

## PROCEEDINGS OF THE LOCAL BRANCHES

"All papers presented to the Association and Branches shall become the property of the Association with the understanding that they are not to be published in any other publication prior to their publication in those of the Association, except with the consent of the Council."—Part of Chapter VI, Article VI of the By-Laws.

Article IV of Chapter VII reads: "Each local branch having not less than 50 dues-paid members of the Association, holding not less than six meetings annually with an attendance of not less than 9 members at each meeting, and the proceedings of which shall have been submitted to the JOURNAL for publication, may elect one representative to the House of Delegates."

Reports of the meetings of the Local Branches should be mailed to the Editor on the day following the meeting, if possible. Minutes should be typewritten, with wide spaces between the lines. Care should be taken to give proper names correctly, and manuscript should be signed by the reporter.

### BALTIMORE.

Dr. Robert L. Swain presided at the April meeting of the Baltimore Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION, which was held at the Hotel Emerson on April 29th, 1925.

The speaker was Dr. H. C. Fuller of Washington, who had as his subject "Solvents Used in Pharmacy."

Dr. Fuller has carried on extensive research work in connection with Isopropanol, and in his clear, concise manner he discussed the investigations on the physiological properties of Isopropanol and its practicability as a substitute for ethyl alcohol, as a solvent in medicinal compounds. He gave the results of observations he had made of the effect of Isopropanol on the animal economy as conducted on rabbits, guinea pigs, cats, dogs, chickens, monkeys and human beings. He stated that the investigations were made with special reference to determining its effect on the vision, its local action when applied to the skin, scalp and open wounds, and its effects on the internal organs when administered by mouth at potable strength. Through these investigations he learned that when administered internally at not over fifty per cent strength, it affects the system to about the same degree as does ethyl alcohol. It is not more toxic than the latter substance and can be used safely as a substitute for a preservative and solvent.

Dr. Fuller exhibited a series of standard U. S. P. and N. F. preparations made with Isopropanol as the solvent. Some of these were at least two years old and had shown no deterioration in potency or appearance. He stated that data have been obtained indicating that in practically every instance involving a U. S. P. or N. F. product, Isopropanol can be

substituted for ethyl alcohol without affecting in the least the physical appearance or the therapeutic efficiency.

Music was also one of the attractions of the evening, and this was made doubly interesting because the soloist was the popular and beloved Mrs. H. L. Meredith of Hagerstown, the wife of the President of the Maryland Board of Pharmacy and of the National Association of Boards of Pharmacy. Mr. Frank Slama of the School of Pharmacy of the University of Maryland accompanied Mrs. Meredith at the piano, and also rendered several enjoyable selections.

The next meeting of the Branch will be held at the Hotel Emerson on Wednesday, May 27th, at 8:15 P.M. Dr. J. C. Munch, Assistant Pharmacologist of the Bureau of Chemistry, Washington, D. C., and Dr. E. W. Schwartze, Pharmacologist in Charge of the Bureau, will present some aspects of Biological Assays. Miss Florence Johnson, who is connected with the Forest Park High School of this city, will be the soloist, and will be accompanied at the piano by Miss N. Eleanor Moore. This will be the last meeting of the Branch for this season.

B. OLIVE COLE, *Secretary-Treasurer.*

### CHICAGO.

The sesqui-centennial meeting of the Chicago Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION was held Friday evening, April 10, at the University of Illinois, School of Pharmacy Bldg. with President L. E. Warren in the chair. The speaker of the evening was Dr. Ralph G. Webster, famous as a toxicologist, who addressed the meeting on the subject of "Toxicology of Interest to Pharmacists."

Dr. Webster's address was quite extended

and of very great interest and covered many incidents from his varied experiences. It included three very important statements regarding the relationship of pharmacists to the Law.

First, under law, a pharmacist is responsible for the dosage of the medicine dispensed. Not only must he use care to see that the dose properly ordered by the physician is properly dispensed but he must check also the accuracy of the physician's order regarding dosage.

Second, the pharmacist is responsible for the purity and quality of the medicines he dispenses in so far as can be expected from a reasonable professional skill and judgment. The speaker quoted as an example a case where Phenacetin was ordered and the prescription was filled from a recently opened pound bottle labeled "Phenacetin" and bearing the name of a well-known manufacturer. It was subsequently proven beyond question that the material in the bottle was strychnine. The pharmacist, however, was not held responsible for the death of the patient but rather the manufacturer. The court held that the examination of every package of medicine purchased by the pharmacist for quality and purity was more than ordinary judgment and professional skill would require of the pharmacist.

The third precaution to be observed by the pharmacist was the danger of counter prescribing. Dr. Webster explained that the law indicated that if a customer inquired of the pharmacist for a remedy for a particular disease or condition, the pharmacist was quite within his legal rights to dispense and sell to the customer any item that he considered useful. If, however, the prospective customer stated his symptoms and requested the pharmacist to prepare him medicine to relieve these symptoms and the pharmacist did so, it would be considered as the prescribing of medicines and would be in direct conflict with the medical practice act. Not only, however, would this transaction be a breaking of the medical law but in case of any harmful action of the medicine on the patient, the pharmacist would be held under the poison laws.

#### MAY MEETING.

The 151st meeting of the Chicago Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION was held at the University of Illinois, School of Pharmacy Bldg., Friday evening, May 8, with an audience nearly filling the lecture hall. The subject of the meeting was "Cod Liver Oil."

Prof. C. M. Snow presented Dean Day's introductory paper discussing the origin and preparation of Cod Liver Oil illustrated by charts and pictures and with an exhibit from the E. L. Patch Co. of Boston, Mass., recently presented to the University of Illinois, School of Pharmacy.

#### COD LIVER OIL.

BY WILLIAM B. DAY.

It is difficult to determine the period at which cod liver oil first came into use as a remedy, but there can be no doubt that it dates back for many centuries, as old records show that Greenlanders, Laplanders and Esquimaux were acquainted with its virtues long before they came in touch with civilization. The modern use of the remedy dates from the eighteenth century, though it is only within the last eighty years that it has come into importance as a medicine in our own country.

From a commercial standpoint most of the cod liver oil that enters commerce comes from Norway and Newfoundland and the smaller part from Massachusetts. This is not for the reason that cod fishing is confined to these localities, but rather that their shore fisheries enable the working up of the cod livers soon after the fish are caught and therefore the production of a good quality of the oil. Some advantage is claimed for Newfoundland over Norway in this respect, though the Norwegian oil is more widely known abroad. In the Norwegian fisheries there are two distinct seasons; an early season lasting from January to April during which fishing is most active near the Lofoten Islands and a later season continuing from May until August when the fishing centers about Finmarken. In the earlier season the catch is generally mature cod which spawn on the banks at that time, while during the later season the catch is a mixture of cod, haddock and coalfish. On the other hand the Newfoundland catch consists almost entirely of cod fish and the principal Newfoundland season is during the summer months though some cod are caught in the winter and spring. The food of the cod varies with the season, consisting generally of caplin, squid and herring.

It has been conjectured that the vitamin content of cod liver oil is in part dependent upon the food, and the statement has been made that the oil obtained from cod livers at the time that the fish are feeding upon caplin is especially rich in the anti-rachitic vitamin.

The fish range in length from sixteen inches to twenty-two inches, though occasionally much larger specimens are caught. The average weight is about eight to ten pounds. The livers vary considerably in size, but will average about one pound in weight and when the fish are healthy and fat the livers are cream colored and quite soft. The oil is obtained by cooking the livers in a steam jacketed kettle, straining, and subsequently refining the oil by chilling it and straining out the stearin. An inferior grade of oil is obtained by expressing the "blubber" remaining after the first operation, but this oil is darker in color and is not used for medicinal purposes. The production of cod liver oil in Newfoundland is directly controlled by the Ministry of Marine and Fisheries, and every manufacturer must hold a license issued by the government. Strict rules are laid down by the government concerning the distribution of the oil so as to insure a uniform product prepared under proper conditions. The cod liver oil thus prepared is filled into barrels which are lined with tin, and exported in this form.

B. R. Harris read a paper on the chemical constituents of Cod Liver Oil Extracts and presented a summary of the data obtained on Gaduol and Jecorrol. Both of these papers were received for publication in the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

Dr. Bernard Fantus discussed the therapeutics of Cod Liver Oil. He stated that recent investigations indicated that Cod Liver Oil contained not only the growth-stimulating vitamin known as Vitamin "A" but also another vitamin which has special curative values in connection with rickets and known as Vitamin "D," or the antirachitic vitamin. Butter is rich in Vitamin "A" but poor in Vitamin "D." Coconut oil contains no Vitamin "A" but is quite rich in Vitamin "D." However, no other known natural substance is so rich in Vitamin "D" as Cod Liver Oil. Rickets is a disease of civilized life. It is more common in winter than in summer. It has been found that fresh air treatment is a potent remedy for the disease and that plenty of outdoor sunshine cures as well as does Cod Liver Oil. Finally, it has been demonstrated that the violet and ultra-violet rays from quartz lamps have the same curative value as sunshine. This might lead to the conclusion that ultra-violet rays and vitamin "D" have something in common in their curative powers.

Very recent investigations indicate that foods and certain fats naturally devoid of Vitamin "D" acquire this curative agent upon being irradiated with ultra-violet light for thirty minutes and that Vitamin "D" can be synthesized right before your eyes. Probably all vitamins are formed by plants and are essential to proper growth and cell proliferation in plants. Sea algae, especially those on or near the surface of the water, absorb the ultra-violet rays. Small fish eat these algae and concentrate or store these ultra-violet rays in their fats. Codfish consuming these small fish concentrate and store in the fat of the liver in the form that we now know as Vitamin "D," these same ultra-violet rays. It is known that the yolk of egg is also rich in Vitamin "D" and that milk likewise contains Vitamin "D."

The question now arises as to how Vitamin "D" acts as a curative agent. Are ultra-violet rays emitted upon the oxidation of oils containing Vitamin "D?" Perhaps cell proliferation in neither animals nor plants can be properly accomplished without these emanations. It would seem as though rapidly growing tissue especially needs these ultra-violet rays. Rickets as well as certain other diseases such as tuberculosis and some skin diseases seem to be benefited by cod liver oil due to the increased proliferation of cells.

While it is true that ultra-violet ray treatment and sunlight treatment are very valuable, the fact remains that cod liver oil as a therapeutic agent occupies a very high place in curative medicine which it probably will retain.

It has been found possible to disguise the disagreeable taste of cod liver oil to quite an extent especially if a fine grade of oil such as Moeller's Oil is used. The following formula is suggested by Dr. Fantus and Professor Snow for disguising the taste.

Benzosulphinid.....	0.05
Coumarin.....	0.001
Vanillin.....	0.10
Dehydrated Alcohol.....	2.00
Oil Bitter Almond.....	0.05
Oil Lemon.....	1.00
Oil Orange.....	0.10
Cod Liver Oil.....	100.00

The saccharin, coumarin and vanillin should be dissolved in the absolute alcohol and mixed with the volatile oils and then incorporated in the Cod Liver Oil. If U. S. P. alcohol is used the water present will cause a cloudiness

of the oil. Some such formula should be introduced into one of our standard formularies.

In the splendid discussion which followed, A. K. Epstein suggested that instead of using oil of lemon, the terpeneless oil be used in about one-twentieth the quantity and further that Oil of Noroli (terpeneless) in small quantity be added. Mr. Epstein also discussed the paper on cod liver oil extracts and stated that such extracts containing apparently the full Vitamin "A" content of the oil had been prepared in which the volume of extract represented 50,000 volumes of the oil. Extracts representing from 10 to 40 volumes of oil were on the market and some of them at least were rich in Vitamin "A" and Vitamin "D." He stated further that emulsion of cod liver oil prepared with Irish Moss as an emulsifying agent rather rapidly lost its vitamin content even to the extent of fifty per cent, while emulsions prepared with tragacanth apparently retained the full vitamin content of the oil. He stated that it was very important that standards be established for Cod Liver Oil Extracts.

Others spoke of the removal of the objectionable fishy odor and taste by filtering the oil through powdered, roasted coffee. It was explained, however, that ground coffee, as other adsorptive materials, might remove the vitamins as well as the disagreeable and irritating amines from the cod liver oil. At least this point should be investigated before the practice of filtering the oil through adsorptive materials was adopted.

The point was made in connection with cod liver oil extracts, that these very concentrated vitamin preparations would undoubtedly be prone to lose their vitamin powers. It seems as though a large bulk of bland oil tends to preserve these substances from oxidation and loss of ultra-violet radiations.

Mr. Harris brought out the theory that the ultra-violet radiation might act catalytically to bring about calcium and phosphorus digestion which seems to be so essential to cell proliferation.

Samples of Cod Liver Oil prepared after the formula suggested by Fantus and Snow were distributed to the audience for noting the odor and taste. Likewise samples of Patch's flavored cod liver oil were distributed.

Some comment was made that the Fantus-Snow preparation was somewhat too sweet, but otherwise it was highly approved. Upon vote it was unanimously declared to be a great

improvement over the natural medicinal cod liver oil.

E. N. GATHERCOAL, *Secretary.*

#### DETROIT.

The April meeting of the Detroit Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION was held on the 24th, at Ann Arbor, Michigan. Dean Kraus, of the Pharmacy Department of the University of Michigan, met the members at the Michigan Union where an excellent dinner was served. Thirty members and guests were present at the dinner.

After dinner the members gathered at the Pharmacy and Chemistry Bldg. of the University where their number was increased to 50.

President Chostner called the meeting to order at 8:15 P.M. The minutes of the previous meeting were read by the Secretary and approved. President Chostner appointed a nominating Committee to report at the May meeting to be held at Detroit, at which time election of officers will take place. The members appointed to serve on this Committee were Messrs. Leonard Seltzer, C. A. Weaver and John H. Webster.

President Chostner then introduced the speaker of the evening Dr. Howard B. Lewis, professor of Physiological Chemistry at the University of Michigan. Professor Lewis gave a very interesting talk on Insulin and its application. He accompanied his lecture with blackboard illustrations.

President Chostner then thanked Dr. Kraus for his hospitality and Professor Lewis for his highly educational and interesting talk.

After a rising vote of thanks by the assembly the meeting adjourned. An inspection tour was made through the newly-equipped Pharmacy Laboratories of the U. of M.

#### MAY MEETING.

The May meeting of the Detroit Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION was held at the Wayne County Medical Society Friday, May 15th.

After an unusually good chicken dinner the meeting was called to order by President Chostner at 8:15 P.M.

The minutes of the April meeting were read and approved. The President then called for a report of the various committees of the past year. The absence of Treasurer Ingram forced a postponement of the reading of the financial statement. The only report being

available from the Treasurer Ingram, from London, was read by Mr. Webster as follows: "Very wet, especially the weather!"

Mr. Hall made a report of progress for the Membership Committee.

Mr. Seltzer then made an appeal for the All Pharmacy Building of the AMERICAN PHARMACEUTICAL ASSOCIATION, he was assisted by Mr. Webster in his earnest appeal for support of this good cause.

The committee on nominations, through Chairman Mr. Seltzer, reported the following nominees for officers for the ensuing year:

*President*, L. H. Rowe.  
*First Vice-President*, R. H. Blair.  
*Second Vice-President*, L. E. Weaver.  
*Treasurer*, F. F. Ingram, Jr.  
*Secretary*, B. A. Bialk.  
*Chairman of Program Committee*, R. T. Lakey.

The nominees were unanimously elected.

W. A. Hall then proceeded with the annual prescription clinic which was intensely interesting and profitable.

Mr. Seltzer then, at the request of the assembly, gave a short outline of his system of Prescription Pricing. This talk proved so interesting that the assembly favored another meeting for discussion of the subject.

Mr. Seltzer's pricing idea was a very interesting one from the standpoint of the Pharmacist, who is saved a lot of embarrassment by following his set rule of prescription pricing.

President Chostner then thanked the speakers for the very interesting talk and after a short address of appreciation for the honor that the Branch had conferred on him, he gave over the chair to the President-elect L. H. Rowe.

Mr. Rowe thanked the members for the honor of having been chosen President. The meeting was then adjourned.

BERNARD A. BIALK, *Secretary*.

#### UNIVERSITY OF NORTH CAROLINA.

The twenty-fourth meeting of the University of North Carolina Branch of the A. Ph. A. was held in Davie Hall on the evening of May 5.

Professor H. R. Totten, of the University department of Botany, delivered a most interesting and unusually instructive address on the Great Botanic Gardens of the World. The lecture was profusely illustrated with lantern slides.

This excellent collection of slides included garden views and drug plants from the following botanical gardens: Oxford, Chelsea, Kew, Regent's Park, Edinburgh, Copenhagen, Stockholm, Amsterdam, Leyden, Gröningen, Brussels, Berlin and Dahlem, Dresden, Paris, Bern, Vienna, Cairo, Calcutta, Ceylon, Buitenzorg, Surinam, Ottawa, Missouri, New York, Brooklyn, and the Arnold Arboretum.

The association is indebted to Dr. Caswell A. Mayo, of the Wm. S. Merrell Co., of Cincinnati, for the loan of the slides and his notes on this subject.

The lecture met with such a favorable reception that Prof. Totten was asked to repeat it before a joint audience consisting of the public school children, the Boy Scouts, and members of the Community Club, of Chapel Hill.

The twenty-fifth meeting of the University of North Carolina Branch of the A. Ph. A. was held in Person Hall on the evening of May 22.

The following officers were elected to serve the Branch during 1925-26: *President*, F. H. Scroggs; *First Vice-President*, K. V. Franklin; *Second Vice-President*, F. O. Garren; *Secretary and Treasurer*, W. J. Lindeman.

After the business session Prof. E. V. Kyser of the School of Pharmacy spoke on "The Branch and Its Relation to Pharmacy in North Carolina." He pointed out the growth of the National Association in North Carolina during the three years since the Branch has been organized. He stated that the membership in this state had grown from a normal yearly membership of twenty-five or thirty to a membership of over two hundred, and further that the State had moved up in its rank among the states from fortieth to sixth place in total membership in the National Association. In conclusion Professor Kyser made the plea that members who are graduating this year should retain their membership and become active in the affairs of the organization. He suggested that some time should be given to thought of the professional side of drug store life and that he hoped that members would develop the habit of contributing papers to the national journal, and finally that they should retain their membership to help the state association maintain their quota in the national body.

The Carolina Inn was the scene of one of the most brilliant social events of the season when the Kappa Psi Fraternity gave its annual dance there May 9. The ball room was tastefully decorated in the fraternity colors, scarlet and

gray. The North State Eight furnished the music for the occasion, and it was unusually good.

Many out-of-town girls were in attendance. During the evening a special number was played for the members of the fraternity and their partners, and at this time beautiful hammered silver perfume vannedes were given as favors.

The dance was one of the most colorful and enjoyable social affairs ever given at the Carolina Inn, which has become the University's social center of activities.

#### NORTHERN OHIO.

A regular meeting of the Northern Ohio Branch of the A. Ph. A. was held at the School of Pharmacy, Western Reserve University, April 28th, 1925.

The meeting was called to order by President Willard Fox. Dr. Arthur C. DeGraff, a member of the faculty of the School of Pharmacy and Crile Research Fellow in Physiology of Western Reserve University Medical School, was introduced as speaker of the evening. His subjects were "Digitalis" and "Insulin."

The history, methods of assay and clinical use of digitalis were interestingly discussed by the speaker, especial emphasis being laid on the cat method of assay. This method, in the opinion of the speaker, is much more accurate than the frog method and the more logical of the two. The official tincture is preferred above all other digitalis preparations, regardless of the claims made for many special formula preparations. The tincture does not deteriorate, so far as its real medicinal virtue is concerned, if properly kept, for a year after preparation. It is driving out of use the preparations of the other members of the digitalis group. The infusion has no real merit above that of the tincture; however, contrary to the general opinion, it will retain its virtue for a week or ten days, if properly stored.

As regards Insulin, the speaker emphasized the fact that it cannot be considered a cure, except, perhaps, in youthful people. It has wonderful value in acute cases of diabetes. In chronic cases diet still plays the important rôle, insulin being a useful adjunct.

After his very instructive talk Dr. De Graff generously answered a number of pointed questions on the subjects discussed.

M. T. CHAMBERLIN, *Acting Secretary.*

#### UNIVERSITY OF WASHINGTON.

The February meeting of the University of Washington Branch was held at Bagley Hall, February 19, 1925. Dr. McLaughlin, city health commissioner, was the speaker of the evening. He presented in detail the scope and divisions of the Health department and the duties of each division. Many special incidents were enumerated, from garbage disposal to sanitarium control.

S. F. Worswick, representative of the Taylor Instrument Company, was the speaker at the March meeting of the University of Washington Branch. The information given by Mr. Worswick on the manufacture, testing, grading, etc., of clinical thermometers offered many selling points for the retailer, besides being of popular interest. "How to Take a Bath" seems to be a specialty talk of the speakers. Apparently best results are obtained if the temperature of the water is controlled and of course a "Taylor Bath Thermometer" is a necessity then.

The speaker at the April meeting of the University of Washington branch was Dr. Simpson, bacteriologist for the State Board of Health. He discussed various types of contagious diseases and disease carriers. Methods used in determining the source of contamination of milk and water supplies were given. Tubes were displayed showing characteristic bacterial growth. Water and sputum containers and various antitoxins were also shown. Materials for sterilization and disinfection handled by the druggist were found to be numerous.

H. V. SNIDOW, *Secretary.*

#### A SUPREME COURT OF NATURE.

William Feather, in "Business Philosophy," says,—“If we would only realize that there is a supreme court of nature we would save ourselves many disappointments. Nature says that capital shall have a fair return. If this return is not forthcoming, no capital is available for additional equipment or extensions. Then we have paralysis of industry. We are not saying that public regulation is not the right thing, but we know that the investor is a human being and that unless he gets a proper return on his money he will refuse to advance capital.”