modes of behaviour. Undue aggressiveness may then develop owing to the mother's expectations outrunning the infant's capacity (for example, in sphincter control), or to her own unconscious conflict and guilt in exerting her power over him and the child's consequent uncertainty of affection. Early experience of this kind sensitizes the individual to those invitations to aggression which later social experience offers.

In the outer world of school and, later, of employment, the child must compete with others and will meet further frustrations while he acquires the skills on which successful competition depends. His anxiety is heightened by his mother's expectations of his success, which thus tends to be equated with being loved, while failure means rejection. For a boy the difficulty may be increased by early identification with the mother (the father tending to be a remoter figure in early childhood), which has led him to view aggressive behaviour as 'bad'—something that the mother has implicitly deplored, although from school days onwards she now expects him to show the reward of it in competitive success.

For the woman, Dr. Turquet saw two possibilities fraught with anxiety and frustration and therefore likely to add to the sum of aggression in society. One is her entry into an occupational life in which her opportunities compare unfavourably with a man's. If, on the other hand, she prefers the older domestic role with its exemption from the need to compete on the male pattern, she then faces the anxiety of choosing and securing a husband, on whose adequacy her own social status will largely depend, and to whom she will lose some of her individual identity. In either case the woman meets an atmosphere of masculine superiority which contrasts sharply with her childhood experience of the mother's seeming superiority in the home. Aggression results from the inferiority which she feels in such an atmosphere. "Hence," said Dr. Turquet, "ambivalent feelings towards motherhood, the declining birthrate, and an unconscious desire to reject the more fundamental aspects of the feminine role."

Following the biological course set by Dr. Hanson, Prof. D. W. Harding emphasized the functional value of aggression, suggesting that we are suspicious nowadays of the whole psychological mechanism of pugnacity on account of its expression in destructiveness and unnecessary attack, and tend to overlook its other manifestation as vigorous action which modifies the environment-both social and nonsocial—in the service of the organism's needs. The capacity for aggressive response is inborn, but the response itself is contingent on the fact that the satisfaction of some other need is obstructed or that the individual judges there to be a threat to some existing satisfaction. In maintaining this view of the contingent nature of aggression we have to make one or two provisos. We have to recognize psychopathological mechanisms that produce what seems at first sight (though not after analytic exploration) a satisfaction in aggression for its own sake. We have also to notice that pleasure in exercising the mechanisms of pugnacity leads to various forms of friendly combat, admittedly satisfying in themselves but free from hostile intention. Finally, there are individual differences (traits of temperament and personality) which cause the aggressive response to occur much more readily in some people than others, though it still remains contingent on their sense of being obstructed or threatened.

Recognizing the biological function of aggression, how are we to account for the feeling of guilt or uneasy regret set up by aggression against other people, in contrast to the ease of mind that follows successful aggression against inanimate objects and natural forces ? Prof. Harding suggested that the explanation lay in the sentiments that attach us, in some degree, to all other human beings and which are based on the intrinsic value to us of social companionship. These sentiments are the human developments of that basic 'tolerance' for other members of the group which Dr. Hanson had postulated as a necessity for members of aggregates even among the simpler organisms.

To the extent to which the social sentiments are developed in us, the use of force against others is bound to cause regret. Yet it may be necessary in the service of other needs and values, and when it is unavoidable the healthy response is regret rather than a sense of guilt. In theory, at all events, we can conceive of an unguilty regret at having to use force against others. In practice, a sense of guilt often occurs, and, like the undesirable forms of aggression, may be due in part to psychopathological components, a point that Dr. Turquet had illustrated in speaking of the guilt that parents may unconsciously harbour in having to control a child.

In general discussion, other speakers emphasized the importance of recognizing the healthy as well as the undesirable forms of aggression. Dr. H. V. Dicks suggested that modern societies seemed more and more to discourage healthy individual aggression and to foster submissiveness to organised groups, while at the same time wars and other outlets of unhealthy aggression became an increasing menace. Dr. J. D. Sutherland and the chairman, Dr. W. Clifford Scott, expressed a general view in suggesting that the topic, which offers many problems for further inquiry, is a field in which the clinical findings of medical psychology and the results of general psychological investigation can supplement each other with special advantage.

OBITUARIES 6

Dr. L. Slater

THE death occurred on August 13 of Dr. L. Slater, chief coal survey officer (Sheffield), North-Eastern Division, National Char board, at the age of fifty-six. Dr. Slater, a graduate of the University of Manchester, served during the First World War as an officer in the Gan forps, and was afterwards associated with the blate Dr. F. S. Sinnatt and the Lancashire and Channe Coal Research Association in the development of the physical and chemical survey of coal seams. In 1923 Dr. Slater went to Sheffield to found, for the Fuel Research Division of the Department of Scientific and Industrial Research, the South Yorkshire Coal Survey Laboratory, which, in its early days, was closely associated with the late Prof. R. V. Wheeler.

His work at Sheffield set a pattern which was adopted in the coal survey laboratories which later were developed in all the major coalfields of Britain. In the course of this work he made a special study of the types of spores found in coal and applied it, with success, to the correlation of coal seams. In his laboratory the relatively neglected microscopical study of coal was steadily pursued over a period of twenty years, and important contributions were made to knowledge.

Dr. Slater was, at one time, chairman of several sub-committees of the British Standards Institution concerned with the standardization of methods of analysis of coal and coke. He was an original member of the Coal Research Club, a select body of pioneers in the scientific study of coal. On behalf of the Midland Institute, he conducted a thorough investigation into the sizing of commercial grades of coal in Yorkshire, putting forward recommendations for simplification which proved to be of great value when the matter was examined on a national basis ten years later. He was recognized as an authority on the Yorkshire Coalfield and his knowledge and advice were widely valued in Yorkshire mining circles.

R. A. MOTT A. M. WANDLESS

Dr. D. A. Hanson Dr. D. A. Hanson Dr. DANIEL HANSON, who was killed climbing in Switzerland on July 25 when acting as a leader at an instructional meet of the Alpine Club, was the only sol of Prof. Daniel Hanson, professor of metalurgy in the University of Birmingham. He wasnelucated at Shrewsbury and the University of Birmingham, where at the time of his death he was a Bivmingham, where at the time of his death he was a research fellow in the Department of Anatomy. Hanson was a brilliant student with wide intellectual interests. In 1945 he won the Chancellor's Essay Prize in competition with undergraduates from all

faculties, a unique distinction for a medical student in his University. His medical education was undertaken as a preliminary to research into problems of human behaviour.

After qualifying in 1947, Hanson began work on the interrelations of neural and endocrine factors. His researches were fruitful, and during the two years of his research fellowship he had published papers on the influence of age and sex on reasoning, on the effect of sex hormones on the performance of a learned response, and on their effect on the water content of tissues. Two further papers were about to be submitted for publication. Hanson's main contributions to knowledge were, first, the fact that cestrogens affect the performance of learned responses in rats, and secondly, that the phenomenon of insight which is occasionally observed in behavioural experiments on rats is largely a function of age and handling. An abstract of the opening paper given by Hanson to a symposium on "Aggression in Nature and Society" appears on p. 428 of this issue. Hanson's death at the age of twenty-five removes a scholar of exceptional promise and considerable charm. He leaves a widow and child. S. ZUCKERMAN

WE regret to announce the following deaths :

Dr. James A. Bowie, principal of the Dundee School of Economics, on September 1.

Prof. S. H. Reynolds, emeritus professor of geology in the University of Bristol, on August 20, aged eighty-two.

NEWS VIEWS and

British Association: Presidents for 1950 and 1951

H.R.H. THE DUKE OF EDINBURGH has accepted the invitation to before president during 1951 of the British Association, when the annual meeting will be held in Edinburgh.

The announcement that Sir Harold Hartley has accepted the presidency of the British Association for 1950 will be received with general satisfaction. Sin Harold has already held high office in the Association, where his work has contributed so much to its great success. Educated at Dulwich College, where he came under the influence of that distinguished chemist, H. B. Baker, he showed at an early age an enthusiasm for chemistry. It was not surprising, therefore, that at Oxford he had a brilliant scientific career. For some thirty years he was associated with the Oxford School of Physical Chemistry, and that famous school of research and teaching now directed by Sir Hartley's former pupil, Sir Cyril Hinshelwood, owes much to Hartley's inspiration. The administrative achievements of Sir Harold Hartley are common knowledge. His flair for administration was given prominence during the First World War, in which he attained the rank of brigadier-general and became controller of the Chemical Warfare Department at the Ministry of Munitions. Since that time, among high administrative offices he has held with distinction, are the vice-presidency and directorship of research for the L.M.S. Railway, 1930-45, and the chairmanship of the British Overseas Airways Corporation, which he relinquished recently. In emphasizing his outstanding success as a scientific investigator and an administrator, his great interest in the arts must

not be overlooked. Books and pictures are vital matters to him. As a lecturer he is in great demand on important national and international occasions.

Physical Society's Awards :

Dr. G. M. B. Dobson, F.R.S.

THE Physical Society has awarded its Charles Chree Medal and Prize for 1949 to Dr. G. M. B. Dobson for his work on physical meteorology. Dr. Dobson is one of Britain's outstanding physical meteorologists whose researches have been chiefly concerned with the physics of the upper air. He has designed and used two instruments of outstanding importance in meteorological work. The first, an electronically operated recording double spectro-meter for measuring the amount of ozone in the upper atmosphere, is now in use all over the world and is of great importance. The second, an automatic photo-electric hygrometer for use in highaltitude flights, was used with great success during the War, and has recently been described in the Proceedings of the Physical Society. Dr. Dobson has obtained very interesting and unexpected results with this instrument, which has solved one of the outstanding instrumental problems of meteorology. Dr. Dobson will receive the Medal and will describe his work at a meeting of the Society on November 4.

Dr. A. J. Guinier

THE 1949 Charles Vernon Boys Prize has been awarded to Dr. A. J. Guinier. Dr. Guinier's principal researches have been concerned with problems of

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