

smoothly moulded. The other model had the whole upper part rounded, was blunt at the front and tapered at the back. Mr. Heald computes from his results that, at 60 miles per hour, the 1922 Sedan requires 27 h.p. to overcome air resistance; 26 h.p. is taken by the 1928 Sedan and 18 h.p. for the 1933 model. The two stream-lined models took 8 and 6 h.p. respectively. At 48 miles per hour it was found that the horse-power expended on air resistance was halved and at 76 m.p.h. it was doubled. Mr. Heald concludes that the 1933 motor, shorn of its projecting bumpers, head-lights and spare tyre, and fitted with a rounded top and sloping wind-shield, would consume 10 h.p. less at 60 m.p.h. and 20 h.p. less at 70 m.p.h.

#### Earthquake Insurance in New Zealand

ACCORDING to a message published in the *Times* of December 21, the Judicial Committee of the Privy Council in New Zealand has decided that, under the Workers' Compensation for Accidents Act, compensation could be claimed for the death or injury of labourers engaged in their occupations during the recent Hawke's Bay earthquake. The insurance companies stated that their liability in the event of a great disaster would be so serious that they could not undertake the risk. The Government accordingly introduced a measure to remove employers' liability in such cases in future. This proposal being opposed, a compromise was reached limiting the total liability of the companies to £50,000 in a single earthquake or in a series of earthquakes lasting for seven days.

#### Teaching of Biology in South Africa

AN address by Dr. E. P. Phillips on "The Teaching of Biology", read to the South African Biological Society, appears in the Society's Pamphlet No. 6, 1933. Dr. Phillips advocated an introduction to biology in the schools by easy stages, which would give pupils an insight into biology as a concrete whole and not as isolated facts. His scheme, beginning like many others, with the differences between living and non-living, leads gradually and finally to knowledge of elementary human physiology, and includes information on the great generalisations of biology. The discussion which followed showed a widespread feeling that biology is not satisfactorily taught in schools, and Dr. Janse placed his finger upon the weak spot in the present system when he made a plea for better trained teachers in biology.

#### Lovibond Comparator with B.D.H. Indicators

INCLUDED in the "Catalogue of B.D.H. Fine Chemical Products", recently received from the British Drug Houses, Ltd., London, N.1, is a leaflet describing the Lovibond comparator for use with B.D.H. indicators. The apparatus consists of a metal case, opening like a book, and furnished at the back with an opal glass screen and two partitions to take the test-tubes containing the liquid under examination. The standard colour glasses, nine in number,

are fitted into a flat disc which may be rotated in the front half of the case, which contains two holes, in front of the test-tubes. By rotating the disc, a colour glass is brought into view in front of one test-tube, containing the liquid only; through the other hole the test-tube containing liquid with the correct amount of appropriate indicator added is visible simultaneously. The colour comparison can thus be quickly made. The pH value of the colour appears at a third hole in the front of the case. Discs are available for different indicators of pH 2.8-9.6 and also for B.D.H. Universal indicator, pH 4-11.

#### Eclipses of the Sun in 1934

THERE will be a total eclipse of the sun on February 13-14, which is invisible at Greenwich. The sun will rise eclipsed over Borneo, and the path of totality runs across the Pacific Ocean without crossing any land except a few very small islands. Oroluk Island, Losap Island and Wake Island lie on the path of totality. No British expedition has been organised to observe the eclipse from any of these small islands. In Borneo the eclipsed sun will, of course, be so low down that no useful spectroscopic observations can be made. The second solar eclipse which will take place in 1934 will be an annular eclipse on August 10, also invisible at Greenwich. The track crosses South Africa from Mossamedes to Inhambane.

#### Announcements

A CONFERENCE on atomic physics will be held in 1934, under the auspices of the Physical Society. It will be opened by Lord Rutherford, and will probably extend over two days at least, some of the meetings being held in London and some in Cambridge.

WE regret that in referring to "Street Traffic Flow" by Mr. Henry Watson in *NATURE* of December 30, p. 987, the price quoted was 31s. net. Messrs. Chapman and Hall, Ltd., inform us that the price of the book is 21s. net.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—A junior technical assistant for the Directorate of Ordnance Factories, War Office—The Permanent Under-Secretary of State (C.4), The War Office, London, S.W.1 (Jan. 15). A chief technical assistant to the electricity undertaking of the Metropolitan Borough of Poplar—The Town Clerk, Council Offices, High Street, Poplar, E.14 (Jan. 19). A principal of the Croydon Polytechnic and Evening Institutes—The Education Officer, Education Office, Katharine Street, Croydon (Jan. 31). A specialist serologist in the Union of South Africa—The Secretary, Office of the High Commissioner for the Union of South Africa, Trafalgar Square, London, W.C.2 (Feb. 6). A principal of the Grimsby Technical Evening School—The Secretary, Education Offices, Grimsby. A chemist under the Sudan Government, at Khartoum—The Controller, Sudan Government London Office, Wellington House, Buckingham Gate, London, S.W.1.