

the university. It is linked up with the problem of adult and further education in general. Spectacular advance is not to be expected; but the patient, determined and sustained pursuit of public education by all such means offers the surest hope of bringing the grave issues of public policy to-day to a level of public understanding in which they can be handled with reason rather than with passion and prejudice.

## THE ROYAL DUBLIN SOCIETY

### The Story of the Royal Dublin Society

By Terence de Vere White. Pp. vii+228+13 plates. (Tralee: The Kerryman Limited, 1955.) 21s.

THE eighteenth century in Ireland was a period of contrasts. While the existence of wealth and culture was evident in Dublin and the larger towns, poverty and ignorance were widespread. Such was the situation when a small band of enthusiasts met together in 1731 and founded "The Dublin Society for improving Husbandry, Manufactures and other Useful Arts and Sciences". As the author of this book, Mr. Terence de Vere White, points out, each of the founders of the Society was expected by the rules to make a study of some special subject and to report to the Society any relevant information he could obtain by reading, conversation or his own experiments.

The Society, later known as the Royal Dublin Society, has had a chequered history, and many of those who know only of the way it has developed during recent years will be grateful to Mr. White for the interesting account he has produced. The story he tells is largely that of the various men who have played a part in building up the Society during the past two hundred years. Such a treatment makes easy reading, but some of the more irrelevant biographical details might well have been replaced by a fuller account of the work which was done. Scientific activities, especially, receive less attention than they deserve. Throughout its career the Society has given direct support to scientific projects likely to be of benefit to the country, one of the most notable of which was the Radium Institute it established at the instigation of the late Prof. John Joly. In addition, it has helped in the advancement of science in Ireland by holding regular meetings which bring together scientific workers from the universities and other institutions, the papers read at these meetings being afterwards published by the Society. In earlier days it appears that this form of activity was thought to overlap that of the Royal Irish Academy, and an interesting account is given of the brief and indecisive struggle for supremacy which occurred between these two learned bodies some seventy years ago. Mention is also made of the controversy aroused by the proposal, strongly supported by the physicist, G. F. FitzGerald, that the Society should grant fellowships.

However, the promotion of scientific research is but a part of the activity of the Royal Dublin Society and is probably of little direct interest to the majority of its members. The increasing popularity of the Spring Show, and especially of the annual Horse Show, has brought unwonted prosperity. This has enabled the Society to improve its amenities and attract a record membership. It has also served to emphasize the advantages available to an organiza-

tion which can pull up on the swings what it loses on the roundabouts. One is tempted to speculate what would have happened if men with large ideas had not come forward when they did to found the Dublin Society. The growing tendency to specialization would most likely have led to the founding of smaller bodies, and while some of these would have been successful, others might have wilted through lack of support. As it was, the widely extending roots of the Dublin Society enabled it to expand freely in various directions. Branches such as museums, a botanic garden, an art school and a veterinary college grew out and later became separated from the main stem. The remaining branches continued to give each other nourishment and support. Such an organization has needed a long time for its development, and the story Mr. White recounts was worth telling.

N. G. BALL

## ADVANCES IN PROTEIN CHEMISTRY

### Advances in Protein Chemistry

Edited by M. L. Anson, Kenneth Bailey and John T. Edsall. Vol. 9. Pp. viii+542. (New York: Academic Press, Inc.; London: Academic Books, Ltd., 1954.) 10.50 dollars.

THIS volume maintains the high standard of its predecessors, and like them is so varied as to contain something of interest to most students of proteins. The biochemists will enjoy the article by H. R. V. Arnstein on the metabolism of glycine. As the simplest amino-acid, it enters into many synthetic and degradative reactions, besides its role in protein synthesis, and Dr. Arnstein's article contains a wealth of information on all aspects. M. I. Chalmers and R. L. M. Synge discuss the digestion of proteins and nitrogenous compounds in ruminants—a not unimportant subject, as much of our protein reaches us from the plant via the rumen. The article recalls war-time attempts to utilize the synthetic powers of the ruminant by feeding urea; but the authors conclude that there has been little evolutionary pressure towards an economical use of protein under generous feeding conditions.

The article on the formation, composition and properties of the keratins, by W. H. Ward and H. P. Lundgren, will be of interest both to protein chemists, because their fibre-like nature and great stability make them excellent materials for physical studies, and to technologists, because of the great importance of the wool and leather industries. The basic knowledge of these materials is fully reviewed. S. I. Mizushima reviews the molecular structure of some dipeptides and synthetic polypeptides mainly from the point of view of structure and physical properties. M. Laskowski and M. Laskowski, jun., discuss trypsin inhibitors, and J. P. Greenstein the resolution of racemic  $\alpha$ -amino-acids. The remaining articles are more physico-chemical in character. D. F. Waugh's discussion of protein-protein interactions is extremely wide, and includes much information on protein structure and on the changes which particular proteins undergo when treated with various reagents; it also discusses a number of specific types of interactions, for example, antigen-antibody and enzyme-substrate.

Finally, D. F. Cheeseman and J. T. Davies discuss physico-chemical and biological aspects of proteins at