

Tertiary Beds, Parts 1-3" (*Trans. N.Z. Inst.*, 55; 56; 61); and "Recent Mollusca of the Chatham Islands" (*Trans. N.Z. Inst.*, 59).

During 1933 and 1934, as part of its oil prospecting work, Taranaki Oilfields and Vacuum Oil Co. employed Finlay to take up a study of the Cretaceous and Tertiary Foraminifera. In this new field his keen mind and ability for intense application, together with his schooling in molluscan systematics, soon produced highly significant stratigraphical results. In 1937 he was appointed micropalaeontologist to the N.Z. Geological Survey, and in the next ten years he revolutionized the status of Foraminifera in the stratigraphy of New Zealand with the following papers: "New Zealand Foraminifera: Key Species in Stratigraphy, Nos. 1-5" (*Trans. Roy. Soc. N.Z.*,

68; 69; and *N.Z. J. Sci. Tech.*, 28); "The Foraminiferal Evidence for Tertiary Trans-Tasman Correlation" (*Trans. Roy. Soc. N.Z.*, 76); and, with J. Marwick, "The Divisions of the Upper Cretaceous and Tertiary in New Zealand" (*Trans. Roy. Soc. N.Z.*, 70).

Finlay was elected Fellow of the Royal Society of New Zealand in 1939, and received from the Society the Hector Medal and Award in 1941.

In addition to his scientific activities, Finlay was an accomplished musician, in later years devoting considerable time to serious composition. A prelude and fugue of his was publicly performed and broadcast by the New Zealand National Orchestra, and some chamber music trios have been broadcast by instrumental groups. J. MARWICK

## NEWS and VIEWS

### Symons Memorial Medal: Sir Geoffrey Taylor, F.R.S.

THE Symons Memorial Medal of the Royal Meteorological Society, which is awarded biennially for distinguished work in meteorological science, has been conferred this year on Sir Geoffrey Taylor in recognition of his classical work on atmospheric turbulence. Sir Geoffrey's first contribution to the subject arose from his participation as meteorologist in the *Scotia* Expedition to the Grand Bank of Newfoundland in 1913. This expedition followed the loss of the *Titanic* from collision with an iceberg in foggy weather in the Atlantic, and his work was concerned with the modification of temperature and humidity in an air mass by turbulence as it passed out to sea from a continental area or over a progressively colder sea—Grand Bank fog is commonly produced in the warm moist south-easterly air stream which encounters a very high gradient of surface temperature in the ice-chilled waters of the Grand Bank area. He made kite observations from the *Scotia* and was able to interpret them in terms of a theory of turbulence which effectively anticipated Prandtl's mixing-length theory of turbulence. Later papers followed in the *Proceedings* and *Philosophical Transactions of the Royal Society*, dealing with momentum transfer by turbulence, the drag of the earth on the wind and the variation of wind with height in the planetary boundary layer. In 1917 Sir Geoffrey gave a very full discussion of the problem of the formation of fog over land as well as at sea, and devised a fog-prediction diagram for Kew Observatory, using methods which have since been elaborated by others. Later he designed a very simple but elegant bi-directional vane for recording turbulent fluctuations in the wind at right angles to the mean motion, and reported on his findings with this instrument in his Symons Memorial Lecture to the Royal Meteorological Society in 1927. Other workers have since made much use of this technique. In the 1930's, Sir Geoffrey gave new impetus to the study of turbulence in his now-famous series of papers on the statistical theory of isotropic turbulence. This work is very wide in scope and will find application in meteorology as it has already done in other fields of fluid-motion study. Sir Geoffrey has, of course, also made many outstanding contributions to other branches of physical science.

### Elliot Medal of the U.S. National Academy of Sciences: Prof. J. T. Patterson

THE Daniel Giraud Elliot Gold Medal of the United States National Academy of Sciences has been awarded to Prof. J. T. Patterson, director of zoological research in the University of Texas. The Elliot Medal is an annual award and is given for an outstanding paper on original research in zoology or palaeontology. Prof. Patterson has made important contributions to genetics, particularly by his papers on isolating mechanisms which have been published in the volume entitled "Studies in the Genetics of *Drosophila*: V. Isolating Mechanisms", issued by the University of Texas in 1947. The studies reported in this volume mark the culmination of research in the phylogeny of *Drosophila* by genetical methods which Prof. Patterson initiated at the University of Texas more than twenty-five years ago. As a combination of experimental and taxonomic investigation it represents a highly significant contribution to research on the problem of species.

### Sir George Beilby Memorial Fund: Awards for 1950

THE administrators of the Sir George Beilby Memorial Fund, representing the Institute of Metals, the Royal Institute of Chemistry and the Society of Chemical Industry, have decided to make two awards for 1950, each of one hundred guineas, from the Fund. These awards have been made to W. A. Baker, in recognition of his experimental contributions to knowledge of the factors determining the production of sound castings of non-ferrous metals and alloys; and Dr. G. Whittingham, in recognition of his experimental contributions to knowledge of the combustion products of fuels containing sulphur and their effects on corrosion. Mr. Baker joined the staff of the Assay Office, Royal Mint, London, as a student assistant and graduated in metallurgy at the University of London as an external student in 1934. Shortly afterwards he joined the British Non-Ferrous Metals Research Association, where he was engaged mainly on such problems as the effects of volume changes and gas evolution in the solidification of metals and alloys, influence of alloy constitution and other metallurgical variables on the casting characteristics of the materials, and the general principles to be observed in developing foundry tech-