CHAPTER V.

ON THE PREVALENT DISEASES OF THE DISTRICT.

Cholera—Small-pox—Fever—Ophthalmia—Dysentery—Hepatitis—Leprosy—Guinea-worm—Skin Diseases.

Prevalent diseases of the district.—The most fatal diseases are, as in other districts, cholera, fever, and small-pox.

Cholera (according to a report of the Collector in 1845,) made its appearance for the first time in the district in 1818, on the return of the British force from the Mahratta war, and since that time there have been frequent epidemics, the two most severe being in 1842 and 1866. An attempt has been made in a preceding chapter to show the years in which cholera was unusually prevalent. The Collector reported that the disease usually appeared at the close of the hot weather and increased with the north-wind in June and July. The first outbreak was generally in some village in the black cotton plains or in some open tract. Mr. Mellor suggested that the great increase of labour in June and July might have something to do with it, but he ridiculed the idea that it was caused by the coarse food of the ryots, pointing out that sepoys who lived on rice were frequently attacked.

The south-west monsoon usually breaks over the district in the first week in June, and the first showers soak the heaps of manure and other refuse which have been carefully piled up in the village for agricultural purposes. The ryot has by this time ploughed his field and proceeds to open out these dung heaps and scatter the contents about preparatory to carting them off to his fields. The dried beds of the tanks moistened for the first time for weeks give off most malarious exhalations, and these causes have always seemed to me quite sufficient for any outbreak. There is a popular belief that in years when cholera is prevalent, there will be but few cases of fever and *vice versâ*. The mortuary statistics, incorrect as they are, seem to confirm this. In former years the disease almost invariably broke out at Hampi during the festival, and was spread all over the country by the returning pilgrims. For the last five years a Surgeon has been sent out from Bellary and strict sanitary regulations have been enforced. The result has been that during

that period there has not been a single case at Hampi. Similar measures in the over-crowded town of Adoni, formerly a hot-bed of disease, have been attended with the happiest results.

Small-pox.—The Sanitary Commissioner in a letter dated December 14, 1870, wrote: "Unless 5-6ths of the children born in a year are vaccinated within a year of birth, the protection of the people against small-pox must be very small indeed. In Bellary 3,512 children were vaccinated in 1868, and 3,542 in 1869. As the births of 23,502 children were registered in 1869, the proportion vaccinated is 15·07. Small as this is, this percentage is greater than in any other district except Coimbatore. Too great dryness of the air or excess of moisture would appear to be alike unfavorable to the increase of small-pox. In Bellary the intensity is greatest in June and July, the dry and moderately cool weather after the monsoon."

Fever is prevalent more or less throughout the year, but is not of a malarious type such as that in the Circars and the Godaveri district. Fevers prevail chiefly in November and December, and gradually decline in January, February and March. Cases of the remittent type, except in certain seasons, are comparatively rare, the continued and intermittent forms are most prevalent. The medical officers in charge of the troops ascribe the continued fever to irregular habits, exposure to the heat of the sun during the day, and to cold at night when on guard. In many instances this fever assumes an acute inflammatory character, with local determination to the head and chest. This latter complication occurs chiefly in the cold season, and in such cases very active antiphlogistic treatment is required, at other seasons low typhoid symptoms occasionally appear in the course of the disease. These fevers are not usually severe and if timely assistance be given the patient speedily recovers. The native doctors enforce fasting, which simply serves to weaken the system, and usually administer severe doses of mercury. In the cold months of the year there is always a great deal of fever about, much of which is doubtless due to the native habit of sleeping out in the open air, in the streets, or fields, when a heavy dew is falling. When the disease is severe or fatal, the danger is generally owing to the supervention of affections of the head or heart.

Intermittents are generally of the quotidian type. There is no marshy ground or vegetation near the cantonment, and the existence and marked prevalence of this form of fever in the station tends

therefore to favor the opinion that the disintegration or decomposition of rocks gives rise to or is attended by the evolution of miasma which is the cause of this fever; or the noxious effluvia may be exhaled from the black cotton soil. The late Staff Surgeon Smith who was for many years a resident of the station has recorded in a report written in 1836, "that he never knew an instance of a European officer being seized with an original attack of intermittent fever at Bellary, and he adds that the chief exciting causes of this disease among the soldiery must be looked for in their careless imprudent habits and exposure at night."

An abstract of the deaths from fever, cholera, and small-pox in the last three years is given below. Trustworthy statistics for earlier years are not forthcoming, nor can entire credit be given even to the returns of the last three years. Cholera and small-pox are easily recognized and the more marked forms of fever, but there is no doubt that very many deaths are from ignorance ascribed to fever which are really due to some other cause.

Years.	Population.	Cholera	Small-pox.	Fever.
A. D.				
1867-68.	.....	2	1,718	7,883
1868-69.	1,304,998	1,488	2,102	8,845
1869-70.	.....	1,396	816	7,001
1870-71.	.....	9	907	9,143

At one time the cantonment of Bellary was considered one of the most unhealthy in the Presidency, and the evil reputation then acquired still to some degree remains. Since the troops were moved out of the low ill-ventilated buildings in the fort into the open barracks they now occupy, there has been a marked improvement in their general health.

Ophthalmia.—The marked prevalence of this disease is attributed to the extreme dryness of the atmosphere, to the excessive glare and reflection from the numerous large masses of granite, and in some parts of the district, to the light colour of the ground and the fine white sandy nature of the soil. The disease commonly appears in the form of the mild purulent ophthalmia (country sore-eyes), but

occasionally the deeper-seated portions of the eye are involved, giving rise in such cases to opacity of the cornea, and in some instances to destruction of the organ.

Dysentery occurs chiefly during the wet weather in June and July, but the cases are not numerous, and those only appear to be attacked who are highly predisposed to the disease.

Cases of *Hepatitis* occur pretty frequently throughout the year, but rather more frequently in July and August than in the other months.

Leprosy and *Elephantiasis* are very uncommon and cases are rarely met with.

Guinea-worm is, so far as my observation extends, most common in the black-soil taluqs, and is attributed by the natives to the brackish nature of the water.

Skin Diseases are common especially among the lower castes, but readily yield to treatment.

CHAPTER VI.

PART I.

GEOLOGY AND MINERALOGY.

The aspect of the district presents a vast surface of apparently boundless plains, broken here and there by detached rocky hills, and occasional clusters and chains of small elevation.

The soil consists of three classes, Régada (black); 2, Masab (mixed,) and Lál (red). The first of these soils which in this district covers over a million acres is from 1 to 12 feet in depth, and is mingled with decomposed felspar and gritty particles of quartz, and is often covered with angular pebbles of white quartz, ferrugineous quartz and jasper. Below this soil is usually found a kunker resembling gravel which is found to answer well for making roads. Analysis shows that the régada soil consists of silica in a minute state of division, together with lime, alumina and oxide of iron and minute portions of vegetable and animal débris. The general idea is that it is formed by disintegration of trap-rocks, but this is not the case. It is more probably a sedimentary deposit from water in a state of repose (Proceedings of the Royal Society, March 22. 1838.)