it does crop out having a dip upwards towards the north-east. It is a remarkable instance of the ignorance of Palestine geology that this great field of basalt, extending over perhaps 200 square miles, is not shown on Lartet's map, though the smaller outlying fragments of it in some cases are.

MR. TYRWHITT DRAKE'S REPORTS.

XVIII.

CAMP IN WADY EL FAR'AH, March 21, 1874.

On the 24th ult. we left Jerusalem and descended to 'Ain el Sultan. En route we visited El Marassas and Shunet Marassas, a Christian ruin of considerable extent, containing the ruins of a church, of which two apses and a portion of mosaic pavement in red, yellow, black, and white are still visible. There are also a number of unusually large rock-hewn cisterns with well mouths; on one of these crosses A are cut on each of its eight sides. Tradition tells of a gentle recluse, named Kaddis K'raytún (the priest Chariton), who lived in days of yore. Suffering much annoyance from the thievish propensities and knavish tricks of his neighbours, he determined to extirpate them, and accordingly served round a draught of serpent's venom, which miraculously destroyed them all, notwithstanding its being a blood and not a stomach poison. After this the good monk lived long and happily.

Between Khirbet Dikki and Marassas we observed a ruined dolmen. The two top slabs were of considerable size: below this is a small semicircular platform built against the hillside with unhewn stones, and lower down again is a small natural cave.

On the following day we rode down to the Dead Sea to fix a couple of piles for measuring the rise and fall of the water. These piles were made by Herr Shick at Jerusalem, and are marked every six inches. It is to be hoped that all travellers will note the height at which the water stands on each at the time of their visit. They are placed opposite the Rijm el Bahr, or island at the north end of the sea. We drove in the first at the water's edge without difficulty, but the second, which had to be driven in water five and a half feet deep, was no such easy job. The joint exertions of Conder and myself, however, enabled us at last to cope with the excessive buoyancy of the water, which forced us to swim, and the strong current setting castwards, which several times carried us away from our work. The use of a heavy mallet while swimming was a novel experiment and somewhat trying; it would have been impossible anywhere else than in water as buoyant as that of the Dead Sea.

A ride to the Jordan mouth, a ditour back westwards to Wady Dabr, where we had a fruitless search after the basaltic greenstone mentioned by Dr. Tristram, and a light meal of eggs and rice in the tent of Shaykh Jemíl abu Nusayr, completed cur day's work.

The Dead Sea.

A curious fact with regard to the Dead Sea is to be noticed as showing that the bottom is still subsiding. At the southern end, the fords between the Lisan and the western shore are now impassable owing to the depth of the water, though I have been told by men who used them that they were in no places more than three feet deep some fifteen or twenty years ago. Again, the causeway which connects the Rijm cl Bahr with the mainland has, according to the Arabs, been submerged for twelve or fifteen years, though before that time it was frequently dry. The Arabs say that the level of the water varies much in different years, and is not dependent on the rainfall, but on the sea itself, as they express it. The currents of this sea are curious and difficult to explain: that along the northern shore sets constantly eastwards, as is shown by the large pebbles at the north-west corner, and their gradual diminution in size towards the east, till at the Jordan mouth there is little but mud and sand. At 'Ain Feshkhah I formerly noticed a current running southwards.

On the northern shores there are no less than six distinct steps in the sea-bank; the two lower are thickly strewn with driftwood and canes. These banks are composed of fine water-worn shingle, and may be traced to a considerable distance up the Ghor, notably at Maydan el 'Abd, some three miles north of 'Ain el Sultan, where an enclosure is formed at the base of the hills about one mile long and half a mile broad. Into this area, which at first glance seemed of artificial construction, two or three small wadies drain, but, having no outlet, filter through the soil. The various geological sections seen in the side of the Ghor are very interesting, and explain the formation of the valley, which will, I think, be fully settled when the Geological Map undertaken by Lieut. Conder is completed.

The Jordan valley is now in full beauty. Wady Kelt is a swift, brawling stream, twenty yards wide and from one to three feet deep. The plain is covered with herbage knee deep, and decked with many bright flowers; deep-red anemones, lavender-coloured stocks, yellow mustard and marigolds, white clover and many coloured vetches, are the most conspicuous.

I have been surprised, however, at the comparative absence of bulbs, for besides a beautiful violet dwarf iris with white eye, I have only found two or three other species.

At this season there are enormous flights of wood pigeons (Ar. jozel), and also of starlings and jackdaws. In the summer the Kata or sand-grouse take their place. These latter birds drink every morning and evening, and consequently are always found nearer water during the extreme heat than in the winter, when pools are of frequent occurrence in the desert.

The first place we camped at north of 'Ain el Sultan was Wady Fusaïl, near the site of Khirbet Fusaïl, or ruins of Phasaelus, a town founded by Herod. At the present day traces of aqueducts and the foundations of ruined garden walls built of unhewn stone are all that remain of the

ancient city. This place is superstitiously avoided by the Arabs, who believe that it is haunted by a ghuleh, or evil spirit, and consequently never camp there. The Abu Nusayr men who accompanied us thus far took their leave as speedily as possible, and the relatives of the Emir el Dr'ayi of the Mesa'ayd Arabs soon left us, under plea of sickness. with only a slave as representative of their tribe. This desertion was due to no ill-will, for here they are most friendly and serviceable, but simply from dread of the abuleh, as I with some difficulty discovered. for at first they attributed it to fear of raids from the south; but as I knew the Arabs in those parts to be friendly, I asked one of the Emir's sons point-blank whether they were afraid of a jinn or ghul, and with much hesitation and many blushes he avowed that such was the case. This fear of ghuls is not uncommon in the country, and I have seen several places said to be haunted by them which are carefully avoided after dusk by the neighbouring peasantry.

We obtained our guides from the fellahîn of the neighbouring hill villages, who were pasturing their cattle in the luxuriant herbage of the Ghor.

Between this camp at Wady Fusail and our present one is a very Kurn Sartaremarkable conical hill called Kurn Sartabeh, or Horn of Sartabeh, who, according to the Arabs, was an ancient king who built the castle there. He is by some called Sabartalah. This horn or peak is a very prominent point, and visible from Hermon and from Moab, as well as from many places on both the eastern and the western hills. It rises some 1,500 feet above sea level, and consequently is 2,500 feet higher than the Jordan at this part of its course. An old path zigzags up a ridge from the south, and by this we rode up. To the west of the peak a ruined aqueduct, built of large roughly-hewn blocks, crosses a narrow watershed and leads to a series of cemented cave cisterns; this aqueduct, though of some length, was simply for the purpose of collecting rain-water. At the base of the cone is an artificial hollow on the west, while the other sides are so steep as to be practically inaccessible to assailants. very steep ascent of 270 feet from this western ditch brought us to the top, where are solid masses of masonry with drafted stones having irregular rustic bosses, and varying in length from two to three and a half feet by two feet in height. This central construction was probably a beacon, and there are traces of a surrounding wall which has been violently overthrown, probably by an earthquake, in part at least, and the débris encumbers the eastern slope to a considerable depth. The stones employed in the construction are hard marbly limestone, seemingly dolomite, and very heavy. The labour of bringing them up to such a position must have been very great, as the nearest point from which they could have been hewn is nearly a mile distant. El Mintar, a fine beacon station near Mar Saba, is fully in view of this point, and is the probable line of signal communication with Jerusalem, which is hidden by the intervening hills from the north-west.

A few days ago I rode over to visit this town, which must formerly Akrabeh.

have been the capital of the Toparchy of Arrabattene, so frequently mentioned by Josephus and in the Books of Maccabees, though it is always the district and not the town referred to by these writers. The modern village is of considerable size, and contains houses better than those usually found in this country. The inhabitants boast that formerly they used to muster some 2,000 guns; now, through the constant drain on their resources by the government, they cannot collect one-tenth of that number. In the north-east part of the village is a mosque of some pretensions, built on part of the ruins of a Christian church. The side port of the mosque door is formed of the broken lintel bearing this portion of an inscription (7007)O EHOIHC(a)N THEPCIMBIOT KAI TENON in square characters. In the chamber beneath the dome is another fragment . . TE . . . ENTOATIO. The ornamentation on both these stones is of similar character to that observed on the Christian ruins of the third to the fifth centuries in North Syria.

A fine tank of masonry stands conspicuously against the hillside in the centre of the village. The stones are roughly squared and packed with small chips; the wall on the lower side is nearly eight feet thick. The Husn or stronghold is a block of houses on the hill to the northwest. Some of the lower courses consist of blocks $3 \times 2\frac{1}{2}$ ft, with rustic bosses, and appear to be Roman or Herodian. Within the enclosure, which can only be traced in part, is a fine rock-hewn cistern with wellmouth. This, though reputed to be only filled by rain-water, is said never to fail, and the water is much esteemed.

Several Roman roads have been traced in this part of the country, and will doubtless help us to fix the sites of several places, of which the names are now entirely lost, though mentioned in old itineraries.

When adverting to M. Ganneau's theory that the Hajar el Asbah, near the north-west part of the Dead Sea, is the stone of Reuben mentioned as forming a boundary mark between Judah and Benjamin, I advanced certain geographical reasons which seemed to me conclusive proof that the boundary line could not by any means have passed by the stone known by that name—marked in Van de Velde as Hajar Lesbah. If additional proofs were needed they would, I think, be found in the fact that the name is not uncommon amongst the Arabs. From this camp we have found both a Hajar el Asbah and an 'Arák el Asbah. The Mesa'ayd Arabs give the same meaning to the word as the Abu Nusayr, Ta'amirah, and other Arabs do in the south, namely, streaked with white. The Hajar el Asbah near here is a fallen block of yellow limestone with a white streak at one corner; it lies beside the road in a narrow gorge of Wady el Far'ah. The 'Arák or cliff is distant some seven or eight miles to the north, and is called so for a similar reason.

Hajar el Asbah.