

EDITORIAL NOTES

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CRITICISM OF SALVARSAN EDITORIAL IN DECEMBER ISSUE.

F. W. E. Stedem writes:

"I wish to register an objection to a statement in the December issue. On page 1137 the writer of the Salvarsan article makes the statement that some of the miseries and calamities of the recent war are partly compensated for through the reduction in price of Salvarsan by American makers, and the breaking of a monopoly. This is not a fact (meaning as to charges and prices). The price of German Salvarsan prior to the outbreak of the war was less than that now charged for an article manifestly inferior.

"I am very much afraid that the writer of the Editorial would have a hard time convincing any very large proportion of the mothers and fathers of the soldiers of our country who bore arms or served otherwise that any remedy of any kind, for any purpose, at any money price, would or could compensate for such sacrifices.

"Is there not also a very grave and reasonable suspicion that the supposedly lower toxicity of our home-made product is really due to the fact that some of the arsenic is lost and not really in combination as supposed?"

MINERAL CONSTITUENTS OF DRUGS.

Kunz-Krause (*Archiv. d. Pharm.*, 258, 183) report the aqueous extract from a genuine cascarilla bark as 4.34 percent, calculated on the bark dried over sulphuric acid. Other published figures varied from 4.80 to 13.25 percent. The ash amounted to 11.85 percent; this requires great care and repeated moistening with ammonium nitrate. The ash had the following composition: (I) Soluble in water, K, Na, Cl, SO₄; (II) soluble in hydrochloric acid, CaCO₃, AlPO₄, FePO₄;

insoluble in hydrochloric acid, SiO₂. The tincture (1 in 5, with 70% alcohol) yielded about 3 percent of dry extract. The chlorine in the ash was determined by dissolving it in diluted nitric acid and titrating with $\frac{N}{10}$ silver nitrate; it amounted to 0.516 percent, calculated on the dried bark. The chlorine is entirely water-soluble. It may readily be determined in aqueous extractions by adding silver nitrate and ferric ammonium sulphate, strongly acidifying with nitric acid, warming, and dropping in strong solution of potassium permanganate until the color changes to pale yellow; the excess of silver may then be determined by Volhard's method. Aqueous extracts (solid) of cascarilla bark were found to contain 8.95 and 15.01 percent of KCl, which occurred in the extract in cubical crystals. Cascarella bark may be regarded, therefore, as a "chloride drug," while henbane belongs to the "nitrate" drugs, and stramonium occupies an intermediate position. According to Burmann (*Ber. d. deutsch. pharm. Ges.*, 30, 376) manganese is a constant constituent in *Digitalis purpurea*, but is not present in *D. ambigua* or *D. lutea*. Webster has now examined a number of species of digitalis, including the three mentioned above, and has found manganese in all of them. In the leaves of *D. purpurea*, the proportion present varies from 0.94 to 8.12 mg. in 100 Gm. of dried leaves. The foregoing are taken from abstracts in the *Pharmaceutical Journal and Pharmacist*, December 18, 1920, p. 538.

THE CHEMISTRY OF ERGOT.

Prof. G. Barger, of the University of Edinburgh, in an address before the North British Branch of the Pharmaceutical Society of Great Britain, spoke on Ergot, its history and chemistry. The *Chemist and Druggist*, of November 27, reports the address; a summary of

our present knowledge of the chemistry of ergot is reprinted:

The chief active principles are: (a) The amorphous alkaloid ergotoxine, $C_{35}H_{41}O_6N_5$, yielding crystalline salts. It is identical with hydroergotinine of Kraft and with Tanret's amorphous ergotinine. Its physiological properties have been described by Dale, and he produced gangrene with it. (b) Histamine = $\text{—iminazolyethylamine} = \text{ergamine } C_8H_9N_2$. Its presence as such in ergot has been demonstrated by physiological means within half an hour of collecting it from the rye, but the amount in liquid extract is probably increased by such processes as prolonged extraction and dialysis. It is a powerful uterine stimulant. (c) Tyramine = *p*-hydroxyphenylethylamine, $C_8H_{11}ON$. It is the chief blood-pressure raising principle of the liquid extract. (d) Acetylcholine, $C_7H_{17}O_2N$, occurs in ergot and some ergot extracts in varying and mostly negligible amounts. It lowers the blood pressure, and is very readily hydrolyzed by sodium hydroxide. Physiologically inert substances so far found only in ergot are: The crystalline alkaloid ergotinine, $C_{33}H_{39}O_5N_5$, of Tanret. It is the anhydride of ergotoxine and the two alkaloids are mutually interconvertible. Ergothionine, $C_9H_{15}O_2N_3S_2 \cdot 2H_2O$, isolated by Tanret; for constitution see Barger and Ewins (*Trans. Chemical Society*, 99, 2336, 1911). Secale aminosulphonic acid ($C_{15}H_{26}O_{15}(NH_2)SO_3H$), crystalline, water-soluble. Secalonic acid, $C_{14}H_{14}O_6$, m. p. 244° , a crystalline yellow coloring matter, present to the extent of 2 percent. Another yellow coloring matter, $C_{16}H_{14}O_7 \cdot H_2O$, m. p. 350° . Selererythrin is the characteristic red coloring matter. Clavicepsin, $C_{18}H_{34}O_{16}$ is, according to Marino-Zucco and Pasquero, a glucoside, hydrolyzed to two molecules of glucose and one of mannitol. Ergosterol, $C_{27}H_{44}O \cdot H_2O$, m. p. 165° , and fungisterol, $C_{26}H_{40}O \cdot H_2O$, m. p. 144° , are two sterols separated by Tanret. The second at least seems to occur also in other fungi. Besides this, ergot contains a large number of substances of general physiological importance also found elsewhere. The fat of ergot (mostly 30.33 percent of its weight) has been examined by Rathje. Various amino-acids are present in the free state—*e. g.*, lucine, isolucine, and valine, probably aspartic acid. Several amines derived from amino acids by decarboxylation occur; the most active of these, histamine and tyramine, have already been mentioned. Much less active are putrescine and cadaverine,

isoamylamine, and agmatine. Choline in ergot is the source of trimethylamine. Betaine and uracil were found by Rielander, the former also by Kraft. Vernine, $C_{16}H_{20}O_8N_8 \cdot 3H_2O$, occurs also in leguminous seedlings. There are further present lactic acid, mannitol, and the disaccharide trehalose.

USE OF SILICATES IN MEDICINE.

Professor Sartory (of Strasbourg University), M. Scheffler (of St. Etienne), and M. Pellissier, who have studied the use of silicates in therapeutics, reported the results at the last meeting of the Academy of Sciences, Paris. Intravenous injection of sodium silicate has hitherto been considered dangerous, but the authors, who experimented first on guinea-pigs and rabbits, and finally on the human subject, state that such injections—commencing with a milligramme daily and finishing with 1 centigramme—are supported without ill effect, either immediate or subsequent. The chemical is useful in arteriosclerous and cardiorenal cases. Arterial tension is reduced, blood viscosity is lowered (it sometimes increases, but always to fall to normal afterwards), dyspnoea diminishes and general vitality improves.—*Chemist and Druggist*, Nov. 27, p. 77.

PERSONAL AND NEWS ITEMS.

The Corporative Association of Pharmacists of the Reserve and Territorial Armies of France has provided for quarterly lectures during 1921. Pharmacist-Major Moreau will take up Medicaments, and describe the organization and working of an Army Reserve; Pharmacist-Major Becker will treat of Chemical Analysis for Army Purposes; Pharmacist-Major Rousseau is to explain the organization, etc., of a Sterilization Service.

Professor Bruntz, dean of the Nancy Faculty of Pharmacy, has been appointed Chevalier of the Legion of Honor.

The Paris Society of Pharmacy offers two gold and two silver medals, to which are added prizes of the founders: The Dubail (300 francs) for biological chemistry; Charles Le-Roy (500 francs) chemical analysis of a medicinal plant or medicament of the vegetable origin; Landrin (900 francs) research on acids, alkaloids, or glucosides; Pierre Vigier (500 francs) practical pharmacy.

Accidents on French submarines were found to be due to arseniuretted hydrogen, produced by storage batteries. Investigations were

conducted by **M. M. Henry and Lasterlin**, pharmacist-chemists of the French Navy, and **Pharmacist-Major Javillier**. Apparatus was designed for absorption of the toxic gases.

The death of **Prof. Armand Jorissen**, member of the faculty of the College of Pharmacy, University of Liege, has been announced. He was born at Liege in 1853. He became a member of the faculty in 1877, and was dean of the college for many years.

Prof. M. A. K. Damberghis, professor of pharmaceutical chemistry at Athens, died in November. He was a member of the International Conference for the Unification of Heroic Medicaments, leading compiler of the Greek Pharmacopoeia, and author of a work on Pharmacography.

Sir James Dobbie, principal of the British Government Laboratories since 1909, has retired. He is best known by his work on the constitution of alkaloids, and on the relation between the chemical structure and the absorption spectra of organic compounds.

Ex-President J. U. Lloyd, of the American Pharmaceutical Association, has been seriously ill with pneumonia. Last reports, about the first of January, were encouraging and gave assurance that he would soon be well.

Governor Coolidge has appointed **John M. Kelleher** to the Massachusetts Board of Pharmacy.

Announcement has been made of the re-appointment of **Edward H. Walsdorf** to the Louisiana Board of Pharmacy, by Governor Parker.

R. F. Grace, chairman of the Louisiana A. Ph. A. membership committee, has been visiting a number of the larger cities of the South, in the interest of the New Orleans meeting of the American Pharmaceutical Association. Much interest was exhibited and promises were made for a representative attendance.

"Rambling through the Orient" was the subject of an illustrated address by **Dr. Jacob Diner** before the December meeting of the New York Branch, A. Ph. A. He visited Japan, China and the Philippine Islands. His daughter, **Dr. Irene C. Diner**, previously attached to the division of industrial chemistry at New York University, New York City, has become associated with the research division of the Chemical Warfare Service, in the capacity of associate chemist working on rubber problems.

Ira B. Clark, Nashville, Tenn., celebrated his twenty-fifth anniversary in the drug business by a reception tendered his friends and patrons at his store on the corner of Woodlawn and Fifth Streets. Mr. Clark served for several years as a member of the State Board of Pharmacy and for seventeen years was a member of the County Court.

F. A. Upsher Smith, of St. Paul, has succeeded the late Chas. W. Drew as director of the Minnesota Institute of Pharmacy. He was for a number of years assistant to Prof. H. G. Greenish.

Edgar Fahs Smith, Ph.D., former provost of the University of Pennsylvania, has been elected president of the American Chemical Society.

Huston Thompson, of Colorado, became chairman of the Federal Trade Commission December 1, 1920, for a term of one year. Mr. Thompson, who was vice-chairman during the past year, succeeds to the chairmanship under the rule of the Commission, which provides for rotation in the office of chairman among the several commissioners.

J. H. Wurdack has been appointed Assistant Professor of Chemistry in Pittsburgh College of Pharmacy.

Turner F. Currens, Manager of the New York Branch of The Norwich Pharmacal Company, was recently elected a director of that organization to fill the vacancy created by President Stofer's death.

C. O. Ewing, assistant chief chemist of the United Drug Company, has returned from a two months' stay in England, where he inspected the analytical and chemical manufacturing department of Boots Pure Drug Company. He states that the larger stores resemble progressive American stores; the pharmaceutical side is more pronounced in most of them.

"Your Druggist Is More than A Merchant."

This is the slogan that appears on an electric sign 115 feet long and 31 feet high, on the roof of the office building of Johnson and Johnson, New Brunswick, N. J.

"This sentence—Your Druggist Is More than A Merchant—aroused such favorable comment from the trade," says the Johnson and Johnson house organ, "that we have introduced it in our national advertising. It has opened new lines of thought about the druggist and his business."

The *Philadelphia Bulletin* has daily advertising messages; from one of these the following paragraphs are re-printed:

Advertisements have established standards of quality for nearly everything. You insist

on that quality when you buy—perhaps unconscious of the fact that advertising has implanted that standard of quality in your mind.

Your local merchants deserve your support and patronage. Read their advertisements.

OBITUARY.

PAUL G. SCHUH.

On November 30th, at 5.35 P. M., Paul G. Schuh, president of the Schuh Drug Company, Cairo, Illinois, up to December 1919, and president emeritus since that time, died of the infirmities of old age. He was born on January 9, 1838, in Leidringen, Württemberg, Germany, and came to this country as a boy of fifteen. He learned the drug business in the store of his brother Herman, in St. Louis, Mo., and in 1863 started for himself in the retail drug business at Cairo, Illinois. In 1893 he incorporated the Schuh Drug Company as a wholesale establishment and was active in its management until a few years ago, when ill health forced him to relinquish active duties.

Mr. Schuh was well and favorably known to the entire drug trade of the United States,

and, prior to ten years ago, was a regular attendant at the meetings of the American Pharmaceutical Association. He affiliated in 1894.

FREDERICK W. SCHULTE.

F. W. Schulte died November 15, 1920, at the residence of his daughter in Mannheim, Germany, in his seventy-ninth year. He left New York for Germany on October 1, 1920, to visit his children and relatives. He had been connected with the New York offices of Fritzsche Brothers since April 4, 1904.

LOUIS E. FEINDT.

We are also advised of the death of Louis E. Feindt, of South Orange, N. J. At this writing we have no particulars from which to prepare a more extended notice. Mr. Feindt joined the Association in 1906.

SOCIETIES AND COLLEGES.

DETROIT A. PH. A. BRANCH.

METHOD FOR STIMULATING ATTENDANCE.

Most local organizations find that social features stimulate attendance. The Detroit A. Ph. A. Branch has promoted the plan by selling season tickets for informal dinners preceding its sessions. In this way a nucleus for attendance has been practically assured, as twenty-five season tickets were at once disposed of. Those who do not desire to participate in the dinner are not compelled to do so, but many members who attend prefer to remain down town and enjoy the sociability provided in this way.

NATIONAL DRUG TRADE CONFERENCE.

MEETING OF DECEMBER 7, 1920.

The eighth annual convention of the National Drug Trade Conference was held December 7 at the New Willard Hotel in Washington, D. C., the member organizations of the body being represented as follows:

American Pharmaceutical Association, John C. Wallace, S. L. Hilton and J. H. Beal; National Wholesale Druggists' Association, C. Mahlon Kline, C. W. Whittlesey and Frank

Holliday for Charles W. Gibson; National Association of Retail Druggists, Samuel C. Henry, James F. Finneran and Eugene C. Brokmeyer; American Association of Pharmaceutical Chemists, Dr. A. S. Burdick for Dr. W. C. Abbott, and J. H. Foy for B. L. Maltbie; American Drug Manufacturers' Association, W. A. Sailer, Charles M. Woodruff for C. J. Lynn, and W. J. Woodruff; The Proprietary Association of America, Frank A. Blair for H. K. Fernald, Joseph H. Hinds for Philip Heuisler, and H. B. Thompson; National Association of Boards of Pharmacy, H. C. Christensen, and W. T. Kerfoot, Jr.; American Conference of Pharmaceutical Faculties, Wortley F. Rudd, E. Fullerton Cook, and Theodore J. Bradley.

The privileges of the floor were extended to W. L. Crouse and other representatives of pharmaceutical associations and members of government bureaus.

President Samuel C. Henry occupied the chair, and Secretary-Treasurer W. J. Woodruff was at his post.

It was moved and seconded and carried that the minutes of the previous meeting be approved as published.