

is no record of the Canadian falls (Horseshoe falls) having ever been frozen over; but the channel leading to the American falls is shallow and carries only five per cent of the flow over the cascades, and, becoming obstructed by ice at times, may then be frozen over. Such an event is always due to ice jams at the head of Goat Island, which occur when thick ice on Lake Erie is broken up by strong south-westerly gales, and large quantities of floe ice are driven into the Niagara River and carried downstream. The level of Lake Erie is stated to be close to its minimum recorded level, and the discharge of the river very low in consequence. The comparative frequency with which the falls have been frozen over (for a short time) since 1922 is clearly, therefore, no evidence for an increase in the average severity of American winters; in fact, temperature records show just the reverse in spite of the occurrence of a few isolated spells of unusual cold within the last few years.

#### Determination of Hydrogen Ion Concentration of Soils

THE British Drug Houses have recently brought out a new type of soil-testing outfit for determination of *pH* values, in which barium sulphate is used as a clarifying agent. This enables the determination to be made with a greater degree of precision than has hitherto been possible, particularly in the case of clay soils. The outfit has been designed in response to a persistent demand for means of estimating *pH* values conveniently and accurately in the field, and is fitted up in a compact oak cabinet of readily portable form. The cost of the complete outfit is £1 1s., and prices are also quoted in the descriptive pamphlet (issued by British Drug Houses) for the individual items, should need arise for their replacement.

#### Directory and Buyers' Guide, 1936-37

THE *Engineer* is the oldest and one of the most influential journals in Great Britain dealing with the progress of engineering. In the interests of the firms advertising in the paper, the proprietors publish every two years a useful directory of about 250 pages. The first 38 pages give an index and vocabulary in French, German, Italian and Spanish of the technical words used in the book. The next 156 pages give an alphabetical list of the manufacturers together with their telephone numbers and telegraphic addresses. The next section gives their telegraphic addresses and the codes they use. Finally a carefully selected list is given of the numbers and titles of British Standard Specifications. The guide has been carefully prepared, and should prove useful to consulting engineers and contractors. It is issued free of charge by the proprietors of the *Engineer*. To qualify for inclusion under appropriate headings, it is necessary to advertise in the columns of the *Engineer* to the extent of £25 a year.

#### The Original Use of the Word "Solute"

DR. P. LECOMTE DU NOÛY, writing from the Institut Pasteur, Paris, asks if it is known who is responsible for the coining of the useful word 'solute'.

The word is not to be found in old text-books, but the "Oxford English Dictionary" gives a quotation from Sir William Dampier's "Recent Developments of Physical Science" in which the word is used in its present sense. Upon referring the point to Sir William, however, he informs us that the Dictionary is wrong in implying that the first use of the word is in that volume, which was first published in 1904. In his "Theory of Solution", published two years earlier, he says (p. 49), "It is customary to distinguish between the medium or *solvent* and the dissolved substance or *solute*". On the other hand, in his "Solution and Electrolysis", published in 1895, Sir William uses the word 'solvend' instead of 'solute'. Apparently, therefore, the word 'solute' was introduced between 1895 and 1902, but who was responsible for the coining of it remains undecided. Perhaps some of our readers can throw light upon the question.

#### Heavy Water and the Colour of Hydrated Salts

IN connexion with his communication on the influence of heavy water on the colour of hydrated salts (*NATURE*, March 28, p. 534), Dr. James Bell writes that it appears that the observation that copper sulphate pentadeuterate solutions and crystals are more green in tint than those of the pentahydrate had already been made. H. Perpérot and F. Schacherl, in an account of an investigation of the vapour tensions of the different deuterates of copper sulphate (*J. de Physique et le Radium*, vii, 6, 439; Oct. 1935), mention this difference in colour, and state that they have undertaken an examination of the absorption spectra of the solutions. As it is unusual for work on this field to be published in that journal, and an abstract has not yet been available, this paper was inadvertently overlooked.

#### Award of Goethe Medal

It is announced that Herr Hitler has conferred the Goethe Medal on Dr. Max Uhle, of Berlin. Dr. Uhle, who is an honorary fellow of the Royal Anthropological Institute, has a world-wide reputation as one of the foremost authorities on South American archaeology. During a residence there of many years he explored a large number of prehistoric sites in Peru, some of his work in the field being supported by grants from the Phœbe B. Hearst benefaction of the University of California. His studies, more particularly of the pottery, are the basis of generally accepted views on the character and chronology of Pre-Inca civilisation.

#### International Association on Quaternary Research

THE third International Conference of the International Association on Quaternary Research will be held in Vienna, on September 1-7. After the conference, excursions will be made to the East Austrian Alps and their forelands. These excursions will start on September 9 and continue until September 25. Those who propose to attend the conference and excursions should write at once for further details and approximate cost to the president, Prof. Dr. Albrecht Penck, c/o Inqua, Rasumofskygasse 23, Vienna III, Austria.