"On Iron-Rhodonite, Pyroxmangite, and their Relations to Rhodonite." By Mr. M. Perutz (communicated by Professor C. E. Tilley).

Determinations of the unit-cell of iron-rhodonite and approximate measurement of the dimensions of pyroxmangite have been made. The similarity of the structures of iron-rhodonite and pyroxmangite is established. By comparison with Gossner's description of rhodonite the conclusion is arrived at that the structure of the former minerals is different from that of rhodonite. After a determination of the density, volume, and mass of the cell of ironrhodonite, possibilities of relations with enstatite are suggested.

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## CORRESPONDENCE.

## BALLARD DOWN FAULT.

SIR,—It is disappointing to learn from Mr. Arkell's paper in the February number that there is no evidence to support his assertion that there is younger *mucronata* chalk below the fault than the *mucronata* chalk above it. (He has no "new evidence", and there can hardly be any old evidence in support of an assertion first made in 1936.) What becomes of the argument he based on this assertion ?

When I wrote "any dip visible in Studland Bay" I did not say, but I meant (and, as I should have thought, obviously) visible *in the chalk*, the only formation under discussion, and the only formation to which my comment that the face on which it showed dip was in truth an east and west face and the dip shown wholly westerly, could apply. I think Mr. Arkell's criticism of my words must have been written with his tongue in his cheek. To my *intention*, whether obvious or cryptic, his criticism is mainly irrelevant.

Mr. Arkell's method of blunting my point about the perfect preservation of very delicate fossils close up to the fault is not very convincing. No doubt chalk may be bent once without any damage to delicate fossils; my experience of chalk suggests that it could never be bent to *and* fro even once without damage to delicate fossils; and Mr. Arkell's hypothesis seems to contemplate more than one bending to and fro.

I agree that he is unable to understand my hypothesis, and by stating this he scores off me. But as I did not attempt or profess to put forward a hypothesis, I think the score is rather a weak one and perhaps hardly worthy of being registered against me by a member of my old college.

However, Mr. Arkell's attitude has had one good result (if good is the right word). It has pricked me into attempting to frame a hypothesis myself, and this I hope will not be obscured even if I use "which" five times in seven lines.

R. M. BRYDONE.

Ivy FARM HOUSE, MUNDESLEY, NORFOLK. 16th March, 1937.