FORSCHUNGEN IN DER ZENTRALEN SAHARA: I. Klimageomorphologie. By WOLFGANG MECKELEIN. *Braunschweig: G. Westermann*, 1959. $9\frac{1}{2} \times 5\frac{1}{2}$ *inches;* 181 *pages; plates and diagrams*

This report of a field study in the Fezzan area of southern Libya (1954–5) is well illustrated and organized. Distinction is made between *Halbwüste* (peripheral), *Vollwüste* (normal?) and *Extremwüste* (core) deserts. The desert in the classical sense is characterized by forms such as hammada, serir (both eluvial and alluvial!), erg, wadi, sebkha, etc. The erg, considered predominantly fossil, and most of the wadis, are seen as attributable to periods of moister climate. In the hyper-arid desert cores, on the other hand, serir and *Staubwüste* (dust desert) with polygonal soils (saline anhydration is the indicated agency) are characteristic. The loose consolidation of the upper soil layers by salts reduces deflation to a minimum, thus preserving more distinctly all traces of water action. No fossil forms are recognized here. All in all, the regional treatment is good and the topical discussions of desert land forms and their genesis are stimulating. Of further value are microclimatic observations of both air and soils by N. Richter, and analyses of some 200 selected soil samples by K. H. Sindowski.

The book raises problems, too. Why, for example, should the erg indicate a moister climate? A major part of the material is derived from deflation of the hammada and serir of the *Vollwüste*, where desert pavement is still being formed elsewhere in the Sahara. Is not the rubefaction of the great Edeyens an indication of soil formation during stabilization under moister conditions following arid phases of dune formation? The consideration of the literature on the geomorphology of other parts of the north-eastern quadrant of the Sahara and the treatment of the role of Cenozoic climatic evolution in the development of desert land forms seemed inadequate to the writer. Nevertheless, Meckelein's study is perhaps the most valuable analysis of the *Klimageomorphologie* of arid zones published in the past decade or more.

K. W. BUTZER

KARIBA: the struggle with the river god. By FRANK CLEMENTS. *London: Methuen*, 1959. $8\frac{1}{2} \times 5\frac{1}{2}$ *inches;* 223 *pages; illustrations.* 16*s*

Frank Clements' 'Kariba,' let it be said at once, is quite first class, and a reviewer can do little more than to urge anyone who has not read it to do so at once. It is the story of the building of the Kariba Dam across the Zambezi River between Northern and Southern Rhodesia, from its first conception in 1912 to the completion of the great wall, 1900 feet long and 420 feet high, which has created an artificial lake 175 miles long and covering 2200 square miles of country.

From time to time during the building years, the world's press carried articles on the physical difficulties of the project, the awarding of the contracts, the opposition of the native peoples living in the path of the lake, the damage caused by Zambezi floods, and the activities of "Operation Noah." Mr Clements has brought all these together, pruned them of sentimentality, sensationalism, and downright lies and produced a unique account of a great venture.

L. M. FORBES

SUN AND SHADOW AT ASWAN. By HERBERT ADDISON. *London: Chapman and Hall*, 1959. $8\frac{1}{2} \times 5\frac{1}{2}$ *inches;* 166 *pages; maps, plates and figures.* 18*s*

The aim of this book, by a former professor of civil engineering at Cairo University who has spent a lifetime in Egypt, was to celebrate the sixtieth anniversary of the building, by British engineers, of the Aswan Dam and in it the author, in an agreeable narrative blended of nostalgic memories and personal anecdote, tells the story of the Dam and its successive heightenings in 1912 and 1934. Yet a third heightening was proposed in 1945. But this, soon afterwards, was overshadowed by the new and quite revolutionary proposal to build the High Dam, the Sadd el Aali, of which so much has since been heard. To those like the writer who have seen the existing dam in its various later phases, Professor Addison's earlier chapters will have a special appeal.