did not disclose the only means by which the method could be carried out. In other words, the first patent did not grant him a monopoly on the method.

In *Century Electric Co. vs. Westinghouse Electric & Mfg. Co.*, 191 Fed., 350, C. C. A., 8th Circuit, applicant filed an application for an apparatus and process. He later divided out the process and filed a second application therefor in accordance with old Rule 41. The process application was the first to issue. The court held that as applicant had divided out the process claims as required by Rule 41, it was clear that at the time the contracts were made the process and apparatus were believed to be separate inventions. However, it was not clear to the court that the process and apparatus were inseparable. The court thought that an apparatus not the mechanical equivalent of the one patented might carry out the process, in which event the monopoly of the process would not be extended beyond seventeen years, for on the expiration of the term of the process patent anybody would have the right to carry out the process by an apparatus that was not the mechanical equivalent of the one patented.

The case of *Ex parte Edison*, 220 O. G., 1373, was somewhat similar to the *Century Electric* case, with this distinction, that whereas Edison divided out in accordance with old Rule 41, as it existed before *Steinmetz vs. Allen*, the divisional application was not filed until more than a year after *Steinmetz vs. Allen* had modified Rule 41. Furthermore, while old Rule 41, which required division between process and apparatus claims, was in force at the time of filing of the divisional application

35 U.S.C. § 101
 apparatus by which it is performed, and distinct therefrom, by way of a
 found in one patent, they may be made subject of distinct
 patents. So in a patent...

In *Century Electric Co. vs. Westinghouse Electric & Mfg. Co.*, the court held that the last filed application which was first to issue, did not invalidate the later issued patents, and that the method and apparatus patents were not for the same invention and both were valid. It is noted that as applicant had filed two applications each disclosing a different means for carrying out the method that the method disclosed could result from more than one form of apparatus. Therefore the first patent did not disclose the only means by which the method could be carried out. In other words, the first patent did not grant him a monopoly on the method.

in the Century Electric case, the divisional application carved out of the parent Edison application was not filed until more than a year after Rule 41 had been changed. The Commissioner held that in view of the fact that the process and apparatus were so closely related that it was difficult to tell in which the invention lay, the applications should have been prosecuted and issued concurrently or as nearly so as possible. In view of the long delay in filing and the dilatory prosecution of the divisional case, it was held that to grant a patent on the divisional case would extend the monopoly covered by the parent case long since issued. In other words, it would amount to granting a second patent for the same invention.

The second class of cases to be considered is the one wherein the claims are in the same form but differ in scope. The leading decision covering this class of cases is *Miller vs. Eagle, supra*. This class of cases had caused the Patent Office considerable trouble before the *Miller vs. Eagle* decision. In *Ex parte Holt*, 29 O. G., 171, an application was filed in January, 1880, and later another application was filed and called a division. The latter went to issue first. The Commissioner held that there was no line of division between the two cases and said:

“It is true that the patent is issued upon an application long subsequent to that of the case containing the broadest claims, but I consider the relative dates of the applications of no importance, since a patent has issued upon one of them and the subject-matter is indivisible.”

This would seem to be in accordance with the rule later enunciated by the Supreme Court in *Miller vs. Eagle*, but, as will be noted later, the courts have not followed the practice indicated in *Ex parte Holt*. In *Ex parte Ransom*, 39 O. G., 119, the Commissioner said:

“A patent should not issue upon an application which is not properly a division of the subject-matter of a patent to the same party, even though the application upon which the patent was granted was concurrent.”

Ex parte Mullen and Mullen, 50 O. G., 837, does not strictly come within the scope of this paper, but the Commissioner in deciding this case laid down the following rules to govern the various classes of cases coming under the head of double patenting: (1) Cases where the various claims differ among themselves only as they constitute different statements of one and the same indivisible invention—cases where, in other words, the lines of division exist as mental figments only, and have no corresponding existence in the concrete subject of invention. In all such cases one application only is permissible, whether pending concurrently or not, because only one patent can be granted for a single invention and a second patent for the same invention under another guise would result inevitably in an illegal extension of the period of exclusive use. (2) Cases where several distinct inventions are dependent upon each other and mutually contribute to a single result. In such cases the several inventions may be included in one patent, or they may be separated into as many patents as there are separate and distinct inventions. In such cases if a patent issues describing all of the mutually dependent inventions and claiming but one of them, a presumption of dedication arises out of the failure to claim what might lawfully have been claimed in the same application. This presumption of dedication is repelled, however, if the inventions not claimed in the patent first to issue are claimed in applications contemporaneously pending in the Office. (3) Cases where the invention described but not claimed is absolutely independent of the invention actually claimed in the first patent. In such a case the invention described but not claimed could not have been lawfully protected in one patent with the independent subject-matter which was actually secured. There can be no presumption of dedication arising out of a failure to claim in a given application what could not have been lawfully claimed in that application, and it is believed that no obstacle exists in such a case to obtaining a patent otherwise allowable upon any application that may be filed before the invention has been in public use or on sale for more than two years and before actual abandonment.

It will be noted that although the first rule is not so definite as the rules laid down by the Supreme Court in the *Miller vs. Eagle* case, it apparently is intended to cover cases in which the difference between the claims of the two applications is a difference of scope or breadth merely—a difference between broad and specific claims. The second rule in *Mullen and Mullen* is well established and has been uniformly followed by the courts since *Suffolk Mfg. Co. vs. Hayden*, 3 Wall., 315, the leading case on this point.

The third rule in *Mullen and Mullen* has been uniformly followed since the decision was rendered. It will be noted that the second patent may be granted upon an application filed before the invention has been in public use or on sale for more than two years. In *Isaacs vs. Speed*, 130 O. G., 2717, the Commissioner held that a patent disclosing a process and apparatus and claiming only the process is no bar to the allowance of an application covering the apparatus filed by the same party within two years after the grant of the patent. However, all process and apparatus cases do not come within the third rule of *Mullen and Mullen* as construed by *Isaacs vs. Speed*, *supra*. The case of *Ex parte Edison*, 220 O. G., 1373, clearly does not come within this rule, but would probably be classified with the cases coming under the first rule and in any case where there is no doubt that the process and apparatus cover the same invention, the case clearly falls within the scope of the first rule (See *Mosler Safe & Lock Co.*, *supra*, and *Ex parte Lord*, 50 O. G., 987).

In *Ex parte Lord*, *supra*, the Commissioner held that:

“An invention restrictedly stated does not become a different invention when claimed more broadly or generically.”

This practice was followed in *Ex parte Edison*, 54 O. G., 263, in which the Commissioner said:

“To grant the present application would be to prevent the public from having the benefit of the invention at the expiration of seventeen years from the beginning of Edison's monopoly thereof, and because the statute expressly limits the

duration of the period of exclusive use of a given invention to seventeen years the prior patents to Edison must be held to be adequate references."

Jones vs. Larter, 92 O. C., 383, was the next important case with the exception of *Miller vs. Eagle*, already considered. In *Jones vs. Larter*, the first filed application went to issue with specific claims. A few weeks before the issue of this patent a second application was filed, and was alleged to be for an improvement on the construction shown in the first filed application, and contained no claims broad enough to read on the first filed application. After the first application had issued claims were filed in the second case broader than the claims in the patent. The Commissioner held that the applicant had no right to these claims in the second application and after referring to several decisions cited, said:

"These decisions and all others on the same line that have been cited have reference to cases in which the broad claims were made in the case first filed, and while that case was held up in the Office without fault of the applicant, another case covering specific improvements on the original device went to patent. They do not apply and were not intended to apply to a case like the present, where the broad claims were not only made in the second application filed, but made therein long after the patent had issued on the first application."

In *Thomson-Houston Co. vs. Winchester Co.*, 73 O. C., 2155, the court said:

"Whatever may be the rule as to cases where the application for the generic patent was filed subsequent to the application for the specific patent, I do not think the patentee should be deprived of his broad patent where the application for such patent was made first and delayed in the Office through no fault of the inventor."

By the above statement the court apparently thought

that the respective filing dates of the two applications might be material.

In view of *Miller vs. Eagle* and *Ex parte Holt*, *Ex parte Ransom*, *Ex parte Mullen* and *Mullen*, *Ex parte Lord*, *Ex parte Edison*, and *Jones vs. Larter*, it would appear that the general rule is laid down by the *Miller vs. Eagle* case heretofore quoted in full. The lower courts, as evidenced by the decisions that will be later referred to, apparently considered that it would be inequitable to hold a patent for the broad invention, resulting from the first-filed application, void on the ground that it was for the same invention as a patent for a specific improvement granted prior to the patent for the broad invention but upon an application subsequently filed. The reason for this is clear. The application for the broad invention may be and often is involved in interference proceedings or appeals and thereby delayed through no fault of the applicant. In any event, an application for a broad invention ordinarily remains in the Office longer than does an application for a specific improvement. It therefore appears that with relation to broad and specific claims merely the rule enunciated in *Miller vs. Eagle*, as construed by the lower courts, should be that *the broad claims should be either in the first application filed or in the first to issue*. The question naturally arises, why is the filing date or the issue date material when the two applications are co-pending? As will be seen later, some courts, under certain circumstances, have held that the filing date is not material (See *Century Electric Co. vs. Westinghouse*, 191 F. R., 350). The answer is that the practice followed in the case of *Cleveland Foundry vs. Detroit Vapor Stove Co.*, 131 F. R., 853, and others, is not the rule, but is merely an exception to the rule enunciated in the *Miller vs. Eagle* case.

In considering how the decisions of the courts agree with the rule that the broad claims should be in the first filed or the first to issue, the cases coming under the second class will be divided into the following subclasses: (1) Where the broad claims are in the first to issue. (2) Where the broad claims are in the last to issue but in the first filed. (3.) Where the broad claims are in the last to issue and the last filed.

The following cases come under the first subclass: In *Century Electric vs. Westinghouse*, 191 F. R., 350, an application for an apparatus was filed May, 1888. In December, 1888, a divisional application was filed for a process. In May, 1889, an application for an improved apparatus and process was filed. In January, 1891, the last filed application matured into Patent No. 445,207, having claims broad enough to read on the apparatus and process described in the first-filed applications. In the improvement patent the inventor expressly disclaimed seeking to cover the process and apparatus covered by the first filed applications. The court said:

“Conceding that the claims of Patent 445,207 were broad enough if they stood alone to cover the main inventions, they did not stand alone, but were conditioned by the specification which accompanied them. They were for combinations and in the light of that specification the new phase regulating devices specified therein constituted an essential element of each of the combinations there claimed, and did not constitute an indispensable element of the process or of the apparatus described and claimed in the earlier applications. These new devices were improvements on the main inventions, and Patent 445,207 was for these improvements in combination with the main inventions while the earlier applications were for the inventions without these improvements. And the conclusion is irresistible that the parties to these patents never intended that Patent 445,207 should secure, and it never did secure, the same invention as either of the other patents, and that it did not render the latter patents void.”

In other words, the court read into the claims of Patent 445,207 the new feature described in the specification but not specifically recited in the claims. When so construed, Patent 445,207 becomes a patent for an improvement of the generic inventions covered by the earlier filed applications, and, when so considered, this case more

properly belongs in the second class of cases, of which *Suffolk Mfg. Co. vs. Hayden*, 3 Wall., 315, is the leading case. It is noted that the court considered it necessary to read the novel element into the claims of the first patent in order to save the later patents from being void on the ground of double patenting.

The following paragraph from the same decision is quoted:

“Where each of several applications which subsequently ripen into patents to the same inventor describes the same machine and process and the inventions claimed in all the applications, *but no one of the applications claims any invention claimed in any of the others* and they are all pending at the same time the respective dates of the applications and of the patents and the respective dates when the applications were filed are immaterial, and the applications and patents can not be used to anticipate or avoid each other.”

The above quoted paragraph states that under the conditions named the filing dates and issue dates of the patents are immaterial, but contains the qualifying statement that *no one of the applications claims any invention claimed in any of the others*. *Miller vs. Eagle* states that it must appear that the *invention* covered by the later patent was a *separate invention* and further, that it must consist in something more than a mere distinction in the breadth and scope of the claims of each patent; and thus indicates that two inventions are not produced merely by the fact that the claims in the respective patents differ in scope. On this point attention is also called to the following quotation taken from the case of *Otis Elevator Co. vs. Portland Co.*, 127 F. R., 557, C. C. A., 1st Circuit:

“Two patents may be for the same invention although the earlier is for a specific machine while the later contains broader claims which embrace both the prior specific machine and others as well.”

Considered in the light of the two decisions, it is clear that the quoted paragraph taken from the *Century*

Electric decision does not violate the rule that the broad claims should be in either the first filed or the first to issue.

In *National Hollow Brake Beam Co. vs. Interchangeable Brake Beam Co.*, 106 F. R., 693, C. C. A., 8th Circuit, the only difference between claims in the later patent and claims in the earlier patent was that the claims in the later patent specified an additional function that would follow from the structure disclosed in the earlier patent. The court held that the combination of elements disclosed in the earlier patent plus a function of said combination is not proper subject-matter for a second patent, and therefore held certain claims in the latter patent to be for the same invention covered by claim 2 of the earlier patent. This was not strictly an instance of broad and narrow claims in the two patents. The claims in the two patents were of substantially the same scope.

In *Dodge Coal Storage Co. vs. New York Central R. R.*, 139 F. R., 976, affirmed, 150 F. R., 738, two patents were in suit, one filed October, 1899, and the other, a division of the first, was filed December, 1900. The parent case was the first to issue. This patent claimed a certain combination. The second patent, resulting from the divisional application, merely added elements to the combination, that were old, and in fact, formed no part of the invention. The said additional elements were necessarily used with the combination called for by the claims of the first patent. The patents, however, were held to be for different inventions, but were declared to be void on other grounds.

In *Welsbach Light Co. vs. Cohn*, 181 F. R., 122, two patents resulting from co-pending applications were under consideration. The second filed application was apparently not referred to as an improvement on the first filed. The court considered that both of the patents were directed to the broad invention, and that applicant had a right to choose which application should contain the broad claims. The court said:

"If he does that in the first patent taken out, although it may rest upon a later application, and first application is followed by later patents, can it be said that the first is void? I think not."

The court thereby implied that if the application with specific claims only had been taken out first, a case of double patenting might have been made out.

In *Victor Talking Machine Co. vs. American Graphophone Co.*, 140 F. R., 860, Circuit Court, N. Y., affirmed, 145 F. R., 350, the second filed application went to issue first with broad claims. The court held that a patent is never invalidated by the fact that the invention claimed in it has been described but not claimed in a patent granted subsequent to the making of the application for the patent first issued.

It is clear that the filing date is not material when the broad claims are in the first patent. *Suffolk Mfg. Co. vs. Hayden* held that the date of issue and not the date of filing determined priority. As will be seen from the cases above cited, the courts have followed *Suffolk vs. Hayden*, and ignored the filing dates in this class of cases.

The class of cases where the broad claims are in the last case to issue, but in the first case filed, will now be considered. The *Suffolk vs. Hayden* case is the leading case in this class. In this case the first application was filed December, 1854. A second application was filed November, 1855, and went to issue in March, 1857. This patent was for an improvement on the structure shown in the first filed application. The improvement alone was claimed and the improvement as applied to the structure shown in the first filed application was also claimed.

In June, 1857, the patentee filed another application for substantially the same structure described and claimed in the first filed application. The last filed application was allowed in December, 1857. The court held that the subject-matter of the patent granted December, 1857, was not surrendered to the public for failure to claim the same in the patent issued in March, 1857, which patent disclosed the subject-matter claimed in the second patent but was for an improvement thereon. It will be noted that the patent in suit was a continuation of the first filed application, and therefore became, in effect, a patent resulting from the first filed application.

In *Kinnear Mfg. Co. vs. Wilson*, 142 F. R., 970, C. C. A., 2nd Circuit, an application was filed April, 1895. A second application was filed April, 1896, and was treated as a continuation of the first filed application. In June, 1895, an application for an improvement on the first filed application was filed and patented September, 1895, the claims therein being limited to the improvement in combination with the structure shown in the first filed application. The patent resulting from the continuing application and containing broad claims was held valid.

In *Cleveland Foundry Co. vs. Detroit Vapor Stove Co.*, 131 F. R., 853, C. C. A., 6th Circuit, the patent in suit resulted from an application filed in December, 1888. Later several applications were filed, directed to improvements. The improvement applications were first to issue. In each one of the improvement patents the improvement was described and claimed as applied to the structure disclosed in the first filed application. However, the improvement patents did not refer to the first filed application or expressly disclaim the subject-matter shown therein. The court held that an express disclaimer was not necessary, so long as the said improvement patents were merely directed to the improvements.

In *Dayton Fan and Motor Co. vs. Westinghouse*, 118 F. R., 562, two applications were filed on the same day, one for the method and the other for the apparatus. Later an application was filed for a special means for carrying out the method disclosed in the first filed application. The last filed application was first to issue. The court held that the improvement patent did not invalidate the patents resulting from the first filed applications.

In *Thomson-Houston Electric Co. vs. Hoosick R. R. Co.*, 82 F. R., 461, C. C. A., 2nd Circuit, patents 495,443 and 424,695 were in suit. The first filed application was the last to issue, with broad claims. The court followed the rule laid down by *Miller vs. Eagle* and declared certain claims in the later patent to be for the same invention as that covered by certain claims in the earlier patent, and therefore void, although the broad claims were in the first filed application.

In *Electrical Accumulator Co. vs. Brush Electric Co.*,

52 F. R., 130, C. C. A., 2nd Circuit, the court held that the prior issue of a patent for a subordinate invention did not invalidate a subsequently issued patent with broad claims, the application for which was pending in the Office at the time the first patent was issued. In this case the broad invention was covered by the first filed case.

In *Thomson-Houston Electric Co. vs. Union Ry. Co.*, 86 F. R., 636, C. C. A., 2nd Circuit, an application was filed in March, 1887, and went to issue in April, 1893. A second application was divided out of the first and went to issue in 1891. The appellees contended that claims 2 and 4 of the first mentioned patent were for subcombinations of the combination claimed in the patent first to issue, for the reason that one of the elements specified in the first patent was not found in the claims of the patent second to issue, and furthermore that if said element was read into the claims, they were not limited to the means employed in the first patent and therefore the claims in suit were not the claims of the first patent. The court held that the element would necessarily have to be read into the claims in suit to make the device operative. Otherwise the alleged combination called for would be a mere aggregation of elements which would not coact unless assisted by some instrumentality not disclosed.

The patent in suit was later reissued and again came before the same court (135 F. R., 759). In the reissue the patentee canceled all reference to the element above referred to and also canceled the same from the drawing. In view of this the court held the reissue to be for a different invention from that covered by the patent first to issue. On review, however, the court held the reissue void for laches in applying for the same.

In *Western Electric Co. vs. Galesburg Union Tel. Co.*, 148 F. R., 857, Circuit Court, Ill., two applications were filed the same day, one for a visible test system for telephone switch-boards and the other for an audible test system. A third application was later filed and was directed to an alleged combination of the two systems. The third application was the first to issue. The specification of this patent referred to the prior co-pending

applications and stated that the patent was for a combination of the systems shown therein. Furthermore, all the claims were restricted to the alleged combination of the two systems. The court considered, however, that the alleged combination was not a true combination and that the whole invention in the case resided in the visible test system. By thus construing the claims to be for the same invention as the claims of the patent directed to the visible system alone, the court concluded the latter patent to be void on the ground of double patenting, notwithstanding the fact that the patent in suit resulted from the first filed application. The patent in suit, so construed, was held to be for an essential element of the prior combination patent.

In *Westinghouse Electric and Mfg. Co. vs. Electric Appliance Co.*, 142 F. R., 545, Circuit Court, Ill., affirmed *Diamond Meter Co. vs. Westinghouse Co.*, 152 F., 704 (C. C. A., 7th Cir.), there were two patents in suit, one covering a method and the other an apparatus. A third patent to the same inventor was issued before, but filed after, the patents in suit, and called for a method. The method recited and claimed in the patent first to issue was more specific and included the method and apparatus claimed in the patents in suit. The court held that:

“Where an application for a basic patent is pending, the granting to the same inventor of a limited combination patent of which the subject-matter of the basic patent is an essential element does not constitute double patenting.”

In *Electric Storage Battery vs. Buffalo Electric Carriage Co.*, 117 F. R., 314, Circuit Court, N. Y., affirmed, 120 F. R., 672, the court held that the fact that the delay in the issuance of a patent after filing of the application resulted in an extension of monopoly beyond seventeen years, due to the fact that the improvement patents went to patent before the generic patent did not constitute grounds for shortening the term of the generic patent, where the delay was due to interference proceedings.

In *Thomson-Houston Electric Co. vs. Ohio Brass*, 80 F. R., 712, C. C. A., 6th Circuit, and in *Thomson-*

Houston *vs.* Winchester Co., 71 F. R., 192, Circuit Court, Conn., and in Thomson-Houston Electric Co. *vs.* Elmira, 71 F. R., 396, the broad applications were first filed but last to issue. In each case the courts held that it was not double patenting.

The class of cases where the broad claims are found in the application last filed and last to issue will now be considered.

To agree with the rule the broad patents should be held void.

The Miller *vs.* Eagle Mfg. Co. case might be included in this class, but in that case there was actually no real difference even in the scope or breadth of the claims in the two patents.

In Houser *vs.* Starr, 203 F. R., 264, C. C. A., 6th Circuit, the claims in the first patent had a limitation not found in the second patent. The court held, however, that the construction shown in the second patent was the equivalent of the structure shown in the first patent. The broad claims in the second patent were held void. The court said:

“The first patent contained a full disclosure, and having been issued in October, 1901, without reservation of any kind which could preserve the subject for patenting on an application filed several months later, everything shown, and which might have been, but was not, claimed, was abandoned to the public and the claims are invalid.”

In Union Typewriter *vs.* L. C. Smith, 181 F. R., 966, C. C. A., 3d Circuit, the original application was directed to improvements in typewriting machines and was filed in May, 1890. Certain claims therein were canceled and filed in a divisional application. On March 15, 1892, the parent case became a patent. One week before that date a third application was filed. This application disclaimed any intention of claiming the pivoted shifting frame which applicant stated was made the subject-matter of the first filed case. In April, 1892, after the first case went to patent, applicant eliminated portions of the specification that disclaimed the subject-matter

above referred to. In July, 1892, applicant added two new claims directed to the pivoted shifting frame, and accompanied the same by a supplemental oath. These two claims were similar in scope to two claims in the patent, but broader. In fact, the two claims submitted were awarded to applicant in an interference proceeding involving the parent case, but were voluntarily canceled therefrom. It therefore appears that the parent case was first to patent with specific claims and that a later filed but co-pending application, alleged to be for an improvement on the parent application, went to patent with claims for the same combination claimed in the parent application but broader in scope. The court held this to be a clear case of double patenting for the reason that the broad claims in the later filed application were for the same invention as the more specific claims in the parent case.

In *Morse Chain Link Co. vs. Link Belt Machine Co.*, 164 F. R., 331, C. C. A., 7th Circuit, the first filed application went to issue first. The second application was filed more than two years after the filing of the first application and went to issue about eight months after the first case. Appellant contended that the first filed application was for a specific embodiment and that the application last filed was for the generic invention. The court could not agree to that, but stated:

“This is not a case in which a patentee, having first made application for a patent for a generic invention, has subsequently applied for patents for specific improvements. This is a case in which a patentee, possessed of an alleged generic idea, elected to first apply for a patent for a specific embodiment embracing the essential feature of the generic idea, and later specifying such essential feature in another specific embodiment, claims that the generic idea growing out of such essential feature, belongs to the later, not to the earlier patent.”

The court apparently considered that the filing dates of the applications were material and that the broad claims should be in the first filed or in the first to issue.

The lower court in the Union Typewriter case, 173 F. R., 297, cited the Morse Chain Link case with approval and made the following statement in referring to the Victor Talking Machine case, 140 F. R., 860, wherein the generic patent was last applied for but first to issue:

“Of course, there is no abandonment by the earlier narrow application in this instance. Had the inventor, however, got his specific patent and later his generic one, it would have presented a very different case.”

The same court in the same case also said:

“It is no doubt true that, where an application in which an invention is expressed broadly is pending at the same time with one upon narrower lines, the taking out of the latter does not preclude the subsequent allowance of the other in broader form. But that, unfortunately, is not this case. Both applications, of course, were pending together; but the one into which the broad claims were eventually brought was the specific and not the generic form, coming in apparently as an afterthought, when the other was already then months out.”

The above quoted paragraph taken alone, would appear to mean that it is permissible for the second of two patents, resulting from co-pending applications, to have the broad claims, regardless of the respective filing dates. That such a construction was not intended by the court is clear from the first quoted paragraph and from the following:

“Undoubtedly there is no double patenting where the broad expression of the invention, although the last to be patented, was granted on an application filed before that for the narrower or specific form. As was well said by J. Townsend in Thomson Co. vs. Winchester Co., 71 F. R., 192 (C. C. of Conn.), the inventor is not to be deprived of his broad patent where the application for it was made first and was delayed in the Patent Office through no fault of his.”

In *Otis Elevator Co. vs. Portland Co.*, 127 F. R., 557, C. C. A., 1st Circuit, the broad claims were in the case last filed and last to issue. In holding this to be a case of double patenting, the court said:

“To avoid the objection of double patenting, it is not enough to show that the prior patent claims a specific machine, and that the later patent contains broader claims, which embrace both the prior specific machine and other machines as well. Two patents may be regarded as for the same invention, though one claims only a specific machine, and the other claims broadly a genus which includes the former.”

In *Palmer Pneumatic Tire Co. vs. Lozier*, 90 F. R., 732, C. C. A., 6th Circuit, two patents were before the court in an interference proceeding. Both patentees had a second prior patent for a fabric to be used in the construction of tires. The later patents, in interference, were drawn to the fabric *per se*. The court held both patents as being for the same invention as the prior patents.

The cases last cited, while not conclusive, indicate that the filing dates are material when the broad claims are in the last to issue.

The third and last main class of cases to be considered, wherein one patent is for a combination and the other for an essential element thereof, merges into the other classes already considered.

The *Western Electric vs. Galesburg*, 148 F. R., 857, the *Westinghouse Electric vs. Electric Appliance*, 142 F. R., 545, and the *Palmer Pneumatic Tire vs. Lozier*, 90 F. R., 732, cases have already been considered and will not again be discussed here.

In *American Bell Telephone Co. vs. National Tel. Mfg. Co.*, 109 F. R., 976, Circuit Court, Mass., claim 2 of the Berliner patent, 463,569, for a telephone transmitter, was held anticipated by Patent 233,969, to the same patentee, issued on a division of the application that resulted in Patent 463,569. Claim 4 of the prior patent covered a system consisting of the same transmitter in combination with a receiver, but in which such

transmitter performed the same function as with any other receiver. The transmitter of the later patent was an essential element of the alleged combination called for by the prior patent.

In *Industrial Mfg. Co. vs. Wilcox and Gibbs Sewing Machine Co.*, 112 F. R., 535, C. C. A., 3d Circuit, the parent application resulted in patent 263,467, and was for a sewing machine combination, claiming as an element a trimmer broadly. Patent 341,790, a division of the parent case, claimed, in combination with any sewing machine, the specific form of trimmer disclosed in the parent case. The court held that the trimming device shown in the parent case was an essential element of the combination claimed therein, and could not be made the basis of a later patent.

In *Dey Time Register Co. vs. Syracuse Time Recorder Co.*, 152 F. R., 440, Circuit Court, N. Y., the novel element disclosed in the patent first to issue, resulting from the second filed application, was combined with other old elements working in a given old way, to produce an old result. Claim 1 of the second patent claimed the same novel element in combination with other old elements, operating in the old way, to produce the old result. The court held that if claim 1 of the later patent was broadly construed to cover the construction shown in the prior patent it was void for double patenting.

In *Palmer et al. vs. Brown Mfg. Co.*, 92 F. R., 925, C. C. A., 1st Circuit, an application was filed containing claims to a combination and subcombination claims to a mechanical movement. Applicant later divided out claims to the mechanical movement and filed a divisional application therefor. The later case went to patent first. Suit was brought on Patent 308,981, resulting from the parent application. The claims sued upon were combination claims that included the mechanical movement, which movement *per se* was covered by Patent 304,550, resulting from the divisional application. The lower court held the combination patent to be void on the ground that what was claimed therein was simply an application to an appropriate use of what was claimed in the prior patent. The C. C. A., however, reversed the decision, holding that the combination was a separate invention from the mechanical movement and that the

said combination, including the mechanical movement as an element, was clearly patentable over the mechanical movement alone. In other words, the Court held that it would involve invention to apply the mechanical movement to the other elements to make up the combination.

In the last class of cases considered, the filing dates are apparently immaterial, the courts holding a second patent void where a prior patent has issued in which the construction claimed includes the subject-matter of the second patent as an essential element. However, this last class of cases does not involve the subject of broad and specific claims, for while the claims in one patent may include an element or elements not included in the other patent, the said elements are ignored by the courts and the claims in the second patent treated as covering the same subject-matter covered by the first patent.

Although the decisions that belong in the three main classes have been discussed, there still remain a few cases that relate to the subject of this paper, but do not properly fall into any one of the three classes.

The *Barbed Wire Patent*, 143 U. S., 275; *Ede vs. Frolich*, Duncker and Reward Carpet Co., 115 F. R., 137, C. C. A., 8th Circuit; *Independent Electric Co. vs. Jeffery Mfg. Co.*, 76 F. R., 981, Circuit Court, Ohio; and *Graham vs. McCormick*, 11 F. R., 859, Circuit Court, Ill., are cases in which the same invention was not claimed in the two patents.

In *Badische Anilin and Soda Fabrik Co. vs. Klipstein & Co.*, 125 F. R., 543, Circuit Court, N. Y., the patents issued on the same day.

In *Anderson vs. Collins*, 122 F. R., 451, C. C. A., 8th Circuit, the essential element doctrine was involved but the court held that the first patent failed to disclose the essential element of the patent in suit.

On reviewing the decisions cited and the reasons advanced by the courts, in the cases considered at length in this paper, there appears to be some basis for the requirement that the broad claims should be either in the first patent or otherwise in the application first filed.

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NEW MATTER

A paper read February 1, 1917, before the Examining
Corps of the United States Patent Office

BY

EDWARD COLLINS,
First Assistant Examiner, Division Thirty-six,
U. S. Patent Office

WASHINGTON, D. C.
1917

New Matter

By

EDWARD COLLINS,

First Assistant Examiner, Division Thirty-six,
U. S. Patent Office.

It was found very early in the development of the Patent System that provision must be made for the admission of amendments to applications for patents. The admission of amendments straightway involves the question how far such amendments should be allowed to change the application as originally filed.

On one hand, it is obvious that a meritorious invention may be made, but the application for patent may be prepared by persons not expert in such matters, and therefore filed in condition not fully complying with the technical requirements of the Patent Office. This consideration is of far greater importance at present than in the early history of the Patent Office, when applications were much fewer, and (in general) less complex in subject-matter.

On the other hand, it is equally obvious that limits must be put upon the right to amend. This would be true even if no rights of any sort were acquired until the actual issue of the patent, for otherwise an unlimited number of inventions might be successively introduced and patented on one application.

According to our present Patent Law, however, the applicant for patent *does* acquire an important right upon the date of his completed application, for he is given this date as that of constructive reduction to practice of the invention. Hence, in justice to the public and to other applicants, he should not be permitted, after filing, to change the application in any way such as to affect the nature of the invention, or as it is called, to introduce new matter.

In the *Rules of Practice of the Patent Office*, No. 32, Edition of 1870, it is stated that:

“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 filing of the application.”

This was repeated in the edition of the following year, with the further statement that---

“further changes than this can only be made by filing a new application. If the invention does not admit of illustration by drawing, amendment to the specification may be made upon proof satisfactory to the Commissioner, that the proposed amendment is part of the original invention.”

In the edition of 1877 this rule was substantially repeated, except that the term “further changes than this” is amplified by “involving a departure from the original invention.”

In 1879 this rule, now Rule 69, further states that “the affidavits prescribed in Rule 47 may or may not be sufficient” to prove that the proposed amendment was part of the original invention.

In the present *Rules of Practice*, of 1916; the rule, now No. 70, is as follows:

“In original applications all amendments of the drawings or specifications, and all additions thereto, must conform to at least one of them as it was at the time of filing of the application. Matter not found in either, involving a departure from the original invention, can not be added to the application even though supported by a supplemental oath, and can be shown or claimed only in a separate application.”

In the case of *Ex parte Snyder*, C. D., 1882, p. 22, the contention was made by applicant that amendments should be allowed at will before the application is taken

up for examination. This was denied by the Commissioner, who said:

“This rule, then, (Rule 69) attaches upon the filing of the application, which occurs when the applicant has completed his application, as provided in Rule 31. The application then receives its serial number, and is placed upon the files for examination. It is then an application in full standing, and thereafter amendments must conform with the rules governing the amendment of applications. The time when an application is taken up for examination is a variable and arbitrary date, and depends solely upon the state of business.”

The reasons for the prohibition of new matter in an application were considered in decision of the Supreme Court of the United States in *Railway Co. vs. Sayles* C. D., 1879, p. 349. It was there stated:

“It will be observed that we have given particular attention to the original application, drawings and models filed in the Patent Office by Thompson and Bachelder. We have deemed it proper to do this, because, if the amended application and model filed by Tanner five years later embodied any material addition to, or variation from, the original—anything new that was not comprised in that—such addition or variance can not be sustained on the original application. The law does not permit such enlargement of an original specification, which would interfere with other inventors who have entered the field in the meantime, any more than it does in the case of re-issues of patents previously granted. Courts should regard with jealousy and disfavor any attempts to enlarge the scope of an application once filed, or of a patent once granted, the effect of which would be to enable the patentee to appropriate other inventions made prior to such alteration, or to appropriate that which has in the meantime gone into public use.”

The subject of permissible changes to the application is treated in decision of the Court of Appeals of the District of Columbia, *Hulett vs. Long*, C. D., 1899, p. 446. It is there stated:

“It is a well settled and long established practice in the Patent Office to allow amendments to be made under proper circumstances to supply omissions and defects in the original specification and claims as filed which have occurred by mistake, oversight, or inadvertence, or even the want of requisite skill in the preparation and presentation of the case to the Office, and the making of such amendments should not be allowed to operate to the prejudice of the claim or claims of the applicant if made in due and reasonable time and in good faith. In many cases the necessity for amendments to supply omissions and defects is not discovered until the application and specification have been subjected to the critical examinations of the experts of the Office, and both the statute law and the Rules of Practice contemplate the making of all necessary amendments and alterations to supply defects and omissions in the presentation of the case, and where amendments have been allowed it should be presumed that they were properly allowed and upon satisfactory showing to the Office that it was by mistake, oversight, or inadvertence, or want of sufficient skill in the preparation of the application that the omission or defects had occurred and not by design to present a new and essentially different claim to invention from that described in the original application made for the purpose of overreaching and defeating a rival invention.”

In this decision reference was made to decision of Mr. Commissioner Marble in *Ex parte Snyder*, C. D., 1882, p. 22:

“He (the applicant) may be permitted, upon proper occasion, to supply suitable connections, to add a spring to a pawl, a handle to a crank, a belt to a pulley, teeth to a wheel, an outlet to a closed receptacle, or other manifest defects or

omissions in features essential to the operation of the invention or to the completeness of the disclosure, and which were caused by a clerical error of the draftsman, or the unfamiliarity of the inventor with official forms. These amendments, supplemental in their nature, may be made as completing the invention imperfectly shown and described. They add to the invention disclosed some part or feature which agrees with the construction and operation already presented.”

This naturally leads to the question as to how far an applicant may be permitted to amend in order to remedy an inoperative disclosure. In practice, perhaps this is the most perplexing and embarrassing question that is presented to the Examiner. Applications for really valuable inventions are sometimes filed in a very defective shape. On one hand, the inventor should, if possible, be allowed the benefit of his filing date. In many cases a new application would be barred by public use or foreign patent, and in other cases the inventor dies soon after the filing. Hence the whole invention is lost unless it can be predicated on the original disclosure. On the other hand, if the application clearly fails to show a reduction to practice of the invention, the inventor must take the consequences. He is clearly not entitled to complete his invention after filing, and yet have the benefit of the filing date.

This subject is treated in decision of Mr. Commissioner Allen, *Ex parte Willits*, C. D., 1905, p. 107. In this case applicant wished to add to the disclosure “a small port or opening” in order to make the device operative. It was stated:

“There is nothing in *Ex parte Snyder* which warrants the conclusion that new matter may be inserted in a case whenever it is done for the purpose of making operative a supposedly inoperative device. New matter is no more admissible for that purpose than for any other purpose. It seems perfectly clear that if new matter were admitted for that purpose, applicants could come to this Office with their applications before perfecting their inventions and before having a

well-defined conception of an operative device, and by subsequent experiments and amendments based thereon so change their applications as to cover inventions made after the applications were filed. The law is well settled that the patent should include only the invention as disclosed in the application as filed. Subsequent discoveries and improvements can not be included therein, whether those improvements are intended to make the device operative or merely to make it perform its functions better.

“Mere clerical or draftsman’s errors may be corrected where the errors are clear from the application itself; but changes can not be made in the application based on allegations of fact not shown by the record.

“In the present case it is by no means certain that the ‘small port or opening’ referred to in the objectionable amendment is necessary to make the device operative. If that device is now inoperative, it could be made operative in other ways. The applicant should not be permitted to describe at this late date that specific construction, since if it would be perfectly obvious to one reading the original description there is no necessity for the specific description, and if it would not be obvious it clearly includes matter not suggested originally.”

A test for new matter was given by the Board of Examiners-in-Chief in Interference No. 38,322, *Alger vs. Bailey*, July 6, 1915. Like all tests of legal questions, this test is more in the nature of a *statement* of the problem than a *solution* of it in any particular case. It is always a matter for individual judgment to determine how an abstract principle bears upon the concrete facts at hand. The quotation is as follows:

“The real test of new matter is believed to be whether those skilled in the art, reading the original application and drawing with reasonable care and attempting to give effect thereto would naturally make the device in the manner in question.”

So far it has been assumed that the change to be made is that of addition or of substitution, which is, in fact, usually the case. It may happen, however, that even the *omission* of elements may involve a departure from the original invention. In *Ex parte Cook*, C. D., 1901, p. 19, claims were rejected on references and the Commissioner held that, by reason of a certain pipe shown, the operation of the device was not different from that of prior devices, and that it did not operate in the manner set forth in argument of the appellant. It was further said that if this pipe were not present, there might be force in applicant's contention as to difference in operation.

Applicant then sought to erase from the specification and drawing all reference to the pipe in question. It was held, however, that applicant had not shown a device omitting the pipe, and consequently had not shown a device which would operate in the manner set forth. To quote from the decision:

"That pipe completely neutralizes the tendency of the other parts and arrangement of parts to produce the operation and result now described. The omission of the pipe A4 from the device, therefore, would change entirely the function and operation of the other parts, and virtually produce a new device. In other words, the omission of that pipe from the case would produce a different invention and involve a departure from the original disclosure."

A contrary decision was reached in the case of *Ex parte Smith and Hoyland*, C. D., 1900, p. 176, when certain flanges were omitted in a substitute drawing. It was held:

"No claim is now made to these flanges, and they are not included as an element of any of the claims. The illustration of them is unnecessary since the device is obviously operative without them. No useful purpose would be served by illustrating and describing them, and their omission does not change in any way the function and operation of the other parts of the device. They

are merely additional and unnecessary elements which may or may not be used, and therefore their omission does not involve new matter."

An important consideration is the bearing of a supplemental oath on the subject of new matter. In decision *Ex parte McDougal*, C. D., 1882, p. 7, it was held:

"Under Rule 47 an applicant may introduce into his application by amendment a part of the invention originally made which was not incorporated into the application either as part of the specification or claim, if he swears that the matter which he desires to introduce into his application and make a part thereof was a part of his original invention. Under this practice, however, the Examiner will enter the date of the new oath on the face of the file wrapper and change the date of the completion of the filing of the application to agree therewith."

The practice above indicated is now obsolete. The tendency has been to restrict more and more the function of a supplemental oath, and it may in the future be abolished altogether. If admitted or required, it has no effect on the effective date of filing, and according to present Rule 70, it affords no ground for the introduction of new matter.

Hitherto it has been assumed that the disclosure is that of the description, drawing, and model, if any. It must further be considered what basis for disclosure is furnished by the *claims*. Judicial decisions upon both sides of the question may be found, as in the following instances:

In the case of *Ex parte Gugler*, O. G., 160, p. 775, an original claim was not objected to by the Examiner as indefinite, but was objected to on the ground that it suggested a variation not disclosed in the original specification and drawings. It was held:

"Either the objection is unfounded or the claim is sufficient basis for an amendment to the showing to make it correspond with the modification suggested in the claim."

A different conclusion was expressed in decision of the Commissioner *In re Heany*, O. G., 171, p. 983. In that case the entire original specification was removed, except two claims and part of a third. It was held:

“A claim alone, disconnected from its specification, is a most uncertain thing, and can not constitute a just criterion for a specification or written description, and can not, therefore, be rightly used as a foundation upon which a specification can be erected.”

Everything relating to new matter in an original application is equally applicable to a divisional application thereof, which depends upon the disclosure of the original, and has the benefit of the original filing date. This was formerly held to be true of continuing applications also, which were held to lose their right to be so considered if they contained anything technically involving new matter. A change of procedure in this respect was occasioned by decision of U. S. Court of Appeals, D. C., *Field vs. Colman*, O. G., 193, p. 221, where it was held:

“The right of an applicant, by substituted application, to relate back to the date of filing the first application for reduction to practice broadly depends upon whether the substituted application is for the same invention as that disclosed in the original application, not that the specific disclosure of the first and second applications may be different or even patentably different if generically they relate to the same invention.”

The Office practice in regard to new matter differs according to whether it is sought to be introduced in the description, drawing, or claims. At one time it was common to refuse to admit such changes, or to suspend action on the case until they were cancelled. The present practice is based on decisions of the Commissioner in *Ex parte Soley*, O. G., 91, p. 1616, and in *Ex parte Furness*, O. G., 104, p. 1655. In the *description*, an

amendment presenting new matter is entered, but applicant is required to cancel it. All claims whose interpretation is affected by the changed description should be rejected on this ground. In the drawing, the changes should *not* be made at first. The affected claims should be rejected, as in the previous case, subject to appeal. If applicant prevails upon appeal to any tribunal, then the changes may be made upon the drawing. If the desired change is in the *claims* it should be entered, but the claims rejected. Appeal may be taken as from rejection on other grounds.

It should be noted that new matter may not affect the claims already in the application, and yet may be made the basis of future claims in the application or in a division thereof. This is well brought out in the case of Brill and Brill *vs.* Hunter, O. C., 96, p. 641, decided by the Commissioner. In this case Hunter originally showed a single plate spring for a motor, and stated that a coil or other form of spring could be substituted for it. In a new application filed as a division, Hunter showed a special arrangement of coil springs. This was refused by the Examiner, but admitted by the Examiners-in-Chief on appeal, apparently on the ground that no claims were made to this feature, but that it was introduced only for purposes of illustration. Nevertheless, claims were afterwards made to this feature for interference with Brill and Brill, and Hunter sought the benefit of his original application as fixing the burden of proof of priority. The Commissioner held that the decision of the Examiners-in-Chief no longer applied to the changed conditions, now that the admissibility of the new showing had become of vital importance to the rights of the other party.

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New Matter in Reissue Applications

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BY

FREDERICK LEWIS PITTMAN,
First Assistant Examiner, Division Thirty-six,
U. S. Patent Office

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New Matter in Reissue Applications

By

FREDERICK LEWIS PITTMAN,

First Assistant Examiner, Division Thirty-six,
U. S. Patent Office.

One of the most important questions to be considered in connection with a reissue application is, What changes may be made in the specification and claims of an original patent and what additions may be made thereto in an application for its reissue? The purpose of this paper is a consideration of the leading decisions upon this subject.

Reissues were granted even before the enactment of any statute specifically authorizing them, and Mr. Lincoln D. Underwood in his paper entitled "Certain Phases of Reissues, Particularly Delay in Filing the Application and Inadvertence, Accident, or Mistake," read November 5, 1914, calls attention to the great abuses of the reissue privilege which characterized its early history and gives the history of the enactment of the reissue statutes, so it is deemed unnecessary to repeat such information in this paper. When the reissue practice was in its formative stages, it was natural that, in the absence of statutory restrictions, definite rules, or the precedent of decisions delimiting the practice, efforts should have been made to include in reissues, anything that had proved to be of value after the grant of the original patent and which was even remotely suggested in the original patent. The early practice was therefore characterized by many attempts to expand original patents by reissue so that they would cover inventions involving great departure from those covered by the original patents on which they were based. It would be impossible, within the permissible length of this paper, to review all such earlier attempts, therefore it will be limited principally to a review of the leading decisions.

The only limitation as the new matter in reissues

contained in the first reissue statute of July 3, 1832, was that the new patent should be "granted to the said inventor for the same invention."

The Act of July 4, 1836, contained no further restriction in this respect.

The Act of July 8, 1870, was the first act to provide any more definite and positive prohibition against new matter, this act specifying that "no new matter shall be introduced into the specification, nor in case of a machine patent shall the model or drawings be amended, except each by the other; but when there is neither model nor drawing, amendments may be made upon proof satisfactory to the Commissioner that such new matter or amendment was a part of the original invention, and was omitted from the specification by inadvertence, accident, or mistake, as aforesaid."

This is the provision in section 4916, Revised Statutes, the present reissue statute upon this subject. Rule 88 of the Rules of Practice provides that

"New matter shall not be allowed to be introduced into the reissue specification, nor in the case of a machine shall the model or drawings be amended except each by the other."

and is based upon section 4916, Revised Statutes.

A patent is in the nature of a contract between the public and the inventor, and the purpose of a reissue is to correct some error which has been made in such contract. The subject-matter must remain the same if the reissue patent is to be for the same invention as the original, as is required by the statute, for it is not within the province of a reissue to make a contract between the public and the inventor relating to subject-matter regarding which there was no intention between the parties at the time the original contract was executed.

New matter in a reissue case may consist in unwarranted amendments to the specification or to the drawings if drawings be included in the original patent, or it may consist in amendments to the claims of the original patent which cause them to present a different invention from that covered by the original patent, or it may consist in new claims which if allowed in the reissue would cause it to embrace a different invention

from that covered by the original patent and therefore to violate that provision of the reissue statute which requires a reissue to be for the same invention as the original patent. In any reissue application, any and all of these forms of new matter may be present.

It is therefore necessary to consider to what extent amendments to the specification and to the drawings, if any, may be permitted, to what extent the original claims may be changed, and the character of new claims that may properly be allowed.

One of the leading cases is that of *Parker & Whipple Co. vs. Yale Clock Co.*, C. D., 1887, 584, which came before the Supreme Court. In this reissue new substantive matter had been introduced into the descriptive portion of the specification and the first eight claims were based upon such added matter. A model had been regularly filed and made a part of the record of the original patent. This model showed the entire clock, but only certain features thereof were described in the original patent or covered by its claims. As to the invention covered by claims 5 to 8 of the reissue, and which involved a specific description of three wheels of the clock train, the court said:

“Perhaps from the fact that the clock had but three wheels, their position might have been understood by an expert from Drawing No. 6. That drawing was not made for the purpose of showing the wheels and it is manifest from the specification that the patentee did not suppose they had anything to do with his invention which he did suppose lay in entirely other parts of the clock.”

The court observed further that the first eight claims “might have been the subject of another application for a patent at the time the original patent was applied for and taken out, leaving that patent valid and operative in respect to the claims it covered.”

The facts being as above indicated, the decision of the court was that--

“There is no evidence of any attempt to secure by the original patent the invention covered by the first eight claims of the reissue, and these

inventions must be regarded as having been abandoned or waived so far as the reissue in question is concerned, subject, however, to the right to have made a new application for a patent to cover them; in other words, these eight claims are not for the same invention as was originally patented."

In order both to form a basis for this conclusion and at the same time repel any inference based upon dicta in prior decisions to the effect that a patent could be properly reissued to cover whatever was disclosed in the original specification, drawing or Patent Office model, the court announced, in substance, the following ruling to determine whether the reissue is for the same invention as the original patent.

It does not follow that what was indicated in the original specification, drawing, or Patent Office model is to be considered as a part of the invention unless the court can see from a comparison of the two patents, (1) that the original patent embodied as the invention intended to be secured by it, what the claims of the reissue are intended to cover, and (2) that the original specification indicated that such invention so claimed in the reissue was embraced in that intended to have been secured by the original.

Walker states that this decision "established the meaning of the phrase 'same invention' to be whatever invention was described in the original letters patent and appears therein to have been intended to be secured thereby"; and he states that:

"This rule has already been repeatedly reaffirmed and reapplied by the Supreme Court and is now as well established as the companion rule of *Miller vs. Brass Co.*"

Therefore he says that "no reissue claim can stand any longer upon a model alone, nor even alone upon a drawing of an original patent." This conclusion, in so far as it relates to disclosure in a model alone would seem to be well founded, but it is no longer of much practical importance since models are so rarely made

parts of patent records. To sustain the statement that a reissue can not stand upon a disclosure in the drawing alone of the original patent, Walker cites the case of *Hailes vs. The Albany Stove Co.*, C. D., 1888, 177. In this case the patentee attempted by a disclaimer drawn up by his solicitor, to make "a new patent, or one for a different invention from that which he had described in his specification" and "the claim as modified by this disclaimer has nothing in the specification to stand upon, nothing to explain it, nothing to furnish a reason for it." The court held that a disclaimer could not be employed to amend a patent in this manner, and observed that a drawing annexed to a patent "can not be used, even on an application for reissue, much less on a disclaimer, to change the patent and make it embrace a different invention from that described in the specification. This is fully and clearly shown in the recent case of *Parker & Whipple Co. vs. Yale Clock Co.*," *supra*.

This does not mean, however, that a reissue may not properly be granted to correct an erroneous description of an invention so as to make it harmonize with the correct showing of the drawing, provided the invention remains still the same.

The case of *Topliff vs. Topliff*, C. D., 1892, 402, also came before the Supreme Court. This reissue was granted within four months from the date of the original patent for a means for supporting carriage bodies on side springs. The original patent described the rock rods, to which the ends of the springs were connected as "secured directly to the front and rear axles," instead of "to the hind axle and front bolster," as set forth in the claim of the reissue. The original specification left the matter indefinite since it described the rock shafts as connected to the gearing of the carriage. The court said:

"The original claim was, in the particular above mentioned, a clear mistake, since affixing the connecting rod and springs to the front axle would render it impossible to be turned, and in addition to this the original drawing shows it affixed to the bolster. The correction of a mistake so clear, made within a short time after the issue of the

original patent, was undoubtedly within the power of the Commissioner, as defined by the Revised Statutes, section 4916."

The case of *Powder Co. vs. Powder Works*, 98 U. S., 126, also came before the Supreme Court, and the court, referring to the inhibition of the statute that "no new matter shall be introduced into the specification," said:

"This prohibition is general, relating to all patents; and by 'new matter' we suppose to be meant new substantive matter such as would have the effect of changing the invention or of introducing what might be the subject of another application for a patent."

The court went on to say further that:

"The legislature was willing to concede to the patentee the right to amend his specification so as fully to describe and claim the very invention attempted to be secured by his original patent, and which was not fully secured thereby, in consequence of inadvertence, accident, or mistake, but was not willing to give him the right to patch up his patent by the addition of other inventions which, though they might be his, had not been applied for by him, or, if applied for, had been abandoned, or waived. For such inventions he is required to make a new application subject to such rights as the public and other inventors may have acquired in the meantime. This, we think, is what the present statute means, and what, indeed, was the law before its enactment, under the previous act of 1836. If decisions can be found which present it in any different aspect, we can not admit them to be correct expositions of the law."

New matter may be presented by elimination as well as by addition of description or drawings if by such elimination the invention is changed. For instance, if certain features have been set forth in the original patent

as essential and in the reissue they are omitted or made non-essential and the interpretation of the claims is thereby changed so that they cover a different invention, new matter may be presented.

Gill *vs.* Wells, 22 Wallace, 1.

Russell *vs.* Dodge, 93 U. S., 460.

Atwood *vs.* Portland Co., 10 F. R., 286.

Kirby *vs.* Mfg. Co., 10 Blach, 307.

So, also, elimination of elements in claims may so broaden or change them as to cause them to cover a different invention, *ex parte* Starkey, 105 O. G., 1259.

The Court of Appeals of the District of Columbia in the case of *In re Hoey*, 127 O. G., 2817, held that where a patent describes certain parts of a device as having a specified function, a claim in the reissue application which refers to such parts as "means" in performing a different function requiring a relative location of parts which was not originally disclosed, imports new matter. The court stated that---

"the reissue must be one in fact and not a new patent on something neither shown nor described in the original patent."

In the case of *In re Briede*, 123 O. G., 322, in the decision of the Court of Appeals of the District of Columbia, Mr. Justice Duell stated:

"The serious question in the case is whether the claim in controversy is for the same invention as the original patent. If it be, then the fact that it is presented in an application for a reissue and not during the application for the original patent, is of no importance under the facts disclosed by the record, and the law applicable thereto. If the claim would have been sustainable, had it been put into the original patent, there would be no valid reason for holding it not sustainable should it appear in the reissue patent.

"When the objection to a claim based on the ground that it is not allowable because first presented in a reissue, is untenable (unless it be found to be for a different invention than that of

the original patent) it would seem that the same rules apply as would be involved if the claim was presented by an amendment to the specification of the original patent.]

“If the specification and drawings of an application as originally filed suggest the claims, made by amendment and finally allowed, such claims are valid.”

Mr. Justice Duell also stated that the courts “are inclined to resolve all doubts as to whether more than one invention is embraced in a patent in favor of the patentee.”

This is a very liberal view of the reissue statute, making the tests as to new matter, first, whether or not it would have been permissible in the original application, and, second, does it cause the reissue to cover a different invention. Matter which will not pass the first of these tests, obviously is not permissible in a reissue. But not all matter which will pass the first test will also pass the second, for the patentee in taking his patent has made a final and irrevocable election as to the invention which he will cover thereby, and whatever rights he may have had during the pendency of his original application to include therein other inventions, have expired with the grant of the patent.

The last clause of section 4916, Revised Statutes, if read alone, might be thought to authorize new matter in reissue applications where there are neither models nor drawings, upon proof satisfactory to the Commissioner that it was a part of the original invention. This clause should be construed, however, not as authorizing the introduction of new substantive matter but merely as extending the privilege of submitting proof to be considered by the Commissioner to aid him in determining whether or not the matter sought to be added was a part of the original invention. Robinson states with regard to this class of cases that:

“In cases where the invention is incapable of representation by a model or by drawings, necessity requires that this question of identity should

be settled by such methods as are most available. Language even at its best is ambiguous, and to compel the inventor to abide by the construction which might be put by others on his words alone, would often deprive him of the most important fruits of his inventive skill. In determining the nature of the invention indicated in his original specification, and attempted to be covered in his original patent, the disadvantage under which he labors through the impossibility of interpreting his verbal description by pictorial or material representations is overcome, in the hearing on his application in the Patent Office, by permitting him to offer extrinsic evidence as to the true character and attributes of the invention which he has undertaken to describe. The sources and the weight of this extrinsic evidence have not been definitely fixed by law. The statutes merely provide that in this class of cases the proof, upon which any matter omitted from the original specification may be regarded as a part of the original invention, must be satisfactory to the Commissioner, and under this provision papers filed in the Patent Office in connection with the case, and other evidence of official actions, have been received."

And, in *Ex parte Dieckerhoff*, 12 O. G., 429, Commissioner Doolittle in considering this clause stated:!

"It gives to such applicants the privilege of submitting proof as to matter not embodied in the original patent, and permits the exercise of discretion on the part of the Commissioner in the consideration of such proof. Construing the whole of section 4916 together, as it should be, and keeping in mind the only real and lawful purpose of a reissue application, to correct accidental mistakes in the original specification and drawing, there is nothing in the last clause, nor any previous one, to authorize a departure from the original invention, and the setting up in a reissue of a substantially different invention. No amount of proof regarding an entirely different

invention, however satisfactory it might be in showing that the same was within the knowledge of an applicant at the time of applying for his original patent, could justify the Office in allowing its introduction therein by reissue. To the extent of correcting such errors and omissions as are sometimes supplied by consulting the model and drawing filed with an original application, the clause of the statute under consideration, I think, clearly obtains. It might permit, for instance, of the consideration of all original papers filed in the case, and such other evidence of official action from which the intentions of the parties could be discovered or their rights determined."

It was formerly held that a patent covering only an apparatus could not be reissued to include the process, but it is now the practice to permit such reissue provided the process is clearly disclosed in the original patent but was not claimed by reason of inadvertence, accident, or mistake. *In re Heroult*, 127 O. G., 3217.

It has also been held that a method patent may be reissued to cover a machine. *Conroy vs. Penn Electrical and Mfg. Co.*, 173 F. R., 299, 302. In this case the original patent covering the method had been held invalid because broader than the invention. It appeared that the reissue patent claimed a machine by which such method and only that can be practiced, and the court considered that the method and the machine were not distinct and independent inventions but were simultaneously evolved and were correlative units of the single act of invention.

A patent for a process may be reissued to include the product. *Asbestos Shingle, Slate & Sheathing Co. vs. H. W. Johns-Manville Co.*, 184 F. R., 620, 631.

A claim which was warranted by the statement of invention in the original patent and which did not exhibit any change in the nature of the invention described but simply gave a more adequate description of the invention without enlarging it, has been held permissible. *Crown Cork and Seal Co. of Baltimore City vs. Aluminum Stopper Co., of Baltimore City*, 108 F. R., 845.

When the original application contained a claim for a stop or guide and such claim was rejected, and canceled, the claims in the patent as issued calling for two guides, a reissue claim for a single guide has been held void. *Franklin & Co. vs. Ill. Moulding Co.*, 128 F. R., 48.

A patentee may extend his claims by reissue where the invention remains the same, and there is no material change in the specification or drawings, and he may omit from combination claims one of the distinct elements of such combination, or may include claims for a sub-combination. *Universal Caster & Foundry Co. vs. M. B. Schenck Co.*, 165 F. R., 344.

The tests as to new matter in reissue cases may therefore be summarized as follows:

First, does the reissue application contain any matter, either in the specification, drawing, if any be presented, or claims which could not properly have been incorporated in the original application during its pendency. If so, any such matter is new matter in the reissue application, and in determining this question, the tests applied in the case of original applications should be considered.

Having applied these tests and determined what matter, if any, must be excluded in view of them, consideration should be given to the question of identity of invention between the original patent and the reissue application and any matter, whether in the specification, drawing, if any be presented, or claims, which causes the reissue patent to cover a different invention from the original patent must be regarded as new matter and excluded from the reissue application. If it be found that the reissue application contains no matter which could not properly have been presented in the original application during its pendency, it is believed that, upon the question of identity of invention, the Office is justified in following the liberal view which Mr. Justice Duell states in *In re Briede* is followed by the courts by resolving all doubts upon this question in favor of the inventor, bearing in mind the fact that the purpose of the patent law is to give him full protection in consideration of his disclosure, and that the reissue statute, being remedial in character, should be liberally construed.

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A Phase of Double Patenting

A paper read February 8, 1917, before the Examining
Corps of the United States Patent Office

BY

ARTHUR W. COWLES,
Principal Examiner, Division Thirty-nine,
U. S. Patent Office

WASHINGTON, D. C.

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By

ARTHUR W. COWLES,

Principal Examiner, Division Thirty-nine,
U. S. Patent Office.

(The purpose of this paper is the consideration of a single, quite narrow, phase of Double Patenting.)

The term "Double Patenting," like too many terms in patent practice, has an elastic definition. But it is ordinarily used to designate the improper grant, to the same party, of a plurality of patents, usually two, the patents disclosing the same precise matter, or similar matter. One of the patents is invalid in view of the other.

The term is most commonly used when the disclosures in the respective patents are not precisely the same, but are similar, the disclosures being of unpatentably distinct species. A quite recent instance of this condition occurs in *Ex parte Isherwood*, 231 O. G., 1211.

The phase to be considered in this paper is not that of unpatentably distinct species; but that phase in which the disclosures are precisely the same; the purpose of the paper being to outline what is believed to be the preferable practice when the same person presents to the office a plurality of applications with the same disclosure, but with different claims.

The chief value of Mr. Robinson's work on patents lies, I think, in his emphasis of the fact that the act of invention is not necessarily dependent on the existence of a patent system; in his analysis of the inventive act as such; and in his application of this analysis to the Patent Law of the United States.

As he says so lucidly and beautifully on page 114, of vol. 1:

The one unchangeable factor in all legal questions relating to inventions is the invention

itself. An invention is either a physical operation or a physical instrument, and as such its essential characteristics are determined by the laws of nature. No human legislation, no judicial interpretation, can increase, modify, or diminish its necessary attributes, and no legal doctrine concerning it can be correct which is based upon a partial or erroneous view of those inherent qualities that differentiate it from all other actual or possible inventions. What is thus true of individual inventions is true of all inventions, considered as a class of agencies employed by man for the production of physical effects. An invention, in that it is an invention, possesses certain attributes without which it could not be an invention, attributes which the law can not alter, and which it can not ignore with any prospect of arriving at reliable conclusions upon any problem that relates to inventions. A clear and accurate apprehension of these necessary attributes is, therefore, the first step in any investigation of the principles and rules of Patent Law, as well as the only guide to the solution of those difficulties which the practical application of that law presents.

And again, on page 136 of vol. 1:

The means by which man satisfies a want arising out of his relations to the external world is, on the contrary, invariably the result of the creative act. The idea which underlies it is necessarily conceived by one before it can be perceived by any. However great the want, however simple the method by which it is supplied, that method can originate only through the exercise of faculties which produce new operations or devices, and not merely discern and imitate the old. When man first came in contact with material nature, he found awaiting him the means of satisfying his most urgent if not all of his essential needs. Fruit offered itself to him for his food, water for drink, the caves and