A similar reaction may be responsible for the bleaching of the color in the Craven test. It was noted also that on extracting celastrol from an orange ethereal solution with soda, acidifying the aqueous solution and extracting with ether, a pure yellow solution was obtained. This again suggests the tautomerism of a 4-alkyl-1,2-naphthoquinone.

From Gisvold's observations (13) it is evident that the alkyl groups R_1 and R_2 must both be fully saturated. An attractive speculation is that the

group R_1 is methyl, for a methyl group occupying the same position is present in the natural naphthoquinone pigments plumbagin, phthiocol, hydroxydroserone and vitamins K_1 and K_2 . In such a structure, furthermore, the methyl and hydroxyl groups would occupy the same relative positions as in plumbagin. The group R_2 which, in view of the optical activity of the pigment (14), appears to have a branched chain, may be a hydrogeranyl or a homohydrogeranyl group.

REFERENCES

- (1) Cooke, R. G., Macbeth, A. K., and Winzor F. L., J. Chem. Soc. (1939), p. 878.
- (2) Morton, R. A., and Earlam, W. T., *ibid*. (1941), p. 159.
- (3) Macbeth, A. K., Price, J. R., and Winzor, F. L., *ibid*. (1935), p. 325.
- (4) Goldschmidt, S., and Graef, F., Ber., 61 (1928), 1858.
- (5) Fieser, L. F., J. Am. Chem. Soc., 51 (1929), 2471.
- (6) Campbell, W. P., and Todd, D., *ibid.*, 62 (1940), 1287.
 - (7) Gisvold, O., Jour. A. Ph. A., 29 (1940), 432.

- (8) Dimroth, O., and co-workers, *Ber.*, 54 (1921) 3020; *Ann.*, 446 (1926), 97, 123; 456 (1927), 177.
- (9) Fieser, L. F., and Dunn, J. T., J. Am. Chem. Soc., 59 (1937), 1016.
 - (10) Craven, R., J. Chem. Soc. (1931), p. 1605.
- (11) Fieser, L. F., and Bradsher, C. K., J. Am. Chem. Soc., 61 (1939), 417.
- (12) Fieser, L. F., and Fieser, M., *ibid.*, 61 (1939), 596.
- (13) Gisvold, O., JOUR. A. PH. A., 29 (1940), 12.
 - (14) Gisvold, O., ibid., 28 (1939), 440.

U. S. Pharmacopoeial Convention

Statement of Income and Expense for the Second Year of the 1940-1950 Decennial Period from May 1, 1941, to April 30, 1942*

The accounts of the U. S. Pharmacopæial Convention, covering the year ending April 30, 1942, have been audited by R. G. Rankin and Company, Certified Public Accountants of New York and Washington. At the direction of the U. S. P. Board of Trustees, copies of the Statement of Income and Expense, and of the Statement of Cash Receipts and Disbursements as prepared by the auditors are attached, together with supplemental data giving further details with respect to disbursements, under the heading Revision and Research.

As would be expected, the sales of the U. S. P. and its Supplements during the past year have been lower than those of the previous year. With the expectancy of the appearance of a new pharmacopæia, sales would naturally be at low ebb. The decrease noted in the expense of printing and binding might naturally be expected to follow the decrease in sales over this period.

An increase in Administration expenses for the year is explained by extra clerical work, largely in connection with the revision of the Constitution and

*Copies of this statement may be obtained by writing to the Secretary, Adley B. Nichols, 43rd St. and Kingsessing Ave., Philadelphia, Pa.

By-Laws, by a meeting of the Constitution and By-Laws Committee in Detroit, and by a meeting of Dean Rogers and Dr. Bunce of the Committee with the Board of Trustees in New York City, together with several meetings of the Board and the interest on bank loans and miscellaneous general expenses.

Convention expense increases are notably due to the publication and distribution of the Proceedings of the 1940 decennial meeting as noted under Printing and Binding, and the general expenses which include an honorarium of \$500.00 to Secretary Warren and the expenses of the 1942 meeting at Cleveland including counsel fees for the year.

The additional detailed statement regarding Revision and Research expenses which is included with this report, readily explains the decrease in revision expenses and the slight increase in those classified as research, when compared to the similar statement covering the activity of the previous year of the decade.

For the U. S. P. Convention, W. PAUL BRIGGS, Treasurer

For the U. S. P. Board of Trustees, E. F. KELLY, Chairman ADLEY B. NICHOLS, Secretary

U. S. PHARMACOPŒIAL CONVENTION, WASHINGTON, D. C.

STATEMENT OF INCOME AND EXPENSE FOR THE YEAR ENDED APRIL 30, 1942

Income	2012 30, 201	-
Sale of Pharmacopœias		
Collections	\$ 8,022.17	
Less: Decrease in Accounts Receivable April 30, 1941		
April 30, 1942. 1,066.71	1,282.60	\$ 6,739.57
Sale of Reference Standards, A. M. A. Articles, etc. Collections	\$ 4,141.25	
Add:		
Increase in Collections Pending Remittance to the Treasurer April 30, 1942	668.29	
Increase in Accounts Receivable April 30, 1942. \$ 495.08 April 30, 1941. 270.46	224.62	5,034.16
Interest on Investments		
Collections	\$ 1,502.50 270.05	1,232.45
Use of U. S. Pharmacopœia Text by Others		$30.00 \\ 171.10$
Total Income		\$13,207.28
Less:		Ψ10,201.20
Expense		
Cost of Publications Sold Publication and Sales Expense		
April 30, 1942. \$7,920.01 April 30, 1941. 5,056.86 2,863.15	\$ 603.37	
Administration Convention Revision Research	4,818.68 3,150.87 23,103.79 6,704.73	
	\$38,381.44	
Less:	400,001,11	
Reimbursement of Petty Cash Expenditures Applicable to Prior Year	1,247.30	37,134.14
Excess of Expense over Income		
For the Year ended April 30, 1942—Exhibit "A"		\$23,926.86
STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS (GENERAL ACCOU	INT) FOR	THE VEAR
ENDED APRIL 30, 1942	21.1) 101	
Cash on Deposit, April 30, 1941		\$ 7,792.17
Add:		
Receipts Sale of Pharmacopœias. Sale of Reference Standards, A. M. A. Articles, etc. Interest on Investments. Use of U. S. Pharmacopœia Text by Others. Return of Petty Cash to General Fund Increase in Bank Loan.	\$ 8,022.17 4,141.25 1,502.50 30.00 1,000.00 35,000.00	
Miscellaneous Income	171.10	49,867.02
		\$57,659.19

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Disbursements

	Publication and Sales			Revision	Research	Total	
Printing	\$ 431.85	\$	\$ 858.52	\$	\$	\$ 1,290.37	
Binding	2,746.38					2,746.38	
General	288.29	609.58	1,986.57	1,737.50		4,621.94	
Clerical		1,116.35	83.50	7,053.19	305.76	8,558.80	
Meetings		1,396.94		3,521.83	1,242.90	6,160.86	
Supplies		100.31	55.88	2,780.59	782.15	3,718.93	
Postage and Tele-							
grams		184.24	166.40	1,235.68	101.68	1,688.00	
Honoraria and Sala-							
ries		1,000.00		6,775.00		7,775.00	
Compensation					4,273.05	4,273.05	
Interest on Bank							
Loans		411.26				411.26	
Total	\$3,466.52	\$4,818.68	\$3,150.87	\$23,103.79	\$6,704.73		41,244.59
5 1 5 1 1 No. 1010 7 1 No. (11)						210 111 00	
Cash on Deposit, April 30, 1942—Exhibit "A"					\$16,414.60		

A MORE DETAILED AND SUPPLEMENTARY FINANCIAL STATEMENT OF THE REVISION EXPENSES

REVISION—MEETINGS	
Public Hearing on U. S. P. XII, Philadelphia, November, 1941	\$2,136.23
the Executive Committee, for the purpose of checking comments on proof, editing texts, etc.	1,385.60
	\$ 3,521.83
Revision—Supplies	
Binders for new volume of circulars, etc Stationery for revision office Mimeograph supplies (paper for circulars, etc., stencils, ink and maintenance of machine) Purchase of reference standards (nicotinic acid, riboflavin, sulfanilamide, menadione, ouabain, thiamine hydrochloride, ergotoxine ethanesulfonate). Miscellaneous expenses	\$ 112.17 221.09 891.63 1,275.65 280.05 \$2,780.59
	⊅ 2,780.09
Revision—Clerical	
Stenographic and clerical assistance, Chairman's office. This includes the services of Mrs. Beulah Tullar, who has been of very great assistance in preparing manuscript for the printer, reading proof in all its stages, preparing index, etc. Mrs. Tullar has assisted in this part of pharmacopocial work for several revisions and consequently her services are highly valuable	\$7,053.19
REVISION—POSTAGE AND TELEGRAPH	

REVISION-GENERAL EXPENSES Translating the "Pharmacopæia and Physician" series into Spanish..... \$ 238.95 Transiting the Fharmacopæia and Physician' series into Spanish. Reprints on "Pharmacopæia and Physician" series. Typewriter. Contribution to the American Pharmaceutical Association toward "Pharmaceutical Ab-155.32100.49 1,000.00 stracts"..... Miscellaneous.... 242.74 \$1,737.50 REVISION—SALARIES AND HONORARIA Salary, Revision Chairman, E. Fullerton Cook..... \$4,375.00 Salary, Executive Assistant to Chairman, Adley B. Nichols..... 2,400.00 **\$6,775.00**

RESEARCH

Most expenses of subcommittee and Advisory Board activity, incurred in the routine of preparing texts for U. S. P. XII are charged as Research.

Subcommittee	Meetings, Supplies, Postage, Clerical and General	Technical Assistance	
2—Biological Products	\$ 26.08		
3-Biological Assays	32.50		
5—Botany and Pharmacognosy	94.38		
6—Proximate Assays	113.63		
7—Inorganic Chemicals	225.46	Dr. F. K. Bell ¹	\$1,783.30
		Joseph M. White, III ¹	150.00
8—Organic Chemicals	627.19	Dr. Melvin Green ²	300.00
		Miss Elinor Sackter ²	1,612.50
12—Solutions, Spirits, etc	11.91		
13—Cerates, Ointments, etc	24.44		
15—Nomenclature	4.44		
Digitalis Study, many conferences, hear-			
ings, etc., leading to the preparation of			
new reference standard and develop-	450.81	C I Dies and W I Vaudens	82.25
ment of the cat assay for U. S. P. XII. Meetings	400.81	C. I. Bliss and W. J. Youden ³	82.20
Clerical			
Supplies			
Posterior Pituitary Assay	53.81		
Hormone Advisory Board	24.85		
Blood Board	100.98		
Vitamin Board	104.05	Dr. O. L. Kline ⁴	45.00
Anti-anemia Board	221.91		
Injections, U. S. P. XII		Dr. Louis Gershenfeld ⁵	300.00
Miscellaneous	315.24		
	\$2,431.68		\$4,273.05
			2,431.68
Total			\$6,704.73

¹ Assistant to Chairman Krantz in checking and developing tests and assays of inorganic chemicals, gases and certain organic texts.

² Assistant to Chairman Beal in checking and developing tests and assays for many new organic drugs.

⁸ Assistance as expert statisticians.

U. S. P. XII.

Books Received

To September 15, 1942

WARREN H. COLE and CHARLES B. PUESTOW, First Aid, Surgical and Medical. D. Appleton-Century Company, Inc., New York, 1942. xxiii + 351 pp.

J.-ULYSSE DEMERS, Étude sur la Préparation et la Sterilisation de Solutés Injectables. Charrier & Dugal, Limitée, Angle Saint-Roch et Saint-Vallier, Québec, 1942. 156 pp.

CLEVELAND PENDLETON HICKMAN, Physiological Hygiene. Revised edition. Prentice-Hall, Inc., New York, 1942. xxi + 482 pp. \$3.25.

Tom Jones, Detailing by Druggists. Romaine

Pierson Publishers, Inc., New York, 1942. 52 pp. \$0.75.

WINFIELD SCOTT PUGH, War Medicine, a Symposium. Philosophical Library, Inc., 15 East 40th Street, New York. 565 pp. \$7.50.

C. A. ROJAHN, Preparacion de Productos Quimicos y Quimico-Farmaceuticos. Trans. and amplified by Francisco Giral. Editorial Atlante, S. A., Mexico, D. F., 1942. Two vols., xxxix + 1002 pp. DOROTHY SUTHERLAND, Do You Want to Be a Nurse? Doubleday, Doran and Company, Inc.,

Garden City, N. Y., 1942. 186 pp. \$2.00.

⁴ Technical assistance in determining physical factors for U. S. P. Reference Cod Liver Oil No. 2, and preparing report for publication. (U. S. Department of Agriculture.)

^b Assistance to Chairman Cook in the preparation of the chapter and monographs on injections for