

SCIENCE

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SENATORIAL INVESTIGATION OF FOOD ADULTERATION.

CONTENTS:

<i>Senatorial Investigation of Food Adulteration</i>	793
<i>Amerind—A Designation for the Aboriginal Tribes of the American Hemisphere</i>	795
<i>Exploring Expedition to the Mid-Pacific Ocean:</i> DR. HUGH M. SMITH.....	796
<i>The Scientific Study of Irrigation:</i> DR. A. C. TRUE.....	798
<i>The International Catalogue of Scientific Literature—Second Conference (II.):</i> DR. CYRUS ADLER..	799
<i>A Double Instrument and a Double Method for the Measurement of Sound:</i> DR. B. F. SHARPE.....	808
<i>New York State Science Teachers Association:</i> DR. FRANKLIN W. BARROWS.....	811
<i>Scientific Books:—</i>	
<i>Urkunden zur Geschichte der nichteuklidischen Geometrie:</i> PROFESSOR GEORGE BRUCE HALSTED. <i>Lachman's The Spirit of Organic Chemistry:</i> DR. JAMES F. NORRIS. <i>Allen's Commercial Organic Analysis:</i> PROFESSOR W. A. NOYES. <i>Books Received</i>	813
<i>Societies and Academies:—</i>	
<i>Section of Geology and Mineralogy of the New York Academy of Sciences:</i> DR. ALEXIS A. JULIEN. <i>Torrey Botanical Club:</i> EDWARD S. BURGESS. <i>The New York Section of the American Chemical Society:</i> DR. DURAND WOODMAN.....	818
<i>Discussion and Correspondence:—</i>	
<i>Larval Stage of the Eel:</i> DR. THEO. GILL.....	820
<i>Scientific Notes and News</i>	820
<i>University and Educational News</i>	824

DURING the closing session of the last Congress, the Senate authorized the Committee on Manufactures to conduct a recess investigation on the subject of the extent and character of food adulteration in the United States. By reason of expiration of the term of service, only three members of the Senate Committee on Manufactures remained, namely, W. E. Mason, Chairman, of Illinois; W. A. Harris, of Kansas, and G. P. Wetmore, of Rhode Island. Under the terms of the resolution it is not necessary to have a quorum of the Committee, but the Chairman or any member designated by him is empowered to conduct the investigation, procure witnesses and to secure the analyses of suspected samples.

The Committee has already begun its work by holding a two weeks' session in Chicago. Dr. H. W. Wiley, the Chief Chemist of the Department of Agriculture, at the request of the Committee, has been detailed by the Secretary of Agriculture as an expert to attend the examinations and to assist in the work as far as possible.

Much interesting testimony was secured at the meeting in Chicago in regard to the extent and character of food adulteration.

Not only were business men who were engaged in adulteration placed upon the stand, but also some well-known hygienic and scientific experts, among whom may be

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mentioned Professor A. B. Prescott and Dr. V. C. Vaughn, from the University of Michigan.

Dr. Wiley was placed first upon the stand, and gave an outline of the character and extent of food adulteration as it has been revealed through the many years of investigation in the Chemical Division of the Department of Agriculture. Manufacturers of 'pure Vermont maple sugar' testified, under oath, that much of the product that they sold contained not more than 25 per cent. of maple sugar or syrup. When asked in regard to the purity of the maple sugar which they bought for mixing purposes they testified that they believed it to be pure, but were by no means certain. Glucose is the usual adulterant for maple syrup, although melted brown sugar is sometimes employed where a thinner product, more nearly resembling maple syrup, is desired. It was testified that when retail dealers desired maple syrup for their customers they specified the price they were willing to pay, and that the mixing was then done according to that price.

Manufacturers of jellies also testified that the cores and skins from cider factories and drying kilns were employed as the base of much of the pure fruit jellies manufactured and sold. Glucose is used as the principal filler in these jellies, and the color and flavor are largely supplied by synthetic products. The quantity of these adulterated goods made is far greater than that of the pure article.

Professor A. S. Mitchell, Chief Chemist of the State Board of Health and Pure Food and Dairy Commissioner of Wisconsin, was a valuable witness before the Committee. He brought with him samples of adulterated goods secured in the State of Wisconsin, and explained in detail the nature of the adulteration as it had been disclosed by his analyses. He described particularly the antiseptics and preservatives

which were on the market under various trade names, such as 'freezem' and 'freezine,' and so forth. 'Freezem' was shown to be a dilute solution of formaldehyde, while 'freezine' was composed chiefly of sodium sulphite. The question of the use of preservatives was discussed by the experts before the Committee, and the universal opinion was expressed that they were all unwholesome. Since, however, there are certain articles of food and condiments, such as cider, tomato catsup, etc., which require some preservative in order to prevent fermentation; and inasmuch as it was brought out in the evidence that in the shipment of butter from Australia to English ports the use of boric acid was quite universal and was not objected to by the English customers, and as it was further stated in the evidence that English merchants required that hams sent to England from a distance should be rubbed with boric acid, the experts unanimously agreed that it would not be wise to pass a law prohibiting the use of all preservatives, but that thorough investigation should be made to determine which kinds of preservatives are least objectionable, and that in all cases any article of food, drink or condiment containing a preservative should have that fact plainly stated on the label and the quantity thereof indicated.

It was brought out in the evidence that the oleomargarine law was practically violated in many parts of Chicago. One witness before the Committee went to five grocery stores and asked for creamery butter. In each case he received oleomargarine. In each case the wrapper, which, according to law, should bear the word 'oleomargarine,' plainly visible, was so arranged that the purchaser could not possibly see the word. The plan was to stamp the word 'oleomargarine' near the corner of the wrapper and then to fold the corner of the wrapper over so that the stamp

would be invisible. One of the dealers selling these packages was brought before the Committee and testified that some of the richest people living in Chicago were his customers, buying this substance and knowing that it was oleomargarine, but who desired that the fact of its use by them should be kept secret.

The ethics of coloring butter and oleomargarine was also discussed before the Committee, and it was brought out in evidence that if oleomargarine was colored pink or any other color than butter color its use as butter would be practically destroyed.

Evidence was also given in the matter of making artificial whiskies from cologne spirits, burnt sugar and the ethers of the organic acids, together with the essential oil to give the proper bead. It was developed that the trade in these synthetic drinks was very large, and that the natural products suffer severely in competition.

Much testimony was also given in regard to the adulteration of the ordinary condiments, such as ground pepper, mustard, cinnamon and so forth. It appeared that these bodies were largely mixed with inert matter, so that the purchaser would really get very little of the condiment which he desired. It was shown that ground coffee was mixed largely with chicory and other substances, and that the coffee bean was mixed with an artificial bean or with a certain proportion of the dead or imperfect beans, which were not only useless for flavoring the beverage, but, on the other hand, were bitter and unpalatable.

The session of the Committee in Chicago had for its object the outlining of the scope of the investigation which will be continued during the summer months in other localities of the United States. The final purpose of the Committee is to obtain material on which to base a report in favor of a national pure food and drug bill, having for

its object the regulation of traffic in the adulteration of food in the District of Columbia and the Territories and the control of inter-State commerce in adulterated food and drug products.

AMERIND—A DESIGNATION FOR THE ABORIGINAL TRIBES OF THE AMERICAN HEMISPHERE.

A PART of the proceedings of the Anthropological Society of Washington, at a meeting on May 23d last, seem destined to produce permanent influence on ethnologic nomenclature; this part of the proceedings taking the form of a symposium on the name of the native American tribes. The discussion was opened by Colonel F. F. Hilder, of the Bureau of American Ethnology, with a critical account of the origin of the misnomer 'Indian,' applied by Columbus to the American aborigines; he was followed by Major J. W. Powell, who advocated the substitution of the name *Amerind*, recently suggested in a conference with lexicographers. A communication by Dr. O. T. Mason followed, in which the various schemes of ethnologic classification and nomenclature were summarized and discussed. Contributions to the symposium were made also by Dr. Albert S. Gatschet, Dr. Thomas Wilson and Miss Alice C. Fletcher. At the close of the discussion the contributions were summarized (by President McGee) as follows:

1. There is no satisfactory denotive term in use to designate the native American tribes. Most biologists and many ethnologists employ the term 'American'; but this term is inappropriate, in that it connotes, and is commonly used for, the present predominantly Caucasian population. The term 'Indian' is used in popular speech and writing, and to a slight extent in ethnologic literature; but it is seriously objectionable in that it perpetuates an error, and for the further reason that it connotes