A Short Discussion on Various Aspects of Plant Patents

By RAYMOND A. MAGNUSON

The following article on PLANT PATENTS was prepared as a report to be given before a class in Patent Law at Washington University School of Law, St. Louis, Missouri, where the writer is presently a student. The writer is much indebted to Mr. Delos G. Haynes, Member of the Missouri Bar, and Lecturer on Patent Law, St. Louis, Missouri, for his inspiring guidance; and, also to Mr. Robert Starr Allyn, of the New York Bar, whose book on Plant Patents (1944, The Corse Press, Inc., Sandy Creek, N. Y.) was found by the writer to be one of the few recent, comprehensive publications devoted exclusively to the subject-matter of Plant Patents. The writer submits this article for publication only in the hope that it may serve as a "thumb-nail" sketch to outline briefly the main additions which the statutes providing for patents on plants have added to the United States Patent System.

I. CHRONOLOGICAL HISTORY OF THE PLANT PATENT ACT.

11 February 1930—Identical bills were simultaneously introduced in the Senate by Hon. John G. Townsend, Jr., of Delaware (S. 3530) and in the House of Representatives by Hon. Fred. S. Purnell of Indiana (H. R. 9765). These bills were referred to the respective Committees on Patents in the Senate and the House and to the Secretaries of Agriculture and Commerce.

12 March 1930—The Secretary of Commerce, after referring the bill back to the Commissioner of Patents (then Thomas E. Robertson) reported back his general approval of the bill although questioning the Constitutionality of the proposal to grant patents on mere "finds" (upon advice and after study of the bill by legal counsel of the Patent Office).

17 March 1930—The Secretary of Agriculture (then the late Arthur M. Hyde) reported back favorably on the bills. 24 March 1930—Senator Townsend introduced new S. 4015, still including provisions for patents on newly found varieties of plants.

3 April 1930—Senate Committee on Patents, without public hearing, filed its report and recommended that its bill (S. 4015), but with amendments eliminating newly found plants, be passed.

3 April 1930—Mr. Purnell introduced new H. R. 11372 omitting the "mere finds".

9 April 1930—The House Committee on Patents held a 'public hearing on H. R. 11372 and added a section barring patents on plants which had been "introduced to the public prior to the approval of the Act".

10 April 1930—The House Committee made its report and recommended passage of the Act.

14 April 1930—Senate Bill 4015 was called on the calendar with an amendment offered by Senator McKellar of Tennessee, and approved by Senator Townsend, barring plants that had been "introduced to the public" prior to approval of the Act.

17 April 1930—The bill (S. 4015) was again called up and again passed over.

5 May 1930—The House Bill 11372 was called on the calendar and after some discussion was "passed over without prejudice".

12 May 1930—The Bill was again called up and amendments agreed to, striking out the provision to protect "newly found variety of plant". The Bill was then passed by the Senate.

13 May 1930—Mr. Vestal, Chairman of the House Patents Committee, asked unanimous consent to take up Senate Bill 4015, which was in the exact language of H. R. 11372 as reported by his committee. Senate Bill 4015 was passed and H. R. 11372 was placed on the table.

23 May 1930—The Bill (S. 4015) as passed by both the Senate and the House, was approved by President Hoover and thus came into being the Townsend-Purnell Plant Patent Act of 1930. II. EXPLANATORY BACKGROUND OF THE PLANT PATENT ACT.

A study of the Senate and House Patent Committee Reports on the Bill while pending before both Houses is explanatory as to the purposes and scope of the Plant 'Patent Act and the Legislators' interpretation of its provisions.

Purpose of the Bill

The purpose of the bill is to afford Agriculture, so far as practicable, the same opportunity to participate in the benefits of the Patent System as has been given Industry, and thus assist in placing Agriculture on a basis of economic equality with Industry. The bill removed the existing discrimination between plant developers and industrial inventors. To these ends the bill provides that any person who invents or discovers a new and distinct variety of plant shall be given by patent an exclusive right to propagate that plant by asexual reproduction; that is, by grafting, budding, cuttings, layering, division, and the like, but not by seeds.

Explanation of Provisions of the Bill

The bill authorizes the grant of a patent only in case the new variety of plant is distinct. The characteristics that may distinguish a new variety of plant would include, among others, those of habit; immunity from disease (s); resistance to cold, drought, heat, wind, or soil conditions; color of flower, leaf, fruit, or stems; flavor (s); productivity, including ever-bearing qualities in case of fruits; storage qualities; perfume; form; and, ease of asexual reproduction.

New and distinct varieties of plants fall roughly into three classes: (1) Sports, (2) Mutants, and (3) Hybrids. In the first class, the Sports, the new and distinct variety results from bud variation and not seed variation. A plant or portion of a plant may suddenly assume an appearance or character distinct from that which normally characterizes the variety or species. In the second class, the Mutants, the new and distinct variety results from seedling variation by self-pollenization of species. In the third class, the Hybrids, the new and distinct variety results from seedlings of cross-pollenization of two species, of two varieties, or of a species and a variety. In this case the word "hybrid" is used in its broadest sense.

All such plants must be asexually reproduced in order to have their identity preserved. This is necessary since seedlings either of chance or self-pollenization from any of these would not preserve the character of the individual parent plant.

Whether the new variety is a Sport, Mutant, or Hybrid, the patent right granted is a right to propagate the new variety by asexual reproduction. It does not give any patent protection to the right of propagation of the new variety by seed, irrespective of the degree to which the seedlings come true to type.

These cultivated Sports, Mutants, and Hybrids are all included in the bill and probably include every new variety of plant that is likely to be developed or discovered. The exclusion of a wild variety, the mere chance find of the plant explorer, from the provisions of the Act, is in no sense a limitation on the usefulness of the bill to those who follow Agriculture or Horticulture as a livelihood and who are permitted under the Act to patent their discoveries.

A plant discovery resulting from cultivation is unique, isolated, and is not repeated by nature, nor can it be reproduced by nature *unaided by man*, and such discoveries can only be made available to the public by encouraging those who own the single specimen to reproduce it asexually and thus create an adequate supply.

The plant originator must recognize the new and appreciate its possibilities either for public use or as a basis for further exercise of the art of selection. It is to be noted that those wild varieties discovered by the plant explorer or other person who has in no way engaged either in plant cultivation or care and who has in no other way facilitated nature in the creation of a new and desirable variety are not within the scope of the Act.

The Act excepts from the right to a patent, the invention or discovery of a distinct and new variety of a tuberpropagated plant. The term "tuber" is used in its narrow horticultural sense as meaning a short, thickened portion of an underground branch. It does not cover or include in its meaning, for instance, bulbs, corms, stolons, and rhizomes. It is thought that substantially the only plants covered by the term "tuber-propagated" appearing in the Act would be the Irish potato and the Jerusalem artichoke. This exception was made, it is believed, because this group alone, among asexually reproduced plants, is propagated by the same part of the plant that is sold as food.

With reference to plants, the words "in public use or on sale", appearing in the Act, would apply to the period during which the new variety is asexually reproduced for sale.

Constitutionality of the Act

Article I, Section 8 of the Federal Constitution provides that "The Congress shall have power . . . to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

There can be no doubt that the grant of plant patents constitutes a promotion of "the progress of science and useful arts" within the meaning of the Constitutional provision. The only question that might arise concerning the matter would be: "Is the new variety a discovery and is the originator or discoverer an inventor?"

At the time of the adoption of the Federal Constitution, the term "inventor" was used in two senses: in the first place, the inventor was a discoverer, i. e., one who finds or finds out; in the second place, an inventor was one who created something new. All the dictionaries in use at the time of the framing of the Constitution recognized that "inventor" included the finder-out, or discoverer, as well as the creator of something new. This is further indicated by the fact that the founding fathers referred to the productions of inventors as "discoveries".

As to patents the doubt is only as to the one word "inventor". The word "discovery" is believed to aptly describe the situation when a new and distinct variety of plant is found; and, "inventors" is certainly as elastic a word as "authors" (which the courts have liberally construed to include map-makers, chart-makers, photographers, sculptors, modelers, and designers. "Writings" have been construed to include photographs, statues, models and designs). It is not to be expected that the courts will be any less liberal in their interpretation of the legislation covering plant patents.

III. CHANGES EFFECTED IN EXISTING PATENT STATUTES BY THE TOWNSEND-PURNELL PLANT PATENT ACT OF 23 MAY 1930.

In brief, the Townsend-Purnell Plant Patent Act of 23 May 1930 made the following changes in the previously existing Public Statutes with reference to Patents:

Sec. 4884 R. S. (U. S. C., title 35, sec. 40.) was amended, by adding a clause, so as to read "... and vend the invention or discovery (including in the case of a plant patent the exclusive right to asexually reproduce the plant) throughout the United States and the Territories thereof ..." (See page 9 of U. S. Patent Office bulletin on Patent Laws, revised May 1, 1947)

Sec. 4886 R. S. (U. S. C., title 35, sec. 31) was amended, by adding a clause, so as to read "... or any new and useful improvements thereof, or who has invented or discovered and asexually reproduced any distinct and new variety of plant, other than a tuber-propagated plant, not known or used by others in this country ..." (See page 9 of bulletin)

Sec. 4888 R. S. (U. S. C., title 35, sec. 33) was amended, by adding a sentence, so as to read ". . . The specifica-

tion and claim shall be signed by the inventor. No plant patent shall be declared invalid on the ground of noncompliance with this section if the description is made as complete as is reasonably possible." (See page 17 of the bulletin)

Sec. 4. (U. S. C., title 35, sec. 56a) The President may by executive order direct the Secretary of Agriculture (1) to furnish the Commissioner of Patents such available information of the Department of Agriculture, or (2) to conduct through the appropriate bureau or division of the department such research upon special problems, or (3) to detail to the Commissioner of Patents such officers and employees, of the department, as the Commissioner may request for the purposes of carrying into effect the provisions of sections 31, 32a, 33, 35 and 40 of this title relating to plants. (See page 18 of bulletin)

Sec. 5. (U. S. C., title 35, sec. 32a) Notwithstanding section 31 of this title, no variety of plant which has been introduced to the public prior to May 23, 1930, shall be subject to patent. (See page 18 of bulletin)

Sec. 6. (U. S. C., title 35 sec. 32b) If any provision of this Act (referring to plant patents) is declared unconstitutional or the application thereof to any person or circumstance is held invalid, the validity of the remainder of the act and the application thereof to other persons or circumstances shall not be affected thereby. (See page 18 of bulletin) (This separability clause was added at the insistence of the then Commissioner of Patents, Thomas E. Robertson, upon the advice of his legal counsel to safeguard against the whole patent structure being declared unconstitutional as the result of the addition of these new provisions to the then existing statutes.)

Sec. 4892. R. S. (U. S. C., title 35, sec. 35.) was amended by adding a phrase, so as to read ". . . the art, machine, manufacture, composition, or improvement, or of the variety of plant, for which he solicits a patent . . ." (See page 19 of the bulletin)

Thus it will be seen that the subject matter of the additions to the law is "any distinct and new variety of plant (other than a tuber-propagated plant) which has been invented or discovered and asexually reproduced."

IV. GENERAL ADMINISTRATION:

Sec. 475. R. S. (U.S.C., title 35, sec. 1.) provides that in the Department of Commerce there shall be an office known as the Patent Office. Sec. 476. R. S. (U.S.C., title 35, sec. 2.) provides that the Patent Office shall be administered by a Commissioner of Patents. Sec. 481. R. S. (U.S.C., title 35, sec. 6) provides that the Commissioner of Patents, under the direction of the Secretary of Commerce, shall superintend or perform all duties respecting the granting and issuing of patents directed by law; and he shall have charge of all books, records, papers, models, machines, and other things belonging to the Patent Office. (See pages 1 and 2 of the bulletin).

Sec. 483. R. S. (U.S.C., title 35, sec. 6) provides that the Commissioner of Patents, subject to the approval of the Secretary of Commerce, may from time to time establish regulations, not inconsistent with law, for the conduct of proceedings in the Patent Office. (See page 3 of bulletin).

Allyn in his study on *Plant Patents* (1944 Chapt. 5, page 16) says that:

The rules with respect to plant patents are, in the main, the same as the rules for all other patents. The Patent Office, however, has added a few specific rules with respect to plant patents, as follows:

PLANT PATENTS—In filing an application for a plant patent the specification should be in duplicate and the drawing also, where colors are involved. Color drawings must be made on heavy Whatman paper (or equal) in permanent water or oil colors. Where color is not a variation upon which the patent depends for its patentability the drawing may be filed in black and white, in which case only one copy of the drawing will be necessary. The reason for filing the drawings and specifications in duplicate is that it may be necessary to have the experts in the Department of Agriculture pass upon the applications as to whether or not the variety is new, and in such cases the office would not care to allow the original application to pass out of its possession. In the case of a plant patent, the oath must allege that the plant has been asexually reproduced and that it has not been introduced to the public prior to May 23, 1930.

Allyn also goes on to point out that all patents are classified in the Patent Office according to the characteristics of the claims; that Plant Patents are assigned to Class 47 and this in turn is divided into sub-classes as follows:

Sub-class 59—Plants (all plants not included in the other three). Sub-class 60—Flowers (all flowering plants other than roses or fruit-bearing plants).

Sub-class 61—Roses (including all rose-bearing plants). Sub-class 62—Fruits (includes all fruit-bearing plants).

The form of claim used in plant patents is substantially the Design Patent form of claim and thus far, as in Design Patents, it would appear that the Patent Office has arbitrarily determined that the inventor or discoverer of a new and distinct variety of plant can only have a single claim; however, the claim shall state the predominant distinguishing characteristic(s) constituting the novelty.

The Patent Office for some reason or other will not permit applicants to tell in the specification what they call the new varieties but it is permissible to give names of parent plants and in fact to refer to parents by names and patent numbers (if any). Although the names are entirely arbitrary, they are not true trademarks but are used descriptively to identify particular plants. Allyn's study on *Plant Patents* discloses, however, that the majority of the files on the plant patents thus far granted do contain the names given the plants by their originators.

Sec. 4886. R.S. (U.S.C., title 35, sec. 31.) (see page 9 of bulletin) and Rule 24 of the *Rules of Practice of the* U. S. Patent Office (Reprint Sept. 1, 1947) provide that an application for a patent shall be made by any person who has invented or discovered and asexually reproduced

any distinct and new variety of plant, other than a tuberpropagated plant, not known or used by others in this country, before his invention or discovery thereof . . . Sec. 4896. R. S. (U.S.C., title 35, sec. 46.) (See page 21 of bulletin) and Rule 25 of the Patent Office *Rules of Practice* provide that in case of the death of the inventor, the application will be made by and the patent will issue to his executor or administrator upon compliance with certain statutory requirements. Further, that in case an inventor becomes insaine, the application may be made by and the patent issued to his legally appointed guardian, conservator, or representative, who shall make the oath required by Rule 46.

Sec. 487. R. S. (U.S.C., title 35, sec. 11) (see page 3 of bulletin) and Rule 17 provide that the Commissioner of Patents shall prescribe rules and regulations as to persons who shall be eligible to prosecute patent applications with the Patent Office. Rule 17 states that an applicant, or the assignee of the entire interest, may prosecute his own case but advises him not to unless he is familiar with such matters and counsels him to secure the services of a competent registered attorney or agent since the value of the patent depends largely upon the skillful preparation of the specification and claims.

V. PROCEDURE FOR FILING AND OBTAINING A PLANT PATENT.

Revised Statutes of the United States, sections 4888 to 4892 (see pages 17-19 of the bulletin) and Rule 30 of the *Rules of Practice in the U. S. Patent Office* establish the requisites of an application for a patent and provide that all applications for plant patents are addressed to the Commissioner of Patents and filed in the United States Patent Office; that a complete application comprises the first fee of \$30.00, and \$1.00 for each claim in excess of twenty (but plant patents are limited to one claim the same as design patents), a petition, specification (including description), oath, and drawings. That the petition, specification, and oath must be in the English language and may be included in a single document. All papers which are to become a part of the permanent records of the Office must be legibly written or printed in permanent ink.

After the application is received at the Patent Office it is numbered serially in order of receipt and the applicant notified of the serial number of his application. The application is then assigned to Division 1, Room 5701 of the Patent Office. The duplicate papers are then referred to the Bureau of Plant Industry in the Department of Agriculture for investigation and research as to the originality and distinctiveness of variety as claimed. The reports of the Chief of the Bureau of Plant Industry are returned to the Patent Office after which the Chief of the Patent Office Division then takes such action as seems to him to be proper, quoting from the report which he has received from the Department of Agriculture, if deemed advisable.

Rules 30-62 inclusive in the Rules of Practice in the U. S. Patent Office (pages 9-19) list instructions for processing the application for a (plant) patent but Allyn in his book on *Plant Patents* (1944) sums up the requirements clearly and concisely wherein he points out:

The *application* must include: (1) a petition; (2) a description of the plant and its history, called the specification; (3) a drawing illustrating the invention; (4) the claim(s); and, (5) an oath.

The government *fees* in plant cases are the same as_ofor ordinary machine, article and process cases, i.e., \$30 upon filing the application and \$30 when the case is allowed for printing. (Chapt. 9, page 18).

The description—The requirement for the specification of a patent is contained in Section 4888 of the Revised Statutes (see page 17 of bulletin). (In regards to plant patents) the specification (in duplicate) should accordingly describe in detail the new plant and furnish all the information possible as to how it was created so that it can be definitely identified and if possible reproduced by others independently.... If the inventor makes the description as 'complete as is reasonably possible' (see Sec. 4888 R. S., page 18 of bulletin) he is absolved under the last clause of the amendment. (Chap. 10, page 18).

The drawings (in duplicate if in color) should illustrate the plant so that it can be properly identified. (Chap. 11, page 19).

Of course, where color is claimed as a distinctive characteristic, it is axiomatic that the drawings should be accurate and as permanent as practicable to make them together with a description of the colors involved according to a recognized standard ("such as Ridgeway's Color Chart or Maerz & Paul's Dictionary of Color, or Windsor & Newton, Ltd., Specimen Tints of Artists' Colours, or any other standard may be sufficient.").

The Patent Office has furnished the writer information that it now has description forms, and photostats available, on Plant Patents.

Rule 37 (see page 11) states that the specification must conclude with a specific and distinct claim(s) of the part, improvement, or combination (in this case, the plant) which the applicant regards as his invention or discovery. As stated earlier, it would appear that the applicant for a Plant Patent is limited to a single claim as in Design Patents. The writer has found no logical reason or explanation offered for such limitation except perhaps that a plant is considered as a single, inseparable entity and cannot be broken down into component parts on which to issue separate patents.

Each petition, specification and oath contained in an application for a (plant) patent must be signed by the inventor or discoverer or by someone authorized by the Statute to sign for him (See Rules 33, 40 and 46, pages 10-12 of *Rules of Practice in U. S. Patent Office.*)

Section 4903. R. S. (U. S. C., title 35, sec. 51) (see page 24 of bulletin) and Rules 65-78 inclusive (See pages 20-25 of *Rules of Practice*) state, in effect, that the Patent Office shall examine each application submitted for a patent; that whenever, on examination, any claim of an applicant is rejected for any reason whatever, the applicant will be notified thereof and the reasons for the rejection will be fully and precisely stated together with such information and references as will . 1

enable the applicant to determine the advisability of further prosecuting his application. If, after receiving this first notice of rejection, the applicant shall persist in his claim, with or without altering his specification, the application will be reexamined. If again rejected, the reason(s) therefor will be fully and precisely stated. The applicant has a right to amend his application before or after the first rejection or action and thus try to overcome the examiner's reason(s) for rejection. When an application has been rejected twice for the same reason(s), the applicant may appeal to the Board of Appeals, and from this Board, to the Court of Customs and Patent Appeals.

Rule 77 (see page 24 of *Rules of Practice*) provides that should the applicant fail to reply to an office action or neglect to prosecute his patent application within six months after filing, the application will be held to be abandoned as provided in Rule 171 unless the Commissioner for good reason shall see fit to extend the time.

The applicant must pay the final government fee of 30 within six months of the date of notice of allowance or the patent will be withheld and the application considered forfeited. (See Rules 164, 167, 171, 174 and 175 of *Rules of Practice*)

VI. THEORY OF UNITED STATES PATENTS, PROOF OF DISTINCTIVENESS, AND RIGHTS GRANTED THEREUNDER:

• The American Patent System operates under the theory that a patent is a sort of contract between the inventor or discoverer and the government whereby in consideration of the government's grant of an exclusive right to make, use and vend the invention or discovery for a certain term of years the inventor or discoverer, in turn, will disclose to the public something worthwhile and of such nature as will promote the progress of science and the useful arts, and which disclosure would not have been made except through the efforts of the inventor or discoverer. Logically therefore, if the disclosure is insufficient or the device inoperative, the public derives no benefit and the patent is therefore void for lack of consideration.

Applying the above reasoning to cases of Plant Patents, it would seem that the applicant must convince the Patent Office that the plant has been asexually reproduced since (as stated earlier) such method of reproduction is necessary to preserve the distinct identity of the plant sought to be patented and unless the patent contains enough information to enable others independently to thus reproduce the plant, it is obvious that the public has derived no benefit and the patent must therefore be invalid because its grant has not promoted "the progress of science and the useful arts" as enumerated by Section 8 of Article I of the Federal Constitution and on which provision the whole United States Patent System is bottomed.

A plant in order to be patentable, according to the terms of Sec. 4886. R. S. (U. S. C., title 35, sec. 31.) (See page 9 of bulletin), should be a "distinct and new variety, other than a tuber-propagated plant" not previously used or patented by others in this country and capable of being reproduced asexually. Further, such plant must be a "useful" one. This would seem to leave quite a responsibility on the Patent Office to determine in the first instance whether the claimed invention or discovery is distinct and new and sufficiently useful to warrant the issue of a patent thereon. An examination of the Plant Patents thus far granted would indicate a lenient, liberal construction of the terms of the statute by the Patent Office (See, for example, Exparte Rosenberg, 43 USPQ 393, and the fifth page of House Report 1129 of Seventy-first Congress, Second Session, entitled Plant Patents, April 10, 1930.)

The files on Plant Patents in the Patent Office would seem to indicate that in many of the earlier cases the first report was unfavorable due to the insufficiency of the evidence submitted with the application. However, recent information received by the writer from the Patent Office is to the effect that many such reports are now favorable. The practice often is to request affidavits signed by disinterested third parties as to the existence and distinctive characteristics of the plant claimed. Such proof seems reasonable enough as otherwise the Patent Office might require a sample plant to be supplied along with the application.

Section 4884 R. S. (U. S. C., title 35, sec. 40.) (See page 9 of bulletin) authorizes the grant of a patent "for a term of seventeen years, of the exclusive right to make, use and vend the invention or discovery (including in the case of a plant patent the exclusive right to asexually reproduce the plant) throughout the United States and the Territories thereof . . .'' and this phrase is used in the grant of Plant Patents. Thus it would appear that a Plant Patent grants its holder the right to exclude others from (1) making (i. e., producing), (2) using, (3) vending, or (4) asexually reproducing the plant. covered in the patent, for the term of 17 years. The U. S. Supreme Court has held in litigated cases of articles, process and composition patents that the rights granted are merely the right to exclude others from making, using, or vending and that each act of unauthorized manufacture, sale or use is a distinct offense against the owner of the patent. Since the primary purpose of the Plant Patent Act was to give plant breeders the same sort of advantage and protection for the fruits of their labor as afforded other discoverers or inventors, it would appear that a similar result should obtain. The Patent Office has interpreted the Plant Patent Act not to include the right to exclude others from the reproduction of the plant, covered in the patent. from seed.

VII. USE, MARKING, NOTICE, INFRINGEMENTS, AND LITI-GATION:

Under the decisions presently in force, the patentee may not control the resale price of a plant or its product and attempts to do so would probably run counter to the Sherman (against unlawful restraints and monopolies) or to the Clayton (unfair competition) Acts. However, Plant Patent owners undoubtedly have the right to require their customers by contract to acknowledge the validity of their patents and to agree not to reproduce them asexually. It would seem to be wise for the plant patentee to make such contractual arrangements with his vendees, for his protection, whenever circumstances would seem to make such arrangements desirable and legal.

Since a patent is considered a property right. infringement of that right is regarded as a tort but the burden is on the plaintiff to prove not only the specific act complained of but also to establish that the act complained of actually constitutes an infringement of his patent rights. (See Sec. 4919. R. S., page 32 of bulletin)

In the case of a *Plant Patent*, it would seem that *thc test of infringement is* whether there was a *reproduction* of substantially the same plant as covered by the patent by any means other than by seed.

It would seem that in infringement suits, a patentee would be unable to recover unless he could prove that he had marked his patented products and that the defendant was duly notified of his infringement(s) of plaintiff's patent rights but continued after such notice to make, use or vend the article so patented. The patentee should therefore place a plate or tag containing the patent notice on every patented plant or tree. Merely "posting" an orchard or garden would appear to be insufficient marking for protection in view of decisions regarding patented articles other than plants.

Suits for infringement of patents are brought in the United States District Court in the district of which the defendant is an inhabitant, or in any district in which the defendant, whether a person, partnership, or corporation, shall have committed acts of infringement and have a regular and established place of business (See Sections 24 and 48 of Revised Statutes, page 31 of bulletin). Section 256 of the Revised Statutes (see page 31 of bulletin) provides that the Federal Courts shall have exclusive jurisdiction of all cases arising under the patent right, or copyright laws of the United States. Section 129 of the Revised Statutes (see page 31) provides that under certain conditions an appeal from the decree of the Federal District Court may be taken to the Circuit Court of Appeals. The Clerk of the Court wherein the suit is brought is required by law to file notice of such suit with the Commissioner of Patents.

Section 4920 of the Revised Statutes (see page 36 of bulletin) was not changed by the Plant Patent Act and hence the *defenses* permissible in a suit on a Plant Patent should be no different from those in other cases of Patent infringements. Thus far there has been surprisingly little litigation involving Plant Patents.

VIII. Conclusions:

Allyn in his study on *Plant Patents* (1944 Chapt. 61, page 57) indicated that many of the Plant Patents issued prior to 1944 appeared to be invalid for one or more of the following reasons:

- (1) That the plant on which the patent was sought had not been created or developed by any act of the applicant but was merely a "find" or "sport" of nature and hence not his invention or discovery within the terms of the law as laid down by Section 4886 of the Revised Statutes (see page 9 of bulletin). However recent information received from the examiner who has charge of plant patent applications indicates that although this defect might have been true in the early days, it is not generally true today.
- (2) That the patent applicant has not sufficiently disclosed the structure of the plant as provided for in Section 4888 of the Revised Statutes (see page 18 of bulletin). It will be noted that this section is very lenient and states that no plant patent shall be declared invalid on the ground of noncompliance with this section if the description is made as complete as is reasonably possible. The Patent Office now has description blanks and photostats available for prospective applicants or other persons desiring the same.

- (3) That the applicant had failed to comply with Section 4888 of the Revised Statutes (see page 18 of bulletin) as to how, why, when, and where the plant was produced thereby rendering it impossible for someone skilled in the art to independently reproduce the same. This being true, the valid consideration for a patent grant would be lacking and the patent should not issue since the public would not thereby be benefitted.
- (4) That the plant on which the applicant desired a patent did not come within the terms of Section 4886 of the Revised Statutes, as amended by act of Aug. 5, 1939, 53 Statutes 1212, which provides that said article shall not have been described in any printed publication or in public use or on sale for more than one year prior to his application, unless the same is proved to have been abandoned. (The period was two years instead of one where the application was filed prior to Aug. 5, 1940—see pages 9 and 10 of bulletin).
- (5) That the plant sought to be patented had been introduced to the public use or sale prior to 23 May 1930, when the act went into effect in violation of Section 5. (U. S. C., title 35, sec. 32a) (see page 18 of bulletin).
- (6) That there had been an improper joinder of inventors contrary to provisions of Section 4886 of Revised Statutes (see page 9 of bulletin) or of Rules 24, 26, 28 or 41 of the Rules of Practice In the U.S. Patent Office (pages 7-11). In this connection see the Board decision in the Plant Patent File 707 In re Kluis et al, 70 USPQ 165.
- (7) That the claims had been directed to the flower or fruit instead of to the plant itself as provided in Section 4886 of Revised Statutes (see page 9 of bulletin). It is believed that current practice recommended is to direct the claim to the plant variety.
- (8) That the applicant had not properly complied with Section 4892 of the Revised Statutes (see page 19 of bulletin) or with Rule 46 of the *Rules of Practice*

- (see page 12) which provide that the applicant shall make oath that he believes himself to be the original and first inventor or discoverer of the variety of plant for which he solicits a patent.
- (9) That the claims were defective for being too indefinite and not in compliance with Section 4888 of the Revised Statutes (see page 17 of bulletin) or of Rule 37 of the Rules of Practice (see page 11) which state that the applicant shall particularly point out and distinctly claim the part, improvement, or combination (in this case the variety of plant) which he claims as his invention or discovery.

Allvn further found that between May 1930 and January 1944 only 610 Plant Patents had been issued. During this same 14-year period there had been 578,254 patents issued on Machine, Processes, and Articles of Manufacture, and 55,728 patents issued on ornamental designs within the United States. By arithmetical computation, he concluded that there had been 91 times as many Design patents and 948 times as many other types of patents as Plant Patents issued during this 14-year period, or, to say it differently, that Plant Patents comprised less than one/tenth (0.1%) of one percent of all patents issued in the United States during this period. The number of Plant Patents granted per year now averages around 55 which would seem to indicate a relatively small interest in the subject of new plant development. Plant Patent 778 was issued January 6, 1948.

Most of the Patents granted to date on Plants have been for flowers, particularly roses, and for fruit and nut-bearing plants. Contrary to the expectation of the framers of the Act, there has been a surprising dearth of patents granted for potentially valuable utilitarian or agricultural purposes.

It is believed that the United States is the only country in the world today which makes provision for granting patents on plants.