

and death-rates may be distinguished within the Empire.

(1.) The Prussian province Posen and the Government districts Gumbinen, Dantzic, Königsberg, Marienwerder, Frankfort, Breslau, Oppeln and Liegnitz.

(2.) The Government district Leipzig in Saxony, South Altenburg and Reuss.

(3.) The Prussian Government districts Arnberg, Düsseldorf and Minden.

(4.) The Bavarian districts Upper Bavaria, Lower Bavaria, Swabia, Upper Palatinate, Mittelfranken and the Palatinate; the Kingdom Wurtemberg, the Badenish circles Heidelberg, Villingen and Konstanz and finally Hohenzollern.

The following are distinguished for their small death-rates—in the north-western part of the Empire the provinces Schleswig-Holstein, Hanover, the district Stralsund, Lauenburg, the Grand duchy Mecklenburg, the duchy Oldenburg, the principalities Lübeck, Schaumburg-Lippe and the town Lübeck, while other equally favored areas lie more dispersed. To these belong the Thuringian states South Weimar, Meiningen, Coburg-Gotha, Schwartzburg-Sondershausen, the Grand duchy Hesse, the district Weisbaden, Trier, Lothringen, the principality Birkenfeld, the Badenish circles Waldshut Lörrach, Freiburg, Offenburg and Baden.

The following figures exhibit the loss which the German Empire sustains through deaths.

(1) Berlin town 34.00 p. m.; (2) the province Prussia 33.99; (3) Province Brandenburg (without Berlin) and Posen 33.96; (4) Bavaria right of the Rhein 33.60; (5) Silesia 33.10; (6) Wurtemberg, Baden Hohenzollern 30.98; (7) Rhine provinces, the district Arnberg, the principality Birkenfeld 30.72; (8) the kingdom of Saxony, Thüringen 30.69; (9) the province of Saxony, Hildesheim Braunschweig Anhalt 28.97; (10) the province Hesse Nassau, the district Hesse, Minden, Waldeck, Schaumburg-Lippe and Lippe 28.16; (11) the province Hanover without Hildesheim, the district Münster, the Grand-duchy Oldenburg, the town Bremen 27.61; (12) the Bavarian Palatinate, Alsace-Lorraine 26.73; (13) the province Pomerania, Schleswig-Holstein, Lauenburg, besides Mecklenburg, the principality Lübeck, the town Lübeck and the town Hamburg 26.02.

The average birth-rate amounted in 1872 to 41.26 per mille for the Empire, fluctuating from 30.96 in the district Lüneburg to 50.55 in the district Zwickau (Berlin 42.96); but data are yet wanting for the separation of the age-classes, the sexes, the fertile women, the fecundity of women and so forth.

(To be continued).

## A MIRROR OF HOSPITAL PRACTICE.

A CASE OF LEPROSY.

BY SURGEON-MAJOR J. H. THORNTON, B. A., M. B.,

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As leprosy is only occasionally seen among Europeans in this country, the details of the following case (communicated by permission of the patient) may be of some interest to the readers of the *Indian Medical Gazette*.

Mr. ———, of the Uncovenanted Civil Service, appeared from his own statement to have been in bad health since 1871, but it was not until 1874 that he perceived the first symptoms of the disease from which he is now suffering, in the form of patches, more or less discoloured, which he mistook for ring-worm and treated accordingly without any benefit resulting. In 1875, after bathing in a hot sulphur spring, the patches increased and became generally diffused over the surface of the body. He went to Ceylon on two months' leave, but only temporary benefit resulted, and in 1876 the patches became more apparent. The state of affairs was then as follows: the arms, legs, chest, and back were covered with copper-coloured circular patches, studded in the centre with small white vesicles. He felt an intense itching and sometimes a creeping sensation, especially on the forearms and legs. The skin over the right ankle and left forearm became slightly anæsthetic, and the anæsthesia subsequently increased while the general health failed. He was treated with Iodide of potassium, arsenic, and other alteratives combined with tonics, and externally by the application of gurjun oil and aqua calcis. As no benefit to speak of resulted from this treatment, he was sent to England on sick leave in April 1877. During his stay in England he was treated by Dr. Erasmus Wilson, Liveing, and others, who advised him not to return to India. He improved to such an extent that he thought himself nearly well, and he left England on his return to India in October 1878. As soon as he reached the Suez Canal, he became worse, and the patches reappeared on different parts of his body, particularly the face. On reaching India he went to the Santal Pergunnahs, where he soon began to suffer from fever and ulcerated sore throat. The patches became darker, and a discharge of blood and mucus from the nostrils commenced, forming scabs which plugged up the nostrils and obstructed breathing until they were brought away by syringing. During the year 1879 he continued to grow worse, and suffered from repeated attacks of fever and diarrhoea, until at last he went to Calcutta and was admitted into the General Hospital, where he remained for a month.

He grew better, and came up to Arrah where he improved steadily, resumed his duties, and continued fairly well until May 1880, when he was sent to Buxar. While carrying on his duties there he worked very hard and exposed himself to the sun, after which he was attacked by fever, with severe pains in different parts of his body. This lasted for several days, and he then recovered slowly, having been much weakened by the attack. Soon after this he returned to Arrah and continued pretty well (with the exception of a slight touch of fever in August) until December 2nd, when he felt pain in some of his joints and noticed that his hands were somewhat swollen. After a few days an attack of fever took place and lasted for about a week, when it passed off, and for a short time he felt better. He was then however seized with severe shooting pains in the arms and legs; the left arm from the shoulder to the hand, and the right leg from the hip to the ankle, being the parts most severely affected. The pains appeared to follow the course of the nerves, some of which could be felt like hard cords irregularly thickened and swollen and very sensitive to pressure. The patches of discoloured skin assumed a deeper tinge, some of them even becoming nearly black. Hyperæsthesia was observed in some portions of skin, while in others the sensibility was much impaired. The skin covering the right ankle, which had been partially anæsthetic for several years, now lost nearly all sensation, so that the prick of a pin or the application of hot water could not be perceived. The hair of his legs and other parts of his body, which had previously fallen off but had grown again since his arrival at Arrah, nearly all fell off once more. He sometimes complained of a sensation of chilliness which could not be dispelled although he covered himself with warm clothing and had a fire in his room. At other times he felt very hot, dry, and thirsty, and complained of great heat and throbbing in the head. Tubercular swellings appeared on the face in different parts, so that the expression was altered, and his hands and fingers also became swollen. The pains in his arms and legs were usually much worse towards evening and during the night; they were somewhat relieved by friction with anodyne liniments, but the relief thus obtained was only temporary. He was also much distressed by the state of his nostrils, from the posterior part of which a sanious discharge proceeded, blocking up the

nostrils until removed by syringing, and causing irritation of the throat by adhering to the mucous membrane. His appetite was capricious; sometimes he felt hungry, but more frequently there was positive loathing of food: his bowels were sometimes relaxed, at others costive. In the latter part of December he improved a little, and was able to do duty for a few days, but on the 31st he got a fresh attack of fever with severe pains along the course of the nerves, and was again quite prostrated. He continued very ill during the whole of January 1881, but grew somewhat better in February, and returned to duty, though he was still very weak and emaciated. On the 9th of April he was exposed to the sun and hot wind, which brought on a severe attack of fever with much pain in the head. At the same time a large number of erythematous spots made their appearance on different parts of his body, particularly the thighs, arms, and hands. They were acutely painful, and some of them threatened to suppurate, but this result did not occur. None were found below the knees, but in previous attacks they had appeared on the legs, leaving dark patches of skin to show where they had been. The bridge of his nose, also, became swollen and inflamed, and the sanious discharge from the nostrils was much increased in quantity. Towards the end of April he got a little better, the fever ceased, the erythematous spots gradually disappeared leaving dark patches of skin in their places, the pains subsided, and the swelling of the nose was diminished, though the organ was still much thickened and the discharge continued. The skin generally was much discoloured, especially on the face and extremities, in many parts of which it was of a dark coffee colour. On the hands it appeared very thin, tense, and shining, and more or less discoloured. Mr. ——— was now in very weak state, and had lost flesh to a considerable extent. He was quite unfit for duty, being unable to bear the least exposure to the sun without an immediate aggravation of the local and constitutional symptoms of the disease. The only hope of any improvement in his condition appeared to lie in his obtaining without delay a complete change of climate, and I therefore recommended him for one year's leave to Europe, to be subsequently extended if necessary. During his long illness Mr. ——— was treated by many medical men and with a great variety of remedies. He has taken all manner of tonics and alteratives, including quinine, steel, arsenic, mercury, cod liver oil, gurgun oil, iodide and bromide of potassium, and many others, in various forms and combinations, and he has used externally chaulmoogra and gurgun oils, belladonna and opium liniments, and other local applications. Sometimes these remedies have appeared to do good, but in every instance the benefit was merely temporary, and after a longer or shorter period the medicine seemed to lose all power and to become quite useless. For nearly three months he made trial of the native treatment by mudra powder and a diet consisting chiefly of gram and water, but the disease seemed unaffected, and he suffered a considerable loss of flesh and strength from the experiment.

Several points in the case of Mr. ——— appear deserving of notice. The disease seems to have assumed a mixed form; the symptoms of anæsthetic leprosy predominated latterly, but although the disease has lasted for seven years, not a single bulla has as yet appeared, nor has there been any ulceration except in the throat and in the nasal cavities. In its earlier stages, perhaps, the case might be considered as belonging to the variety described by Kaposi, in the 4th volume of Hebra's Diseases of Skin, as *Lepra Maculosa*, or *Morphœa*, which, according to this author, passes into anæsthetic leprosy sooner or later. The disease has, so far, presented a curious series of remissions and exacerbations; during the former it seemed dormant, and the patient was not only able to do his official work without difficulty, but could ride long distances and play at racquets and lawn-tennis. The latter rendered him perfectly helpless, and each successive attack seemed to increase in duration and severity. I was unable to learn any thing definite from him regarding the origin of the disease, but I ascertained that he had been employed for several years previously in an unhealthy and malarious tract of country; that he had been very hard worked, and that his health had been much injured by hardship and exposure. Such conditions would probably favour the occurrence of the disease in a country like India where it is endemic. As regards treatment there is little to be said, and the experience of this case confirms the opinion of most observers that leprosy is incurable. It may however be

alleviated and retarded by judicious general treatment, improved diet, and, above all, by the removal of the patient to a country where the disease does not prevail.

*Arrah, 21st May 1881.*

#### CASES FROM PRACTICE AT A BENGAL VILLAGE.

BY SURGEON-MAJOR K. P. GUPTA, M.B., F.R.C.S.E.

##### 5.—*Case of Atresia oris or closure of the jaws from a dense cicatrix consequent on Cancrum oris.*

K., a married woman, æt. 18, suffered from malarious fever and hypertrophied spleen from childhood till three or four years ago. The fever proving obstinate, she was greatly emaciated, and at last Cancrum oris set in. By careful treatment and by change of air she got rid of her fever, and her health was much improved within the last three years. But the Cancrum oris was only partially healed. A hole was left on the right cheek about  $\frac{1}{2}$  of an inch in circumference, with an offensive discharge from it.

*Present condition.*—The patient does not suffer from any fever now; the spleen is hypertrophied and indurated; general health not bad. There is a hole on the right cheek which discharges an offensive sanious fluid; some rough bone could be felt inside the sore. The jaw is firmly closed by a dense cicatricial tissue in the right side of the mouth, so much so that she cannot open her mouth and eat any solid food; she can only sip fluids and liquids between her teeth. Her friends applied to me for her relief, especially for her inability to eat any solid food.

As the cancrum oris was not quite healed, and as she still had a large indurated spleen and was living in a malarious place, no serious operation could be thought of, such as dividing the dense fibrous band. I had therefore to content myself with removing some pieces of necrosed bone from within the hole on the cheek, and then with great difficulty removed two upper and two lower incisor teeth. The difficulty arose from the patient's inability to open her mouth at all, and consequently the forceps could not be introduced and so get a sufficient purchase of the teeth to be removed. After much trouble one lower incisor tooth was extracted, and the room thus gained facilitated the removal of the others. The poor girl was greatly relieved and saved from semi-starvation, as she could now feed herself through the opening made by the removal of four front incisors.

*Results.*—Two months after this I learnt the sore on the cheek was closing up and she could manage to eat her food through the opening between the teeth.

##### 6.—*Aneurism of the arch of the Aorta.*

An elderly man, æt. 55 to 60, was brought to my house in a small *doolie* from Jettiah, a village about three miles distant, under the escort of his two sons. The latter said their father was suffering from an abscess, and the principal man of their village had recommended that he should be brought to me for having it opened. On examination I found it was not an abscess but a huge aneurism ready to burst. Neither the patient nor his sons could give me a good history of the case. He had been subject to fever and rheumatism. No history of syphilis. He had had a sort of pain behind the upper part of the sternum for a long time, attended with dyspnoea and dyspnoea at times. But for the last two months a swelling began to appear at the upper part of the sternum. At first he had great œdema of the face and neck, due, no doubt, to pressure of the aneurismal tumour on the superior Vena cava. Pulsation was not visible on the tumour, which was situated on the upper part of the sternum and more to the left, and bounded by the left clavicle above. As the man complained of a troublesome pain in the tumour, I ordered a Belladonna plaster to promote euthanasia, cautioning his sons not to let any quack or barber open the so-called abscess, as they were much disappointed at my not touching it even after my explanation.

##### 7.—*Two cases of Syphilitic Psoriasis contrasted.*

The first case. A Brahmin male, æt. 45 years, with a syphilitic history, was attacked with psoriasis. His palms