PROCEEDINGS OF THE LOCAL BRANCHES

"All papers presented to the Association and its branches shall become the property of the Association, with the understanding that they are not to be published in any other publication than those of the Association, except by consent of the Committee on Publication."—By-Laws, Chapter X, Art. III.

Reports of the meetings of the Local Branches should be mailed to the Editor on the day following the meeting, if possible. Minutes should be typewritten, with wide spaces between the lines. Care should be taken to give proper names correctly, and manuscript should be signed by the reporter.

ST. LOUIS.

A meeting of the St. Louis Branch, A. Ph. A., was held at the St. Louis College of Pharmacy, July 31, with a large attendance in spite of the excessively hot weather.

The address of the evening was given by Captain J. H. Sewing, a pharmacist and physician of St. Louis, who was captured and held as a prisoner in Germany. Captain Sewing told in a most interesting manner of his experience from the moment a fellow soldier informed him that they were "going to Berlin" to the time he reached the American line after the armistice. His narrative was given in a conversational manner, covering many little incidents in which everyone was interested. He described the hardships and cruelties inflicted on some of the prisoners. For a time he served as a physician in a German hospital. Captain Sewing dwelt on the drug market of Germany as he found it during the war. Coal-tar products were very plentiful and were used as freely as salt. Hydrogen peroxide was as available as water. Castor oil, however, and fats of all kinds were unobtainable for medical use or food.

Following his address, the members asked many questions which led to his outlining his experience in Belgium and France while serving with the British army.

In the absence of the President and Vice-President, Dr. H. M. Whelpley occupied the chair during the business session. Officers were elected as follows:

President, Frantz F. Berg. Vice-President, Burton H. St. John. Secretary-Treasurer, Leslie E. Pritchard. Member of the Council, J. Merner Noble.

The Branch unanimously voted to extend the American Pharmaceutical Association an invitation to hold the 1921 meeting in St. Louis.

The Committee on Membership, consisting of Messrs. F. F. Berg and J. Merner Noble, reported that nine applications for membership had been turned over to the treasurer.

The special program for the meeting of September 12 will include a report from the St. Louis members who attend the New York meeting of the American Pharmaceutical Association.

COMMITTEE REPORTS

REPORT OF THE COMMITTEE ON DRUG MARKET.*

(Continued from p. 673, August issue, Journal A. Ph. A.)

LANOLINE, ANHYDROUS: Anhydrous Lanoline has been a cause of some concern during the past year, the odor, amount of ash and reaction of ash in particular having tended to deviate from the U. S. P. requirements. Following is a detailed report on 13 of the lots examined, many of which were rejected:

^{*} Presented to the 1919 Convention of the Pennsylvania Pharmaceutical Association at Buena Vista Springs, 1919.

Sample.	Àcidity.	Ash. Re	eaction of Ash.	All other U. S. P. Requirements.
1	Normal	Unweighable	Normal	Normal
2	Normal	0.234%	Alkaline	Normal
3	Normal	0.270%	Alkaline	Normal
4	Normal	0.062%	Normal	Normal
5	Excess	0.01%	Normal	Normal except negligible excess of chlorides
6	Normal	0.004%	Normal	Normal
7 · · · ·	Slight excess	0.09%	Normal	Normal except negligible excess of chlorides
8	Normal	0.041%	Normal	Normal except negligible excess of chlorides
9	Normal	0.600%	Alka 🥱	Normal
10	Slight excess	0.14%	Alkali _t .	Normal
II	Slight excess	0.238%	Alkaline	Normal
12	Normal	$\mathbf{o.44}\%$	Alkaline	Normal
13	Slight excess	0.40%	Alkaline	Normal

Reported by G. E'we.

LIQUOR FORMALDEHYDE: One lot was rejected because it was thick and gelatinous. It undoubtedly contained considerable paraformaldehyde.

Reported by J. G. ROBERTS.

LUPULIN: Nine lots assayed 44.9%, 45.2%, 53.9%, 57.7%, 60.5%, 63.0%, 63.7% and 64.3% ether-soluble matter, respectively. The U. S. P. 8th requires not less than 60%.

Reported by L. J. LIPMAN.

MAGNESIUM CARBONATE: Each of three lots examined contained an excess of calcium amounting to 0.94%, 1.24% and 1.32% calculated as calcium oxide.

Reported by J. G. ROBERTS.

MALE FERN: Three lots were not Male Fern but were other members of the fern family.

Reported by G. E'we.

MANGANESE DIOXIDE: Three lots assayed 66.2%, 70.1% and 70.3%, respectively, of Manganese Dioxide but were otherwise U. S. P. The U. S. P. requires not less than 80% Manganese Dioxide.

Reported by F. J. KEENAN.

MANGANESE GLYCEROPHOSPHATE: One lot contained no citric acid as required by the N. F. and as a consequence was not as soluble as required by the N. F.

Reported by L. J. LIPMAN.

MERCURY CACODYLATE: One lot labeled "C. P." was not nearly completely soluble in water and therefore, was unsuitable for hypodermic tablets or ampul solutions. Another lot labeled simply "Mercury Cacodylate" gave reactions for mercury and cacodyl but contained about 25% of mercuric chloride.

Reported by K. Suto.

MERCURIC OXIDE, YELLOW: One lot was alkaline to litmus. Another lot was alkaline to litmus and alkaline to methyl orange equal to 0.072% sodium carbonate. A third lot was alkaline to litmus, neutral to phenolphthalein and alkaline to methyl orange equal to 0.949% sodium carbonate. The U. S. P. requires that yellow oxide mercury be neutral to litmus. This is an admirable requirement since this substance is employed largely in the treatment of the eye.

Reported by G. E'we.

MYRRH: One lot contained about 70% of another gum, and was rejected. Four lots assayed 25.7%, 25.8%, 33.4% and 38.7%, respectively, of alcohol-soluble matter. The U. S. P. requires not less than 35% alcohol-soluble matter. Reported by G. E'we.

OIL ALMOND, EXPRESSED, NOT U. S. P.: A sample, so labeled, consisted of Oil Peach Kernels. Reported by K. Suto.

OIL, BEAR: The following results were obtained with one lot:

Reported by J. G. ROBERTS.

OII, CADE: One lot was not of U. S. P. quality as it responded to the U. S. P. test for rosin.

Reported by F. J. Keenan.

OIL CEDAR LEAF: Ordinary oil of cedar leaf as found on the market is said to be made indiscriminately from *Juniperus Virginiana*, *Thuja Occidentalis* and other related conifers, a fact which causes considerable variations in its analytical characters. Pure Oil of Cedar Leaf obtained from *Juniperus Virginiana*, has a specific gravity of .887 at 15° C and an optical rotation of $+59^{\circ}$ 25'.

The examination of three samples from various sources give specific gravities at 15° C. ranging from .9221 to .9256 and optical rotations ranging from $+25.76^{\circ}$ to $+32.87^{\circ}$. All of these samples have higher specific gravities and lower optical rotations than the standard but they are closer than usual to it and probably contain less oil from the other portions of the tree.

Reported by J. G. ROBERTS.

OII, CHAULMOOGRA: The one lot examined had a Sp. Gr. at 45° C. of 0.907, iodine number 107, saponification number 185, acid number 11.4. There is no U. S. P. or N. F. standard. The British Pharmacopoeia gives standards for Chaulmoogra Oil. This lot did not conform to the British Pharmacopoeia standards.

Reported by G. E'we.

OIL GOOSE: One lot of good quality gave the following results:

Solidifying point	14° C.
Specific gravity at 15° C	.921
Acid value	6.0
Saponification value	196.8
Iodine value	72.7

Reported by J. G. Roberts.

OIL LEMON, TERPENELESS: There is a great need for a standard for aldehydes, calculated as citral, for this product. The 12 lots examined varied as follows: 20.2%, 24.2%, 25.8%, 26.6%, 33.4%, 44.3%, 49.4%, 52.2%, 54.1%, 59.2%, 60.3% and 67.9% aldehydes, calculated as citral, respectively.

Reported by G. E'we.

PAPAIN: Continues to assay low and vary in activity. The 6 lots examined digested 1.33, 4.01, 9.48, 13.6, 14.0 and 14.6 parts of fresh lean beef, calculated on a dry basis, respectively.

Reported by K. Suro.

PAPAIN: There is probably no substance which has been subjected to as much adulteration and about which more conflicting statements have been made than Papain. Among the adulterants that are known to have been added are bread crumbs, rice, flour, dextrin, congee and wild cactus milk. Positive identification of some of these substances is very uncertain so that it is possible, in some instances, for unscrupulous dealers to dispose of adulterated goods without detection. One sample was rejected because it was of suspicious quality. We were unable to detect any adulterants but it had the property of readily absorbing water which rendered it gummy and unfit for powdering.

Reported by J. G. ROBERTS.

PHENOL: The rejection of a two-drum lot was recommended because it was of poor appearance. One drum was quite dark colored while the other was both dark and dirty.

Reported by J. G. ROBERTS.

PHENYL SALICYLATE: One sample was considered of unacceptable quality because of a yellowish color. Reported by J. G. ROBERTS.

PILOCARPUS: Two broker's samples were submitted, each of which contained about 22% of stems. As the U. S. P. permits not more than 5% it was considered that the quantity present was in considerable excess. They were entirely satisfactory in regard to alkaloidal content as they contained, respectively, 0.92% and 0.76%, which amounts are well above the U. S. P. limit of not less than 0.6%.

Reported by J. G. ROBERTS.

PIPSISSEWA: Two lots contained 38% and 50%, respectively, of stems and fruits, whereas only the leaves are desired. A third lot was largely stems. The N. F. limits stems and fruits to not more than 5%.

One lot was Chimaphila maculata, whereas the N. F. specifies Chimaphila umbellata.

Reported by G. E'we.

POPPY HEADS: It was found necessary to reject five of the thirteen cases in one lot because the contents were in a mouldy condition.

Reported by J. G. ROBERTS.

POTASSIUM CARBONATE: A sample submitted by a broker did not comply with the U. S. P. requirements as it was 3% low in strength, contained an excess of heavy metals and was insufficiently soluble in water. The U. S. P. states that Potassium Carbonate is soluble in 0.9 part of water; this sample was not soluble in this amount but required about three parts to dissolve the greater portion. The rest appeared to be insoluble as the addition of several more portions did not give a clear solution.

Reported by J. G. ROBERTS.

POTASSIUM PERMANGANATE: The rejection of two lots was advised because they were 2.3 % and 1.07 %, respectively, low in strength. Reported by J. G. Roberts.

One lot was a trifle low in strength, namely 98.4%, whereas the U. S. P. requires 99%. It also contained an excessive proportion of insoluble matter rendering it unsuitable for compressed tablets to be used in the preparation of solutions.

Reported by G. E'we.

PULSATILIA: One lot consisted of only the tops, whereas the whole dried herb is used.

Reported by P. Cohn.

RED GUM, AUSTRALIAN: One lot was practically insoluble in water. It contained no water-soluble tannin. It was soluble in alcohol to the extent of 94.5%. This lot had evidently been previously exhausted with water. Australian Red Gum should contain $40^{-}50\%$ of water-soluble tannin. This lot was rejected. Reported by G. E'we.

RENNIN: The five lots examined assayed 1: 15,625, 1: 25,000, 1: 25,000, 1: 30,000 and 1: 37,500, respectively. They were all satisfactory except the first one.

Reported by K. Suto.

RUE: One lot so labeled contained no rue but consisted of the crushed leaves of *Rhus copalina* with traces of the pellucid glandular leaves of a second species which consisted of an unidentified heath.

Reported by G. E'we.

SAFFLOWER, AMERICAN: One lot was so old and faded that it would yield a poorly colored fluid extract and was rejected, as a consequence. Reported by G. E'we.

SANGUINARINE NITRATE: A great improvement has been effected in this product during the past year. Whereas in previous years low strength and great variation was the rule, in the past year the four lots examined all assayed between 99.8-100.0% pure sanguinarine nitrate.

Reported by L. J. LIPMAN.

SARSAPARILLA: Two lots contained excessive stem structure adhering to the roots.

Reported by G. E'we.

SASSAFRAS BARK: Two lots contained 20% and 22% respectively, of whole roots. A third lot was mostly not deprived of the periderm as required by the U. S. P.

Reported by P. Cohn.

SCAMMONY RESIN: One lot assayed 85.0% ether-soluble matter and 1.38% ash but was otherwise of U. S. P. quality. Another lot assayed 84.0% ether-soluble, gave an unweighable ash and was otherwise of U. S. P. quality. The U. S. P. requires not less than 95% ether-soluble matter and not more than 1% ash. Reported by G. E'we.

SCOPOLA ROOT: The alkaloidal content of one lot was a little low as it contained only .47%. Reported by J. G. ROBERTS.

SCULLCAP: One lot contained only a trace of official scullcap. It contained a small proportion of *Scutellaria canescens*, a species related to the official drug, but consisted mostly of *Trichostema dichotomum*.

Reported by G. E'we.

SAPO MOLLIS, U. S. P.: Practically all of the many lots examined were neutral or possessed a negligible acidity whereas the U. S. P. requires an alkalinity equivalent to not less than 0.1% potassium hydroxide. It seems impractical to meet the U. S. P. requirement of minimum alkalinity. The explanation offered by a soap manufacturer is that soft soap may be alkaline in great excess of the U. S. P. upper limit when first prepared, because of incomplete saponification and later became neutral due to completion of the saponification.

Reported by G. E'we.

SOAP, CASTILE: The rejection of a lot represented by one sample was advised because its iodine value was only 68.7 whereas the U. S. P. standard requires it to be not less than 84 nor more than 90.

Two other samples having iodine values of 81 and 82.5, respectively, were examined. This seems to be a prevalent condition as almost without exception the iodine values of other samples are lower than the U. S. P. minimum limit. Samples of a well established and reliable

brand of Castile Soap obtained at various times have been found to have the following iodine values: 81.79, 82.28 and 79.36. These results indicate that the U. S. P. limit is too high particularly in view of the fact that the minimum limit for olive oil from which it is made is only 79.

Reported by J. G. Roberts.

SODIUM BENZOATE: One lot was not of U. S. P. quality because it was only 96.1% pure. Reported by J. G. ROBERTS.

SODIUM SULPHATE: Sample was slightly acid to litmus instead of neutral as required by the U. S. P. Reported by J. G. ROBERTS.

SPIGELIA: The examination of four samples showed that not one of them was of U.S. P. quality. One sample was practically all Ruellia. Another contained about 21% stems and other foreign matter and about 29% dirt, showing that it contained about 50% of true Spigelia. One lot contained about 5% excess of stems, while another was practically of U.S. P. grade as it had only 1% excess of stems.

Reported by J. G. ROBERTS.

One lot contained excessive soil and stones.

Reported by G. E'wE.

ST. JOHN'S WORT: A lot of ground "St. John's Wort" consisted of a mixture of innumerable plants, grasses and other botanical specimens in a finely ground condition. Botanical examination failed to reveal more than a trace of St. John's Wort. This lot of drug was offered by a jobber who maintains no scientific control over his botanical supplies and evidently this lot of "St. John's Wort" was foisted upon him by another dealer. This lot was rejected.

Reported by G. E'wE.

STILLINGIA ROOT: One lot was wormy and mouldy to the extent of 70-80% and was rejected. Reported by G. E'we.

STRAMONIUM LEAVES: Three lots were found to contain 0.36%, 0.33% and 0.43%, respectively, of mydriatic alkaloids which amounts are all well above the U. S. P. limit of not less than 0.25%.

Reported by J. G. ROBERTS.

STROPHANTHIN: The U. S. P. requires Strophanthin to be very soluble in water. Two lots were not very soluble since even minute quantities dissolved very slowly but completely.

Reported by G. E'we.

STYRAX: The four lots examined yielded the following results:

Sample.	Ash.	Insol. matter.	Non. vol. alc. sol.	Acid value.	Sap. val.	All other U.S. P. tests.
ī	0.42%	1.56 $\%$	Normal	99.9	189	Normal
2	o .01 %	1 .43 $\%$	87.9%	117.6	198.5	Normal
3 · · · ·	0.08%	2.17%	74.0%	150	196	Normal
4	0.55%	2.20%	75.0%	114	193.1	Normal
U. S. P.						
requires	not No	t more N	ot less			
more tha	n 1% t	han 2.5% t	han 60%	56-85	170-230	Normal
N	os. 3 and	4 were labeled	"artificial."		Reported	by G. E'we.

TOLU: The U. S. P. requires that Tolu be "soluble in alcohol" but sets no standard for the accidental impurities always present in a natural product. The seven lots examined contained 0.5%, 1.0%, 1.3%, 1.8%, 2.1%, 3.43% and 5.8% alcohol-insoluble matter, respectively. They answered all other U. S. P. requirements.

Reported by G. E'we.

TRITICUM: Bermuda Grass has been frequently offered as a succedaneum for Triticum during the past year, but of course, cannot be used in a preparation labled as containing Triticum.

Three lots of Triticum were not Triticum but Cynodon dactylon (a related grass).

Reported by G. E'we.

WAHOO BARK: One lot consisted of the whole root.

Reported by G. E'we.

WATER PEPPER: One lot consisted almost entirely of stems whereas the whole herb is desired. Reported by G. E'we.

WATER, ROSE, STRONGER: This did lot not comply with the U. S. P. requirements and was of very undesirable quality as it had a decided yellowish color, contained mucoid growths, and yielded about 63 times more residue after the evaporation of 100 mils than is permitted by the U. S. P. It apparently was obtained by maceration instead of distillation.

Reported by J. G. ROBERTS.

WATER, ORANGE FLOWER, STRONGER: This lot also, did not comply with the U. S. P. requirements and was of undesirable quality. It yielded about 70 times more residue after the evaporation of 100 mils than is permitted by the U. S. P., had a decided yellowish color and contained mucoid growths. It also appeared to have been obtained by maceration instead of by distillation.

Reported by J. G. ROBERTS.

WILD CHERRY BARK: Has been very scarce the past year owing to the dearth of labor. Much which has been offered has been very thick and weak in flavoring power.

One lot consisted of 65% of official *Prunus serotina* and 35% of another Prunus bark, probably *Prunus demissa*, which was blackish externally, light brown on its inner surface, very thick and practically devoid of hydrocyanic acid.

Reported by G. E'we.

YERBA SANTA: Two lots contained 11% and 15%, respectively, of stems whereas the U. S. P. permits olny 5%. Reported by G. E'we.

ZINC BORATE: One lot contained sulphates equivalent to 18% of zinc sulphate and was rejected. Reported by G. E'we.

ZINC OXIDE: Only two of the fourteen lots examined contained lead in excess of the U.S. P. limit.

The lead in one of the two samples was only slightly in excess, whereas the other contained a tremendous excess.

Reported by G. E'we.

The following table shows the results of 206 crude drug assays made in the Analytical Laboratory of the H. K. Mulford Company during the year June 1, 1918–June 1, 1919.

,				, ,		No. st	an dard .
Drug.	No. of samples.		Highest assay.	Average.	Standard.	Above.	Below.
Aconite Leaves	. 2	0.350%	0.660%	0.505%	o . 2 $\%$ alkaloids	2	О
Aconite Root		0.371%	0.693%	0.549%	0.5% alkaloids	4	1
Belladonna Leaves	. 14	0.272%	0.686%	0.469%	o . 3 $\%$ alkaloids	13	1
Belladonna Root	. 7	0.450%	0.672%	0.701%	o .45 $\%$ alkaloids	7	О
Cantharides, Chinese	. 3	0.667%	1.290%	0.933%	0.6% cantharidin	3	o
Capsicum	. 4	14.44%	15.08%	14.80%	15 $\%$ non-volatile		
					ether-sol. ma	tter 2	2
Cinchona, Red	. 2	4.90%	9.40%	7.15%	$_5\%$ alkaloids	I	1
Cinchona, Yellow	. 12	3.90%	8.86%	6.46%	5% alkaloids	9	3
Colchicum Seed	. 4	0.555%	$_{ m 0.650\%}$	0.621%	0.45% colchicine	4	o
Conium Seed	. 5	0.739%	1 .003%	$\mathbf{o}.875\%$	o.5% coniine	5	o
Cubeb Berries	- 3	23.6%	25.4%	24.8%	15 $\%$ oleoresin	3	0
Gelsemium	. т	0.930%	0.930%	0.930%	o .4 $\%$ alkaloids	I	O
Ginger, Jamaica	. 18	3.11%	7 - 45%	4.69%	4% oleoresin	13	5
Guarana	. 6	4.18%	4.70%	4.25%	4% caffeine	6	O
Hydrastis	. 10	2.97%	4.06%	3.64%	2 .5 $\%$ alkaloids	10	o
Hyoscyamus	. 2	0.0843%	o .0975 $\%$	0.0909%	0.065% alkaloids	2	О
Ignatia	4	2.62%	3.28%	3.03%	$_2\%$ alkaloids	4	o
Ipecac	. 18	1 .63%	2.54%	$_{2.25}\%$	ı .75 $\%$ alkaloids	17	I
Jalap	. 2	7.50%	15.10 $\%$	11.30%	7% total resins	2	0
Kola Nuts, Dried	16	1.40%	2 . 73%	ı .88 $\%$	1.5% caffeine	13	3
Lobelia	10	0.460 $\%$	1 .066 $\%$	0.857%	0.5% alkaloids	10	О
Nux Vomica		2.15%	2.80%	2 .49 $\%$	2.5% alkaloids	5	7
Physostigma	8	0.120%	0.373 %	0.190%	0.15% alkaloids	4	4
Pilocarpus	4	0.570 $\%$	0.930%	0.762%	o .6 $\%$ alkaloids	3	I
Podophyllum	18	2.49%	6.50%	3.99%	3% resin	14	4
Sanguinaria	7	$_{2}$. $_{50}\%$	6.65%	5.03%	$_{2.5}\%$ alkaloids	7	o
Stramonium Leaves	1	o . 544 $\%$	0.544 $\%$	\circ . 544%	o . 25 $\%$ alkaloids	I	0
Veratrum	8	1,22%	2.70%	1 . 57 $\%$	1 $\%$ alkaloids	8	O
Totals	206					173	33

Comparison with Reports Previously Submitted	COMPARISON	WITH	REPORTS	PREVIOUSLY	SUBMITTE
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Year.	Total.	Above	Below.	Percent. above.
1909 Report	395	313	82	79 - 3
1910 Report	340	291	49	85.6
1911 Report	263	224	39	85.1
1912 Report	298	235	63	78.8
1913 Report	382	264	118	69.1
1914 Report	286	221	65	77.2
1915 Report	133	98	35	73.6
1916 Report	215	156	58	72.9
1917 Report	172	147	25	85.3
1918 Report	131	113	18	86.8
1919 Report	206	173	33	83.9

Last year one-half of the Aconite Root, Hyoscyamus, Jalap and Stramonium Seed samples ran below standard. This year Capsicum, Red Cinchona, Nux Vomica and Physostigma are the drugs, one-half or more of which ran below standard. The general yearly average of 83.9% is very satisfactory in view of the dearth and inexperience of the available labor during the past year.

Reported by G. E'we.

Committee G. E'WE, CHARLES H. LAWALL, G. W. OSTERLUND, J. G. ROBERTS, Chairman.

COMPOUND SOLUTION OF CRESOL.*

BY S. L. HILTON.

The official formula for this preparation is accompanied by some difficulties; on account of these it is not usually compounded in a retail pharmacy. The cost of linseed oil and potassium hydroxide unnecessarily increases that of the finished product. The liberation of glycerin in making the product is also a disturbing element, and the product made with linseed oil has not been a popular one, owing to its dark color.

The above facts led to a series of experiments, wherefrom some suggestions are submitted for the next revision of the U. S. Pharmacopoeia, also a sample of the product, prepared according to the devised formula. The finished, modified preparation is of the same cresol strength as the official, contains no glycerin, has approximately the same amount of soap, mixes clear with water and is much lighter in color. It has been pronounced superior to the official preparation by several physicians who had formerly used the official preparation.

Formula.

Cresol	500 Gm.
Oleic Acid	226 Gm.
Sodium Hydroxide	35 Gm.
Water	

1000 Gm.

Dissolve the sodium hydroxide in 100 mils of water and filter through cotton. Weigh the oleic acid in a tared container (bottle or flask), add the cresol, shake well. Add the solution of sodium hydroxide, shake thoroughly until saponified and add sufficient water to bring the weight of the product to 1000 grammes.

The preparation can be made in less than 15 minutes and has all of the properties of the official preparation, without the disadvantages pointed out above.

It cost about 60 cents per liter as compared to about 98 cents per liter for the official, at the present market price of materials.

^{*}Read before Section on Practical Pharmacy and Dispensing, A. Ph. A., New York City Meeting, 1919.