

Serpentinized peridotites of the type under discussion are related to island-arc structures and lie close to the belt of negative gravity anomalies found in the East and West Indies as well as the Marianne arc of the Pacific. They are also found as long narrow belts along the cores of mountain systems or the roots of old eroded mountain systems, which also presumably went through an island-arc stage. In the West Indies it was found that they were intruded during the first great deformation of the present arc, but did not accompany later deformations. This type of peridotite is never found anywhere but in island arcs or mountain belts as mentioned above.

The serpentine belts of the world were plotted on maps of the continents. Six ages of serpentine intrusion have been noted: Archaean, mid Proterozoic, late Ordovician, Carboniferous, late Jurassic or Lower Cretaceous, and Middle Eocene. Belts of serpentines of each age have a worldwide distribution, and can often be traced uninterruptedly for thousands of miles.

Inasmuch as the serpentine belts lie along the axis of the zones of major deformation of the earth's crust, they perhaps may be used by geologists to unravel the difficult problem of tracing the course of and dating ancient mountain systems. On most continents they show a rudely concentric arrangement, with the oldest at the center, suggesting the building up of the continents from a small central nucleus with the development of successive island arcs around it and the successive fusion of each deformed zone onto the core to increase its size.

## BOOK REVIEW

ANGEWANDTE KRISTALLSTRUCTURLEHRE. E. BRANDENBERGER. 208+VII pages, 88 figures. Gebrüder Borntraeger, Berlin; 1938. Price R.M. 12 (paper); R.M. 13.50 (cloth).

This volume is intended to serve as a guide in the use of the International Tables for the Determination of Crystal Structure. The various *x*-ray methods and actual procedures of structure determination are not considered, but rather the geometrical and crystallographic background, including symmetry, translations, point groups, space groups, and use of interference data. For a person beginning work in the field of crystal structure, and who has a good command of German, this book would be very helpful. The advanced worker in this field will find much of an elementary nature, but the subject is thoroughly covered and well presented, and brings together in one volume material which is rather widely scattered in the literature.

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