

appreciation, special performances and special films for juveniles. Of outstanding interest under the two last-mentioned headings are accounts of certain activities of the Governments of the U.S.S.R. Their "Children's Cinemas" are, it is said, equipped on broadly conceived lines as recreational centres. In addition to the theatre itself, they include a large hall for games and musical programmes, a library and reading room, a room for quiet table games, a refreshment counter, and a sort of cinema museum in which are displayed exhibits illustrating the history and technique of cinema production with sets of photographs of the best films and leading cinema personalities. Children are encouraged to amuse themselves, before the performance begins, in the various rooms, especially the large hall, where the programme usually is such as to prepare them for understanding the film about to be shown.

APART from the technical staff of these Children's Cinemas, a special staff of teachers is employed in these houses. A special section of the Central Department for Industrial Cinematography employs a regular staff for the making of films for children, the subjects including travel and exploration, animal life, children of the U.S.S.R. and other countries, lives of remarkable persons and works of popular children's authors, among whom are mentioned Mark Twain, Jules Verne, Swift, Kipling and Pushkin. For the guidance of makers of such films certain basic principles have been prescribed, such as: "Any attempt to address children otherwise than in the real language of art, to 'talk down' to the child's intellectual level—i.e., any conscious or deliberate simplification—makes the juvenile film stereotyped and false. It should be simple with the simplicity of a real work of art, but not simplified".

Technical Progress and Unemployment

AN Advisory Committee on Management (International Labour Organization) at its meeting on May 2 and 3 studied the practical methods which industrial undertakings could adopt to alleviate the immediate social consequences of the elimination of surplus works or technical equipment and of the rapid and extensive mechanization of production (Geneva: International Labour Organization). The Committee drew up a list of measures which might be taken by organizations obliged to reduce their staff in consequence of progressive mechanization or other industrial changes. These measures are classified into five groups according to whether they are preliminary and designed to postpone or minimize or avoid dismissals as, for example, by reduction of hours or transfer of workers to other services; those intended to systematize inevitable dismissals, taking account of all psychological and moral issues involved; those intended to help workers who are dismissed; measures of adjustment among the remaining staff; and general measures involving co-operation with staff representatives, other undertakings and official or private organizations.

IN regard to the measures for dealing with actual dismissals, the Committee stresses the importance of selecting workers for dismissal on the basis of objective criteria, the information of staff in advance and the careful spreading of dismissals over a period. The Committee also considered a report prepared by the International Labour Office on the use of office machinery and its influence on conditions of work for staff. Various technical means of mitigating the physiological and psychological consequences of the mechanization of office work were suggested by the Committee, which in regard to the general effects, expressed the opinion that a reduction of hours of work in offices would assist in reducing those drawbacks. The Committee also holds that to counteract the occupational consequences of the use of machines, the social guarantees recognized as due to the industrial worker should be granted equally to office employees, especially by a general extension of social legislation and of the system of collective agreements.

The Rockefeller Foundation

THE Rockefeller Foundation in 1937 distributed a total of more than 9,500,000 dollars. Fifty-five per cent of the grants were for work in the United States, and among the largest appropriations and authorizations of the year were 420,000 dollars to the China Medical Board for the maintenance of the Peiping Union Medical College; 360,000 dollars to Harvard University for research in industrial hazards; 300,000 dollars to the Yale University School of Medicine for the Department of Psychiatry; 300,000 dollars to the California Institute of Technology for the development of organic chemistry; 275,000 dollars to the National Research Council for research in problems of sex and in biophysics; 250,000 dollars for the general research fund of the Yale University School of Medicine; 240,000 dollars to the Royal Institute of International Affairs for research in international problems; 156,000 dollars for teaching and research in psychiatry at the Harvard Medical School and Massachusetts General Hospital; 150,000 dollars to the National Institute of Economic and Social Research for basic economic research, and 100,000 dollars to the International Institute of Intellectual Co-operation for research in connexion with the International Studies Conference. The annual report of the Foundation includes the president's review with the detailed reports of the secretary, the treasurer and the directors of the International Health Division, the Medical Sciences, the Natural Sciences, the Social Sciences and the Humanities and the vice-president in charge of the programme in China.

IN the natural sciences, the Foundation has given its major support to experimental biology, including research on hormones, nutrition, and enzyme chemistry, while assistance given to organic chemistry has been largely prompted by a desire to develop work on its biological aspects with the view of forwarding the progress of medicine itself in the United States. The president's remarks on the social sciences are of

special interest at the moment. Emphasizing the importance of scientific work in this field, he suggests that in it lie the possibilities of ultimate social intelligence. Social progress more and more requires minds trained to function scientifically on social problems, as well as improved facilities for observing, recording and interpreting social phenomena and public recognition of the importance of accessions of knowledge in this field. The appropriations of the Foundation in this field in 1937 were largely for the promotion of research in social security, international relations, and public administration. It is satisfactory to note that although the normal development of the work in China has been rudely interrupted, no project has been discontinued, although six out of the eight major projects have been forced to leave the areas in which their work was being done. Reference has already been made in these columns to the president's comments on the barriers to the work of the Foundation which have been encountered through restrictions on intellectual freedom in certain countries (see NATURE, May 21, p. 939).

The Gas Engine Afloat

IN a paper on "Marine Engineering Problems of To-day" read to the International Conference of Naval Architects and Marine Engineers in June of this year, Mr. Sterry B. Freeman suggests that the time is now ripe for a reconsideration of the gas engine for ship propulsion. On October 11, Mr. J. F. Gibbons read a paper at the Institution of Marine Engineers on "Gas Engines for Small Craft". The author considers only small vessels like tugs, colliers, coasters and trawlers, using gas producers of ordinary type, and the power contemplated lying between 300 and 1,500 h.p. Mr. A. E. L. Chorlton in 1913 outlined a proposal for a gas steam plant of 5,500 brake horsepower suitable for driving a Channel passenger vessel, and took as an example the well-known passenger steamer *La Marguerite*. The gas engines in this design were to be arranged athwartship and geared to the paddle-shaft. They were assisted in manœuvring by uniflow steam cylinders, the steam being supplied by a waste-heat boiler operating on the gas engine exhausts. In the early stages of development there was no competition by the oil engine, as it had not yet been developed. The ordinary type of marine steam reciprocating engine often operated more economically. In those days, the cost of coal was much less than it is now so there was less urge to reduce its consumption. The question now is very different. Apart from the national advantage of having fuel in the country that does not need to be imported, a great deal of experience has been gained in the design of small producers for use on road vehicles. In an article in *Engineering* of November 4, it is stated that if the use of gas engines and producers afloat, instead of being tentatively explored by individuals, had been persevered in by established engineering firms, with only a fraction of the financial backing that has been given to Diesel engines, there is little doubt that by now the technical problems would have been commercially solved.

Does the Mocking-Bird Mock?

THE mocking-bird (*Mimus polyglottos*) repeats notes used by other birds, and one case at least has been recorded where it was able to do so by the time of its first winter plumage, that is, before it had had much experience in listening to other birds. A suggestion has been made, therefore, that long racial habit in mimicry may have impressed these notes upon the genetic complex of the species, so that the young individual inherited, rather than learned, the adopted song—an acquired character in fact. On the other hand, there is a possibility that the repetition of notes may be due to "parallel ability and adventitious similarity rather than actual and individual mimicry". Another suggestion is made by Loye Miller (*The Condor*, 40, 216; 1938). He interprets the song as a sequence of *motifs*, each *motif* being commonly repeated from three to nine times (making a unit) before a new *motif* is adopted. An ordinary song employs from thirty-five to fifty of such units. Now these *motifs* are largely original; rarely do 10 per cent of them resemble the notes of other species of birds, and the resemblances may be fortuitous or mimetic. But the fact that the notes of the California woodpecker or of the shrike are repeated only in places occupied by these birds, suggests some deliberate mimicry. Miller suggests that the mocking-bird is not to be regarded as a plagiarist, but as an artist picking up a suitable stave wherever it may be found to weave into its own roundelay.

Improvement of Child Nutrition

AN appeal has been circulated by the Children's Minimum Council, 72 Horseferry Road, S.W.1, for the improvement of the nutrition of children, and to ensure that no child, by reason of the poverty of its parents, be deprived of at least the minimum of food and other requirements necessary for full health. The Council desires that free milk may be available for all school children, and also midday meals in all schools under local education authorities. Where the expenditure available for food is insufficient, it urges the provision of cheap milk for expectant and nursing mothers and children under school age, and free meals for older children. It is maintained that if the known deficiencies in the national dietary were made good, a revolutionary improvement in the public health would certainly follow. The Council needs an income of at least £1,000 a year for the continuance and expansion of its work, and subscriptions are invited for this purpose.

Journal of the Czech Astronomical Society

WITH a delay of only one month during the crushing events of last October, the next issue of *Říše Hvězd*, the monthly journal of the Czechoslovakian Astronomical Society, has been published under an editorial entitled *Začínáme Znovu*—"We start again". In this editorial, Dr. Hubert Slouka calls upon all Czech astronomers to unite in working together for the creation of a well-equipped Government observatory, even if only a modest beginning can be made.