but that every formation should be placed on its proper horizon, and I cannot believe that the proper horizon of the St. Bees Sandstone is the same as the Bunter Sandstones.

W. T. AYELINE.

15, KENNINGTON TERRACE. KENNINGTON PARK, S.E.

## THE PERSIAN VOLCANO KOH-I-TAFTAN.

SIR,—In a footnote to a joint paper by my son and myself on the rocks of the Baluch-Afghan frontier (Q.J.G.S., vol. liii, p. 289), we gave a short account of a visit by Captain P. Molesworth Sykes to the volcano of Koh-i-Taftan, 12,600 feet high, situated near the eastern border of Persia, about 200 miles north of the Arabian Sea.

Captain P. Molesworth Sykes, who is now Consul at Sistan (Seistan), paid a second visit to Taftan (Koh means 'mountain' and -i- 'of') last January, and he writes to me as follows:—"When passing the eastern base of Taftan, Wood of the Telegraphs and myself tried to scale it from that side. At about 12,000 feet elevation we found seven orifices from which white vapour was being ejected with a noise like that of a steam-engine. The holes were very small and covered with stones, while, all around, were sulphur and sal-ammoniac. I collected here three tins full of the sulphur, the ash, and the stone. Almost at the summit the road was barred by perpendicular cliffs some 30 feet high, and so we could not reach it. The vapour issuing from the seven orifices (two being much bigger than the others) was visible for a distance of 10 or 15 miles, while the ground close to me was hot enough to break the bulb of my register. The climb was much steeper than on the south-west side, or perhaps I had not quite got over my seediness of the previous summer."

As so little is yet known about the Taftan volcano, and as it lies so much outside the range of ordinary travellers, the above brief account of Captain Sykes's second visit to this locality is interesting. The great heat of the ground near the orifices through which steam is still ejected under considerable pressure shows that the fires of this old volcano have not yet completely died out.

Captain Sykes kindly sent me the specimens he collected, but as they have not yet arrived I am afraid they have gone astray en route, or have been confiscated by some over-zealous Persian official who, in his care for the morals of Europe, may have thought that suspicious intercourse with the infernal regions ought not to be encouraged.

Should Captain Sykes again visit Koh-i-Taftan, it would be interesting if he could make a good representative collection of the solid rocks of that mountain found in situ.

I would remind those who may think it strange that an active volcano should have existed so far away from the sea that in Eccene times the sea flowed over what is now the Indus Valley into Baluchistan and Afghanistan (Manual Geol. India, 2nd ed., p. 494). This sea did not commence its retreat until the end of the Eccene period; and whilst it remained, the Koh-i-Safid range, of which Koh-i-Taftan forms a part, was probably not far removed from its shore.

C. A. McMahon, Lieut.-General.

20, NEVERN SQUARE, S.W.