

in philosophy is, of course, explicit in his acceptance of a professorship of natural philosophy at Washington University in 1954 (an appointment which he reported to me with evident satisfaction). In fact the view proposed, according to which quantal uncertainty is requisite for, but does not fully encompass, human freedom, that freedom is chance plus choice and quantum theory provides only the chance, is an insight that has been borne out by developments in other fields with increasing power of conviction. A short paper entitled "Science and the supernatural" is less persuasive, probably because it has an outward purpose, for in it Compton tries to counteract certain irreligious claims made by the physiologist A. J. Carlson. Religious sensitivity marks this writing, as it does the author's character; only his attempt to justify the doctrine of the Trinity seems a little artificial. However, in this context I cannot forego mentioning my amazement at Compton's knowledge of oriental lore and oriental religions, which is evident throughout this book.

Many readers will enjoy the biographical reflections. There are recollections of Michelson, Millikan, Richardson, Rutherford, Stearns (a student and collaborator of the author's), Einstein, Davisson, and Lawrence, all personal friends of Compton's. And there is a patriotic speech on Jefferson as a scientist.

Doubtless of greatest interest are the extensive comments on the momentous affairs of the atomic age. The author, together with Fermi, Lawrence, and Oppenheimer, formed a panel which was asked by President Truman to prepare a report stating whether it could devise any kind of demonstration that would seem likely to bring the war with Japan to an end without using the bomb on a live target. The conclusion, submitted on 16 June 1945, was negative. Many people have wondered how a man of Compton's moral and religious convictions arrived at the formidable decision to drop the bomb on a city. The reasons are given in article 28, entitled "On the use of weapons," and they will impress posterity.

The book needs no praise from any reviewer. It is monumental and will stand among the great personal documents of all time.

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## Pictures from the Scott Expeditions

**Edward Wilson's Birds of the Antarctic.** BRIAN ROBERTS, Ed. Humanities Press, New York, 1967. 191 pp., illus. \$17.50.

Ornithological work in polar regions has presented two quite different challenges. One is to study birds in an individual-rich but species-poor avifauna. The other is to meet a climate of a severity unsurpassed on the globe. Remarkable, talented men have accepted these challenges, and Edward Wilson is an outstanding example. His personal influence and practical contributions to Scott's two antarctic expeditions (*Discovery*, 1901-04, and *Terra Nova*, 1910-12), on which he served as surgeon and zoologist and, on the second, chief scientist, have obscured his ability as an artist and, still more, as an ornithologist.

Wilson's trip with two companions to Cape Crozier to study emperor penguins nesting in the dark, cold ( $-40^{\circ}$  to  $-70^{\circ}\text{F}$ ), and blizzards of an antarctic winter has been called "the hardest journey ever made" and "one of the most gallant stories in polar history." Wilson has been called the most gifted ornithologist ever to serve in south polar explorations. It has also been said that if he had lived (he died with Scott on their return journey from the pole in 1912) he would have been one of the foremost bird artists of his day.

In expeditions of an earlier period, sketches and paintings often filled the function that specimens and photographs have now largely taken over.

## A Record of Accomplishments

**Nobel Lectures.** Physiology or Medicine, 1901-1921. Published for the Nobel Foundation by Elsevier, New York, 1967. xii + 563 pp., illus. \$85 for the 3-volume set Physiology or Medicine.

Each year since 1901 the Nobel Foundation has published *Les Prix Nobel*, which contains all Nobel Lectures of that year, in the languages in which they were given. Short biographies of the laureates are also included. The Elsevier Publishing Company has now published, in English, the Nobel Lectures for 1901-1962, organized by subject categories, Physics, Chemistry, Physiology or Medicine, Literature, and Peace. The appearance of the present volume marks the completion of the

Wilson collected many specimens, and some pioneering photography was done on the Scott expeditions, but his sketching and painting, done under extremely difficult conditions, formed an important part of the scientific results of the expedition.

Included in this volume are a summary of Wilson's life, extracts from his diaries, including his account of "the worst journey in the world," a bibliography of his writings and one of writings about him, and a list of manuscripts and pictures, most of them from the Scott Polar Research Institute at Cambridge, consulted by the editor. But this text is merely a frame in which to present a selection of Wilson's pictures. Besides those used to embellish the text, there are more than 300, in 60 pages of color and 42 of monochrome. They range from pencil sketches of petrels in flight and penguins active and at rest to color details of heads and feet of albatrosses, from pencil studies of icy scenery to watercolors of emperor penguins on their breeding grounds. There is intimate detail and scenic splendor; Wilson has caught the very feel of ice, snow, and sea, and his birds live.

This volume provides a footnote to history. It is also an important part of the permanent record. Not least, it is a handsome book of beautiful pictures.

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three scientific series, consisting of three volumes each.

The publication of these volumes is justified by the publisher on the grounds that the articles will be more readily accessible to those who wish to follow the development of only one, or a few, of the categories. The presentation addresses and biographies accompany the articles.

Sixteen lectures are included in this volume. Two each were presented in 1906 and 1908; two laureates, Finsen (1903) and Bordet (1919), did not deliver lectures, and prizes were not awarded in 1915-1918 and 1921. The list of names is sufficiently impressive to justify the publisher's statement that