

covered with a thin sheet of sand ; indeed, I had not seen more than small patches laid bare during the past six years. The bed, when not covered by the shingle beach, can be traced into the foot of the cliff, and here a large group was broken up by the sea before it could be removed, and several beautiful crowns were destroyed. In my experience, *Pentacrinus* seems to be about as common—or as rare—in Stonebarrow Cliff as at Black Ven ; I imagine that some specimens in old collections labelled “ Black Ven ” or “ Lyme Regis ” may have been obtained from Stonebarrow by the local fossil dealers who supplied visitors with specimens in the Anningian Epoch, and afterwards.

J. F. JACKSON.

CHARSIDE,
LOWER SEA LANE,
CHARMOUTH,
DORSET.
9th May, 1966.

FAULT SCARP OR FAULT-LINE SCARP ?

SIR,—Nothing could be more obvious than the distinction between a fault scarp, formed directly by fault movement, and a fault-line scarp, due to differential erosion. Its importance is stressed in all the textbooks and, one gathers, in all elementary teaching. Yet this radical distinction, as regards origin and history, is not always observed, even in high places. The chief error (as it seems to the writer) is in calling a scarp, occurring along a fault, a fault scarp before its claim as a fault-line scarp has been properly considered. Where along a fault a more resistant kind of rock on one side stands higher than a less resistant kind on the other, the scarp must be provisionally taken to be a fault-line scarp in the absence of reliable evidence to the contrary, because the universal and perpetual process of erosion will in any case tend to produce that effect.

An example of what appears to be lack of care in this connexion is shown on opening any edition of the *British Regional Geology* handbook on *The Pennines and Adjacent Areas*. Here we see, as frontispiece, a fine photograph of “ Giggleswick Scar : A prominent fault scarp ”. The additional very brief description seems to imply that this is not merely a loose use of terms but that a fault scarp is indeed meant. There is no discussion about it. The writer is convinced that all the evidence points to its being simply a fault-line scarp.

May one suggest that geomorphology is specially liable to suffer if the processes of reasoning are not strictly watched ?

JOHN CHALLINOR.

CAPEL BANGOR,
CARDIGANSHIRE.
21st June, 1966.