VII .- Note on the modes of occurrence and localities of Abriachanite,

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THE blue substance first came under my observation many years ago in one of the Slickensides, in the first quarry opened for the supply of Abriachan granite, and situated by the side of the road leading to Abriachan,—a somewhat isolated district amongst the hills overlooking Loch Ness.

It was then seen in purplish-blue spots, dotting here and there the surface of the rocks which had been exposed to considerable weathering, and over which water had poured freely.

Since then it has been found all along this ridge wherever the granite has been exposed, in patches of greater or less extent, on the surface, or in the cracks of the felspathic veins traversing the gneiss;—in many of the masses of rock fallen from the cliffs,—along the shores of the Loch,—and covering the gneissose blocks met with in considerable quantities in the Allt Cuig, a narrow burn immediately beyond the Loch-End Inn, a little more than six miles from Inverness.

Here it was first observed in what is its purest condition, in small rectangular looking masses of delicate and microscopic fibrous crystals of a bluish silky lustre.

It has also been found in narrow seams in the granite veins which force their way through the rocks of the Dochfour Burn, at the picturesque waterfall immediately above the bridge in the private road leading to Dochfour House.

Its greatest developement, however,—except at one station to be afterwards described,—is at a short distance east of the point last referred to, in an excavation made for metalling the road mentioned, at a spot where the rock is considerably shattered; this is possibly the result of a neighbouring fault, and the rock has been here much exposed to weathering and other disintegrating agencies.

At one period indeed during the summer, this road (formed by taking skillful advantage of one the numerous Kames forming so striking a feature at the mouth of the Great Glen,) presented, where the material

was newly thrown down, a beautiful and brilliant blue color, which at once attracted attention.

At this point the mineral was noted in the crevices and cracks of the rock, or covering its surface in the form of a soft unctuous clay; in this, when examined microscopically, the beautiful and delicate parts already mentioned could be seen.

It has also been met with in numerous boulders apparently from the Abriachan district, scattered as far eastward as the Leachkin,—the face of the hill between Dunain and Craig Phadrick,—in the water-rolled pebbles and blocks in the gravel ridge running from Jorvain up to the foot of the Dunain Hill, and in one are two fragments of micaschist picked from one of the stone heaps on the top of the Leachkin.

To the west of and behind Dunain extends a district known as Englishton Moor, and over this quantities of scattered boulders lie,—these contain the blue material in abundance.

After the development, however, mentioned by the side of the new approach to Dochfour House, it has been observed in largest quantities in the Reelig Burn. Here it is seen where the surface of the rock is exposed immediately below the mansion house of Reelig, and also lower down in masses of rocks which had perhaps fallen down during the preceding winter, into the bed of the burn, and not far from where some rude arches of stone-work exist.

The most striking aspect however which it has been seen to present was met with at the Limestone Quarry now being worked not far from the point last mentioned.

In one of the old workings on the surface of a large mass of rock which had recently fallen, the half was observed to be of a bright red colour from a coating of reddle or some similar substance, whilst the other half presented as seen in the bright sunlight, a dazzling blue appearance.

The district indicated in the foregoing description will be best understood by reference to Professor Geikie's or Professor Nicol's Geological Map of Scotland, and comprises roughly an extent included within a line drawn from the middle of the granite region on the north western shore of Loch Ness, to the burn shown as finding its way into the Beauty Firth at Kirkhill. It must not however be understood that the mineral may not be found beyond this area, but investigation has not extended beyond this in a westerly direction; and it was not picked up in Glen Urquhart during last summer in frequent excursions made to this part of the country.

The mineral itself is apparently connected with the disintegration and decomposition of the felspar contained in the various rocks of this district. It occurs as already remarked in various forms; covering the surface of the rocks in which it is found with a fibrous bluish-white silky-like coating, or a bluish-white powder, or in seams of a more or less dark-blue tint.

It has also been met with of a whitish-blue colour, generally diffused through fragments of gneissose rock, picked up in the Allt Cuig Burn; and lastly it has been obtained in what is believed to be its purest form, in the minute rectangular masses composed of delicate microscopic fibres of a silky lustre, and of a bluish colour.