

NEW NAME FOR A VALANGINIAN AMMONITE GENUS

SIR,—Mr. St. Stephanov from the Geological Institute, the Bulgarian Academy of Sciences, Sofia, kindly drew my attention to the fact that in my article on “Dobrogeites—a New genus of Valanginian Ammonites” the name *Dobrogeites* Nikolov, 1962, is homonymous with *Dobrogeites* Kittl, 1908. Therefore I suggest *Dobrodgeiceras* nom. nov. to replace *Dobrogeites* Nikolov, 1962 (non Kittl, 1908). The type species is *Dobrodgeiceras ventrotuberculatum* Nikolov, the holotype of which is the specimen designated in my paper (1962, p. 70, figs. 1a, b. Coll. BAN Cr. 253).

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December, 1962.

REFERENCES

- KITTL, E., 1908. Beiträge zur Kenntnis der Triasbildungen der nordöstlichen Dobrudscha. *Denkschr. K. Akad. Wiss. Wien*, **81**, 522.
NIKOLOV, T., 1962. *Dobrogeites*—a New genus of Valanginian Ammonites. *Comptes rendus Acad. bulg. Sci.*, **15**, no. 1, 69–71.

VOLCANIC ROCKS OF THE ORAMUTIA SECTION, CENTRAL KENYA

SIR,—Dr. McCall's letter (*Geol. Mag.*, 1962, **99**, pp. 475–76) raises the issue of *fiamme* (pumice lenticles) as structures pointing to the origin of ignimbrites. In particular, McCall objects to *fiamme* being flattened by lithostatic load operating during the cooling of ash-flows. McCall also seems to assume that any general conclusions derived for the origin of *fiamme* will inevitably influence the hypothesis of the origin of ignimbrites. This is by no means true since *fiamme* or *fiamme*-like structures can originate in a variety of ways as follows:

(1) Numerous writers described *fiamme* as fragments of pumiceous material in ignimbrites. Such fragments are certainly not embryonic vesiculation areas as is claimed by McCall (*Nature*, 1962, **196**, pp. 364–65), since frequently the rectilinear margins of the less welded fragments of pumice are observed to cut across the microvesicles which form such fragments. New textural evidence for compaction rather than flow origin of *fiamme* in ignimbrites has been described elsewhere (Rast, *L'pool and Manch. Geol. Journ.*, 1962, **3**, pp. 97–108).

(2) The term *fiamme* originally was proposed for lenticular cross-sections of cake-like masses of glass in a welded-tuff (not an ignimbrite) known as *piperno*, which was first described by Dell'Erba (*Gior. Miner. Crist. and Petr.*, 1892, **3**, pp. 23–53). This rock consists of sub-aerially accumulated fragments of lava and pumice (in the type known as *sperone*), which in cross-sections appear similar to the lenticles of pumice in ignimbrites. The similarity is especially pronounced when *piperno* or *sperone* are pneumatolysed. Rittman (*Volcanoes and their Activity*, Interscience, 1962) points out that these fragments have been flattened by impact with the ground of effectively liquid volcanic bombs projected by lava-fountains.

(3) Numerous Russian authors suggest the existence of the so-called tuffolavas, which constitute a type of flow brecciated lavas. Such lavas contain fragments of pumice, but according to Shirinian (*Trudy Lab. Volcan., Acad. Sci. U.S.S.R.*, 1961, No. **20**, pp. 47–58) the texture of their matrix is microvesicular and fluidal rather than vitroclastic as in ignimbrites. The average density of vesicular tuffolavas is much less than that of ignimbrites and they evidently represent the foam-lavas of McCall. Thus Russian investigators envisage both pyroclastic flows and foam-lavas to contain *fiamme*. Boyd (*Bull. Geol. Soc. Amer.*, 1961, **72**, pp. 387–426) envisages all transitions between lavas, foam lavas and ignimbrites.