COMMITTEE REPORTS

REPORT OF COMMITTEE ON QUALITY OF MEDICINAL PRODUCTS. September 1916*

The chief feature of the drug market for the past year has been the conditions resulting from the scarcity of drugs and chemicals of all sorts. Importations have been checked partly through the curtailment of foreign production and partly through the difficulties of transportation. In addition to this the foreign consumption has been increased so that the balance for supplying to us was decreased. To this scarcity of foreign drugs has been added a scarcity of domestic products, owing to an increased demand for export.

The conditions referred to as resulting from this scarcity affect both prices and qualities. The prices of all drugs have increased, in most cases phenomenally and in many cases to figures that would heretofore have been considered impossible. The following are some of the present, as compared with ordinary wholesale prices, and the list might be largely extended:

	1913.	1916.		1913.	1916.
Acid Benzoic (Toluol)	$0.30	$ 7.50	Acetphenetidin	$ 0.90	$ 25.00
Aconite Root	0.20	0.50	Balsam of Peru	1.85	4.00
Bay Leaves	0.12	1.00	Belladonna Leaves	0.45	1.85
Belladonna Root	0.20	2.00	Buckthorn Bark	0.14	1.00
Bryony	0.15	1.20	Bleached Calamus	0.28	2.00
Cannabis	1.80	2.75	Colchicum Root	0.20	1.30
Doggrass	0.16	1.40	Digitalis	0.25	0.90
Gentian	0.06	0.28	Henbane	0.24	1.25
Licorice Root	0.06	0.25	Methylene Blue	1.25	13.00
Musk Root	0.08	3.00	Oil Bitter Almond	5.20	12.00
Oil Amber Rect	0.20	1.75	Oil Caraway	1.50	2.50
Oil Castor, gal	0.90	2.50	Oil Cinnamon	12.00	18.00
Oil Coriander	9.60	35.00	Oil Cod Liver, Norwegian,		
Oil Fennel	1.85	4.00	bbl	25.00	150.00
Phenolphthalein	1.25	20.00	Oil Juniper Berries	1.00	7.50
Potassium Bicarbonate	0.10	1.25	Potassium Bromide	0.35	4.00
Potassium Carbonate	0.08	0.85	Potassium Binoxalate	0.12	1.25
Quinine Sulphate	0.26	0.75	Pulsatilla	0.12	4.00
Resorcin	1.10	18.50	Rhatany Root	0.12	0.75
Safflower	0.30	1.80	Saccharin	1.05	16.00
Senna	0.08	0.30	Sage	0.10	0.50
Styrax	0.30	1.25	Sloe Berries	0.14	0.60
Thymol	2.40	11.00	Tragacanth	0.90	2.85
Valerian	0.25	0.65	Venice Turpentine	0.30	3.00

Speculative manipulation has had some part in this process of advancement of prices, but in the main it has been a legitimate result of the law of supply and demand. In so far as pharmacists and dealers have had the drugs to supply, this result has accrued to their benefit, and the loss has fallen wholly on the ultimate consumer. In a great many cases, dealers have not been able to reap this advantage, because they have not had the goods, or have not had them in sufficient quantity. Conservative dealers would far rather supply their products in normal quantity at ordinary profits than to supply fractional quantities at fanciful percentages of gain. Deducting running expenses from profit on the restricted sales, even at these high figures, the net proceeds are not always satisfactory. The profits of the pharmacist are not proportionate with those of

* Read before Scientific Section, A. Ph. A., Atlantic City meeting, 1916. Dr. H. H. Rusby stated that a portion of the preliminary part of this report had been taken from that of a like committee of the New York State Pharmaceutical Association, and the Committee desired that due credit be given.

the dealers who supply him. In many cases he pays ten times as much for the ingredients of a prescription, but it is impossible for him to multiply his profit on the prescription to correspond. Thus the general tendency with the pharmacist, except as relates to the stock that he had on hand, has been to require larger capital, with a reduced percentage of profit. The chief danger is, however, to be expected when prices begin to retrace their steps downward. Here is where good business sense is to be most manifested. It is obvious that each purchase, however small, sold at a price decline means a loss, to some extent. It follows that every bit of skill that the pharmacist possesses should be devoted to restricting such losses as far as possible, and this means buying in the most cautious manner and in the smallest possible amounts. Even then, every pharmacist is certain to lose money when the decline commences, but he can save himself from serious loss—possibly disaster.

The effects on the quality of drugs have been wholly that of deterioration. No argument is needed to prove that in times of scarcity, lower grades get into use than those which are customary; nevertheless, it will be profitable to indicate some of the influences which lead to this result.

The cultivation of drugs is a very large industry in the old world, in addition to the collection of wild supplies. This industry has been enormously restricted by the scarcity of labor incident to the war, and by the necessity for the employment of this labor in work of more immediate necessity. These cultivated products representing the very highest quality, thus become in poor supply.

The collection of wild supplies of drugs in the old world, is a far more stable and regular procedure than in this country. It is mostly conducted by people with whom it is a regular employment, and who know how to supply a more or less uniform product. Thousands of these men have gone into military service, and the collection and preservation of drugs has passed into less competent hands, and there is an insufficiency of this poorer service. The result has been an inevitable deterioration of quality, increase of impurities and admixtures and a greater number of errors of identity.

Deliberate sophistication is always encouraged and promoted by high prices. With a drug at 6 cents a pound, a 10 percent adulteration will scarcely pay, all things considered, but with the price at 60 cents—and it sometimes shows an increase several times greater than this—the profit is very tempting. It is to be remarked that the federal inspectors stand ready to exclude and do exclude practically all such importations when they are substandard; but with prices so very high as they now are, there are handsome profits in increasing the impurity up to the full legal allowance. It is also to be remembered that interstate inspection of drugs is but feebly carried out.

There are in existence at all times, large stocks of substandard drugs. It would be expected that when a lot of drugs has been found to be clearly and seriously below the legal standard, and in a way that cannot be remedied, it will be destroyed, but such is usually not the case. It is preserved, often for years, in the expectation of the occurrence of some condition, as that of the present, that will favor its distribution.

Purchasers who at ordinary times would not consider taking anything but the very best will now be inclined to treat for a lower grade, especially if they have commitments to deliver at prices prevailing before the rise.

In all of these ways here enumerated, there has been brought about a wide-spread and serious deterioration of quality in drug supplies, notwithstanding the fact that a majority of these influences have been met and checked by the proper officials.

It is not too much to say that the impurities, adulterants and substitutes of the past year, in the drugs offered for import at New York have exceeded the total for the preceding five years, and have perhaps equalled those of the first year of the administration of the present Food and Drugs Act. It can also be asserted that very few of these offerings have gained admission to the country, except after they had been re-conditioned to meet the Federal requirements. It may also be said that but for the Federal inspections under this law, most or all of these drugs would have entered commerce. Not only so, but the amount of those thus offered would have been several times greater than they have been and all would easily have been accepted. Consideration of the details which here follow will probably convince all that the results of this year's operation of the Federal law constitutes a full return for all that its administration has cost since

its enactment. It should be stated that great quantities of samples of spurious and adulterated drugs have been received by our drug houses, subject to approval, which have been rejected upon being condemned by competent authority.

Examination of various state reports show that the simple solutions, spirits and tinctures are still off from standard strength. Twenty-eight out of forty samples were condemned by one State Board, and forty-four out of ninety-seven by another. Spirit of Camphor, Spirit of Anise and Spirit of Peppermint were found very deficient.

On the other hand a very encouraging condition of products as a whole is shown by some state reports. Of two hundred and forty-six samples examined by one State Board only five were branded as adulterated. Thirteen lots of calomel tablets were all full strength. Twenty lots of strychnine tablets gave no wide divergence from claimed strength. Another State Board reports fifty-six varied from standard out of three hundred and thirty-eight.

There are still occurring cases of hasty and ill-advised action in overzealous efforts to execute laws and regulations. A young woman was held five days in confinement on the charge of having heroin in her possession, in spite of her assertion that it was a toilet powder, which statement was later verified by chemical analysis.

There is still good reason for complaint at the carelessness of reports on the part of some having the enforcement of the law in their keeping. It is surprising when the standing of reputable people may be at stake, that such careless statements will be made. As an illustration —Report of one State Board says in relation to an insecticide that "it contains Oil Tar, Oil Pennyroyal, Ammonia and SIMILAR simples. Complete analysis not made." If a complete analysis was not made, why should they state what it contains? As a matter of fact, it did not contain any Oil Tar nor any Ammonia. After a good deal of correspondence they stated that it was not Oil of Tar, but a coal-tar derivative of some sort, but insisted that it contained Ammonia. A subsequent sample they reported did not contain Ammonia and did not contain a coal-tar derivative, while the same percentage of phenol was used in each, both lots being made from the same formula. This was later corrected to read "did not contain Oil of Tar." (Original sample finally sent in had experienced a change of heart since leaving laboratory. It no longer was true to formula. It had an abundance of free ammonia and a tar product not present in the bottle when marketed.) The seriousness of pursuing such a course in uncalled-for injury to others, with possibility of troublesome proceedings to secure justice, and the discrediting of the whole subject of organic assays seems to be lost sight of by some Boards.

The question of misbranding under the new label law is a perplexing one. The article by Prof. J. H. Beal in the *American Druggist* for April 1916 presents many of its aspects in a forceful way and the various decisions of the courts are gradually clarifying it.

It is interesting in this connection to note the results of the examination of six hundred and eleven proprietaries by a committee of the Proprietary Association of America as to their relation to the food and drug and labelling laws of the U. S. and the states. One hundred and sixty complied in every respect. Eighteen were passed after criticism. Thirty-seven provisionally. Three hundred and eighty-eight required amendment and five were withdrawn from the market.

It is easy to see how the letter of the law may be innocently broken. A proposed new A. Ph. A. recipe book formula for "Honey and Almond Cream" does not contain Honey and the title would be misbranding. Other cases of the persistence of old names not accurately descriptive will occur to every one. Again the N. F. adopts preparations with titles long in use by different manufacturers, but applying to entirely different formulas.

One result of the high prices has been to largely curtail the use of the product involved. The bromides serve as an illustration.

	Sold in 1910 at	1913.	1915.	1916.
Ammonium Bromide	$0.30 lb.	$0.49 lb.	$4.50 lb.	$1.00 lb.
Calcium Bromide	0.39 lb.	0.44 lb.	3.50 lb.	0.80 lb.
Lithium Bromide	1.10 lb.	1.50 lb.	5.00 lb.	... lb.
Potassium Bromide	0.19 lb.	0.37 lb.	5.50 lb.	1.35 lb.
Sodium Bromide	0.25 lb.	0.45 lb.	3.50 lb.	0.80 lb.
Strontium Bromide	0.32 lb.	0.43 lb.	3.50 lb.	0.80 lb.

During the period of excessive prices, from November 1915 to July 18, 1916 their use dropped to nearly the vanishing point. It remains to be seen whether the tumble from the sky to a hole in the ground will restore their popularity.

TABLE.

ACETIC ACID: Six shipments were rejected assaying below the required 36% of absolute acid. H. ENGELHARDT.

Two carboys—U. S. P. standard of purity 80%—assayed 79.06% and 79.21% but would not stand the permanganate test for C. P. E. L. PATCH.

ACID CITRIC: One lot was Tartaric and one a mixture of Citric and Tartaric. IND. B. H.

ACID OLEIC PURIFIED: A lot had to be rejected on account of containing too large a proportion of solid fatty acids. H. ENGELHARDT.

ACID TANNIC: One lot rejected on account of its dark color. W. L. SCOVILLE.

ACONITE ROOT: One lot assayed very low and contained 6.4% ash. E. L. PATCH.

Of ninety-seven samples of tincture, forty-four were not within 10% of official strength. NO. DAKOTA EXP. STATION.

Of four samples of root examined three were rejected, assaying below 0.5% of aconitine. H. ENGELHARDT.

ACONITE TINCTURE: Forty samples assayed 0.013 to 0.051 Gm. Aconitine to 100 Cc. Twenty-eight were below U. S. P. standard of 0.045. CONN. AGRIC. STATION.

ADEPS LANAE: Several lots contained petrolatum and resin. N. Y. COM.

A large shipment of anhydrous was rejected because acid number was too high, probably due to the presence of resin. The product had a very sticky consistence and did not readily mix with water. H. ENGELHARDT.

Medicinal quality is hard to obtain. It is usually of dark color, strong in odor and frequently shows an excess of sulphur compounds. W. L. SCOVILLE.

AJOWAN: Vast quantities of this drug have been imported the past year. It appears to have gone mostly to Newark, N. J., for the purpose of manufacturing thymol, which it contains in large percentages. H. H. RUSBY.

ALCOHOL: Of twelve samples five were ethyl alcohol and seven methyl alcohol variously labeled acetone, alcohol and Columbian spirits. PROC. N. Y. PHARM. ASSOC.

ALOES: One lot contained no aloin. W. L. SCOVILLE.

AMYL NITRITE: We were compelled to reject several samples which assayed below the requirements of the U. S. P. We found 72.6%, 70.0%, 71.3%, 74%. The assay was made both by the official gasometric method and by Dietze's potassium chlorate method. H. ENGELHARDT.

ANTIPYRIN TABLETS: Ten grains assayed 86.5% antipyrine. E. L. PATCH.

ASAFOETIDA: This article is now almost always good. The standards which were worked out by the U. S. Bureau of Chemistry, and which were submitted to so much criticism by certain English chemists, have been fully justified. H. H. RUSBY.

Powdered, 20% ash. Insoluble in alcohol, 41.5%. Soluble in alcohol, 53.5%. Moisture, 5%. E. L. PATCH.

Eleven lots ranged from 32.76% soluble in alcohol and 37.46% ash to 76.4% soluble in alcohol and 6.6% ash. Eight samples contained more than 64% soluble in alcohol, and with one exception, less than 8% of ash. The lowest ash content was 4.58%. W. L. SCOVILLE.

ASPIRIN: Several lots were adulterated; 100,000 tablets containing little aspirin were seized and destroyed. Of one hundred and twenty-seven lots, nine contained a mixture of salicylic acid and acetyl salicylic acid, twenty-two contained sugar, starch, phosphates, etc., and no aspirin. CHICAGO HEALTH COM.

BARIUM PEROXIDE has been difficult to obtain and runs lower in strength than in previous years. Two lots accepted contained 78% and 73% BaO_2. W. L. SCOVILLE.

Lots have contained an excess of sodium chloride. E. L. PATCH.

BALSAM TOLU: One lot contained 9.8% inert material insoluble in alcohol and contained excess of moisture. E. L. PATCH.

BELLADONNA LEAF: Twelve samples met the requirements of the U. S. P. Lowest 0.3%, highest 1%. H. ENGELHARDT.

Five samples, 0.37%, 0.464%, 0.28%, 0.238%, 0.35%. E. L. PATCH.

Six lots contained from 0.30% to 0.52% alkaloids. W. L. SCOVILLE.

BELLADONNA ROOT: Four samples had to be rejected, assaying only from 0.4% to 0.445% of total alkaloids. H. ENGELHARDT.

BEEF EXTRACT

Sodium Chloride 4%	Water 20%	Proteids 54.25%
Sodium Chloride 5.8%	Water 22%	Proteids 52%
Sodium Chloride 6.63%	Water 18.3%	Proteids 46.45%
Sodium Chloride 4%	Water 19%	Proteids 55%
Sodium Chloride 4.93%	Water 14%	Proteids 52.19%

E. L. PATCH.

BEESWAX: Genuine beeswax of Chinese origin has been rejected because its analytical figures vary from the ordinary and its appearance is somewhat different. DRUG TOPICS.

BUCKTHORN BARK: For years this was imported in large quantities from Russia and distributed to the trade. It is now stated that it was the bark of *Rhamnus catharticus* and not *Rhamnus frangula.* M. G. K. CO.

BUTTERMILK: It is stated that in Philadelphia 85% of the buttermilk sold is made from dried skim milk mixed with water and a little lactic acid. It tastes better than the genuine, but is of inferior value. N. A. R. D. JOURNAL.

CALCIUM PHOSPHATE PRECIPITATED: One lot labeled "U. S. P." contained 1.32% of $CaCl_2$. Another lot labeled "Technical" contained but 1.1% $CaCl_2$. The "U. S. P." was priced at a large advance over the "Technical." E. L. PATCH.

CANNABIS INDICA: Sample of American-grown *Cannabis Indica* was of fine color and appearance, but gave only 5.96% of ether-soluble constituents against an average of 11% in foreign-grown. E. L. PATCH.

CANTHARIDES, RUSSIAN: A considerable quantity of Mylabris or Chinese blister beetle has been offered under the name of Cantharis. Its admission has been permitted upon an agreement to change the name. H. H. RUSBY.

CAPSICUM

"Mombassa"	20%	alcoholic extract,	6.2%	ash.
"Choice"	23%	alcoholic extract,	6%	ash.
"Bombay"	21.7%	alcoholic extract,	8%	ash.
"Bombay"	21.5%	alcoholic extract,	7%	ash.
"Bombay"	19.5%	alcoholic extract,	8%	ash.
"Mombassa"	24%	alcoholic extract,	6%	ash.

E. L. PATCH.

CARAWAY SEED: A shipment was received which appeared to be contaminated with mouse dung, but upon examination the latter was found to be a sclerotium, quite closely related to common ergot. Although the amount was small, the poisonous nature of such an admixture called for rigid exclusion. H. H. RUSBY.

CARD TEETH: A shipment of card teeth had to be rejected because it contained a considerable amount of brass. H. ENGELHARDT.

Lot 1: Bright, clean, free from rust, free from copper. Trace of grease yielded to ether.

Lot 2: Bright, clean, free from rust, free from grease. E. L. PATCH.

CASSIA FISTULA: A single shipment of *Cassia Brasiliensis* has been offered as *Cassia fistula.* H. H. RUSBY.

(To be continued.)

TENTATIVE DEFINITIONS AND STANDARDS FOR CONDIMENTS OTHER THAN VINEGARS AND SALT.

January 1917.

The Joint Committee on Definition and Standards is considering the advisability of adopting the following definitions and standards for Spices. Any one interested is invited to present his views to the Committee in writing, addressed to Mr. John Phillips Street, New Haven, Conn., or to Mr. J. S. Abbott, Secretary of the Joint Committee on Definitions and Standards, Bureau of Chemistry, Washington, D. C.

1. *Spices* are aromatic vegetable substances used for the seasoning of food and from which no portion of any volatile oil or other flavoring principle has been removed, and which are clean, sound and true to name.

2. *Allspice, pimento,* is the dried* fruit of *Pimenta officinalis* (L.) Karts., and contains not less than eight percent (8%) of quercitannic acid (calculated from the total oxygen absorbed by the aqueous extract), not more than six percent (6%) of total ash, not more than three-tenths percent (0.3%) of ash insoluble in hydrochloric acid, and not more than twenty-five percent (25%) of crude fiber.

3. *Anise, aniseed,* is the dried,* ripe fruit of *Pimpinella anisum* L. and contains not more than nine percent (9%) of total ash, and not more than two percent (2%) of ash insoluble in hydrochloric acid.

4. *Bay leaves* are the dried * leaves of *Laurus nobilis* L.

5. *Capers* are the flower buds of *Capparis spinosa* L.

6. *Caraway, caraway seed,* is the dried* fruit of *Carum carvi* L., and contains not more than eight percent (8%) of total ash, and not more than one and five-tenths percent (1.5%) of ash insoluble in hydrochloric acid.

7. *Cardamom seed* is the dried* fruit of *Elettaria cardamomum* White and Eaton, and contains not more than eight percent (8%) of total ash.

Cayenne and Red Peppers.

8. *Red pepper* is the red, dried,* ripe fruit of *Capsicum.*

9. *Cayenne pepper, cayenne chilli,* is the dried* ripe fruit of *Capsicum frutescens* L., *Capsicum baccatum* L., or some other small-fruited species of *Capsicum,* and contains not less than fifteen per cent (15%) of non-volatile ether extract, not more than six and five-tenths percent (6.5%) of total ash, not more than one percent (1%) of ash insoluble in hydrochloric acid, not more than one and five-tenths percent (1.5%) of starch, and not more than twenty-eight percent (28%) of crude fiber.

10. *Paprika* is the dried,* ripe fruit of *Capsicum annuum* L., having the pungency and flavor characteristic of that grown in Hungary.

(*a*) *Rosenpaprika, rozsapaprika, rose paprika,* is paprika prepared by grinding specially selected pods of paprika, the placentae, stalks and the stems being removed, and contains no more seeds than are normal to the pods. It contains not less than fourteen percent (14%) and not more than eighteen percent (18%) of non-volatile ether extract, not more than six percent (6%) of total ash, not more than four-tenths percent (0.4%) of ash insoluble in hydrochloric acid, and not more than twenty-three percent (23%) of crude fiber.

(*b*) *Königspaprika, king's paprika,* is paprika prepared by grinding whole pods of paprika without selection and includes the seeds and stems naturally occurring with the pods. It contains not less than twelve percent (12%) and not more than eighteen percent (18%) of non-volatile ether extract, not more than six and five-tenths percent (6.5%) of total ash, not more than four-tenths percent (0.4%) of ash insoluble in hydrochloric acid, and not more than twenty-three percent (23%) of crude fiber.

(*c*) *Pimenton, pimiento,* is the dried,* ripe fruit of *Capsicum annuum* L., having the characteristics of that grown in Spain. It contains not less than eleven percent (11%) and not more than fourteen percent (14%) of non-volatile ether extract, and not more than eight percent (8%) of total ash, not more than five-tenths percent (0.5%) of ash insoluble in hydrochloric acid, and not more than twenty-one percent (21%) of crude fiber.

11. *Celery seed* is the dried* fruit of *Apium graveolens* L., and contains not more than ten percent (10%) of total ash, and not more than one percent (1%) of ash insoluble in hydrochloric acid.

12. *Cinnamon* is the dried* bark of certain species of *Cinnamomum,* from which the outer layers may or may not have been removed.

13. *True cinnamon, Ceylon cinnamon,* is the dried* inner bark of *Cinnamomum zeylanicum* Breyne.

14. *Cassia* is the dried* bark of certain species of *Cinnamomum,* other than *Cinnamomum zeylanicum,* from which the outer layers may or may not have been removed.

15. *Cassia buds* are the dried* immature fruits of certain species of *Cinnamomum.*

16. *Ground cinnamon, ground cassia,* is the powder consisting of cinnamon, cassia, cassia buds, or a mixture of these spices, and contains not more than five percent (5%) of total ash and not more than one percent (1%) of ash insoluble in hydrochloric acid.

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* The term "dried" as used in this schedule refers to the air-dried spice.

17. *Cloves* are the dried* flower buds of *Caryophyllus aromaticum* L., and contain not more than five percent (5%) of clove stems, not less than fifteen percent (15%) of volatile ether extract, not less than twelve percent (12%) of quercitannic acid (calculated from the total oxygen absorbed by the aqueous extract), not more than seven percent (7%) of total ash, not more than five-tenths percent (0.5%) of ash insoluble in hydrochloric acid, and not more than ten percent (10%) of crude fiber.

18. *Coriander seed* is the dried* fruit of *Coriandrum sativum* L., and contains not more than seven percent (7%) of total ash, and not more than one and five-tenths percent (1.5%) of ash insoluble in hydrochloric acid.

19. *Cumin seed* is the dried* fruit of *Cuminum cyminum* L., and contains not more than eight and five-tenths percent (8.5%) of total ash, and not more than one and five-tenths percent (1.5%) of ash insoluble in hydrochloric acid.

20. *Curcuma, turmeric,* is the dried* rhizome or bulbous roots of *Curcuma longa* L.; (*Amomum curcuma Jacq.*) or *Curcuma rotunda* L.

21. *Dill seed* is the dried* fruit of *Anethum graveolens* L., and contains not more than ten percent (10%) of total ash and not more than three percent (3%) of ash insoluble in hydrochloric acid.

22. *Fennel seed* is the dried* fruit of varieties of *Foeniculum vulgare* Hill, and contains not more than nine percent (9%) of total ash and not more than two percent (2%) of ash insoluble in hydrochloric acid.

23. *Fenugreek* is the dried* fruit of *Trigonella Foenum-graecum* L., and contains not more than five percent (5%) of total ash.

24. *Ginger* is the washed and dried,* or decorticated and dried, rhizome of *Zinziber officinale* Roscoe, and contains not less than forty-two percent (42%) of starch,† not more than eight percent (8%) of crude fiber, not more than seven percent (7%) of total ash, not more than one percent (1%) of lime, not more than two percent (2%) of ash insoluble in hydrochloric acid, not less than fourteen percent (14%) of cold water extract, and not less than two percent (2%) of ash insoluble in cold water.

25. *Limed ginger, bleached ginger,* is whole ginger coated with carbonate of lime, and contains not more than ten percent (10%) of total ash, not more than four percent (4%) of carbonate of lime, and conforms in other respects to the standard for ginger.

26. *Horse-radish* is the root of *Radicula armoracia* (L.) Robinson.

27. *Prepared horse-radish* is comminuted horse-radish with or without vinegar.

28. *Mace* is the dried* arillus of *Myristica fragrans* Houttuyn, and contains not less than twenty percent (20%) nor more than thirty percent (30%) of non-volatile ether extract, not more than three percent (3%) of total ash, not more than five-tenths percent (0.5%) of ash insoluble in hydrochloric acid, and not more than ten percent (10%) of crude fiber.

29. *Macassar mace, Papua mace,* is the dried* arillus of *Myristica argentea* Warb.

30. *Marjoram* is the dried* leaves, with or without a small proportion of the flowering tops, of *Marjorana hortensis* Moench, and contains not more than sixteen percent (16%) of total ash, and not more than four and five-tenths percent (4.5%) of ash insoluble in hydrochloric acid.

31. *Mustard seed* is the seed of *Sinapis alba* L. (white mustard), *Brassica nigra* (L.) Kock (black mustard), or *Brassica juncea* (L.) Cosson (black or brown mustard).

32. *Ground mustard* is the powder made from mustard seed, with or without the removal of the hulls and a portion of the fixed oil, and contains not more than one and five-tenths percent (1.5%) of starch† and not more than six percent (6%) of total ash.

33. *Prepared mustard, German mustard, French mustard, mustard paste,* is a paste composed of a mixture of ground mustard with salt, a vinegar, and spices which do not simulate the color of ground mustard; and calculated free from water, fat, and salt contains not more than twenty-four percent (24%) of carbohydrates (calculated as starch†), not more than twelve percent (12%) of crude fiber, and not less than five and six-tenths percent (5.6%) of nitrogen derived solely from the materials named above.

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* The term "dried" as used in this schedule refers to the air-dried spice.

† The term "starch" as used in this schedule refers to starch as determined by the official diastase method.

34. *Nutmeg* is the dried* seed of *Myristica fragrans* Houttuyn, deprived of its testa, with or without a thin coating of lime, and contains not less than twenty-five percent (25%) of non-volatile ether extract, not more than five percent (5%) of total ash, not more than five-tenths percent (0.5%) of ash insoluble in hydrochloric acid, and not more than ten percent (10%) of crude fiber.

35. *Macassar nutmeg, Papua nutmeg, male nutmeg, long nutmeg,* is the dried* seed of *Myristica argentea* Warb., deprived of its testa.

36. *Paradise seed, grains of paradise, Guinea grains, Melegueta pepper,* is the seed of *Amomum melegueta* Roscoe.

37. *Parsley leaves* are the leaves of *Petroselinum sativum* Hoffman.

38. *Black pepper* is the dried* immature berry of *Piper nigrum* L., and contains not less than seven percent (7%) of non-volatile ether extract, not less than twenty-eight percent (28%) of starch,† not more than six and five-tenths percent (6.5%) of total ash, not more than five-tenths percent (0.5%) of ash insoluble in hydrochloric acid, and not more than fourteen percent (14%) of crude fiber. One hundred parts of the non-volatile ether extract contain not less than three and twenty-five hundredths (3.25) parts of nitrogen.

39. *Ground black pepper* is the product made by grinding the entire berry of *Piper nigrum* L., and contains the several parts of the berry in their normal proportions.

40. *Long pepper* is the dried* fruit of *Piper longum* L.

41. *White pepper* is the dried* mature berry of *Piper nigrum* L., from which the outer coating or the outer and inner coatings have been removed, and contains not less than seven percent (7%) of non-volatile ether extract, not less than fifty-two percent (52%) of starch,† not more than three per cent (3%) of total ash, not more than three-tenths percent (0.3%) of ash insoluble in hydrochloric acid, and not more than five percent (5%) of crude fiber. One hundred parts of the non-volatile ether extract contain not less than four (4) parts of nitrogen.

42. *Peppermint* is the dried* leaves and flowering tops of *Mentha piperita* L., and contains not more than twelve percent (12%) of total ash.

43. *Saffron* is the dried* stigma of *Crocus sativum* L., without more than ten percent (10%) of yellow styles, and contains not more than six percent (6%) of total ash, not more than one percent (1%) of ash insoluble in hydrochloric acid, and not more than fourteen percent (14%) of volatile matter when dried at 100° C.

44. *Sage* is the dried* leaf of *Salvia officinalis* L., and contains not less than one percent (1%) of volatile ether extract, not more than ten percent (10%) of total ash, not more than one percent (1%) of ash insoluble in hydrochloric acid, and not more than twenty percent (20%) of crude fiber.

45. *Savory, summer savory,* is the dried* leaf, blossom, and branch of *Satureja hortensis* L., and contains not more than twelve percent (12%) of total ash, and not more than one and five-tenths percent (1.5%) of ash insoluble in hydrochloric acid.

46. *Spearmint* is the dried* leaves and flowering tops of *Mentha spicata* L.

47. *Star aniseed* is the dried* ripe fruit of *Illicium verum* Hook., and contains not more than five percent (5%) of total ash.

48. *Taragon* is the dried* young leaves and flowering tops of *Artemisia dracunculus* L.

49. *Thyme* is the dried* leaves and flowering tops of *Thymus vulgaris* L. and contains not more than fourteen percent (14%) of total ash, and not more than four percent (4%) of ash insoluble in hydrochloric acid.

REPORT OF THE SPECIAL COMMITTEE ON COMPULSORY HEALTH INSURANCE OF THE CHICAGO BRANCH OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

The special committee appointed to consider the subject of compulsory health insurance respectfully reports as follows:

The Health Insurance Bill proposed by the American Association for Labor Legislation is a lengthy measure, consisting of 59 separate sections, providing for the compulsory insurance of

* The term "dried" as used in this schedule refers to the air-dried spice.

† The term "starch" as used in this schedule refers to starch as determined by the official diastase method.

certain classes of wage workers. The bill proposes methods for raising funds for meeting the expenses of such insurance, and provides for the creation of a State Social Insurance Commission and of certain other boards and committees which are to be charged with the administration of the various provisions of the act.

Because of the length and complexity of the proposed measure, and the close inter-relation of provisions distributed through the different sections—the effects of which can not be appreciated without long and careful study—and the further fact that the bill would require the state to assume new and unusual functions that are to be discharged through new and untried instrumentalities, your committee does not feel able at this time to present any final criticism or pronounce any final judgment thereon, and accordingly presents the following as a preliminary report or as a report of progress:

SOME LEADING FEATURES OF THE BILL.

A complete and critical analysis of all of the provisions of the bill would require many pages for its presentation, and therefore only a few of its more important features are given below.

Classes of Persons Insured.—Every person employed at manual labor under any form of wage contract, within the state, except home workers and casual employees, and every other worker who does not receive compensation in excess of $100.00 per month is to be compulsorily insured. "Home workers and casual employees" are to be provided for by special regulations of the Insurance Commission. Other exceptions are employees of the United States, or of the state or municipality for whom health insurance is already provided by legally authorized means.

Provision is also made for the voluntary insurance of self-employed workers and of members of the family of the employer and of certain other persons under specified conditions. (Secs. 3, 4 and 5.)

Insurance Benefits.—Insurance benefits under the proposed law are to consist of the following:

In case of any illness, or of accident or death not covered by workmen's compensation, and including all medical, surgical and nursing attention and treatment for the insured persons and of dependent members of their families, and medical and surgical supplies to the extent of $50.00 in any one year, together with a cash benefit equal to two-thirds of the weekly wage of the insured for 26 weeks, and in case of death a funeral benefit of $50.00. (Secs. 6, 7, 8, 9, 12, 15.)

Instead of home treatment the insured may be treated in a hospital or sanatorium, in which case the cash benefit shall be reduced to one-third of the weekly wage, and paid to the insured member's family. (Secs. 13 and 16.)

Maternity benefits are to be paid to insured women or to the wife or widow of an insured worker for six months during the year preceding confinement. (Sec. 8.) Additional benefits may be granted in certain cases. (Sec. 20.)

Cost and Contributions.—The cost of the benefits provided for in the bill is to be met by contributions from employers, employees and the state in the proportion of 40 percent by the employee, 40 percent by the employer, and 20 percent by the state. If the employee earns less than $9.00 per week his contribution is reduced in proportion and that of the employer correspondingly increased. (Sec. 22.)

The bill places no limit upon the funds which may be thus collected, but provides merely that the amount "shall be computed so as to be sufficient for the payment of benefits and the expenses of administration of the fund and necessary reserve and guarantee funds." (Sec. 23.)

In addition to its contribution of 20 percent of the benefit funds, the state is largely charged with the expenses of administration, such as the salaries of the Commissioners and their employees, and other matters. (Secs. 43, 44, 45, 46, 47, etc.)

MACHINERY OF ADMINISTRATION.

The machinery of administration is to consist of certain state bodies having a general supervision over the administration of the law, and of certain local or district bodies operating under the supervision of the state officials. The general or state bodies are to be a Social Insurance Commission, a Social Insurance Council, and a Medical Advisory Board.

The State Social Insurance Commission.—The supreme governing body is the State Social Insurance Commission, consisting of three members, one of whom shall be a physician, appointed by the Governor and paid by the state.

The Commissioners must give their whole time to the work, and may not have any other employment or hold any other political office or appointment.

The Social Insurance Commission is charged with the general work of administration, and with the supervision of the local or district funds and societies. (Secs. 43, 44, 45, 46, 47, 48, 49, 50, 51.)

The Social Insurance Council.—The Social Insurance Council is to consist of twelve members, six to be elected by the employer directors of the local funds and six by the employee directors of the local funds. Members are to hold office for two years, and to receive a per diem allowance and their necessary expenses while in attendance at meetings. Four regular meetings are to be held annually and such additional meetings as may be deemed necessary.

The duties of the Council are to pass upon regulations proposed by the Commission, and upon the annual report which the latter is to submit to the Governor.

Though it may pass and report upon such regulations and reports as are laid before it, it does not appear that the Council has any veto power over the acts of the Commission and is apparently merely an advisory body. (Secs. 52, 53, 54, 55.)

The Medical Advisory Board.—The Medical Advisory Board is to be chosen by the State Medical Societies. (Sec. 56.) The number of members of this board is not specified, nor is there given any definition of what shall constitute a state medical society within the meaning of the act. The indefiniteness of this section is sure to be provocative of many disputes.

The Medical Advisory Board must be consulted on medical matters (Sec. 56), and shall also pass upon all disputes between insured persons and physicians and between local funds and physicians before the State Social Insurance Commission may consider and decide such disputes. (Sec. 14.)

LOCAL ADMINISTRATIVE BODIES.

The local administrative bodies provided for consist of the local Insurance Carriers, referred to in the bill as "Carriers" or "Funds," together with Committees of the Fund, Boards of Directors, and Arbitration Committees.

Insurance Carriers or Funds.—The State Commission is to divide the state into districts, each of which shall contain not less than 5,000 persons subject to compulsory insurance, and in each of which there shall be established one or more local or trade funds to carry the insurance of those who are members of the respective funds, and which are to operate under supervision of the other local bodies and of the Social Insurance Commission. (Secs. 25, 26, 27, 28.)

Every person subject to compulsory insurance is by definition a member of the trade fund of his trade, or if there is no such special trade fund, a member of the local fund of his district. Employers are employer members of all funds of which any of his employees are members. (Sec. 34.)

Committees of the Fund.—For each of such local or trade funds there is to be a committee of not less than 20 nor more than 100 members, elected annually, one-half by employer members and one-half by employee members of the fund. The only apparent duties of the Committee of the Fund are to elect the Board of Directors and to pass upon the annual report and account submitted by the latter. (Secs. 29, 30.)

The Board of Directors.—The Board of Directors is to consist of not less than 8 nor more than 18 members, elected by the Committee for a term of one year, one-half representing the employer members and one-half the employee members of the fund.

The Board of Directors is charged with the general administration of the local fund, in accordance with the provisions of the constitution of the fund and under the supervision of the State Insurance Commission, and is required to accumulate a reserve from the annual income which shall be equal to one-sixth of the cash expenditures for the preceding three years.

Members of the Board of Directors are to receive $5.00 a day while attending meetings. (Secs. 31, 32.)

Arbitration Committees.—Arbitration Committees are appointed by the State Social Insurance Commission to pass upon disputes between physicians and insured persons or between physicians and the local funds, but the State Commission is prohibited from deciding any appeal from such Arbitration Committee until after the same shall have been passed upon by the State Medical Advisory Board. (Sec. 14.)

The above is a very brief and very incomplete presentation of the more salient features of the Health Insurance measure proposed by the American Association for Labor Legislation. A complete analysis of all of the features worthy of special study would require many times the space which can be devoted to it in this preliminary report.

SOME ALLEGED OBJECTIONS TO THE HEALTH INSURANCE BILL.

In a circular issued by the Insurance Economics Society of America it is alleged:

(1) That the law could not be enforced without exercise of the police power of the state.

(2) That the law could not reach and serve more than 25 percent of the persons nominally coming within its terms.

(3) That the state would collect a tax of $5.00 to effect a saving of $1.00.

(4) That the wage earner would be forced to pay $9.60 to save $4.80.

(5) That if the 33,500,000 wage earners of the country could be brought within the operation of the law it would create 3,350,000 discards who, because of age or physical disability, could not secure employment because of their uninsurable condition.

(6) That it would furnish employment or remunerative association for 250,000 politicians.

(7) That carrier funds to the amount of $150,000,000 annually would be politically controlled or administered.

(8) That it would permit a small percentage of physicians to control most of the industrial practice.

(9) That it would constitute an interference with religious liberty by compelling the medical examination of and medical treatment of Christian Scientists.

(10) That it would cost the State of Illinois the sum of $12,500,000 annually, or an addition equal to 83 percent of its present annual tax burden.

(11) That it would cost the employers of the State of Illinois, as contributors to the funds and in the form of taxes, the sum of $35,500,000 annually.

(12) That it would cost the wage earners of the State of Illinois $23,040,000 annually.

This committee does not vouch for the accuracy of the foregoing statements but presents them as the expressions of persons who have made a special study of health insurance and who should be well qualified to express opinions with reference thereto.

RECOMMENDATIONS.

This committee does not wish to be understood as being at present either in favor of or as opposed to legislation proposing to establish compulsory health insurance.

Rather it is our desire to study the whole subject in a purely judicial frame of mind, and to reach conclusions that shall be as nearly as possible devoid of partisan bias, or prejudice growing out of our professional relations to the sick. For the present, therefore, we submit for your consideration the two following recommendations:

(1) That the Committee on Health Insurance be continued, with instructions to continue its study of the subject of health insurance and to report thereon from time to time as it may deem advisable.

(2) That there be adopted and transmitted to the President of the Senate and to the Speaker of the House of Representatives of the General Assembly of the State of Illinois, as expressing the sense of the Chicago Branch of the American Pharmaceutical Association, the following resolution:

RESOLVED, That recognizing the importance of the subject of Compulsory Health Insurance and the evils of hasty and ill-considered legislation passed upon the initiative of bodies organized to promote such legislation, often *ex parte*, as it were, the Chicago Branch of the American Pharmaceutical Association earnestly recommends to the General Assembly of the State of Illinois that no bill providing for compulsory health or other compulsory social insurance be passed for the present; but, instead, that a commission be appointed of impartial men not committed on the subject, to investigate the whole question from every angle; to give all interested an opportunity to be heard and finally to report their conclusions to the next session of the General Assembly.

CHICAGO, ILL., February 23, 1917.