

Section on Scientific Papers

Papers Presented at the Fifty-Ninth Convention

THE SCOPE OF FOREIGN PHARMACOPŒIAS.

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In connection with the work of compiling the Digest of Comments on the Pharmacopœia of the United States (eighth decennial revision) and the National Formulary (third edition) now being carried on in the Hygienic Laboratory it has been found desirable to have for ready reference an index of the corresponding monographs in foreign pharmacopœias.

The index is arranged on cards or heavy paper slips, 12.5 by 20 cm. in size, and since its completion has been suggestive of a number of practical applications in connection with the study of articles official in the Pharmacopœia of the United States.

Not the least interesting of the several uses to which the index can be put is a comparative review of the scope of the U. S. P. with that of the pharmacopœias of other countries.

Thus it may interest you to learn that of the 957 titles included in the U. S. P. the equivalent of 356 are included in ten or more of the recently published foreign pharmacopœias, 144 of the articles being included in all of the fifteen pharmacopœias under review.

A total of 201 U. S. P. titles have no corresponding description in any one of the foreign pharmacopœias and an additional 94 of our official substances have been included in but one of the several books while the remaining 306 titles occur in from two to nine of the foreign pharmacopœias.

A further review of these titles suggests that fully 90 per cent of our widely used and medicinally valuable remedies are included in the 356 titles recognized by the majority of the foreign pharmacopœias while but a very few of the articles not described in some one other pharmacopœia would be seriously missed by American physicians if their official recognition were discontinued.

The appended tables present a review of the general scope of the recently published pharmacopœias and it is interesting to note that the number of articles not included in the U. S. P. is almost proportional to the total number of titles included in the foreign pharmacopœias rather than depending to any appreciable degree on the direct intercommunication existing between the two countries.

Thus the Servian Pharmacopœia with only 474 official articles contains but 144 that are not described in the U. S. P. and the Ph. Dan. VII with 489 official articles contains 160 that are not recognized in this country.

The new French Codex, on the other hand, with 1122 official articles contains 686 that are not included in the Pharmacopœia of the United States, and the new

German Pharmacopœia with approximately 700 titles (671) contains 269 for which no corresponding title is to be found in the U. S. P.

For some decades the German Pharmacopœia has held the rather unique distinction that it contained fewer articles not included in other pharmacopœias than any one other book of its kind. The Ph. Germ. IV contained but eleven titles that were not included in one or more foreign pharmacopœias and the Ph. Germ. V, despite the inclusion of a number of comparatively recent German chemicals, contains only sixteen titles not included in some one other pharmacopœia.

One of the more promising indications that pharmacy is destined to play an important part in the future development of the medical sciences is to be found in the general recognition that has been accorded to the provisions of the international treaty of 1906 regarding the strength of potent medicaments, based on the Brussels Conference of 1902.

The accompanying table (II) based on the comparative data that have appeared in the several volumes of Digest of Comments mentioned above, contains a graphic presentation of the approximate degree to which the several recently published pharmacopœias have complied with the provisions of the Brussels Protocol.

While the rating that has been given the several articles is necessarily an arbitrary one it nevertheless serves to indicate approximately the degree to which the several pharmacopœias have complied with the requirements of the Brussels Protocol, on a basis of 5 points for each title.

Taking the practical results of this, the first international treaty for the unification of medicaments, as a basis it would appear that even more can be accomplished in the very near future and that the frequently expressed hope that we may have international uniformity in Latin titles, methods of analysis, and strength of all potent medicaments may become a reality in the not far distant future.

In conclusion may I express the hope that American pharmacy will take an active part in the development of acceptable standards for widely used medicaments and that in future American pharmacists will lead rather than follow in any movement designed to advance the sciences relating to medicine as well as medicines.

TABLE I, SHOWING NUMBER OF TITLES INCLUDED IN THE SEVERAL NEWER NATIONAL PHARMACOPŒIAS.

	Published	Total No. of Titles	General Headings	Drugs	Chemicals	Preparations
Ph. Germ., V.....	1910	671	34	191	202	244
Ph. Russ., VI.....	1910	617	26	179	193	219
Ph. Hung., III.....	1909	534	17	152	171	194
Ph. Ital., III.....	1909	659	18	175	195	271
Ph. Fr., V.....	1908	1122	48	271	293	510
Ph. Svec., IX.....	1908	583	19	144	179	241
Ph. Serb., II.....	1908	474	18	141	141	174
Ph. Helv., IV.....	1907	853	29	244	227	353
Ph. Dan., VII.....	1907	489	22	142	144	181
Ph. Austr., VIII.....	1906	698	19	232	160	287
Ph. Belg., III.....	1906	722	25	185	173	329
Ph. Japon., III.....	1906	706	14	204	207	281
Ph. Ndl., IV.....	1905	673	17	200	182	274
Ph. Hisp., VII.....	1905	1073	0	269	260	544
U. S. P., VIII.....	1905	957	6	241	268	442

TABLE II, SHOWING THE APPROXIMATE DEGREE OF COMPLIANCE WITH THE PROVISIONS OF THE BRUSSELS CONFERENCE AS EVIDENCED IN THE PHARMACOPCEIAS PUBLISHED FROM 1905 TO 1910 INCLUSIVE.

INTERNATIONAL PROTOCOL TITLES	U. S. P. VIII, '05	Ph. Hisp. VII, '05	Ph. Ndl. IV, '05	Ph. Austr. VIII, '06	Ph. Belg. III, '06	Ph. Japon IV, '06	Ph. Helv. IV, '07	Ph. Dan. VII, '07	Ph. Fr. V, '08	Ph. Svec. IX, '08	Ph. Serb. II, '08	Ph. Ital. III, '09	Ph. Hung. III, '09	Ph. Russ. VI, '10	Ph. Germ. V, '10
Aconiti tuber	4	3	5	..	4	5	5	..	5	..	..	5	..	5	5
Tinctura Aconiti	3	5	5	..	5	4	5	..	5	..	..	5	..	5	4
Belladonnae folium	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Tinctura Belladonnae	3	5	5	5	..	5	..	5	..	5	..	5	5	5	..
Extractum Belladonnae	3	..	..	5	5	..	5	5	5	5	5	5	5	5	5
Colchici semen	5	5	5	5	5	5	5	5	5	5	5	5	5	..	5
Tinctura Colchici	3	5	5	5	5	5	5	5	5	5	5	5	5	..	5
Digitalis folium	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Tinctura Digitalis	3	5	5	5	5	5	5	5	5	5	5	5	2	5	5
Ipecacuanhae radix	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Tinctura Ipecacuanhae	..	5	5	5	5	5	5	..	5	5	5	5	5	..	5
Sirupus Ipecacuanhae	2	5	5	5	5	5	5	..	2	..	5	5	5	5	5
Hyoscyami folium	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Tinctura Hyoscyami	3	5	5	..	5	..	..	..	5	..	..	..	..	..	..
Extractum Hyoscyami	3	5	5	5	5	2	5	5	5	5	5	5	5	5	5
Nux vomica	4	5	5	5	5	4	5	5	4	5	5	5	5	5	5
Tinctura Nucis vomicae	3	5	5	5	5	5	5	5	4	4	5	5	5	5	5
Extractum Nucis vomicae	3	5	5	5	5	..	5	5	5	5	5	5	5	5	5
Pulvis Opii	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Extractum Opii	5	5	5	5	..	3	5	..	5	5	5	5	5	5	5
Tinctura Opii	3	5	5	5	4	4	5	5	4	4	5	5	5	4	4
Tinctura Opii crocata	..	5	5	5	4	..	5	5	..	5	5	..	5	5	5
Opii et Ipecacuanhae pulvis compositus	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Tinctura Opii benzoica	4	5	5	..	5	5	5	5	5	5	..	..	..	5	5
Tinctura Strophanthi	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Ergotum secale	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Extractum Ergoti	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Extractum fluidum Ergoti	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Acidum hydrocyanicum dilutum	5	5	5	..	5	..	..	..	5	..	..	5	..	..	..
Aqua Laurocerasi	..	5	4	5	5	3	5	5	..	5	..	..	..	..	..
Aqua Amygdalae amarae	2	..	..	..	2	5	..	5	..	5	5	5	5	5	5
Aqua phenolata	..	5	5	5	5	5	5	..	5	5	5	5	5	..	5
Sodii arsenas	4	5	5	..	5	..	5	..	5	..	..	3	..	..	..
Kalii arsenicosi liquor	5	5	5	5	5	5	5	5	5	5	..	5	5	5	5
Sirupus ferri iodati	5	5	5	5	5	5	5	5	2	5	5	5	5	5	5
Tinctura Cantharidis	3	4	5	5	5	5	4	..	5	5	5	5	5	5	5
Tinctura Iodi	3	..	5	5	5	5	3	5	5	..	5	5	5	5	4
Tinctura Lobeliae	3	5	5	..	5	5	5	5	5	..	5	5	3	..	5
Cocainum hydrochloricum	5	5	5	5	5	5	5	5	..	5	5	5	5	5	5
Unguentum Hydrargyri	3	5	5	5	5	3	5	5	3	5	5	5	5	5	5
Vinum antimoniale	5	5	5	5	5	5	5	..	5	..	5	5	5	5	5