

CORRESPONDENCE

CORRELATION OF LAKI BEDS

SIR,—When defending his correlations (1939) which I have questioned (1940*b*), Mr. Pinfold (1940) apparently thinks that the Punjab contains nothing that I would regard as Shekhan Limestone ; but I have shown (1940*a*) that I regard representatives of that limestone as extending to within a few miles of the Salt Range itself.

Again : when correlating the Nammal Shales of the Salt Range with the Ghazij Shales of Baluchistan, Mr. Pinfold overlooks the presence of basal Laki forms like *Nummulites lahirii* in the one and late Laki forms like *Assilina daviesi* in the other. Nor can I accept his generalizations about exposures of the “Dunghan” Limestone until I have seen adequate fossil evidence in their support.

The palaeontological facts are as follows :—

1. The earliest known Laki fauna appears in the Nammal Shales of the Salt Range. It includes numerous *Nummulites lahirii*, *Nummulites* cf. *kelatensis* and a variant of *Assilina dandotica*. Traces of this fauna have been seen in collections from the base of the Meting Limestone of Sind, but never at any higher level.
2. The next formation, or Sakesar Limestone of the Salt Range, like the Meting Limestone of Sind and its Baluchistan equivalent, abounds with *Alveolina globosa*, which thereafter seems to disappear.
3. Succeeding this limestone, on the Salt Range as in Baluchistan, come the first known, relatively rare, appearances of *Assilina daviesi*. The same form appears in the later Laki beds of Afghanistan (De Cizancourt, 1938). On the Salt Range this level is represented by the Bhadrar beds, which are definitely younger than the Sakesar Limestone and older than the Shekhan Limestone.
4. The latest Laki beds of Baluchistan, as of the northern Punjab (except the Salt Range) and Kohat, see the influx of numerous *Dictyoconus*-group forms, which survive far into the succeeding Khirthar. *Assilina daviesi* usually abounds at this level, as the characteristic—if not the only—assiline of the same. This is the Shekhan Limestone level.

When defending the term "Dunghan" Limestone, Mr. Pinfold claims the suffrage of most geologists who, he says, know "that formation". But very few geologists have visited Dunghan Hill, and none have figured Eocene fossils from it; indeed the Geological Survey of India formally referred the Dunghan Limestone to the Cretaceous (Holland and Tipper, 1913-16). As I have already pointed out (1940*b*), all the "Dunghan" fossils cited by Pinfold himself were actually obtained from the Bolan area. Hence my preference for the term "Bolan" Limestone.

I understand that collections from Dunghan Hill have recently been made by the Burmah Oil Company. If adequately figured and described, these should show whether or not an equivalent of the Bolan formation is to be seen there.

Mr. Pinfold apparently accepts my contention that, contrary to general opinion, Ranikot beds do exist in Baluchistan.

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