

### Earthquakes in India

The *Times* correspondent from Bombay reports that several earthquake shocks have been felt daily between July 5 and July 9, with epicentres near Paliad, a town 64 miles from Bhavnagar, near the west of the Gulf of Cambay. Paliad is being deserted by its population of approximately 5,000 in consequence of these shocks. This area cannot be said to have been greatly affected by earthquake shocks in the past, and there is no record of one at all in Miss E. F. Bellamy's catalogue for the years 1913-1930. There was some destruction of property in this district at the time of the Great Cutch earthquake of June 16, 1819, which was attended by what was probably the greatest vertical surface displacement resulting from any earthquake in India. The ground to the north was uplifted by 15-20 ft., whilst that to the south was depressed between 10 and 15 ft. When further reports come to hand, it will be interesting to see whether this epicentre is a south-easterly migration of the great earthquake of more than a century ago, or whether it is purely a local surface phenomenon.

### Science and Mankind

IN his presidential address to the Society of Chemical Industry at Ottawa on June 20 on the relation of science to the world of to-day, Viscount Leverhulme reminded his audience that science recognizes no political frontiers and accepts as her servants those in all countries who are engaged in the search after truth and who are working to increase mankind's knowledge of natural phenomena. Discussing the relation between mankind and science, he suggested that possibly we ask too much of science and apply new methods in fields where they have only a limited application. The man of science approaches all problems with the one purpose by observation, measurement and comparison to discover truth. The quest is dispassionate, and though a utilitarian purpose or a commercial motive might inspire the research, that does not affect the scientific approach to the problem which characterizes the scientific worker. Nearly all the contributions of science to our comfort and welfare can be traced to the quest of knowledge for its own sake.

THE scientist as such is not concerned with ethical and moral problems, or with the political issues which may surround developments arising from his work. When, however, so many scientific discoveries having a practical application can be used destructively as well as constructively, the significance of the remark made by Lord Leverhulme's father that the greatest problem in the twentieth century would be the man behind the machine becomes apparent. Lord Leverhulme, indeed, suggested that just as the ethical development of the human race has not reached the point where it can safely be given aeroplanes and high explosives, so the human mind, in the mass, has not reached the point when it can adjust itself to the new revelations of physical and astronomy. If mankind is to become worthier of the gifts and opportunities science is giving him, Lord Leverhulme

suggested that we must depend on forces and guiding principles at present outside the range of science. Even psychology, which is giving us a deeper understanding of man's mind and emotions and behaviour, has its limitations, and man cannot impartially demand of science the answer to every question and expect of her the solution of every problem. We should abandon the conception of science as an invading army that has ravaged and laid bare the spiritual. In the daylight of true proportion and perspective, science should be welcomed as a friend by those who work for the progress of humanity in other spheres of life.

### Science and Industry

THE Messel Memorial Lecture of the Society of Chemical Industry for 1938 was delivered by Dr. L. H. Baekeland on June 21. Dealing generally with "Science and Industry", Dr. Baekeland sketched more particularly the growth of chemical industry first in Europe and then in the United States. The value of chemical industry was only fully realized in the United States with the outbreak of the Great War, and Dr. Baekeland described how Mr. F. P. Garvan's appreciation of the dependence of the United States on Germany for dyes, intermediates, photographic chemicals, medicinals, etc., led him to organize the Chemical Foundation, of which he remained president until his death. Any *bona fide* American chemical manufacturer or company can become a stockholder, but can only subscribe for a limited number of shares. Every stockholder has the opportunity of acquiring licences by paying royalties on any patents owned by the Foundation. The money thus collected is used for developing chemical education, research, and similar efforts for advancing knowledge in chemistry and for the development of chemical industries. Generous support is furnished to many societies for the advancement of science and industry and medical research. Garvan also recognized the possibility of much closer relations between chemical industries and agriculture, and instigated the formation of the National Farm Chemurgic Council to co-ordinate agriculture, industry and science. Few men, Dr. Baekeland considers, had more influence in the United States on science and industry than Mr. Garvan, and there is now a much wider appreciation of the importance of scientific research in industry.

### International Astronomical Union

THE triennial conference of the International Astronomical Union, representing 27 countries, will be held at Stockholm during the week August 3-10 under the presidency of Prof. E. Esclançon, director of the National Observatory of Paris. After the usual opening meetings, the conference breaks up into a number of committees at which astronomical problems, especially those calling for international co-operation, are discussed. Draft reports from no fewer than twenty-nine such committees have been distributed a month in advance to those attending the meeting. Among the topics to be discussed are standard notations in astronomy—a provisional list