

## ASSOCIATION BUSINESS

AD INTERIM BUSINESS OF THE COUNCIL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, 1936-1937.

Office of the Secretary, 2215 Constitution Avenue, Washington, D. C.

LETTER NO. 10.

March 18, 1937.

*To the Members of the Council:*

79. *Election of Members.* Motion No. 36 (Council Letter No. 9, page 269) has been carried and applicants for membership numbered 153 to 209, inclusive, are declared elected.

80. *Use of Text of N. F. VI.* Motion No. 37 (Council Letter No. 9, page 269) has been carried and Dr. Hatcher has been so advised.

The following communication has been received from Chairman DuMez of the Committee on Publications:

"I have gone over the sample pages of the manuscript of Dr. F. R. Davison for a text book on pharmacology and recommend that permission be granted him to use portions of the text of the N. F. VI for comment therein..."

(*Motion No. 39*) It is moved by DuMez that Dr. F. R. Davison be granted permission to use portions of the text of the N. F. VI in his book entitled "A Textbook of Pharmacology and Therapeutics, Including Prescription Writing, Materia Medica and Toxicology," with the customary acknowledgment and at the usual charge of \$5.00.

81. *Committee on Recipe Book.* Motion No. 38 (Council Letter No. 9, page 269) has been carried and Messrs. George A. Moulton, Charles E. McCormick and M. G. de Navarre are elected members of this Committee.

82. *Applicants for Membership.* The following applications, properly endorsed and accompanied with the first year's dues, have been received:

No. 210, William O. Votteler, 1582 Bardstown Rd., Louisville, Ky.; No. 211, Charles H. Tye, Harlan, Ky.; No. 212, Frank J. Schneitzer, Jr., 2567 Bank St., Louisville, Ky.; No. 213, C. W. Krause, 10th & Madison, Covington, Ky.; No. 214, Willard G. Codey, 10th & Madison, Covington, Ky.; No. 215, James A. Simmons, Greensburg, Ky.; No. 216, John L. Cornett, 206 E. Main St., Richmond, Ky.; No. 217, Leo J. Wagner, 3035 So. 4th St., Louisville, Ky.; No. 218, Nathan H. Kaplin, 1049 18th St., Louisville, Ky.; No. 219, Charles H. Howard, Main St., Harlan, Ky.; No. 220, E. C. Sutphin, Box 787, Chapel Hill, N. C.; No. 221, S. A. Bobroff, 307 McCauley St., Chapel Hill, N. C.; No. 222, C. O. Oates, Jr., 410 Ruffin Dorm., Chapel Hill, N. C.; No. 223, John David Smith, 202 W. Rosemary St., Chapel Hill, N. C.; No. 224, Jesse W. Tyson, 202 W. Rosemary St., Chapel Hill, N. C.; No. 225, John F. Rhem, 101 Old West, Chapel Hill, N. C.; No. 226, O. T. Berch, 2111 W. North Ave., Milwaukee, Wis.; No. 227, Ray Miess, 1800 No. Farwell Ave., Milwaukee, Wis.; No. 228, Rudolph L. Yanda, Jr., 57 Crafton Ave., Crafton, Pa.; No. 229, Ralph G. LeMoon, 531 Suisman St., Pittsburgh, Pa.; No. 230, Joseph Peter Resnick, 311 Halkett St., Pittsburgh, Pa.; No. 231, Chester Wm. Krause, 625 Hastings St., Pittsburgh, Pa.; No. 232, Wilbur Grove, 1039 Flemington St., Pittsburgh, Pa.; No. 233, Margaret E. Wade, 7919 Tacoma St., Pittsburgh, Pa.; No. 234, John Wm. Holroyd, 409 Monongahela Ave., Otto, McKeesport, Pa.; No. 235, Salvatore M. Fortino, 511 Main St., Sharpsburg, Pa.; No. 236, Eugene Garretson Smouse, 736 Franklin Ave., Wilkinsburg, Pa.; No. 237, Jane R. Carnahan, 545 Mullberry St., East Liverpool, Ohio; No. 238, Charles F. Brand, 39 Walnut Ave., Wheeling, W. Va.; No. 239, Roderick Walters, 405 Ruxton St., Pittsburgh, Pa.; No. 240, Ralph Wm. Kemerer, Main St., Boston, Pa.; No. 241, Betty J. Haeckler, 373 South Winebiddle St., Pittsburgh, Pa.; No. 242, Robert C. Kealey, 117 N. 5th St., Jeannette, Pa.; No. 243, Robert L. Peel, 548 Spruce Ave., Sharon, Pa.; No. 244, Harry H. Vandervort, Jr., 3306 Dawson St., Pittsburgh, Pa.; No. 245, Ewing Garofalo, 1119 Bluff St., Pittsburgh, Pa.; No. 246, Sidney L. Gondelman, 3366 Webster Ave., Pittsburgh, Pa.; No. 247, Frank J. Chodzinski, 3055 Brereton Ave., Pitts-

burgh, Pa.; No. 248, John Raffensperger Rouzer, 610 26th St., Altoona, Pa.; No. 249, John H. Nosidlak, 401 Maline St., Pittsburgh, Pa.; No. 250, Charles R. Pearce, Good St., Jeannette, Pa.; No. 251, George E. Smith, 1119 Bluff St., Pittsburgh, Pa.; No. 252, Robert E. Williams, 1012 Broadway, East McKeesport, Pa.; No. 253, Timothy A. Lucum, 1411 Page St., N. S., Pittsburgh, Pa.; No. 254, Joseph Kozloski, 605 E. North Ave., Pittsburgh, Pa.; No. 255, Peter John Silvester, 1410 Page St., Pittsburgh, Pa.; No. 256, Charles A. Britcher, Jr., 1024 LaClair St., Pittsburgh, Pa.; No. 257, Walter H. MacWilliams, Naval Medical School, Washington, D. C.; No. 258, C. P. Dean, 1610 N. Taylor St., Arlington, Va.; No. 259, John S. Malcolm, University Hospital, Ann Arbor, Mich.; No. 260, Francis E. Wessinger, University Hospital, Ann Arbor, Mich.; No. 261, Lawrence G. Mann, University Hospital, Ann Arbor, Mich.; No. 262, Don E. Francke, University Hospital, Ann Arbor, Mich.; No. 263, James R. Thayer, 4588 Parkview Pl., St. Louis, Mo.; No. 264, Thomas D. James, 3972 a Utah St., St. Louis, Mo.; No. 265, Lorene M. Massagli, 136 Leland Ave., San Francisco, Calif.; No. 266, Lenita S. Thomas, P. O. Box 604, Hollister, Calif.; No. 267, Gallio Joseph Marzano, Pedro Miguel, Canal Zone; No. 268, Harry N. Trotter, U. S. Naval Hospital, Brooklyn, N. Y.; No. 269, John Ray Dakin, U. S. Naval Hospital, Brooklyn, N. Y.; No. 270, Manuel Horne do Munoz, Munoz Rivera No. 5, Guayanilla, P. R.; No. 271, Hugo L. Menke, 384 Post St., San Francisco, Calif.; No. 272, Edwin Hesse, Jr., 2679 Atlantic Ave., Brooklyn, N. Y.; No. 273, I. Sydney Wolfe, 2487 Bloor St., W., Toronto, Ont., Canada; No. 274, Leander James Eckels, 207 N. Front St., Steelton, Pa.; No. 275, Howard Lee Baker, 4015 Plainville Rd., Cincinnati, Ohio; No. 276, Raymond Watson, 4606 19th St., N., Arlington, Va.; No. 277, C. S. Stonebraker, 2156 Noble Rd., E. Cleveland, Ohio; No. 278, Henry Kot, 6646 N. Clark St., Chicago, Ill.; No. 279, Edward J. Breck, 31 Elm St., Springfield, Mass.; No. 280, Earl Pitcock, Tavern Hotel, Oak Creek, Colo.; No. 281, Louis Manna, 2016 Daly Ave., New York, N. Y.; No. 282, A. J. Shimon, Pocohontas, Iowa; No. 283, Herbert Marshall Cobe, Maplewold Farm, Forest Grove, Pa.; No. 284, Joseph C. Steiminger, 276 Jefferson Drive, Mt. Lebanon, Pittsburgh, Pa.; No. 285, John Claggett Jones, 1121 State Office Bldg., Richmond, Va.; No. 286, Lester E. Bonnin, 2446 N. 45th St., Milwaukee, Wis.; No. 287, J. B. Moore, 613 S. First St., Louisville, Ky.; No. 288, Edmund Edward Goodmaster, 14 Gilbert Ave., New Haven, Conn.; No. 289, Joseph Senelnick, 1580 Bloor St., W., Toronto, Ont., Canada; No. 290, Walter Clayton Spain, 5904 Nottingham Rd., Detroit, Mich.; No. 291, Samuel Rothenberg, 1143 Blue Hill Ave., Dorchester, Mass.; No. 292, Joseph T. Cooley, Jr., A. T. O. House, Gainesville, Fla.; No. 293, Kenneth L. Kelly, Colorimetry Section, Bureau of Standards, Washington, D. C.; No. 294, Wilton C. Harden, 9 Melvin Ave., Catonsville, Md.

(*Motion No. 40*) Vote on applications for membership in the AMERICAN PHARMACEUTICAL ASSOCIATION.

83. *Time and Headquarters for the 1937 Meeting.* Dr. Hugo H. Schaefer, Local Secretary, has recommended on behalf of the Local Committee on Arrangements that the week of August 16th be approved as the time, and the Hotel Pennsylvania as the headquarters for the 1937 meeting. President Beal and Secretary Kelly recently conferred with Dr. Schaefer in New York about the arrangements for the meeting and concur in this recommendation.

(*Motion No. 41*) It is moved by Kelly that the week of August 16th and the Pennsylvania Hotel be approved as the time and headquarters for the 1937 meeting. A vote on this motion will be called for in about one week.

E. F. KELLY, *Secretary.*

March 24, 1937.

*To the Members of the Council:*

We regret to announce the death of Honorary President Willis G. Gregory, which occurred at Buffalo, N. Y., on Saturday, March 20th.

The ASSOCIATION was officially represented at the funeral exercises.

E. F. KELLY, *Secretary.*

## LETTER NO. 11.

April 1, 1937.

*To the Members of the Council:*

84. *Use of Text of N. F. VI.* Motion No. 39 (Council Letter No. 10, preceding) has been carried and Dr. Davison has been so advised.

85. *Election of Members.* Motion No. 40 (Council Letter No. 10, preceding) has been carried and applicants for membership numbered 210 to 294, inclusive, are declared elected.

86. *Time and Headquarters for 1937.* As no comment has been received, a vote is called for on Motion No. 41 (Council Letter No. 10, preceding).

87. *Report of the Auditor.* Mr. W. A. Johnson, Certified Public Accountant, has submitted the following report:

"I have made an examination of the books and accounts of the AMERICAN PHARMACEUTICAL ASSOCIATION and of your report, as Treasurer, for the calendar year 1936, and I hereby certify that the total cash and securities on hand at December 31, 1936, amounting to \$216,538.37, is correctly stated.

"All cash receipts have been traced to deposits in banks to the credit of the respective funds for which received, and all disbursements have been found evidenced by properly authorized voucher checks.

"Cash on deposit has been reconciled with statements submitted by the banks as of the close of the year or verified by comparison with certificates of deposit.

"Investment securities, having a face or par value of \$138,100.00, have been verified by examination of the bonds or certificates. No changes were made in the investment portfolio during the year.

"Interest accruing on registered bonds and on coupons attached to other bonds have been properly accounted for on your report and have been deposited to the credit of the proper accounts in the depositories of the ASSOCIATION, except for the following coupons which are in default:

## Headquarters Building Fund

\$200 Chicago, Milwaukee & St. Paul R. R. 5% bonds,  
coupons due February 1, 1936 and August 1, 1936.

## Life Membership Fund

\$100 City of Detroit, Mich. 4% bonds,  
coupons due Nov. 15, 1932, May 15, 1933 and Nov. 15, 1936.

"In each case of default of interest the unpaid coupon has been attached to the bond and returned to the safe deposit vault of the ASSOCIATION.

"Records maintained by the Secretary of the ASSOCIATION have been examined and transfer of funds from his account to that of the Treasurer have been verified and found to be correctly stated."

The Treasurer's Report for 1936, which includes the following summary of accounts will be published in full later:

## COMPARISON OF FUNDS.

*Current Fund.*

	<u>Dec. 31, 1935.</u>	<u>Dec. 31, 1936.</u>
Deposit in Merchants & Newark Trust Co.....	\$ 765.38	\$ 30,793.43
Deposit in Boston Penny Savings Bank.....	419.88	430.43
Deposit in Baltimore Trust Company.....	1,638.61	1,536.20
	<hr/>	<hr/>
Total Current Funds.....	2,823.87	32,760.06

*Permanent Funds.*

Endowment Fund.....	17,273.60	17,773.14
Centennial Fund.....	6,098.77	6,242.99
Ebert Legacy Fund.....	8,916.38	9,227.63

Ebert Prize Fund.....	1,076.63	1,054.67
Life Membership Fund.....	33,828.53	34,133.31
Endowed Membership Fund.....	129.05	129.05
Research Fund.....	68,138.54	69,040.98
Headquarters Building Fund.....	552,907.73	560,946.99

Total Permanent Funds.....	688,369.23	698,548.76
----------------------------	------------	------------

*Trust Funds.*

F. B. Kilmer Fund.....		3,000.00
Wm. Procter, Jr., Monument Fund.....	18,487.80	19,073.28
Jos. P. Remington Honor Medal Fund.....	1,331.22	1,343.64

Total Trust Funds.....	19,819.02	23,416.92
------------------------	-----------	-----------

*Summary of Funds.*

Current Fund.....	2,823.87	32,760.06
Permanent Fund.....	688,369.23	698,548.76
Trust Funds.....	19,819.02	23,416.92

Total Funds.....	\$711,012.12	\$754,725.74
------------------	--------------	--------------

SUMMARY OF ASSETS AND TRUST FUNDS.

	Dec. 30, 1933.	Dec. 30, 1934.	Dec. 31, 1935.	Dec. 31, 1936.
Current Fund.....	\$ 6,284.72	\$ 4,196.01	\$ 2,823.87	\$ 32,760.06
Permanent Funds.....	625,569.92	680,507.27	688,369.23	698,548.76
Total Assets.....	631,854.64	684,703.28	691,193.10	731,308.82
Trust Funds.....	18,580.11	19,214.15	19,819.02	23,416.92
	<u>\$650,434.75</u>	<u>\$703,917.43</u>	<u>\$711,012.12</u>	<u>\$754,725.74</u>

SUMMARY OF DEPOSITS, SECURITIES AND PROPERTY.

Deposit in Baltimore National Bank.....	\$ 18,713.32
Deposit in Merchants & Newark Trust Co.....	30,793.43
Deposit in Boston Penny Savings Bank.....	443.95
Deposit in Baltimore Trust Co.....	5,928.05
Deposit in Maryland Trust Co.....	22,559.62
Securities in Baltimore National Bank.....	138,100.00
Property in Washington, D. C.....	538,187.37

Total Deposits, Securities and Property, December 31, 1936..	<u>\$754,725.74</u>
--	---------------------

88. *Applicants for Membership.* The following applications, properly endorsed and accompanied with the first year's dues, have been received:

No. 295, Andrew L. Croal, 500 So. Third St., Las Vegas, Nevada; No. 296, Darrell Lee Janzen, Box 2, Shafter, Calif.; No. 297, Elvin Schmidt, 406 No. Maclay, San Fernando, Calif.; No. 298, Jerome C. Bryant, Jr., 405 California St., El Monte, Calif.; No. 299, Eiko Matsui, 532 Silver St., Elko, Nevada; No. 300, George M. Halstead, 101 N. Bushnell, Alhambra, Calif.; No. 301, Thomas Everette Mayo, 2009 Fairburn Ave., Los Angeles, Calif.; No. 302, Abraham Morton Gordon, 1815 E. 2nd St., Los Angeles, Calif.; No. 303, Cecil Winston Rea, 911 W. 35th St., Los Angeles, Calif.; No. 304, Samuel James Velis, 1146 So. Lorena St., Los Angeles, Calif.; No. 305, Dario John Balzano, 2606 Huron St., Los Angeles, Calif.; No. 306, Florence Hideko Tanase, 847 Exposition Blvd., Los Angeles, Calif.; No. 307, Sister M. Elizabeth, 716 Yale St., Los Angeles, Calif.; No. 308, Edward John Bradel, 316 Thorn St., Sewickley, Penna.; No. 309,

Leonard Bernard Klein, 14 Whiteside Rd., Pittsburgh, Pa.; No. 310, George Brunner, 522 Dip-pold Ave., Baden, Pa.; No. 311, P. Joseph Augustine, Fourth St., Sutersville, Pa.; No. 312, Edward N. Koch, Jr., 5631 Woodmont St., Pittsburgh, Pa.; No. 313, Edward A. Sport, 12 Magee St., Cambridge, Mass.; No. 314, Paul B. Elder, 805 E. Mulberry St., Bryan, Ohio; No. 315, George W. Drain, 916 Parrish St., Philadelphia, Pa.; No. 316, Eleanor Kairis, Sinai Hospital, Baltimore, Md.; No. 317, Jacob Louis Cohen, 531 N. Beatty St., Pittsburgh, Pa.

(*Motion No. 42*) Vote on applications for membership in the AMERICAN PHARMACEUTICAL ASSOCIATION.

E. F. KELLY, *Secretary*.

---

### ACTION ON PROPOSED AMENDMENTS TO THE BY-LAWS.

SUBSEQUENT to the annual meeting of the ASSOCIATION in Portland, Oregon, in 1935 President Costello appointed a committee to study the *Constitution and By-Laws* in accordance with a resolution which grew out of certain recommendations made by President Fischelis at that meeting, see August 1935 issue of the JOURNAL, page 655.

The Committee was requested to apprise the membership in advance of the Dallas meeting, of the changes proposed, and the preliminary report of the Committee was published in the July 1936 issue of the JOURNAL, page 649.

The majority and minority reports of the Committee were submitted during the First General Session of the meeting at Dallas, and were considered and acted on in part at the Second General Session, as reported in the October 1936 issue of the JOURNAL, pages 892 and 908, respectively. Action on several proposed amendments was postponed until the next annual meeting and the purpose of this statement is to direct the attention of the membership to these proposed amendments to the By-Laws, to the discussion of them and to the fact that they will come up for action at the New York meeting in August.

---

### ARRANGEMENTS FOR ANNUAL MEETING OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.\*

The Annual Meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION and its affiliated groups will be held in New York City during the week of August 16, 1937. The Local Committee in coöperation with Local Secretary Hugo H. Schaefer, has selected the Hotel Pennsylvania as Convention Headquarters. This hotel is the largest of the Statler group, with 2200 rooms and 2200 baths. It is connected by underground passage with the Pennsylvania Railroad station, the Hudson Tubes and the city subways. Garage facilities also are very convenient. *The rates begin at \$3.50 single and \$5.00 double.* All rooms are with bath, radio and circulating ice water. There are five hotel restaurants—from cafeteria to night club—with reasonable prices. It is significant that the first convention ever held in this Hotel was that of our ASSOCIATION—just eighteen years ago. The Hotel management has not forgotten this fact and intends to surpass itself in making our 1937 meeting something in the nature of a celebration.

With the recent general reduction in transportation rates, all special convention rates have been discontinued except where a number of persons may travel from the same point as a party. Inquiry about transportation should be made of the local agent.

The Local Committee is busy arranging an elaborate and interesting entertainment program, including a boat ride to Bear Mountain, a night-club evening, a banquet with lavish vaudeville entertainment, besides the usual sight-seeing trips, visits to industrial plants, Radio City and a Trans-Atlantic liner.

---

\* From Bulletin No. 14, A. PH. A.

The various officers, including those of the sections and affiliated organizations report that an unusually large number of interesting papers and reports will be presented at the meetings, and speakers of prominence will address the various sessions.

The banquet hall, ball room and all meeting rooms will be air cooled. Everything points to a record meeting—in attendance, in interest and in entertainment. Reservations should therefore be made as early as possible.

#### SYRUPS TO HIDE OBJECTIONABLE TASTES.

Syrups of Cacao, Raspberry and Eriodictyon were shown to be the "all purpose" flavoring agents of choice in a series of tests conducted over a period of three years at the University of Minnesota Medical School Department of Pharmacology, reported by Dr. Harold N. Wright, in the *Journal of the American Medical Association*.

Syrups of Cherry, Sarsaparilla, Orange, Citric Acid and Cinnamon were all grouped closely together, as second-grade flavoring agents, and Syrups of Wild Cherry, Licorice and Aromatic Elixir were found to be the least efficient flavoring and disguising agents.

Dr. Wright presented the following table to indicate the percentage scores given these various syrups:

Flavoring Agent.	Score.
Syrup of Cocoa, N. F. V	71
Syrup of Prepared Cacao, N. F. VI	67
Syrup of Raspberry, N. F. VI	68
Compound Syrup of Eriodictyon	59
Syrup of Cherry, N. F. VI	52
Compound Syrup of Sarsaparilla	48
Syrup of Orange	48
Syrup of Citric Acid	47
Syrup of Cinnamon	46
Syrup of Wild Cherry	35
Elixir of Licorice	32
Aromatic Elixir	27

The percentage scores given here represent a composite derived from tests made to discover which materials were preferred for flavoring alone, which were more efficient in disguising effectively bitter taste, ammonium chloride (saline taste) and tincture of digitalis. Groups of students were asked to taste four flavors at a time, or four combinations of the various drugs with flavors, and to indicate their preferences.

Three points were given for first choice, two for second choice, one for third and no credit for fourth choice. The results were expressed as a percentage of perfect first choice.

Dr. Wright suggests that a score of 75 per cent or more was considered highly effective, from 60 to 65 per cent indicates a second-grade flavoring agent, from 35 to 50 per cent, third grade, and less than 35 per cent as practically worthless.

During the four-year period, statistical studies showed the tests to be fairly reliable among the several groups tested.

It was found that the flavoring agents were not equally effective for the three types of bad taste desired to be camouflaged. For testing the efficiency of the syrups to disguise the bitter taste of alkaloids, 0.1 per cent quinine bisulfate is added to the various flavoring agents. According to Dr. Wright, this produced a bitter taste sufficiently intense so that it was not completely masked by any of the flavoring agents, and corresponded to a greater degree of bitterness than is produced by a solution of codeine sulfate containing 30 mg. ( $\frac{1}{2}$  grain) to the teaspoonful.

For the saline test, ammonium chloride was added until a concentration of 8 per cent was reached, corresponding to a preparation containing 0.4 grams (6 grains) of ammonium chloride per teaspoonful.

For the test on digitalis, the tincture of digitalis was added until a concentration of 10 per cent was reached, corresponding to approximately 0.5 cc. of tincture of digitalis to each teaspoonful.

The following composite table taken from Dr. Wright's work indicates the efficiency of the various flavoring materials for the various types of materials tested. Column 1 shows the percentage preference for the flavor taken by itself. Column 2—efficiency in disguising bitter taste, Column 3, efficiency in disguising ammonium chloride, and Column 4 in disguising tincture of digitalis.

Flavoring Agents.	1.	2.	3.	4.
Syrup of Cocoa, N. F. V	91	81	41	..
Syrup of Prepared Cacao, N. F. VI	88	67	34	77
Syrup of Raspberry, N. F. VI	71	77	40	83
Syrup of Orange	53	21	61	57
Syrup of Cherry, N. F. VI	51	48	47	60
Cpd. Syr. of Sarsaparilla	48	39	58	..
Syr. of Citric Acid	46	35	50	60
Aromatic Syrup Eriodictyon	35	73	54	73
Elixir of Licorice	33	27	35	..
Syrup of Cinnamon	32	41	64	..
Syrup of Wild Cherry	29	14	41	54
Aromatic Elixir	27	27	23	32
Syrup of Licorice	26	12	11	..
Tincture of Vanillin 20% in Syrup				59

Iso-alcoholic elixirs and 10 per cent tinctures of vanillin have values below 25 which may be used for disguising digitalis.—Through *Drug Topics*.

#### THE RELATIVE IN VITRO ACTIVITY OF CERTAIN ANTISEPTICS IN AQUEOUS SOLUTION.

A valuable report of work from the Mallory Institute of Pathology, Boston City Hospital, is published in the January 23, 1937, *Journal A. M. A.* by Robert H. Nye, M.D., Boston. The list of antiseptics employed is given in the following; this number of the *Journal* should be noted by pharmacists for the prescription department, and by laboratory workers.

##### LIST OF ANTISEPTICS EMPLOYED.

All proprietary solutions were purchased, when possible, in the open market. The non-proprietary solutions were prepared in this laboratory. In each instance the usable strength is given. The dilutions noted in the results refer to dilutions of the respective usable dilutions.

##### SOLUTIONS CONTAINING IODINE.

1. Compound solution of iodine, U. S. P. Usable strength undiluted. Iodine content 5 per cent (1:20) when titrated with a standardized tenth-normal sodium thiosulfate solution.
2. Iodine solution (nonalcoholic). Usable strength undiluted. Iodine content 0.78 per cent (1:128), titrated as above. Submitted by Amend Laboratories, Inc., New York.
3. Compound solution of iodine, U. S. P., diluted 1:6.4. Usable strength undiluted. Iodine content 0.78 per cent (1:128), titrated as above.
4. Compound solution of iodine, U. S. P., diluted 1:27.8. Usable strength undiluted. Iodine content 0.18 per cent (1:555), titrated as above.

##### SOLUTIONS CONTAINING MERCURY.

1. Metaphen (1:500). Usable strength undiluted. Manufactured by Dermatological Research Laboratories, Philadelphia.
2. Merthiolate (1:1000). Usable strength undiluted. Manufactured by Eli Lilly & Co., Indianapolis.
3. Mercurochrome (1:50). Usable strength undiluted. Salt manufactured by Hynson, Westcott & Dunning, Inc., Baltimore. Solution prepared in the dispensary, Boston City Hospital.

4. Mercuric oxycyanide ("containing mercury cyanide"—Merck) (1:4000). Usable strength undiluted.
5. Mercury bichloride (Vaidhulis-Arnold modification, aqueous) (1:1000). Usable strength undiluted.
6. Merphenyl nitrate (1:1500). Usable strength undiluted. Obtained through the courtesy of Hamilton Laboratories, Inc., Hamilton, Ohio.
7. Merphenyl borate (1:500). Usable strength undiluted. Obtained through the courtesy of Hamilton Laboratories, Inc., Hamilton, Ohio.

## SOLUTIONS CONTAINING CHLORINE.

1. Zonite. Usable strength 1:2. Available chlorine content (diluted) 0.53 per cent (1:190), titrated, after conversion to iodine, with a standardized tenth-normal sodium thiosulfate solution. Manufactured by Zonite Products Corporation, New Brunswick, N. J.
2. Apco No. 25, diluted 1:8.3. Usable strength undiluted. Available chlorine content 0.39 per cent (1:260), titrated as above. Dilution made in the dispensary, Boston City Hospital. Manufactured by Ampere Products Company, West Orange, N. J.

## MISCELLANEOUS SOLUTIONS.

1. Hexylresorcinol (1:1000). Usable strength undiluted. Manufactured by Sharp & Dohme, Baltimore.
2. Listerine (25 per cent alcohol). Usable strength undiluted. Manufactured by Lambert Pharmacal Company, St. Louis.
3. Pepsodent (25 per cent alcohol). Usable strength undiluted. Manufactured by Pepsodent Company, Chicago.

All these antiseptics were tested simultaneously for (1) bactericidal activity, (2) bactericidal activity in mixtures containing 50 per cent horse serum, (3) diffusibility and (4) toxicity. In addition, figures representing unit costs were obtained. The methods employed and the results obtained are reported in the article.

## COMPARISON OF SALES OF CHAIN STORES IN 1929 AND 1935.

Liberty is taken in reprinting the comparison of sales herewith from the current issue of the *Druggists Circular*, as prepared by Paul C. Olsen for that publication.

	Per Cent of Drug Store Sales Made in Chain Drug Stores.			Per Cent of Drug Store Sales Made in Chain Drug Stores.	
	1935.	1929.		1935.	1929.
Washington	57.4	60.1	Boston	29.8	30.2
Chicago	48.1	35.2	New York	26.8	25.4
Cleveland	46.4	34.6	Buffalo	26.3	16.5
Pittsburgh	44.6	40.1	Philadelphia	24.7	21.3
Detroit	44.2	33.6	Average for 14 largest cities	37.2	30.0
San Francisco	38.8	20.0	Average for U. S. outside 14 largest cities	21.8	14.4
Baltimore	38.5	28.7	Average for entire U. S.	25.7	18.5
St. Louis	38.4	26.2			
Milwaukee	38.3	30.3			
Los Angeles	33.8	30.0			

VALUE OF "PATENT" AND  
"PROPRIETARY MEDICINES."

The aggregate value of druggists' preparations and patent or proprietary medicines made in 1935 amounted to \$275,223,159, an increase

of 15.2 per cent as compared with \$238,823,903 reported for 1933. Manufacturers engaged primarily in the production of these classes of preparations and medicines employed 22,129 wage earners in 1935 and expended \$21,978,878 in wages.—From *Standard Remedies*.