

## BOOK NOTICES AND REVIEWS.

REVIEW OF THE FOURTH EDITION OF THE PHARMACOPOEIA OF JAPAN—  
ENGLISH TRANSLATION.

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The Fourth Revised Edition of the Pharmacopoeia of Japan was completed in May 1920 and appeared in print the following year. It represents the results of the labors of a committee of 21 members, a chairman, and a secretary, appointed by the Minister of Home Affairs. The actual work of revision covered a period of 5 years and 2 months, having been begun in March 1915. In this revision 73 new items were added, 94 items were deleted and 1400 alterations made, besides numerous changes in the terms and wording of the monographs.

The English translation of this Edition is the work of the Publication Committee of the Pharmaceutical Society of Japan. It was completed in March 1922, just 1 year and 10 months after the Committee of Revision finished its labors. This is indeed a remarkable feat, and the members of the Publication Committee having this work in charge are to be commended for the rapidity with which they worked and the high degree of excellence attained. While the English is awkward in places, the meaning is clear in all cases and the usefulness of the volume is in no wise diminished thereby.

The new volume contains a total of 534 pages, 28 of which are devoted to introductory and explanatory notes; 437 to drugs, chemicals and preparations; 20 to reagents and volumetric solutions; 19 to tables; and 30 to the index. The form of arrangement and sequence is very similar to that of the Ninth Revision of the Pharmacopoeia of the United States.

The introductory matter includes, in addition to the historical introduction and preface, a chapter headed "Introductory Notes." This chapter contains details of a specific nature such as a statement defining the arrangement of the material in the monographs; definitions for such terms as *tepid*, *warm*, *hot*, *hot extraction*, *cold extraction*, *parts by weight*, *weighable*, *et cetera*, also definitions for the degree of fineness of comminuted drugs; and directions for determining rotatory power, melting points, congealing points, boiling points, acid values, saponification values, ester values and iodine values.

The main portion, or body, of the book contains the monographs on the official articles. In this portion there are 688 titles arranged alphabetically. Nineteen of these titles are class headings, viz.: *Capsulae*, *Decocta*, *Elaeosacchara*, *Electuria*, *Emplastra*, *Emulsiones*, *Extracta*, *Extracta Fluida*, *Infusa*, *Linimenta*, *Pastae*, *Pastilli*, *Pilulae*, *Pulveres*, *Saturaciones*, *Sirupi*, *Species*, *Spirituosa*, and *Suppositoria*. Under each of these headings, there are given specifications for standards to which the articles of the class should conform or general directions for methods of preparation. The new titles of which there are 73 are: *Acetonum*, *Acidum diaethylbarbituricum*, *Aethylium chloratum*, *Aethylmorphinum hydrochloricum*, *Agar-Agar*, *Antipyrino-Caffeinum citricum*, *Argentum colloidalis*, *Benzaldehydum*, *Benzolum*, *Bismutum jodatum subgallicum*, *Calcium chloratum*, *Calcium lacticum*, *Capsulae*, *Chloroformium pro narcosi*, *Cortex Cinnamomi Loureirii*, *Emetinum hydrochloricum*, *Emplastrum saponatum salicylatum*, *Emulsiones*, *Emulsio Olei Jecoris*, *Electuaria*, *Ferrum sulfuricum siccum*, *Folia Scopoliae*, *Herba Swertiae*, *Hydrargyrum sulfuratum rubrum*, *Kalium sulfoguaajacolicum*, *Lignum Santali album*, *Limonada citrica*, *Limonada hydrochlorica*, *Linimenta*, *Liquor Aluminium acetici*, *Liquor Gelatinae sterilisatus*, *Liquor Hydrogenii peroxydati*, *Liquor Jodi compositus*, *Liquor Kali caustici*, *Liquor Natrii chlorati physiologica*, *Liquor Ringeri*, *Methylenum coeruleum*, *Natrium thiosulfuricum*, *Oleum Arachidis*, *Oleum Pruni armeniacaee*, *Oleum Tsubaki*, *Paraaminobenzoyldiaethylamino-aethanolum hydrochloricum*, *Pastae*, *Pasta Sulfuric cum Pice liquida*, *Pastilli Acidi acetylsalicylici*, *Pastilli Chinini hydrochlorici*, *Pastilli Kalii jodati*, *Pastilli stomachici*, *Phenolphthaleinum*, *Pilulae Acidi arsenicosi*, *Pilulae Ferri et Chinini*, *Pilulae Guajacoli carbonici*, *Pilulae Kreosoti carbonici*, *Pulveres*, *Pulvis stomachicus*, *Pulvis Qinci cum Amylo*, *Pyoktaninum coeruleum*, *Radix Polygalae*, *Saturaciones*, *Sirupus Abelmoschi*, *Sirupus Polygalae*, *Spirituosa medicata*, *Talcum depuratum*, *Theophyllinum*, *Tinctura Jodi diluta*, *Todaiwo*, *Tropacocainum hydrochloricum*, *Unguentum Argenti colloidalis*, *Unguentum basilicum*, *Unguentum camphoratum*, *Unguentum Willkinsoni*, *Unguentum Wilsoni*, *Vaselinum flavum*. The items which were official in the previous edition but which were not admitted to the new edition, numbering 94 in all, are: *Acetum aromaticum*, *Acetum Scillae*, *Acidum carbolicum crudum*, *Albumen Ovi siccum*, *Anetho-*

lum, Aqua Amygdalarum amararum, Aqua Anisi, Aqua Carvi, Aqua Picis, Arsenum iodatum, Carrageen, Carvonum, Chininum bisulfuricum, Collemplastrum, Cortex Mezerei, Extractum Aconiti Napelli, Extractum Cardui benedicti, Extractum Cascariillae, Extractum Phytostigmatis, Extractum Phytolaccae, Extractum Ratanhiaae, Flores Arnicae, Flores Chamomillae romanae, Flores Malvae, Flores Rosae, Flores Sambuci, Flores Tiliae, Flores Verbasci, Folia Althaeae, Folia Belladonnae, Folia Bucco, Folia Coco, Folia Farfarae, Folia Melissa, Folia Trifolii fibrini, Fructus Carvi, Gossypium carbolisatum, Gutti, Herba Cardui benedicti, Hydrargyrum cum Creta, Kino, Lapis Pumicis, Lignum Santali rubrum, Liquor Arseni et Hydrargyri iodati, Liquor Ferri oxchlorati, Liquor Nitroglycerini, Magnesia usta ponderosa, Magnesium carbonicum ponderosum, Mel rosatum, Nitroglycerinum, Oleum Hyoscyami, Oleum Juniperi, Oleum Lauri, Oleum Myristicae aethereum, Oleum Resinae empyreumaticum, Oleum Sabiniae, Oxymel, Oxymel Scillae, Paraldehydum, Pastilli Acidi borici, Pastilli Ferri lactici, Pastilli Kalii chlorici, Pastilli Menthae, Pastilli Natrii bicarbonici, Pilulae Aloes et Asae foetidae, Pilulae Chinini sulfurici, Pilulae Colocynthidis et Hyoscyami, Pilulae Ferri carbonici Blaudii, Pilulae Hydrargyri, Pulvis aerophorus laxans, Radix Gelsemii, Radix Phytolaccae, Radix Ratanhiaae, Radix Serpentariae, Resina Dammar, Semen Tonco, Sirupus Croci, Sirupus Sennae cum Manna, Sparteinum sulfuricum, Species laxantes, Species pectorales, Spiritus Juniperi, Tinctura Aloes, Tinctura Gelsemii, Tinctura Lavandulae composita, Tinctura Ratanhiaae, Tinctura Scillae, Tinctura Serpentariae, Unguentum Paraffini, Unguentum stibiatum, Unguentum sulfuratum, Veratrinum, Vinum stibiatum.

In the selection of items to be admitted, the Committee of Revision appears to have acted most conservatively. The articles deleted are, with few exceptions, either obsolete or of little medicinal value. The articles admitted are for the most part identical with those contained in other modern pharmacopoeias, except that preference has been given to Japanese pharmaceutical chemicals and drugs. This is especially true in the case of vegetable drugs as is clearly shown by the recognition of the following as official: the leaves of *Scopolia japonica* Maxim., the leaves of *Datura tatula* L., the leaves of *Meniha arvensis* L., var. *vulgaris* Benth., the leaves of *Prunus macrophylla* Sand Z., the bark of *Cinnamomum Loureirii* Nees., the roots of *Abelmoschus manihot* Medic., the root of *Gentiana scabra*, the rhizomes of plants belonging to the genus *Coptis*, the rhizomes of *Dryopteris crassirhizoma* Nakai, the rhizome and roots of *Valeriana officinalis* L., var. *latifolia* Miq., the rhizomes of plants belonging to *Rheum* grown in Japan, the herb of *Swertia japonica* Makino, the seeds of *Prunus armeniaca* L., the tuberous roots of plants belonging to *Orchis*, *Anacamptis* or *Cremastra*, and the oil expressed from the husked seeds of *Camellia japonica* L. With respect to the newer remedies admitted, it might be said that the Committee was ultra-conservative. While such substances as aspirin, lactophenin, novocaine, orexin tannate, protargol, pyramidon, salipyrin, tannalbin, tannigen, theophyllin, thiocol, trional, veronal and xeroform are included in this list, such important remedial agents as the arsphenamines, suprarenal gland or epinephrine, pituitary, and thyroid have not been given recognition. Among the galenic and pharmaceutical preparations now obsolete or little known in this country are preparations belonging to the following classes: oil-sugars, electuaries, pastes, pastils, saturations (mixtures containing CO<sub>2</sub>, prepared by the saturation of solutions of acids with alkali carbonates), species, medicated cottons and medicated gauzes.

To one accustomed to the nomenclature of the United States Pharmacopoeia, some of the titles seem queer, *i. e.*, Adeps Lane cum Aqua, Aqua Carbolisata Pro Disinfectione, Calcaria Chlorata, Carbo Ossium Pulveratus, Fructus Aurantii Immaturi, Pastilli Stomachici, Pulvis Aerophorus, Pulvis Infantum, Stibio-Kalium Tartaricum, Stibium Sulfuratum Aurantiacum, Unguentum Hebrae, Unguentum Wilsoni, Unguentum Vesicans Fortius. And, when one encounters Paraaminobenzoyldiaethylaminoethanolum Hydrochloricum, it is realized that the American physician is not the only one who has trouble with pharmacopoeial nomenclature.

That portion of the book devoted to reagents and test solutions is not nearly as complete as that given in the Pharmacopoeia of the United States. While there are listed 158 reagents, the specifications given are very brief. Only 16 volumetric solutions are listed and in no case are directions for preparation given—only specifications for strength and a few equivalents are given.

The only tables appearing in the book are the following: (1) A list of the common official medicines which should always be kept in a dispensary. (2) A list of official medicines, which belong to the class of poisonous medicines, and which should be preserved with special care, separate from the others, in a cabinet or cupboard that can be closed. (3) A list of official medicines, which belong to the class of strong or powerful medicines, and which should be preserved with care, separated from the others. (4) A table of maximum adult doses. (5) A table giving the names, synonyms and atomic weights of the more important elements. (6) A comparative table of the official and popular names of the newer remedies.

Leipzig is the "book center" of the entire world. The Bibliographisches Institut (Bibliographic Institute) in Leipzig is one of the foremost publishers who specialize in high class books. The firm favored us with the following two works for review:

*Die Pflanzendecke der Erde.* Eine allgemeine Pflanzengeographie von Dr. Adolph Hansen. 276 pp. 1 map and 24 illustrations.

It is a credit to pharmacy that the author of this work was an apotheker, who became professor of botany at the University of Giessen where he died on June 24, 1920. Plant geography is that branch of botany which deals with the distribution of the various plants in different parts of the world and its underlying causes. After his travels in the tropics (1799-1804) Alexander von Humboldt became the father of this special field of botany, as laid down in his book, "Ideas to a Plant Geography" (Stuttgart 1807).

The first part of the book, the Introduction, deals with the flora in general, its history, development and the changes caused by the influence of man.

The second part comprises the Vegetation of the Earth, divided into the following parts: Arctic Zone, Europe, Asia, Africa, Australia and the Islands in the Pacific Ocean, America and the Antarctic Zone.

The author points out that the present plant population of the different parts of the world have arisen from various sources, undergoing different processes of development in the course of ages. Even though physical conditions be equivalent at the present time on two points of the world, the plant materials which had to change and adjust themselves to these new identical environments may have been originally different. Even in nature evolution is constantly progressing!

The referee begs to call special attention to the historical part of the book to which 10 pages are devoted, beginning with the works of Theophrastus about 305 B. C. who can be rightly called the father of botany. The history

of that 15 folio volumes master work, "Flora Brasiliensis" (1840-1905), is also given in detail.

A large map in colors shows at a glance the distribution of the different forms of vegetation over the world. Six plates contain 24 excellent illustrations of plants from all parts of the world and help to illustrate the book and elucidate its contents. Thanks are due to the publishers for this part of the work.

The book is a work of art and should become better known among teachers, pharmacists and the public in the United States, quite specially as books on plant geography are not too abundant.

*Weltgeschichte*, 9. Band: Amerika und Australien. Lex. 464 pp.

The classic work "Helmolt's History of the World" is now complete in its second edition after 12 years of hard work. Volume 9 before us treats America and Australia together with an index for the entire set. The history of America has been written by Prof. Dr. Konrad Haeblerland, and Dr. Johannes Hohlfeld, both expert historians.

How broad and thorough the subject is treated can be seen from the following chapters: Aborigines of South, Central and North America, Central American Culture, South American Culture, Discoveries and Conquests. Spanish Colonies, British Colonies, War of Independence of North America and South America, United States since 1820, Antilles, Canada, Independent South America, Central America and Brazil. Richly illustrated with 2 maps, 3 colored plates, 8 printed plates and 68 illustrations in the text, the book before us is a work of art.

It is the pride of Americans that our hemisphere has contributed its share and over, to the sum total accomplished by the entire world. For that reason it is well to learn that two outsiders, two German professors, hold that very same opinion. We can recommend this book very highly.

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