COMMITTEE REPORTS

REPORT OF COMMITTEE ON INTERNATIONAL PHARMACEUTICAL NOMENCLATURE.*

To the Members of the American Pharmaceutical Association:

Your Committee on International Pharmaceutical Nomenclature has no definite accomplishment to report on at this time.

When the undersigned was made chairman of this Committee two years ago, an attempt was made to fix a definite goal toward which the Committee should work, it being realized that progress would be slow and that spasmodic efforts directed along different lines would be futile. With this object in view, the members of the Committee were asked to submit their opinions on what should be done first. As a result, it was decided that our first efforts should be directed toward bringing about uniformity in pharmaceutical nomenclature in the English-speaking countries.

As the initial step, the Committee made an attempt to secure the coöperation of Canada. Professor Henry G. Barbour of McGill University, who is a member of the U. S. P. Committee of Revision, was communicated with and he agreed to try and secure the backing of the Canadian medical and pharmaceutical organizations in an appeal for greater uniformity in the nomenclature of the United States and British Pharmacopœias. However, his efforts do not appear to have met with success, and as he is no longer in Canada, our efforts to secure the assistance of our northern neighbors were discontinued for the time being.

This year a new point of approach was tried. It was decided to sound out the members of the Pharmaceutical Society of Great Britain with a view to obtaining their opinions on the matter and enlisting their coöperation. With this object in view a letter was addressed to the Secretary, Mr. W. S. Glyn-Jones, requesting that we be informed if the Pharmaceutical Society of Great Britain was interested in the matter and how we might work with them to the best advantage. In reply, Mr. Glyn-Jones stated that he would submit the matter to the Council at the meeting to be held in July, and that he would inform us of the Council's attitude shortly thereafter. Unfortunately this information has not been received to date. If, however, it proves to be favorable, it would appear that we have at least made a beginning in securing the machinery with which to work.

In this connection, it is also desired to call your attention to the fact that the Federation Internationale Pharmaceutique has a committee on international pharmaceutical nomenclature. At the meeting of the Federation held in Brussels in April 1922, their Committee was instructed to prepare a table of Latin titles appearing in the different national pharmacopœias together with the corresponding titles in Esperanto.[1] This work has not yet been completed, but sample pages have been obtained, one of which is attached hereto for those who may desire to look it over. As this Committee is actually at work and is producing, it might be well for our Committee to get in closer touch with it next year.

(Signed) A. G. DuMez, *Chairman.*

REPORT OF THE COMMITTEE ON STATUS OF PHARMACISTS IN GOVERNMENT SERVICE.†

The Committee can report the passage and approval on March 4, 1923, of the Classification Bill—"To provide for the classification of civilian positions within the District of Columbia and in the field services." This bill will go into effect on the first day of the next fiscal year in which a corresponding appropriation has been authorized, July 1, 1924, being the earliest date upon which it could apply.

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* Report received and recommendation adopted, Asheville meeting, A. Ph. A. See p. 902, October JOURNAL A. PH. A., 1923.

[1] See page 757, September JOURNAL A. PH. A., 1923.

† The report was received at Asheville meeting, A Ph. A., 1923. It was voted to cooperate with Admiral Stitt of the Navy Department in his efforts and that the matter of cooperation with the Veterans' Bureau be specifically looked after by the Committee on Status of Pharmacists in Government Service. See p. 902, October JOURNAL A. PH. A.

Although, as reported last year, "pharmacy" was included, by amendment, in the professional and scientific service group, in the final redrafting of the bill to meet the approval of both the House and Senate, all such details were omitted. This group "shall now include all classes of positions, the duties of which are to perform routine, advisory, administrative, or research work which is based upon the established principles of a profession or science and which requires professional, scientific or technical training, equivalent to that represented by graduation from a college or university of recognized standing." Seven grades are provided for with maximum salaries varying from $2400.00 to $7500.00, depending upon the importance and responsibility of the position.

PHARMACISTS IN THE ARMY.

Eighty-nine pharmacists have been commissioned in the Reserve Section of the Medical Administrative Corps and twenty-five (25) commissions to pharmacists have been granted with a rank above that of Captain, in the Sanitary Corps. Some of these have been appointed specifically because of their qualifications for making a survey of the drug-manufacturing facilities in this country. A similar survey is being made of all industries that the information may be available at Washington.

Again the Committee would urge young men graduates of pharmacy, who have the necessary physical qualifications, to apply for Commissions in the Reserve Section of the Medical Administrative Corps.

There is now an opportunity for pharmacists to organize and officer this branch of the Army and this is of the utmost importance if pharmacy is to receive the recognition which has so long been withheld.

The Surgeon-General, Dr. Ireland, is urging enlistments and inviting the help of pharmacists. The opportunity is here and if it is not seized and an able organization built up now, pharmacy has no one to blame but itself, should a large army again be needed and pharmacy find itself without a place in the organization.

An order has been issued by the Secretary of War at the request of the Surgeon-General, under date of July 16, 1923, on the subject of "Examination of pharmacist applicants for appointment or promotion in the Officers Reserve Corps, which reads as follows:—

> "It is desired that whenever it is practicable, an officer of either the Sanitary Officers Reserve Corps or the Medical Administrative Officers Reserve Corps, who is a pharmacist, be made a member of the Board before which a pharmacist applicant appears for examination, for appointment or promotion."
>
> "There has been some criticism of the fact that pharmacist applicants were required to appear before an army board consisting of physicians only and this order has been issued to remove that criticism."

PHARMACISTS IN THE NAVY.

The time or conditions this year have not seemed propitious for actively promoting any legislation for the establishment of a Pharmaceutical Corps in the Navy but reliable information has been received that legislation, providing for the commissioning of pharmacists in the Medical Corps of the Navy, will be proposed to the next Congress. A letter from the office of the Surgeon-General of the U. S. Navy, written August 31, 1923, suggests that "in order that no conflicting proposals be brought before Congress, action by this Association be withheld until the proposed legislation is in such shape as will meet the views of all concerned."

This committee was prepared to offer a tentative draft of a bill providing for commissions for pharmacists in the Navy, but in view of this gratifying development in the Surgeon-General's office, which will insure his support, and, it is understood, the support of other important officials of the Navy, we recommend no action at this time but that this committee endeavor to keep in close touch with Surgeon-General Stitt and coöperate in the drafting of the bill and, if satisfactory, its passage by Congress.

PHARMACISTS IN THE WAR VETERANS' BUREAU.

Repeated complaints have been received concerning the status of pharmacists in the War Veterans' Bureau. This requires careful investigation and the Committee of next year may be able to secure some adjustment in this service.

E. FULLERTON COOK, *Chairman.*

REPORT OF THE COMMITTEE ON PHYSIOLOGIC ASSAYING, AMERICAN PHARMACEUTICAL ASSOCIATION, 1923.*

In view of the fact that practically all of the members of the Committee were actively engaged in lending all possible assistance to the Committee on Biological Assays of the United States Pharmacopœial Revision Committee, no actual coöperative laboratory experiments were carried out during the past year.

The Committee accordingly thought it would be advisable that the Report this year take the form of a survey or synopsis of the work done in the field of Physiologic Assaying, from July 1, 1922, to July 1, 1923.

We therefore beg to submit the following bibliography with short abstracts of articles published during the above period.

This bibliography may not be complete but contains all of the articles that came to the Committee's attention.

ABSTRACTS OF BIBLIOGRAPHY OF PHYSIOLOGIC STANDARDIZATION, JULY 1922–23.

Abstracts from Journal of the American Pharmaceutical Association.

ASSAY OF DIGITALIS BY INTRAMUSCULAR INJECTION INTO THE FROG.

By. M. S. Dooley and C. D. Higley, Vol. 11, Nov. 1922, p. 911.

The need of a modification of the present U. S. P. method of Digitalis assay to insure more uniform absorption is pointed out. The authors suggest the intramuscular injection of the frog as an improvement over the customary injection into the ventral lymph sac. They furnish considerable data to show that the end-point is sharper following intramuscular injection due to more rapid and complete absorption of the drug injected. They believe that rate of absorption plays an important rôle since it influences the rate of elimination.

DETERIORATION OF TINCTURE OF DIGITALIS.

By Haskell, Daniel and Terry. Vol. 11, Nov. 1922, p. 918.

These authors contend that while it has been repeatedly shown by the frog and guinea pig methods of assay that Tr. Digitalis loses strength rather rapidly, yet the Hatcher Cat Method indicates that there is no apparent loss of activity in a period as long as five years. They attribute this apparent discrepancy to a decrease in the absorbability of the tincture from the lymph sac of the frog but do not explain how the guinea pig method falls into the same error.

ISOLATED UTERUS ASSAY FOR PITUITARY EXTRACT.

By P. S. Pittenger and A. Quici. Vol. 12, Jan. 1923, p. 14.

This method is valuable only when certain minor details are closely observed. These refer particularly to the preparation of Locke's solution.

EFFECTS OF LARGE DOSES OF CANNABIS INDICA.

By Albert Schneider. Vol. 12, March 1923, p. 208.

The author concludes that the effects of large doses of Cannabis are extremely variable even in one and the same person and as such its preparations should be taken from the U. S. P.

BIOLOGIC STANDARDIZATION OF LOCAL ANAESTHETICS.

By P. S. Pittenger. Vol. 12, March 1923, p. 229.

The method proposed in a previous paper is shown to be quantitative and many observations on the stability of cocaine and procaine solutions under various conditions are reported upon.

FLUIDEXTRACT OF ERGOT.

By J. P. Snyder. Vol. 12, March 1923, p. 246.

It is advisable to defat Fldext. Ergot as this does not affect its therapeutic activity nor hasten its deterioration. Carbon tetrachloride is the preferable defatting agent. Defatting almost eliminates the difficulty due to precipitation.

CHEMICAL METHOD FOR ASSAY OF STROPHANTHUS PREPARATIONS.

By A. Knudson and M. Dresbach. Vol. 12, May 1923, p. 390.

The authors suggest a colorimetric method using Baljet's alkaline picrate reaction for

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* Report was made before Scientific Section, A. Ph. A. and presented in abstract before General Session, A. Ph. A. See p. 902, October JOURNAL A. PH. A., 1923.

assaying Strophanthus preparations. They find a close agreement between the chemical results and those obtained with Hatcher's Cat Method.

BIOLOGICAL TESTING OF SALVARSAN AND ITS DERIVATIVES.

By H. B. Corbitt. Vol. 12, July 1923, p. 620.

The author describes the technique of the two Hygienic Laboratory methods for testing arsenicals of the arsphenamine type.

Proceedings of Pennsylvania Pharmaceutical Association (1922).

UTERUS ASSAY FOR PITUITARY EXTRACT.

By P. S. Pittenger and A. Quici.

The authors describe methods of eliminating some difficulties encountered with the isolated uterus assay for Pituitary Extract and arrive at the following conclusions:

In order to obtain satisfactory results with the isolated uterus method of assaying Pituitary extracts:

1. Glass distilled water must be used.
2. All chemicals employed in making Locke's solution must be of the highest ("Reagent") purity.
3. All apparatus and solution containers must be frequently washed with boiling water and Locke's solution should be freshly prepared.
4. Thin, "stringy" uteri should not be used, as they are all deficient in normal activity, and in response to stimuli, while the thick, more muscular uteri are practically all active and sensitive.
5. Only the highest purity "Reagent" or "Analyzed" chemicals should be employed in preparing Locke's solution.
6. Sodium Chloride in the form of "large" crystals appears to be more satisfactory than salt in the form of small crystals or powder.
7. The authors are of the opinion that when the above precautions are observed the Isolated Uterus Method gives better results than any other method so far proposed.

Abstracts from Journal American Medical Association.

THE STANDARDIZATION OF DIGITALIS BY ITS ACTION ON THE HUMAN HEART.

By Harold Pardee. Vol. 81, July 21, 1923, p. 186.

The author gives a preliminary report of a method of testing Digitalis on human beings by means of the electro-cardiograph.

A RAPIDLY ELIMINATED DIGITALIS BODY.

Vol. 80, April 14, 1923, p. 1072.

Since it is a known fact that digitalis preparations are slowly eliminated from the system, at the request of the Council of Pharmacy and Chemistry of the A. M. A., Prof. Hatcher endeavored to prepare a more rapidly eliminated fraction of Digitalis.

After extensive work he isolated a digitalis body with true digitalis action which is very quickly eliminated.

This new digitalis body will possibly have an important bearing on the dosage and biologic standardization of digitalis.

THE POTENCY OF SOME COMMON DIGITALIS AND STROPHANTHUS PREPARATIONS.

By G. F. Strong and Albert Wilmaers. Vol. 80, May 5, 1923, p. 1308.

The authors made a comparison of the various commercial preparations by the cat method. Their conclusions follow:

1. The potency of a group of the more common digitalis and strophanthus preparations has been examined by the cat method.
2. The results show that there has been considerable improvement in the strength of the digitalis that is available to the average patient. Tinctures, leaves in pill form, and some liquid preparations of digitalis and strophanthus in ampuls were found to approximate fairly closely the expected standards; that is, the minimal lethal dose per kilogram (cat unit) is 1 cc. of tincture of Digitalis, 0.1 Gm. of the powdered digitalis leaf, 0.1 mg. of crystalline strophanthin, and 0.3 mg. of digitoxin.
3. Too great emphasis cannot be placed on the importance of avoiding the use of drops

in prescribing tincture of digitalis. A readily available means of measuring cubic centimeter and five-tenths cubic centimeter amounts would be of distinct value.

Chemical Abstracts.

SOME TECHNICAL POINTS IN THE METHOD OF PHYSIOLOGICAL CONTROL OF ADRENALINE PRODUCTS.

By A. Richaud. *Jour. Pharm. Chim.*, 25, 289–98 (1922).

The necessity of washing the adrenaline (A) from the cannula after each injection by Cushny's control method is discussed. From the tracings obtained upon injecting for comparison solutions of unknown and known strengths of A, R. deduces the *increase* of blood pressure (which is a function of the adrenaline contents), by drawing the heights of the curves. A graph made from these increments as ordinates and the concentrates of the solutions used as abscissas, gives a direct means of comparison.

ACTION OF ERGOT ON THE ISOLATED UTERUS.

By Mario Chió. *Arch. farm. sper.*, 33, 7–16, 31–2, 38–51 (1922).

Within physiological limits a constant relation exists between the action of calcium salts and that of ergot on the isolated uterus of the guinea pig. The more depressing the effect of calcium salts the more the muscular tonus is increased by small doses of ergot, and *vice versa*. Where, in exceptional cases, the virgin uterus fails to react normally to calcium salts, its behavior toward ergot is also anomalous. In such cases ergot can act as a stimulant of muscular contraction only when the tonus is previously lowered. In determining the *activity of an ergot preparation* the uterus should first be treated with a calcium salt in order to establish conditions favorable to the action of ergot and to render less likely a response due to other factors.

PHARMACOLOGICAL AND PHARMACODYNAMIC STUDY OF THE STROPHANTHIN GLUCOSIDES; STROPHANTHIN AND OUABAIN.

By M. Tiffeneau. *Bull. Sci. Pharmacol.*, 29, 184–90, 244–9 (1922).

The lethal toxicity of ouabain given intravenously is 0.23 mg. per Kg. for the rabbit. A dose of 0.21 mg. is at times fatal, one of 0.20 mg. is not. The drug does not change its toxic power when kept in the cryst. state, nor does sterilization by autoclave in neutral or saline solutions destroy its action. Observations on the exposed heart of the dog during acute ouabain poisoning demonstrated 3 phases of reaction: (1) slowing, due to stimulation of the vagal centers, lasting from the 2nd to the 5th min. and not occurring after bilateral vagotomy; (2) a phase of acceleration, in which the rhythm regains and passes its normal rate, accompanied by arhythmias and auricular-ventricular dissociation; (3) a phase of fibrillation ending in death. The lethal dose (cardiac arrest in 10 to 20 min.) for the dog is between 0.14 and 0.15 mg. per Kg. body weight given intravenously. Crystallized strophanthin is more toxic, killing in a dose of 0.11 mg. per Kg. Amorphous strophanthin is less toxic, the lethal dose varying from 0.17 to 0.19 mg.

ACTIVITY EVALUATION OF URGINEA SCILLA (SQUILL).

By Joseph Markwalder. *Klin. Wochschr.*, 1, 212–15, 1922.

The digitalis-like activity of the combined glucosides in squill was quantitatively estd., biologically, by injecting known doses into the lymph sac of frogs. The minimum lethal dose per Gm. of frog was taken as the mean between the max. dose that was just inactive and one that was just active. This value is referred to as a frog dose (F. D.). This F. D. is used merely as an index for evaluating the quantities of active principle in squill and should not be confused with the minimum lethal dose for man. The squill glucosides, taken collectively, have an activity like that of digitalis glucosides; the heart stops in systole. The material to be tested, fresh bulbs or dry powder, was exhausted with alcohol and water. The colloids are easily removed and there remains an ext. contg. only the active glucosides and the carbohydrates. Fresh squill, freed from the exterior dead leaves, contains from 4.0 to 8.55 million F. D. per Kg. of dry material. Drying *in vacuo* or in air does not destroy the glucosides. There is no appreciable difference between the glucoside content of red and white squill. The heart of the bulbs and the dead exterior leaves contain very little glucoside. The mature intermediate leaves are rich in glucoside. A sample of commercial dried powder contained 1.5 million F. D. per Kg. The so-called extracts of commerce do not deserve to be so called because they contain less glucoside than the starting material. The com. tincture is valueless because it is quite inactive.

THE EFFECT OF PANCREATIC EXTRACT (INSULIN) ON NORMAL RABBITS.

By Banting, Best, Collip, MacLeod and Noble. *Am. J. Physiol.*, 62, 162–76 (1922).

Insulin (*C. A.*, 16, 3115) injected subcutaneously into normal rabbits causes a fall in the per cent. of blood sugar within a few hours. In the great majority of cases exhibiting convulsions the blood sugar has been found to be about 0.045%. As a basis for the physiologic assay of insulin the authors suggest as one unit the number of cc. which cause the blood sugar of normal rabbits to fall to 0.045% within 4 hours. This dose is decidedly active in lowering blood sugar in diabetic patients.

STUDIES ON THE BIO-ASSAY OF PITUITARY EXTS.

By M. I. Smith and Wm. T. McClosky. *Public Health Reports*, 38, 493–512 (1923).

A standard is proposed for use in assaying pituitary extracts, prepared from the infundibulum of fresh pituitary glands by treatment with acetone to remove water and fat. Comparisons of commercial and experimental pituitary extracts with an aqueous solution of this material are given as determined by the oxytocic method verified by the pressor test. Seasonal variation was not detected nor is the activity materially affected by the source of the glands as from steers or cows. Fractional sterilization of properly acidulated extracts does not affect activity, but the use of the autoclave at 15 lbs. pressure causes rapid deterioration. Commercial extracts vary greatly in activity, one being 8 times as active as the weakest. A recommended standard of activity for the commercial preparation is the equivalent of 4 mg. of the standard powder or substance in each cc.

ERGOT PREPARATIONS.

By Hede Halphen. *Klin. Wochschr.*, 1, 1149–51 (1922).

The action of a large number of commercial ergot preparations on the excised virgin guinea pig uterus was compared. The best of these preparations was 1100 times as powerful as the poorest. The individual variations were enormous. Most of the preparations contain reducing substances of inert material that can be precipitated with alcohol and $Pb(OAc)_2$. If the ergot powder is suspended in water and set aside, a bacterial fermentation occurs that removes the sugars and most of the colloidal substances. The concentrated filtrate is miscible with alcohol in all proportions, gives no precipitate with $Pb(OAc)_2$, is physiologically highly active and can be injected without local pain or irritation.

Medical Research Council.

PHYSIOLOGICAL STANDARDIZATION OF EXTRACTS OF THE POSTERIOR LOBE OF THE PITUITARY BODY.

By J. H. Burn and H. H. Dale. Special Report Series No. 69, London, 1922.

This report shows the findings of an exhaustive study of the standardization of Pituitary Extract.

The subject matter of this article is sub-divided as follows:

I. Introduction.
II. The Choice of a Physiological Method.
III. Details of the Method.
IV. Suggested Artificial Standards.
V. The Use of an Extract Made from Perfectly Fresh Pituitary.
VI. The Regular Activity of Perfectly Fresh Glands.
VII. The Activity of Commercial Extracts.
VIII. Concluding Remarks.

Abstracts from American Journal of Pharmacy.

THE STABILITY OF STROPHANTHUS EXTRACTS.

By Clayre A. Pomeroy and Fred. W. Heyl. July 1922.

However difficult it may be to secure the therapeutic action of strophanthus per os, either because of the difficult absorption or the destructive hydrolytic cleavage by means of the acidity of the gastric juice, the fact is plain that hypodermatically, rapid absorption ensues, and the desired therapeutic effects are secured.

After reciting briefly the present conditions of strophanthus chemistry of the three drugs—*Strophanthus Kombe*, *Strophanthus hispidus* and the unofficial *Strophanthus gratus*, the authors draw the following results from their investigations, using the official one-hour frog method as a means of standardization:

(1) Strophanthus seeds vary widely in potency, but tinctures retain their original strength, showing marked stability.

(2) Dilute aqueous galenical solutions prepared for hypodermic or intravenous injection, containing the mixed strophanthins, deteriorate slowly.

(3) They should be discarded after about one year, although approximately 70 per cent. of the activity is retained at that time.

(4) Crystalline ouabain stored in dilute saline solution (of hypodermic strength) showed a small rate of deterioration.

Journal of Pharmacology (Proc.).

BIOLOGICAL ASSAY OF PITUITARY EXTRACT.

By Edwin E. Nelson, Ph.D., Ann Arbor. 19, 270–1 (1922).

A table of results from the assay of commercial preparations shows the necessity for some agreement as to method of assay, and standard substance for comparison. The pressor method and the oxytoxic are outlined and criticized both favorably and unfavorably. Potassium chloride and histamine are investigated as substances for comparison. Neither is considered suitable and the need is felt for some preparation from the gland itself. Because of the evidence given elsewhere as to the non-identity of the oxytoxic and pressor substance found in the gland, the pressor method should not be employed since the drug is used chiefly for its oxytoxic action.

Druggists Circular.

ONE-HOUR FROG TEST.

By Miss Elizabeth Gates and Miss Louise Lilly. July 1922, LXVI, 262.

The One-Hour Frog method was outlined and discussed.

A digitalis tincture was found to be twice as toxic on frogs, made from dried drug, as a tincture made from a portion of the same sample of leaves placed in alcohol at time of collection. The "green drug tincture" gave the better clinical results.

Arch. Exp. Path. und Pharm., through Bull. Sci. Pharmacol.

LILY OF THE VALLEY.

By S. G. Zondek. LXIV, 292.

Zondek tried both the dried and fresh roots, flowers and leaves, tinctures and decoctions of the convallamarin on frogs and reports that tinctures when kept in the dark do not lose their activity to any appreciable extent. A greater amount of active glucosides is present in convallaria than in digitalis, but the toxicity of the former is not as great as that of the latter. Aqueous extracts have the same therapeutic action as tinctures, but the latter are preferable on account of their stability. The greatest amount of active glucosides is present in the flowers and these glucosides do not produce any bad by- or after-effects. It was further found that man is not as sensitive to lily of the valley as to digitalis.

Jour. Pharmacology and Experimental Therapeutics.

EVALUATION OF THE HORMONE OF THE INFUNDIBULUM OF THE PITUITARY GLAND IN TERMS OF HISTAMINE, WITH EXPERIMENTS ON THE ACTION OF REPEATED INJECTIONS OF THE HORMONE ON THE BLOOD PRESSURE.

By John J. Abel and Chas. A. Rouiller. Vol. XX, No. 1, p. 65.

The authors' summary of the above paper follows:

A method has been described which yields a preparation of the pressor-oxytocic principle of the infundibulum, which is actually equal in oxytocic activity to from 20 to 30 times its weight of the acid phosphate of histamine, or from 12 to 18 times its weight of histamine dihydrochloride. It is estimated that when the active principle is freed entirely from the accompanying inert material, it will be found to be weight for weight 40 to 50 times more powerful in its action on the guinea pig uterus than histamine. This estimate is made on the assumption that the isolation of this unstable hormone as a chemical individual can be effected with the retention of its peculiar powers as manifested in the preparations described in this paper. In agreement with our findings as given above it appears that the hypophysis of the ox, the posterior lobe of which weighs on the average 0.4 gram, does not contain more than two milligrams of the oxytocic principle.

The powerful solution with its extremely low content in organic matter, which is obtainable by our method, exhibits all of the really characteristic physiological activities of ordinary saline

extracts of the infundibulum. A first intravenous injection is always followed by a pure pressor vaso-motor response; a later injection by a pronounced depressor vaso-motor response, although the response to the later injection may be very slight. The actively secreting kidney of the rabbit responds to an injection by a diminished secretion or by an entire inhibition of the urinary flow.

The results obtained with our relatively pure solutions and with the salts obtained from them lead us to believe that the vaso-motor, oxytocic and renal action of our preparations are only the expression of the manifold physiological properties of one and the same hormone. In addition to this principle the infundibulum also contains depressor substances which have been described in previous papers. The methods described in this paper effect a clean separation of the pressor-oxytocic substance from these depressor substances.

A CHEMICAL METHOD OF ASSAYING THE ACTIVE PRINCIPLES OF DIGITALIS.
By Arthur Knudson and Melvin Dresbach. Vol. XX, No. 3, p. 205.

The authors describe a simple chemical method for the valuation of galenical preparations of Digitalis based upon the Baljet reaction. It consists of decolorizing the digitalis preparation with lead acetate, removing the excess lead and then treating the decolorized solution with an alkaline picrate solution and allowing the color to develop. The intensity of the color, which is measured in a colorimeter against a standard, is found to vary with the physiological activity and gives results which are in close agreement with those obtained by the bio-assay of Hatcher and Brody (10).

Abstracts from the Proceedings of the American Drug Manufacturers' Association, 1922.

REPORT OF SUB-COMMITTEE ON ACONITE. P. 140.

The results of several years of coöperative work prove that there is no parallelism between the results of the chemical and physiological assay for Aconite. The chemical assay of Aconite and its preparations is shown to be valueless, but that the physiological assay, based upon the minimum lethal dose on guinea pigs, is a true index to the value of preparations of this drug.

REPORT OF SUB-COMMITTEE ON CANNABIS. P. 124.

Five samples of Fluidextract of Cannabis were sent to five different laboratories to be tested by the U. S. P. IX Biologic Assay method and wide variation was found in the results obtained by the various laboratories.

REPORT OF THE SUB-COMMITTEE ON DIGITALIS. P. 127.

Three samples of Tincture of Digitalis, prepared by making different dilutions of a Fluidextract, were submitted to the various experts throughout the country in order to determine the relative merits of the different Biological Assay methods. The results of these tests showed that the "M. L. D. Guinea Pig Method" and the "M. L. D. Frog Method" are about equally accurate and that both are more accurate than either the "One-Hour Frog Method" or the "Cat Method." This report also shows that the greatest variations between the results obtained and the actual strength of the preparation is only 21.8%, whereas Tincture of Digitalis varies from 300 to 400%. Digitalis and its allies, therefore, can be satisfactorily assayed and standardized by any of the aforementioned methods.

REPORT OF THE SUB-COMMITTEE ON PITUITARY EXTRACT. P. 209.

As the result of a series of coöperative experiments this Committee concluded that the Bio-assay of Pituitary Extract as given in the U. S. P. IX cannot be relied upon as a means of determining the oxytocic value of products of the Pituitary Gland. Also that Histamine and Potassium Chloride are unsatisfactory standards.

Respectfully submitted,

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E. L. NEWCOMB, *Chairman.*