of any particular quantity should consult *The Nautical Almanac* for 1931 to see if it is there. No doubt, many will find new useful data included, but others will not like *The Nautical Almanac* to be permanently increased to the size of that for 1931 and will object to many pages of advertisements.

We welcome the inclusion of the "Derivation" occasionally, especially when extensive alterations have been made. It is important that the basis of the great mass of accurate and consistent data given in The Nautical Almanac should be clearly stated, otherwise astronomers engaged in new determinations of the various quantities involved may be led into error, vitiating all their work. Perhaps in the past we have not given sufficient credit to Dr. Cowell and his assistants in the preparation of our National Ephemeris: we are apt to take it for granted. Anyone reading the introduction will realise how great a fraction of the data given in astronomical ephemerides has been contributed by our own Office, and will congratulate it on the volume for 1931, which must have involved an enormous amount of extra hard work on the part of Dr. Comrie in arranging and compiling new material.

J. J.

OBITUARY.

F. E. BAXANDALL, A.R.C.Sc., was appointed to the staff of the Solar Physics Observatory in 1883, on his completion of the course for his degree of Associate of the Royal College of Science, London. At that time the chief subject of inquiry was in regard to the possibility of variations in sun-spot spectra, with associated research on the terrestrial elements encountered in the work. In the early "nineties" the Observatory routine was greatly extended by Sir Noman Lockyer in the acquisition of a powerful prismatic camera, and Baxandall took a share in the night-work involved in photographing the stellar spectra, and also in their subsequent reduction and interpretation. The discovery of terrestrial helium by Ramsay in 1895 led to renewed laboratory investigation of gaseous and metallic spectra. realised that the existing records of terrestrial spectra were inadequate for the proper identification of the new material, and steps were taken by the Director to provide new laboratory equipment. An entirely new series of spectra of the available chemical elements was obtained under various conditions, and from

this time Baxandall devoted most of his work to the reduction and classification of the details of these spectra. Perhaps the most important part of this consisted of the investigation of the so-called "enhanced" lines found in the spark spectra of elements, which were found to account satisfactorily for many spectrum lines in stellar spectra which had previously been thought to be due to substances not present on the Earth. These results were published in various communications to the Royal and Royal Astronomical Societies, and also in a series of Publications of the Solar Physics Observatory. An extension of the research on enhanced lines by one of his colleagues resulted in the recognition of multiple enhancement of the lines of certain elements, such as Silicon, and also in the detection of enhanced spectral lines of some of the gaseous elements. It was not possible to resume this work after the removal of the Observatory and part of the staff to Cambridge in 1913, but Baxandall utilised the preliminary results in a further series of publications dealing with their significance in the interpretation of stellar classification. In recent years he has had in preparation several papers dealing with the revision of identifications in the solar spectrum, and on the spectra of several variable stars.

His death occurred suddenly on October 30, 1929, at the age of 61 years.

C. P. B.

NOTES.

THE RADCLIFFE OBSERVATORY, OXFORD.—In connection with the proposed removal of this institution to South Africa, the Radcliffe Trustees have decided, as a preliminary measure, to obtain data as to the suitability of certain sites in the Union. They have invited Dr. W. H. Steavenson to make the necessary tests, which will extend over a period of several months. Dr. Steavenson, who sailed for South Africa on January 3, took with him a 6-inch Cooke equatorial, lent by the Royal Observatory, Greenwich. This instrument will be erected, in the first instance, at Pretoria, where tests of the seeing conditions will be made on the lines of those now being carried out in California in connection with the choice of a site for the 200-inch reflector.