

have revolutionized the current methods of grassland management. After holding the posts of professor at Cirencester and adviser in agricultural botany at Aberystwyth, Sir George became the first director of the official Seed Testing Station when it was founded by the Food Production Department of the Ministry of Agriculture during the war of 1914-18. Thence he proceeded to the chair of agricultural botany at Aberystwyth and also became director of the Welsh Plant Breeding Station when it was founded in 1919. Gathering round him a band of enthusiastic and patient research assistants, he began the long series of experiments which have made his work famous the world over.

So early as 1913 Sir George was interested in pasture problems, such as drought resistance, and the response of grassland species under manuring, and in 1916 he collaborated with his present successor, T. J. Jenkin, in investigations on indigenous species in relation to habitat and sown species. For the next twenty-five years his attention was devoted to the various ways in which the grasslands of Great Britain could be improved and better use made of the great acreage of unprofitable and neglected pastures up and down Great Britain. The importance of varieties and strains was fully recognized, and geneticists and plant breeders on his staff concentrated their attention on the production of the special types of the herbage plants needed for specific purposes. The labor involved was immense, and only by most skillful organization has it been possible to carry through the work without confusion or delay, and to apply the results to agricultural practice. Varieties of grasses and clovers have been bred for earliness or lateness, for leaf or stem production, for spreading or erect types, to provide seed to meet different requirements.

Parallel with the plant-breeding work, problems of management were investigated, particularly in relation to the effects of grazing, and the most amazing and valuable results were obtained. But all the time Sir George was working towards his main object of obtaining recognition from the government and farmers alike that poor or derelict pasture could be so improved as to become an important asset instead of a liability. Much preliminary critical work was carried out, the importance of buried and viable seeds in the soil being early recognized. Then in 1933 the station acquired Cahn Hill, whereon large-scale hill experiments could be made in order to develop methods whereby improvements could be made and to determine their economic value. Much progress has been made, both on the hill pastures and in connection with ley farming, in which poor permanent pasture is improved by ploughing up and reseeded. Sir George Stapledon's new appointment will provide an

excellent opportunity to demonstrate the value of his ideas, backed by wide experience, and the venture will be followed with great interest by all who have the interests of agriculture at heart.

THE INSTITUTE OF AERONAUTICAL SCIENCES

AN account is given in the *New York Herald Tribune* of the gift of the Daniel Guggenheim estate at Sands Point, L. I., to the Institute of Aeronautical Sciences for the establishment of a center for aeronautical research and study. The gift was made by Mrs. Guggenheim in memory of her husband, who during his lifetime gave several million dollars for the advancement of aeronautical sciences.

The Guggenheim estate, near Port Washington, L. I., contains 162 acres, with two thirds of a mile of shore front and a forty-room house overlooking Long Island Sound. It has been named Daniel Guggenheim Park by the council of the institute. A board of trustees will supervise arrangements for the use of the property and will appoint a board of scientific advisers to conduct aeronautical research. In accepting the gift from Mrs. Guggenheim, the institute consulted with her son, Lieutenant Commander Harry F. Guggenheim.

Daniel Guggenheim established the Daniel Guggenheim Fund for the Promotion of Aeronautics in 1926 with a gift of \$2,500,000, which was subsequently increased. He previously had established the Guggenheim School of Aeronautics at New York University, and the fund endowed schools of aeronautics at the Massachusetts Institute of Technology, the Georgia School of Technology, the California Institute of Technology, the University of Washington, Leland Stanford University, Syracuse University and the University of Michigan. The fund also established a chair of aeronautics in the Library of Congress, made the first equipment loan in this country to establish aerial passenger service, set up the first complete aeronautical weather-reporting service and established a safety prize.

The Institute of Aeronautical Sciences, which now has headquarters at Rockefeller Center, was organized in 1932 and has forty-seven branches throughout the country and a library of more than 12,000 aeronautical publications.

AWARDS FOR EXHIBITS AT THE MEETING OF THE AMERICAN MEDICAL ASSOCIATION

At the ninety-third meeting of the American Medical Association in Atlantic City, gold, silver and bronze medals were presented by the committee on award of scientific exhibits. The awards in Group 1 were for exhibits of individual investigations, which