BIBLIOGRAPHY OF PHARMACEUTICAL RESEARCH

Compiled by A. G. DuMez, Reporter on the Progress of Pharmacy.

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APPARATUS AND MANIPULATIONS.

Hoek, H.

Berkefeld sieve-filter

Apoth.-Ztg., 47 (1932), 318

Thomann, J.

Sterilization methods of the Swiss Pharmacopæia V

Pharm. Acta Helv., 7 (1932), 25

PHARMACEUTICAL PREPARATIONS.

De Sanctis, Gioacchino

Preparation of laudanum and methods of titration of morphine in opium

Officina, 4 (1931), 131; through Chem. Abstr., 26 (1932), 1708

Ihbe, Heino

Contribution to the improvement of the method for making fluidextracts

Pharm. Ztg., 77 (1932), 276

Maxwell, Norman V.

Tincture of defatted cochineal

Pharm. J., 128 (1932), 183

Milne, George R., and Todd, Robert M.

Glycerite of boric acid prepared under reduced pressure

Pharm. J., 128 (1932), 186

Schaap, O. P. A. H.

Note on the preparation of suppositories

Pharm. Weekbl., 69 (1932), 208

Voigt, J.

Gum acacia as a protective colloid for colloidal silver

Pharm. Zentralh., 73 (1932), 103

PHARMACOLOGY, TOXICOLOGY AND THERAPEUTICS.

Bauer, K. H., and Rauscher, K.

Absorption of intestinal gases with adsorgan, silargel, argocarbon, etc.

Pharm. Zentralh., 73 (1932), 131

Dietzel, R., et al.

Characteristics and disinfectant action of adsorptive disinfection

Apoth.-Ztg., 47 (1932), 244, 261, 283

Elvehjem, C. A.

Relative value of inorganic and organic iron in hemoglobin formation

J. A. M. A., 98 (1932), 1047

Eschenbrenner and Kohn

Contribution to the pharmacology of the propyl ester of p-oxybenzoic acid (nipasol)

Pharm. Ztg., 77 (1932), 275

Ginsburg, H. M., and Nixon, C. E.

Report of 11 cases of thallium poisoning

J. A. M. A., 98 (1932), 1076

Greengard, Joseph, and Kluver, Cessa

Value of liver extract and iron in the anemia of young infants

J. A. M. A., 98 (1932), 1069

Hartman, Frank A., et al.

Treatment of Addison's disease with extract of suprarenal cortex

J. A. M. A., 98 (1932), 788

Hecht, Walter

Bioclimatic experiments to investigate the causes of therapeutic variations in drug plants

Heil- u. Gewürz-Pflanzen, 14 (1931), 15; through Chem. Abstr., 26 (1932), 1388

Klarmann, Emil, et al.

Bactericidal properties of monoethers of dihydric phenols

J. Am. Chem. Soc., 54 (1932), 1204

Macdonald, A. D., and Israëls, M. C. G.

Estimation of the relative toxicities and efficiencies of local anesthetics

J. Pharmacol. & Exper. Therap., 44 (1932), 359

Malonez, A. H., and Tatum, A. L.

Picrotoxin as an antidote in acute poisoning by the longer acting barbiturates

J. Pharmacol. & Exper. Therap., 44 (1932), 337

Read, R. R., and Miller, Ellis

Some substituted phenols and germicidal activity

J. Am. Chem. Soc., 54 (1932), 1195

Rehberg, P. Brandt

Heart hormones

Dansk Tids. Farm., 6 (1932), 41

Stasiak, Aranka, and Rigó, Laszló Stability of commercial extracts of the posterior lobe of the pituitary

Magyar Gyógyszerésztud. Társaság Értesitője, 7 (1931), 507; through Chem. Abstr., 26 (1932), 1709

Travell, Janet

Contribution to the pharmacology of pseudomorphine

J. Pharmacol. & Exper. Therap., 44 (1932), 123 Wakeham, Glen, and Tracy, George P.

Effect of ultra-violet irradiation upon the toxicity of pure nicotine

J. Pharmacol. & Exper. Therap., 44 (1932), 295

ANIMAL AND VEGETABLE DRUGS.

Bertrand, Gabriel, and De Berredo Carneiro, P. Chemical study of guarana

Bull. sci. pharmacol., 39 (1932), 65 Houser, F.

Contribution to the knowledge of aloin

Pharm. Acta Helv., 7 (1932), 53

Kroeber, Ludwig

Contribution to the study of medicinal plants of Germany

Pharm. Ztg., 77 (1932), 241

Kühn, K. C.

Cantharides

Pharm. Zentralh., 73 (1932), 97

Laursen, A.

Oxidizing enzyme in gum acacia and its inactivation

Dansk Tids. Farm., 6 (1932), 54

Lipták, Pál, and Szahlendar, Károly

Ipecac root from Rio and Cartagena

Magyar Gyógyszerésztud. Társaság Éretsilője, 7 (1931), 493; through Chem. Abstr., 26 (1932), 1709

ALKALOIDS AND GLUCOSIDES.

Béguin, Ch.

Methyl salicylate glucosides

Pharm. Acta Helv., 7 (1932), 40

Bertrand, Gabriel, and De Berredo Carneiro, P. Existence and distribution of caffeine and theobromine in the organs of guarana

Compt. rend., 194 (1932), 26; through Chem. Abstr., 26 (1932), 1707

Bridel, M., and Charaux, L.

Water-soluble purgative from black alder bark, hydrolyzable by rhammodiastase

Compt. rend., 192 (1931), 1269; through Chem. Abstr., 26 (1932), 1707

Ehrenstein, Maximilan

Alkaloids of tobacco

Arch. Pharm., 269 (1931), 627

Ekkert, Laszió

Reactions of arecoline

Magyar Gyógyszerésztud. Társaság Értesitője, 8 (1932), 47; through Chem. Abstr., 26 (1932), 1709

Goris, A., and Chalmeta, A.

Critical study of methods for the alkaloidal assay of coca leaves

Bull. sci. pharmacol., 39 (1932), 69

Issekutz, Béla

Potentiometric titration of alkaloids of the papaverine type

Magyar Gyógyszerésztud. Társaság Értesítője, 7 (1931) 488; through Chem. Abstr., 26 (1932), 1708

Kofler, L., and Aufermann, W.

Influence of drying on the saponin content drugs

Heil- u. Gewürz-Pflanzen, 14 (1931), 1; through Chem. Abstr., 26 (1932), 1388

Majima, Riko, and Morio, Shin-Ichi

A new aconite alkaloid

Proc. Imp. Acad. (Tokyo), 7 (1931), 351; through Chem. Abstr., 26 (1932), 1707

Nunn, Arthur W.

Detection of strychnine in cases of poisoning

Pharm. J., 128 (1932), 145

Papavassiliou, Marie

Some new reactions of the salts of quinine and a new method for the quantitative determination of the alkaloid

J. pharm. chim., 15 (1932), 167

Perelmann, J.

Influence of indifferent powders on the alkaloidal assay of dried belladonna extract

Pharm. Zentralh., 73 (1932), 145

Rindi M

Alkaloids of the bark of Strychnos henningsii

Trans. Roy. Soc. S. Africa 20, Part 1 (1931), 59; through Chem. Abstr., 26 (1932), 1390

OILS, FATS AND WAXES.

Bourdiol, M.

Viscosities of oils at low temperatures

Bull. sci. pharmacol., 39 (1932), 76

Rothe, Otto, and Surerus, Detlef

Identification of chaulmoogric acid in the oil from Carpotroche brasiliensis

Rev. soc. brasil. chim., 2 (1931), 358; through Chem. Abstr., 26 (1932), 1710

ESSENTIAL OILS.

Bennett, A. H.

Characteristics of Sicilian lemon oil of the current season

Perf. & Ess. Oil Rec., 23 (1932), 39

De Santos, Irene, and West, Augustus P.
Pine needle oil from Pinus insularis of the
Philippines

Philippine J. Sci., Vol. 46, No. 1; through Perf. & Ess. Oil Rec., 23 (1932), 36

Penfold, A. R.

Leptospermum citratum oil from New South Wales

Perf. & Ess. Oil Rec., 23 (1932), 35

Will, Hanns

Estimation of essential oils in drugs

Apoth.-Ztg., 47 (1932), 216

Winkler, L. W.

Contribution to the investigation of essential oils

Pharm. Zentralh., 73 (1932), 98

Wührer, J.

Triorthocresyl phosphate in apiol

Apoth.-Ztg., 47 (1932), 232

Zimmermann, Walther

Use of the vanillin-hydrochloric acid color reaction in the examination of essential oils *Pharm. Zentrall.*, 73 (1932), 113

ANALYTICAL METHODS AND RESULTS.

Berg, Richard, et al.

New method for the determination and separation of salicylic acid, saligenin and salicylaldehyde

Chem.-Ztg., 55 (1931), 975; through Chem. Abstr., 26 (1932), 1387

Busi, M., and Collina, C.

Analysis of ethylene for anesthetic use

Atti soc. ital. progresso sci., 19 (1931), 195; through Chem. Abstr., 26 (1932), 1707

Chelsi, Santiago A.

Studies in the Vitali reaction for atropine II Anales farm. bioquím., 2 (1931), 26; through Chem. Abstr., 26 (1932), 1710

Csipke, Zoltán

Test for citric acid in galenical preparations Magyar Gyógyszerésztud. Társaság Értesitője, 8 (1932), 56; through Chem. Abstr., 26 (1932),

1710

Ekkert, Laszló

Reactions of anesthesine

Magyar Gyógyszerésztud. Társaság Értesitője, 8 (1932), 45; through Chem. Abstr., 26 (1932), 1709

Hart, Merrill C., and Emerson, Harold

Quantitative determination of α -dihydroergosterol in ergosterol from ergot

J. Am. Chem. Soc., 54 (1932), 1077

Mikó, Gyula

Titrimetric and new gravimetric determination of the obromine sodium salicylate

Magyar Gyógyszerésztud. Társaság Értesítője, 8 (1932), 34; through Chem. Abstr., 26 (1932), 1709

Mikó, Gyula

Color reaction of aloes with metric acid

Magyar Gyógyszerésztud. Társaság Értesitője, 7 (1931), 499; through Chem. Abstr., 26 (1932), 1709

Mikó, Gyula

Determination of caffeine, pyramidon and phenacetin in the presence of each other

Magyar Gyógyszerésztud. Társaság Értesitője, 8 (1932), 30; through Chem. Abstr., 26 (1932), 1709

Rosenthaler, L.

Brom-acidimetric procedures III

Pharm. Acta Helv., 7 (1932), 45

Rupp, E., and Poggendorf, A.

Preparation of sodium cobaltic nitrite reagent

A poth.-Ztg., 47 (1932), 282

Schorn, Edwin J., and McCrone, Robert M.

Determination of mercuric oxide and mercuric ammonium chloride

Pharm. J., 128 (1932), 187

Ubrig, E.

Practical testing of ampul glass

Pharm. Ztg., 77 (1932), 227

ORGANIC COMPOUNDS.

Dumont, P., and Declerck, A.

Contribution to a study of abasine, allonal, bromural, codeonal, dial, cibalgine, didial, dialacetine, hemypmon, diogenal and declonal, etc.

J. pharm. Belg., 14 (1932), 158, 177

Eisenbrand, J.

Light absorption of certain arsenic compounds of the arsphenamine group

Arch. Pharm., 269 (1931), 683

Hart, Merrill C., and Emerson, Harol β-Ergosterol

J. Am. Chem. Soc., 54 (1932), 1070

Heyl, Frederick W.

Sterols of ergot III

J. Am. Chem. Soc., 54 (1932), 1074

Niederl, J. B., and Matelson, Samuel

Synthesis of thymol, chlorothymol and homologues of thymol

J. Am. Chem. Soc., 54 (1932), 1063

Wagenaar, M.

Microchemical reactions of vanillin and piper-

Pharm. Weekbl., 69 (1932), 190

CLINICAL METHODS AND TESTS.

Patton, H. W.

Simple colorimetric method for the determination of potassium iodide in blood and urine

U. S. Naval Medical Bull., 30 (1932), 214 Schoorl, N. Sugar titration with De Jong's reagent Pharm. Weekbl., 69 (1932), 253

PHYTOCHEMICAL LITERATURE.*

BY EDWARD KREMERS.

With the classification of all natural objects as belonging to one of the three natural kingdoms, mineral, vegetable and animal by Emanuel Koenig in 1682, it became the practice of authors of chemical texts to arrange the *materia chemica* in like manner. A text of far-reaching influence is Lemery's *Cours de Chimie* which first appeared in 1675 and which served as a standard text in many countries for a century and a half. The division on Plant Chemistry in this treatise resembles a text on vegetable materia medica during the second half of the 19th century, rather than a text on phytochemistry. But very few chemical individuals are enumerated by Lemery. Even Berzelius *Lehrbuch*, as late as 1837, still suggests this resemblance though, by that time, many chemical individuals had been isolated from plants and receive due consideration in the text. Still later, in Liebig's *Handbuch der Chemie* of 1843 a goodly share of the section devoted to "Organic Chemistry" is replete with phytochemical material.

With the second half of the 19th century the tendency toward synthetic compounds gained the ascendency. Witness Berthelot's Chimie organique fondée sur la synthese of 1860. After that Kekulé's structural theories prepared the way for a veritable orgy of synthetic organic chemistry. During the fourth quarter of the 19th century, organic chemistry began to share its primacy with physical chemistry and since the beginning of the 20th century, not only inorganic chemists, but organic chemists as well, have been trained largely in physico-chemical methods and have applied the new viewpoint to their researches.

If the chemical developments of the past half century have revealed a strong tendency away from the study of the products of plant life, the latest development has drifted, nevertheless, into an application of both synthetic organic chemistry and physical chemistry to the study of life problems. Thus Emil Fischer is quoted as having stated that "The great and stimulating problems of organic chemistry have their roots in their application to biology." His ambition, it has been said, was to synthesize a sugar, an alkaloid and a protein. accomplished this and much more for phytochemistry though he seldom worked with plants as such. If Emil Fischer has done much for what may be regarded as phytochemical statics, so-called biochemists of to-day are utilizing their physicochemical training in the study of phytochemical as well as zoöchemical kinetics. Both points of attack of the chemistry of plants are equally important. danger in the latter point of view lies in the fact that its methods are not infrequently based on an insufficient knowledge of the chemical individuals involved in the investigation, hence, the interpretation of results may go astray. present biochemical situation is comparable in a measure to the one existing in

^{*} Section on Historical Pharmacy, A. Ph. A., Miami meeting, 1931.