# SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

FRIDAY, MAY 6, 1904.

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## *THE GENERAL MEETING OF THE AMERICAN PHILOSOPHICAL SOCIETY.*

A GENERAL meeting of the American Philosophical Society which undertakes to bring together the members from widely different parts of the country has now become an annual event of the week following Easter. All the general meetings which have been held so far have been highly successful and profitable and have served to arouse much interest in the history and purposes of this organization, which is the oldest scientific society on this continent. The interest in the meeting this year was in no respect inferior to that of former years, as was evidenced by the large attendance of non-resident members and by the extensive program of scientific papers.

That these meetings fill a real need in the scientific life of this country is the opinion of most of those who have attended them. This society, more than any other in this country, with the possible exception of one, stands for the solidarity of human learning. A lively appreciation of this fact is awakened by an inspection of the contents of the long series of volumes issued by the society during a period of more than one hundred and fifty years, as well as by a glance at the varied character of the papers offered at the general meeting. There are few if any organizations in this country which attempt to cover the same field. The American Association for the Advancement of Science and the National Academy of Sciences are devoted to scientific subjects in the stricter sense. The American Philosophical So-

preservation of food. Chemical disinfectants are described under the heads of 'Metallic Salts,' 'Organic Substances' and 'Compounds Related to the Alcohols.'

Methods of disinfection are described as related to towns and municipalities and as personal and internal disinfection. The chapter on the preservation of food is only a small part of the work and is not nearly so valuable as the part devoted to disinfection pure and simple. A résumé of legal statutes and regulations is also given and a short and necessarily brief account is given of the methods of analysis.

Of great interest is the discussion of those substances used both as disinfectants and as food preservatives. Many of these are described as non-poisonous, in such a way as to mislead the careless reader.

A careful reading of the article on fluorides would not warrant the apparent recommendation of it as a substance suitable for addition to food products.

Inasmuch as acetate of alumina has lately been used to a very large extent in sausages imported into this country, it is interesting to read, on page 175, the statement referring to this substance: 'It would doubtless be useful for surgical dressings but is unnecessary and unsafe as a disinfectant.'

In general it may be assumed that substances which are valuable for surgical dressings are not as a rule proper substances to be added to foods.

The salts of copper and zinc belong also to this class of bodies, and while their use as disinfectants is praiseworthy, their presence in food products is at least suspicious.

Other well-known substances belonging to both classes are salicylic and benzoic acids and their salts, sulphurous acid and its salts, and formaldehyde.

In regard to the preservation of food by these reagents the general tendency of Rideal's work is to discourage their use, and this tendency must, it seems to me, be commended by all thoughtful students of hygiene and nutrition. In spite of this general tendency, however, the department committee of the English government, while prohibiting absolutely the use of formaldehyde or preparations thereof in foods, recommends that salicylic acid may be used in quantities not greater than one grain per pound, except in milk, from which all preservatives of every kind are excluded. Cream and butter, however, are allowed to carry boric acid or borax; in the case of the former, in quantities not to exceed .25 per cent. of boric acid or its equivalent in borax; in the case of the latter, not to exceed .5 per cent. of boric acid or its equivalent in borax. In the case of foods intended for infants and invalids, however, all preservatives are to be excluded. At the International Congress of Hygiene at Brussels, 1903, resolutions were passed in favor of the total abolition of preservatives in all kinds of foods. This, however, as is seen, includes salt, sugar, wood smoke, etc., which have been in use from time immemorial and hence such a recommendation is too drastic (page 423).

The summary of facts respecting food preservation by chemicals is a very valuable part of this excellent work.

H. W. Wiley.

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*SCIENTIFIC JOURNALS AND ARTICLES.*

The May number of *The American Journal of Science* contains the following articles: 'Recent Changes in the Elevation of Land and Sea in the Vicinity of New York City,' by G. W. Tuttle; 'Geology of Brome Mountain, one of the Monteregian Hills,' by J. A. Dresser, 'Crystallization of Molybdenite,' by A. J. Moses; 'Behavior of Typical Hydrous Chlorides when Heated in Hydrogen Chloride,' by F. A. Gooch and F. M. McClenahan; '*Stegomus Longipes*, a New Reptile from the Triassic Sandstones of the Connecticut Valley,' by B. K. Emerson and F. B. Loomis; 'Note on the Probable Footprints of *Stegomus Longipes*,' by R. S. Lull; 'Canyon City Meteorite from Trinity County, California,' by H. A. Ward; 'Two Microscopic-Petrographical Methods,' by F. E. Wright; 'Denucleating Effect of Rotation in Case of Air Stored over Water,' by C. Barus and A. E. Watson.

THE May number (volume 10, number 8) of the *Bulletin of the American Mathematical Society* contains the following articles: 'Report of the February Meeting of the American Mathematical Society,' by Professor F. N. Cole; 'Report on the Requirements for the Master's Degree,' by the Committee of the Chicago Section; 'On the Subgroups of Order a Power of $p$ in the Linear Homogeneous and Fractional Groups in the $GF[p^n]$,' by Professor L. E. Dickson; 'The Exterior and Interior of a Plane Curve,' by Dr. G. A. Bliss; 'Ricatti Isothermal Systems—a Correction,' by Dr. Edward Kasner; Shorter Notices; Notes; New Publications.

ACCORDING to the annual announcement of the Marine Biological Laboratory at Wood's Hole, the *Journal of Morphology,* the publication of which was interrupted in 1901, at the conclusion of the seventeenth volume, is to be immediately resumed, and will be open for larger papers in animal morphology, requiring, as a rule, extensive illustration in lithographic plates. A *Journal of Animal Biology* is also to be undertaken in the interest of investigations upon living animals, dealing especially with the problems of evolution as presented in the phenomena of heredity, variation, hybridization, etc., and requiring experimental methods and methodical observation.

## SOCIETIES AND ACADEMIES.

### THE GEOLOGICAL SOCIETY OF WASHINGTON.

THE 152d meeting was held February 24, 1904.

Dr. Arthur L. Day presented a paper entitled 'The Study of Minerals in the Laboratory.' Dr. Day drew attention to the relation of some problems of physics to geology and pointed out the lines of investigation which had been undertaken by the Physical Laboratory of the United States Geological Survey. His paper was intended as an introduction to a summary of the results of certain investigations, an abstract of which will appear below.

This was followed by a discussion of the oil fields of Alaska, by Dr. George C. Martin. Indications of petroleum have been found at three distinct localities on the Pacific Coast of Alaska and have been reported from several others. The Controller Bay field lies adjacent to the coast, about twenty miles east of the Copper River delta. In this field one well has been drilled which struck oil and several others were being put down at the time of Dr. Martin's visit. The rocks, consisting of shales and sandstones, are closely folded and are probably of Tertiary age, and are overlain by coal-bearing horizons which are also Tertiary. The structure, as far as could be determined, is complex.

The second locality lies on the west shore of Cook Inlet, at Enochkin Bay. In this locality the seepages indicate the presence of petroleum, though the wells drilled thus far have not yielded any gushers. The oil-bearing rocks are of Jurassic age and are thrown up into broad, open flats.

One hundred miles to the southwest is Cold Bay, where a similar occurrence of petroleum seepages has been found. The geologic structure and rocks seem to be identical with those of Enochkin Bay. An account of these oil fields has been published by Dr. Martin in Bulletin 225, U. S. Geological Survey, pp. 362–385.

THE 153d meeting was held March 9 and the first paper was entitled 'Extra Morainic Pebbles in Western Pennsylvania,' by Mr. Lester H. Woolsey. Mr. Woolsey said that glacial pebbles, granites, diabases, etc., of probably Wisconsin or Iowan age, have been found in 950-foot terraces (supposedly Kansan) along Raccoon Creek in Beaver and Washington counties as far south as Burgettstown on the Panhandle Railway. Similar pebbles were found up to 1,100 feet elsewhere in Beaver County. This is some evidence of a general flooding of this region in post-Kansan time.

Mr. F. H. Knowlton then gave a paper on the 'Fossil Floras of the Yukon.' Up to about 1900 the known fossil flora of Alaska numbered about 110 species, all of which had come from the coast region from Sitka to Cape Lisburne. With the exception of the Cape Lisburne forms, which were regarded as of Jurasso-Cretaceous age, practically all those known were Tertiary in age. The discovery