

that the study of geological materials has been overshadowed by the development of the technique in meteorites and it seems too early to see whether this will prove a cheap age-dating technique.

A general chapter on Rb/Sr dating of the calibre of Damon's chapter on K/Ar dating would have been very welcome but the editors must have decided not to duplicate too much material with previous books. The chapter by Hamilton describes the use of strontium isotopes in the elucidation of the origin of basalts and carbonatites. There are also some minor errors for example, the statement 'In any strontium rich, rubidium poor, mineral the ratio $\text{Sr}^{87}/\text{Sr}^{86}$ ratio is 0.710 ± 0.007 ' is false because, during metamorphism, redistribution of strontium may result in radiogenic strontium entering such a mineral.

On a preliminary examination this appears to be an attractive book and indeed there are some very worthwhile chapters but the geologist who feels inclined to buy it should look at it carefully to see how well it lives up to what he expects from it.

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PHINNEY (R. A.), editor. *The History of the Earth's Crust: A Symposium*. Princeton (Princeton University Press), 1968. viii+244 pp., 97 figs., 2 coloured pls. Price £6. 10s.

The hypothesis of continental drift has long had its enthusiastic adherents and its sceptics. Recently, however, evidence has been obtained from research into oceanic magnetic anomalies, deep-sea magnetic stratigraphy, and earthquake mechanisms that continental-sized blocks of ocean floor and continent are moving at rates of 1–5 cm per year. This evidence of the spreading of the sea floor was presented at a conference at the Goddard Institute for Space Studies, New York, in November 1966, which happened to come at a critical period when the evidence was becoming available but had not been published. This volume contains the contributions to that conference by those who made the significant advances. It includes papers that identify and discuss certain chemical and physical parameters that place significant restrictions on the way the mantle and crust of the Earth can have evolved. The evidence from the oceanic basins is reported in detail, and papers on palaeomagnetism, basement age dating, and the structure of mountain belts give a comprehensive view of the evidence available on the continents. Full details of contributors and titles of individual papers are given in *Mineralogical Abstracts*, vol. 20.

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