A NOTE ON MALARIA AT MOUNT AURIOL, FREETOWN.

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The garrison of Mount Auriol and Kortright consists of one company Royal Garrison Artillery and two companies 2nd West Indian Regiment at the former and one company of West Indian Regiment at the latter. These are parts of the Freetown garrison, although accommodated in barracks on the slope of a hill, 800 to 1,100 feet above the sea and separated from the town and native quarters by half a mile of uncultivated land. The sick are treated in the Station Hospital, Mount Auriol. During the period over which these notes extend, from the middle of August to the end of October, 1904, a period of two and a half months, I examined the blood of all men who came to hospital with fever, or who developed fever after admission, with the following results:

Number of men suffering from fever... 100
    " " diagnosed malarial fever... 39
    " " in whom malarial parasites were present... 47
    " " diagnosed malaria, in whom malarial parasites were present... 27

The diagnosis of malarial fever was made independently of microscopical examination, to find out the correlation between clinical and microscopical methods. It will be seen that, in practically 70 per cent., the microscope confirmed the diagnosis.

The remaining cases of fever, in which parasites were found, were chiefly venereal and slight surgical cases, who, during treatment, had an intercurrent attack of malaria.

In studying the variety of parasite found in these 47 cases, 46 showed only small rings, and judging by these alone, it was impossible to say which variety of malaria was present; but in 16 of the 46 a diagnosis could be made from the characteristic appearances of rosettes and gametes, nearly or completely grown.

The one case in which rings were not seen was a case of blackwater fever, showing one or two benign tertian gametes only.

The 16 cases in which it was possible to diagnose the variety of malaria were as follows:

| Malignant tertian | 1 |
| Benign tertian   | 2 |
| Quartan          | 12 |
| Mixed benign, tertian, and quartan | 1 |
In addition to ordinary small rings with a single chromatin spot in them, a number of specimens (49 per cent.) showed small rings with two chromatin spots. These were of very constant character, i.e., small rings or horse-shoes, with two distinct chromatin spots in one hemisphere, fairly close together, the intervening blue strip of protoplasm being extremely difficult and sometimes impossible to make out. Manson describes a ring with double chromatin spot as occurring sometimes; but being so frequently met with and of such a definite appearance it may perhaps be of some significance. These double-dotted rings were seen in 6 cases of quartan malaria, and in 16 cases in which small rings only were found. With the exception of one case of malignant tertian in which crescents were found, the cases were of a mild character and yielded to quinine at once. At this period, the rainy season, the *Anopheles* are not found in any quantity at Mount Auriol, as the pools and water-courses are frequently and thoroughly scoured.

Most of the malaria occurred amongst the West Indian detachment, especially that at Kortright on the highest ground, only 5 cases occurring in the European company. This is probably due to the fact that the West Indians are granted sleeping-out passes and sleep down in Freetown pretty often, and are thereby more liable to infection.

I carried out the microscopical work in the laboratory of the Sanitary Officer, Major F. Smith, D.S.O., R.A.M.C., who very kindly lent me every assistance he could.