constructed. On the upper reaches of the River Jordan and Lake Tiberias, surveys are being carried out with the view of further hydroelectric development. Lord Reading stated that the demands in the Corporation's area are still far from the saturation point. As the policy of reducing tariffs wherever possible is being continued, the prospects are promising. As Palestine is practically a 'new' country from the economic point of view, it is not surprising that the company is already on a remunerative basis.

Sedimentation

BULLETIN 98 of the National Research Council of America (1935, pp. 246) embodies the report of the Committee on Sedimentation for 1932–34, and indicates the immense activity of investigators in this subject as well as of the members responsible for the report. The latter includes about a thousand references to current literature and in itself represents a commendable example of bibliographic and abstracting work. The topics discussed include European studies and varved sediments (Antevs); German contributions (Becker); studies at Stanford University (Blackwelder); glacial sediments (Leighton and Townley); British researches (Milner); mineralogy of sediments (Pettijohn); hydrologic and hydrographic investigations (Piper); chemical aspects (Steiger); recent sediments and petroleum source-beds (Trask); miscellaneous types (Twenhofel); marine bottom deposits (Vaughan); oxidation-reduction conditions in the Gulf of Catalina (ZoBell); and terminology of coarse sediments (Wentworth, with notes by Boswell). The last of these is a contribution of very general interest. The Sub-committee on Nomenclature and Classification of Sediments is studying the terminology of eleven groups, and in his introduction to the present report, Trowbridge holds out the prospect that following up the two reports already issued on volcanic and coarse sediments, others may be expected at the rate of two or more per year. The Committee is to be congratulated on the thoroughness of its work. It is obvious that without such a review geologists could not possibly keep in touch with the widely varied results of current progress in a branch of their science which is fundamental to its main object and to many of its applications.

Mining Legislation in South Australia

WE have received from the South Australian Department of Mines the *Mining Review*, No. 61, for the half-year ended December 31, 1934. After a short preface signed by Dr. L. Keith Ward, director of mines and also Government geologist, whose report appears afterwards, the review contains a summary of mining legislation, etc. A statistical portion which, together with a table at the end of the volume, shows that the total value of the minerals produced in South Australia since 1841 up to the end of 1934 equals 53¼ million pounds, taking gold at its old value. They also show a considerable increase both in quantity and value in 1934 compared to 1933, the quantity of iron ore produced in the former year being practically 1¼ million tons, showing an increase of half a million tons over 1933. Gold has naturally increased both in quantity and in value, and most other minerals show increases, though these in some cases are but slight, and actually show decreases in a few cases. Next comes a statement as to subsidies, from which it would appear that the amount advanced to various mines is nearly £71,000, of which a little more than £18,000 has been repaid. Next we have certain reports of treatment works and Government boring operations, followed by a short report by the Government geologist, and a series of reports by the chief inspector of mines, which give much detailed information about many of the mines of the Province.

Research on Shellac

IN 1925, the Indian Government founded the Lac Research Institute to ensure that the rapid development of rival products, and the high price levels reached in the post-War period, did not cause lac to meet the same fate that indigo had suffered previously. The results obtained during the first nine years work of the Institute and the present trend of the investigations have recently been published as an illustrated booklet in concise, interesting and non-technical form ("Lac and the Indian Lac Research Institute", by D. Norris, P. M. Glover and R. W. Aldis. Nankum: Lac Research Institute. Rs. 2.8). The lac insect yields both a colouring matter and a resin, and it was for the former product that it was originally cultivated. With the discovery of aniline dyes, however, the lac dye industry came to an end and the resin in unmanufactured form as lac, or the manufactured form as shellac, became the important feature of the industry. The uses to which shellac can be put are numerous, but the greatest proportion is adsorbed by the gramophone, electrical and varnish trades. The increasing use of synthetic resins such as bakelite inevitably threatened the industry, but as new methods have now been discovered whereby the natural product may be used in combination with the synthetic, the situation has improved. Research work is carried out on entomological, chemical and biochemical lines, many problems naturally occurring with regard to the insect and its host plant as well as the secretion of lac and its preparation for the market.

All-India Institute of Hygiene and Public Health

IN the annual report of the All-India Institute of Hygiene and Public Health, Calcutta, for 1934, the first to be issued, the events which led to the foundation of an All-India Institute of Hygiene are first recapitulated. The conception of providing courses of post-graduate training in public health originated with Sir Leonard Rogers, and as a result of his efforts the Calcutta School of Tropical Medicine was founded and opened in 1920. It was realised that there was also need for the training of an Indian personnel in public health, but circumstances prevented the realisation of this object until the Rockefeller Foundation offered to provide funds for a site, and for the

building and equipment of an institute, provided the Government of India undertook its maintenance. A site was acquired in 1930, and the building erected adjacent to the Tropical School, which was opened in 1932. The work of the Institute is carried on in six sections, and a representative staff has been appointed under the directorship of Lieut. Col. A. D. Stewart, who is also the professor of hygiene. A description of the building is given, together with an account of the work of the sections, and of the research work that is in progress.

Food Poisoning

THE Ministry of Health has issued a memorandum on the steps to be taken by medical officers of health (outside London) in suspected cases of food poisoning (Memo. 188/Med.). The two classes of food poisoning are dealt with—contamination of food by poisonous chemicals and bacterial infections of food, which are far more frequent. Directions are given outlining the methods of investigating outbreaks, the collection of material for chemical or bacteriological examination, and method of packing and transmission to the Ministry, with hints on the chemical or bacteriological examination. In an appendix, a scheme is outlined for the routine inquiry into outbreaks of poisoning by meat foods, and in a second appendix valuable details are given for the isolation and identification of the bacteria (*Salmonella*) concerned in bacterial food poisoning.

International Congress on Soil Science

THE papers presented to the third International Congress on Soil Science, held recently at Oxford, embody work that is representative of most aspects of soil science; these are issued in two volumes (London: Thomas Murby and Co., 1935). The first volume contains those presented to the several commissions, and the second includes papers read at the plenary sessions, together with the address of the president, Sir John Russell. The papers are in English, French or German. The president, in his address, dealt with the contribution of soil science towards improving economic conditions, mentioning in particular the value of the surveying and mapping of soils as a preliminary to all schemes of agricultural development. As interesting examples of such contribution, those mentioned by Hardy, in his paper on "Some Aspects of Tropical Soils", may be quoted; these dealt more particularly with quantitative soil profile investigations. In the Caribbean region, for example, studies of this nature have rendered possible the exact definition of soil best adapted to the growth of several important orchard and field crops, and have made manifest certain soil factors that are definitely harmful to those crops. This aspect of soil work was dealt with by the commission on soil genesis, morphology and cartography and by that on the application of soil science to land amelioration.

No part of soil science stands to gain more from a Congress of this nature than that represented by those two commissions, since work in this field would lose much of its value without uniformity in methods of approach and expression of results. Studies on the composition and structure of the soil, divided for the purpose of the Congress into four commissions, namely, soil physics, soil chemistry, soil microbiology and soil fertility, reflect the progress that has been made in recent years in this aspect of soil work. Schofield made a contribution in which soil moisture relationships are regarded from a new point of view based on energy considerations, and introduced a scale to specify the degree of wetness or dryness of a soil; it was shown that by carefully distinguishing wetting from drying conditions, a more rational interpretation could be applied to data on plant wilting and field moisture capacity.

Cooke's Illustrations of British Fungi

A MAGNIFICENT series of eight volumes of "Illustrations of British Fungi" appeared towards the close of the last century. They were the work of Dr. M. C. Cooke, and served as a very pleasing and facile reference for naming the larger fungi. More recent advances in the scientific nomenclature of the Basidiomycetes, however, have shown that the names attached to the plates were not always correct. A great deal of confusion has resulted, and has somewhat diminished the usefulness of the work. Mr. A. A. Pearson has largely remedied this state of affairs, by publishing a modernised index to the "Illustrations" (*Trans. Brit. Mycol. Soc.*, **20**, Pt. 1, 33–95, Aug. 1935). This was originally based on notes prepared by Dr. Quelet, but Mr. Pearson also obtained the opinions of Prof. René Maire and Mr. Carleton Rea. These authorities concur upon a large number of species, but are by no means agreed upon others. The student of mycology will, however, be able to find the highest common factor between them where necessary, and will be able to use his Cooke's "Illustrations" again, with reasonable accuracy.

Fossil Elephants in Eldorado

A NOTABLE discovery of the remains of the extinct Columbian elephant, one of the largest of elephants, is recorded from Eldorado, Oklahoma, by Science Service, Washington, D.C. The University of Oklahoma and Kansas State College have united in excavating certain mounds in which casual digging had revealed fossil bones, and the first results include seven skulls and many bones, tusks and teeth of the species referred to. The elephant remains range from those of mature individuals to young ones, five to seven years old. In addition to these remains, bones of extinct species of camel, horse and bison have been excavated. It appears that the area of the discoveries was an ancient water-hole which had a bottom of very soft mud in which the animals had become bogged.

Guide to Statistics

THE "Guide to Current Official Statistics of the United Kingdom", for 1934 (H.M. Stationery Office. 1*s.*), has recently been published. This guide, now in its thirteenth year, has become almost indispensable