MEMORIES OF

SEVEN CAMPAIGNS

A RECORD OF THIRTY-FIVE YEARS' SERVICE IN THE INDIAN MEDICAL DEPARTMENT IN INDIA, CHINA, EGYPT, AND THE SUDAN, By

JAMES HOWARD THORNTON

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DEPUTY SURGEON-GENERAL INDIAN MEDICAL SERVICE (RETIRED)

LATE PRINCIPAL MEDICAL OFFICER, PUNJAB FRONTIER FORCE

With an Introduction by

A. EGMONT HAKE

AUTHOR OF 'THE STORY OF CHINESE GORDON,' ETC., AND EDITOR OF 'GENERAL GORDON'S JOURNALS AT KHARTUM'

Illustrated by

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INTRODUCTION

It would be difficult to find a more interesting period in the modern history of our Empire than that at which the author of these Memoirs began his career as a military surgeon. Dr. Thornton, recently appointed as a medical officer to the Bengal army, had only passed a few months in the discharge of the duties assigned to him at Benares when the news was spread through India that the native army was in open revolt. The two years which followed, during which the Mutiny lasted, were years of severe apprenticeship in the service of his country. It was an experience which proved in many respects profitable to him. His duties at Cherra Poonjee which followed almost immediately upon his return from the famous expedition to Peking demanded the practical knowledge which the fortunes of war had bestowed. The grave responsibility which devolves upon medical officers at military stations in India is well exemplified in this work. Such an appointment often comprises the medical charge of the jail, the police, and other civil establishments of the station, in addition to military obligations. Besides being arduous in the extreme, such a position frequently proves perilous to the health of the officer. During the summer months rain often falls in torrents, and in spite of every precaution the officer in medical charge of a hill station gets wet through frequently, and is sometimes laid up by illness. Rain is indeed one of the most relentless foes in tropical climates against which the soldier has to contend. In many an expedition, when the rainy season begins, the men come into hospital every day by

dozens, as it happened in Assam, attacked with malarious fever. At one time during the Bhootan war, so picturesquely described by Dr. Thornton, scarcely a soldier remained in camp who was fit for duty. This Bhootan expedition was indeed remarkable among frontier wars in India for the excessive amount of sickness among the troops. It was quite sufficient, as Dr. Thornton observes, to convince the most sceptical of the existence of some special agent, commonly called malaria, as the chief cause of intermittent and remittent fevers. The fact that the 'chill' theory was discarded by most, if not all, the medical officers who served with the Bhootan Field Force, is the most incontrovertible argument that can be brought forward. While Dr. Thornton had charge of the station at Julpigoree, his duties were even more arduous than at Cherra Poonjee; and his practical recommendation of a month's holiday each year to every medical officer, in order to prevent a breakdown in health and the consequent application for leave of absence to Europe on medical certificate, appears well worth consideration at headquarters.

Another foe against which the military surgeon has to take prompt action is cholera, and Dr. Thornton's account of the outbreak of this disease at Arrah in 1879, during the season of intense heat, is extremely suggestive. His plan of placing his cholera patients in empty sheds, at a short distance from the station, was attended with marked success. A supply of pure water is no doubt one of the chief means of preventing these outbreaks; and where improvements in the water supply to Indian stations have been carried out, it is gratifying to learn from this work that the result has proved satisfactory.

During the rebellion in Egypt headed by Arabi Pasha, the general hospital of the Indian Division at Suez was admirably managed by Dr. Thornton. The manner in which the beds were

arranged on board the P. and O. steamer in Suez docks showed excellent judgment and foresight. The ship was moored close to the sea wall, and thus presented her broadside to the prevailing wind. Complete ventilation was obtained, and the sanitary state of this floating hospital was perfect from first to last. While Dr. Thornton occupied the position of principal medical officer of the Indian contingent at Suakin he wisely adopted the same plan. A hospital ship was moored in the southern harbour near the shore. Excellent work was done at Suakin, not only in his superintendence of the hospitals, but in the improvement of the sanitary condition of the camps as well as the environs of the town. Lord Wolseley, at the time of his visit to Suakin, spoke of the order and cleanliness of the hospitals in the highest terms. Indeed this praise was well deserved, for at that time there had only been six deaths reported in the hospitals of the Indian contingent, two cases being from wounds received in action and four from disease, out of more than 1000 sick and wounded, admitted and treated there since the landing at Suakin. In Lord Wolseley's despatches relative to the Nile and Suakin expeditions, Dr. Thornton's name was among the list of officers whose services were considered deserving of special mention.

The value of the recorded experiences in India of men like Dr. Thornton can hardly be overrated; for they serve admirably to acquaint the British nation with the immense importance of our Indian Possessions, as well as with the overwhelming responsibility such Possessions involve.

The fact that the British Indian Empire was not established by the democracy which now governs it, nor by any of the monarchs or statesmen who preceded the democracy, goes a long way to explain the surprising indifference regarding these enormous possessions displayed by the average Briton and by the various represen-

tatives of the British people, be it in Parliament or in the Press. The Indian Empire was the result of the intelligence, the pluck, the enterprise, of a handful of British individuals, and now stands among the many monuments bearing witness to the immense potency of our national character, and to the capabilities of private initiative when unhampered by State interference. If the transfer of the management of our Indian Possessions from the East India Company to the British Government has not evoked a keener interest in them on the part of the British people, the cause must be sought in the turn taken by the political aspirations of the nation during the past half century. In Great Britain, as in most other civilised countries, the progress of art, literature, science, and popular education fostered irresistible aspirations towards greater political liberty, and, by a long succession of reforms, the masses of Europe have acquired a large share in government. The transference of political power from the classes to the masses has in Great Britain been more complete, more rapid, and especially more peaceful, than in any other country. Theoretically the people had the power since the time of Cromwell, though existing legal restrictions, privileges, and above all political corruption, prevented the masses from turning it to practical account. Thanks to the British Constitution, it was natural that all reforms should be asked for in the name and carried through the influence of the masses. Hence it became necessary for those politicians who were anxious to pass political reforms, or to assume prominent positions, to espouse such causes as really, or apparently, furthered the interests of the masses, and to discard measures, however important to the country, which appeared at all recondite, remote, or abstruse. In this way the parish pump became the all-absorbing object of political attention.

The immense importance to the English people of our Colonial Empire, and still more of India, was not a subject that lent itself

to platform orations. If our Eastern Empire was referred to at the hustings, it was done more frequently with the object of holding it up as a source of weakness and corruption than with any other intent. It was frequently asserted that India had an interest only for the aristocracy, the official and the military classes, who there found the means of enriching themselves, and a pretext for imposing themselves on the British Nation. 'Perish India' was almost a Party cry, and the Little England Party was almost a power.

During the last twenty years many events have happened which should have, and no doubt to some extent have, opened the eyes of the parish pump politicians. The experience of almost every civilised State, including those of North and South America, has proved beyond the possibility of doubt the fallaciousness of the supposition that national and democratic government does not suffice to secure prosperity, and that, so far—from no inherent fault in nationalities or democracies, but in consequence of ignorance, prejudice, and corruption—economic misery for the masses has been the result. With the examples of Italy, France, the Argentine Republic, and the United States before the world, no sensible man would counsel us to leave India to herself in order to increase her prosperity and our trade.

The universal Free Trade which was to be the outcome of progress, of general enlightenment, is as far off as ever, and the obstacles to the export of British products have been enormously increased. The few markets that we have under our own control have therefore acquired immense importance.

Other powerful Continental nations who, some time ago, had no ambition for colonial expansion, now seek to counteract the evil consequences of their foolish economy by aiming at monopolising colonial markets, and there is an universal scramble both for

continents and islets. Many of our self-governed colonies seem fatally bound to repeat all the errors of the old countries, and, by every conceivable economic mistake, to keep down trade with England to a ludicrously small fraction of what it ought to be. The high Protective duties, bad as they are, represent only a part of the obstacles that block the way to British commerce. Far greater evils are the reduced consumption of the colonial populations, the artificial arrest of progress, the bar to healthy immigration, the ruinous indebtedness, the chronic financial troubles; and many similar effects of perverted economic legislation tend to render the colonies poor markets for British goods.

It is under such circumstances that the value of a possession like India begins to stand out prominently. It does so all the more when we bear in mind that our present trade with India is entirely in its infancy, and that this immense source of wealth and prosperity is hardly yet essayed. I know that this statement will be looked at askance by those who know India simply by superficial reports, or by those who have visited the country and carried away no other impression save that of its apparent poverty. Those who wish to form an adequate idea of what India might be to England, should study that dependency in the light of economy. A time will come when the question of the trade and prosperity of the British people will take precedence of all the barren Party questions which now monopolise the best brains of the country, and then the resources of our Indian Empire and how to utilise them will be adequately considered. It would be premature and bootless to enter upon a question of such magnitude. It will suffice to remind those who are interested in economic questions that in India dwell nearly 300,000,000 of industrious, frugal, intelligent, honest human beings, eager to produce wealth and to consume British manufactured goods to the full extent that their economic conditions

permit; that this easily governed population has a strong tendency to increase; that in spite of these enormous numbers, there are in India immense tracts of land waiting for cultivation and irrigation; that the soil is fertile, the climate intensely fructifying, and the products of the highest value.

When the British nation is aware of the economic and commercial results which may be achieved by a closer and free co-operation between India and these Islands, when India is freed from such obstacles to her prosperity as Protection Duties, the Salt Tax, State money-borrowing, and the ruinous usury system, the life-work of such men as Dr. Thornton will be appreciated at its full value. The doing and daring of such men is made doubly useful when they record in a work like the present one their experience and their observation. For every word that can be written or spoken with the view to evoking a greater interest among our people in our Eastern Empire is invaluable.

It is natural that different minds should receive different impressions, and that consequently there should be a slight divergence in views and appreciations between the many works that have been written in connection with India. As far as I can judge, Dr. Thornton's work acquires a special value from the freedom from prejudice with which he has recorded his views and his observations. As a proof of this it will suffice to call attention to his remarks on the opium question. As a military officer, as a medical man, and as one intimately acquainted with many districts of India, his opinions should carry great weight with many thinking men. Students of sociology will rejoice to find that, on entirely practical grounds, Dr. Thornton's conclusions harmonise completely with those arrived at by their own abstract reasoning. It was to be expected that that class of reasoners who swell our teetotal ranks would cry out for prohibition of the opium traffic in India

as a panacea against the opium-consuming proclivities of the Hindoo. It was not likely that they would listen to the irrefutable sociological arguments, nor to the conclusions drawn from almost universal experience, all tending to show that Government prohibition against the use of any article of consumption invariably intensifies and vitiates the use of it. It would have been useless to try to convince our fanatical prohibitionists that the tabooing of opium in India on the part of alien rulers, and the application of such supervision as, at the cost of many millions, could be applied to the vast Indian Empire, would unfailingly produce not only a largely increased consumption of opium, but the worst forms of abuse. But the stubborn facts which Dr. Thornton calmly places before the world must convince the prohibitionists that this important question has other aspects than those of sentimentalism.

The prohibitionists are not the only faddists to whom India presents the temptation of a vast virgin field for mischievous cant. To judge from certain platform utterances, the long distance which separates England from India alone deprives the latter country of the benefit of an invasion on the part of agitators in favour of all sorts and kinds of social nostrums. As it is, efforts are being made to create in India a demand for representative Local Government, national Parliaments, and even Home Rule. The impracticability and the danger of fostering such aspirations are clear to all who have a practical or theoretical knowledge of Indian circumstances. But, unfortunately, the advocates of such reforms seem to have as little knowledge of India as they have of the real nature of the panaceas about which they preach. They belong, as a rule, to that school of politicians who, even in Great Britain and Ireland, are bringing about an economic and social retrogression—a school eager to multiply what they

mean to be democratic and paternal administrators, but what turn out to be bureaucratic authorities. If these men would only stop to consider the mission of the new governing bodies they are so anxious to create, if they would realise for themselves that the mission of all authorities should be to protect liberty and prosperity, they would considerably modify their doings at home, and understand that these objects could be attained for India through British rule, but never through Socialism in India.

To incite the natives of India to take the government of the country into their own hands would be to emulate the French revolutionary socialists who preach revolution for revolution's sake, without having a definite programme for reform. A revolution in France would simply bring back the Monarchy or the Empire, but a successful revolt against British rule in India would mean chaos. Dr. Thornton's interesting account of his experiences during the Mutiny, as well as the history of that dreadful period, should deter every true Briton from fanning into a flame any spark of discontent that may show itself.

It has often been predicted, and especially by England's enemies, that one day India must escape from the leading-strings of Great Britain. It has been pointed out that causes tending towards this result are at work every day. The contact of natives with Europeans, the spread of education, the fading of caste prejudices, the arising of new sects and religious movements, the growing power of the native press, the increased self-reliance among the native troops springing from flattery, military distinctions, and employment outside the dependency, and the assimilation of socialistic doctrines by the numerous young Indians who come to complete their education in these Islands—all these facts may well be supposed to pave the way for an independent Indian Empire in the distant future. On the other hand, those who

believe in the endurance of our Eastern Empire say that these very signs of progress in India tend to strengthen England's hold, because with more enlightenment, with more freedom from prejudice, the natives will better appreciate the advantages of British rule, and wisely recommend the gradual removal of all causes of poverty, suffering, and discontent with our Government. Such an aim has no doubt been pursued by the successive British administrations, but, strange to say, there is one great fundamental cause of widespread misery and untold suffering among the natives, the removal of which seems never to have been taken into consideration by either Englishmen or Anglo-Indians—I refer to the atrocious usury system which crushes the producers in India, which renders their life a burden, which compels British officials and British soldiers to act the part of extortionists against the poor debtors on behalf of the merciless usurers.

That Dr. Thornton, a military and medical man, has not paid any special attention to this vile system of usury or its ruinous effect on the natives, on Indian finances, and on British trade, can well be understood. But that the administrators of India, experienced English financiers, university economists, pragmatical philanthropists, merchants and shipowners in search of business, should have paid hardly any attention to the fundamental cause of poverty in India is at the least, be it said, surprising.

It seems that Anglo-Indians look upon the usury system not as the outcome of bad economic legislation and pernicious State-meddling, but as an indispensable feature of civilisation on Indian soil. Even when forcibly brought under their notice, they seem to say, 'Kismet, kismet,' and think no more about it. Thus, for instance, an old retired Anglo-Indian who in conversation enumerated the causes of discontent among the Indian people did not refer to usury at all. When asked whether the system was not

a most pernicious one, he said it certainly was, and that even his success in life had been marred by it. He then told how once, in an up-country station, he was obliged to raise a large amount in cash, and how the native money-lender charged him fifty per cent. interest per annum, and thus rendered the repayment of the capital with the interest an extremely slow and difficult matter. He is probably not the only Englishman who has thus been severely struck by a calamity which he is in part instrumental in perpetuating among the struggling natives.

It is strange that in times like these the great majority of Anglo-Indian officials who have seen their income dwindle in consequence of the fall in silver, should not have looked to the abolition of the usury system as the most practical means for the redress of this great grievance. They have a moral right to a nominal increase in their emoluments, and, if they do not get it, it is because the Indian Budget does not allow of it, the prosperity of the dependency standing at too low an ebb. Once the usury system is superseded by more rational financing, the prosperity of India will permit justice to be done to the officials, and enable British merchants to realise profits large enough to stand such fluctuations in the rates of exchange as henceforth are probable.

But, instead of any such attempt to strike at the chief cause of bad Budgets, it is exasperating to find that our Government has thought fit to fall back on American currency tamperings at the very time when the evil consequences of such manœuvres have been made manifest to the whole civilised world. Having said this much on Indian finance, I feel bound to add that Dr. Thornton merits the gratitude of his readers in having carefully avoided any reference to this vexed and much bemuddled rupee question.

If politicians, financiers, and business men, connected with India, would expend the same amount of thought and observation within their spheres, as Dr. Thornton has in his, we should witness a prosperity in India which would outstrip anything experienced either in ancient or modern States.

A. EGMONT HAKE.

CHAPTER I

My medical education—I obtain an appointment as assistant-surgeon in the East India Company's service—My voyage to India round the Cape—First impressions of Calcutta—Brief sketch of the city—My journey up the country—Description of Benares—I pass the language examination and obtain medical charge of a native infantry regiment—My march to Allahabad and back—Dâk bungalows—I am transferred to a battery of artillery.

I ENTERED as a medical student at King's College, London, in the spring of 1851, and matriculated at the University of London the same year. After going through the usual courses of lectures and hospital attendance for two years, I passed the first examination for the degree of M.B. A year later I took the degree of B.A. with honours, thanks chiefly to the excellent education I had received as a boy at Chatham House, Ramsgate. In 1855 I passed the examination for the membership of the Royal College of Surgeons of England, and on the completion of my professional studies at King's College, I was made an associate of that institution.

I then began to look about me for employment. Circumstances, as well as inclination, prompted me to enter some branch of the public medical service, at home or abroad, and at that time the Indian Medical Service was by far the most attractive. Accordingly I applied for an appointment as assistant-surgeon on the Bengal Medical Establishment, which had been placed at the disposal of the Council of King's College by one of the Directors of the East India Company.

I was so fortunate as to be selected by the Council out of

several applicants for that appointment, but for some months I was unable to take it up, as I had not reached the age of twenty-two, below which no one could be admitted into the service. I took advantage of the delay by passing the second and final examination for the degree of M.B. at the University of London in November 1855.

Having taken up my appointment, I embarked at Gravesend for Calcutta in the ship *Contest*, on the 16th of March 1856. The vessel was not a regular passenger ship, and there were only two passengers besides myself, both of them young officers proceeding to join their regiments. The voyage to Calcutta occupied about three months and a half, and but little occurred to vary its monotony. We sighted land only once. On that occasion we were becalmed, and lay for several hours off the island of Tristan da Cunha, in the South Atlantic Ocean, midway between South America and the Cape of Good Hope. Tristan da Cunha is a rocky mountain rising abruptly from the sea to a height of nearly 8000 feet, with a mass of cloud generally resting upon its summit. It is sterile, rugged, and inaccessible, except at one or two points, where a landing can sometimes be effected. It is often visited by severe storms, and, indeed, a more forbidding and inhospitable spot could hardly be found in any part of the world.

Although we lay off the island for several hours, we were not permitted to land, as our captain expected a gale to spring up shortly. However, several of the European settlers, whose white cottages we could distinguish near the landing-place, came off to us in a boat with fish and vegetables, in return for which we gave them sundry stores, clothes, etc., of which they stood in need. For such necessaries they appeared to depend in a great measure upon the visits of passing ships, though a vessel was sent to them from the Cape once or twice a year.

A few miles distant was Inaccessible Island, less lofty than Tristan da Cunha, but surrounded on all sides by towering cliffs, which seemed to render a landing almost impossible. Nevertheless, two German sailors are said to have somehow gained access to the island, and to have lived there for a time. After leaving these islands we had a fine run towards the Cape. We did not touch there, however, but passed round four or five hundred miles to the southward. The weather now became very cold, and the ship was attended by numbers of gulls, albatrosses, and other sea birds, which gradually fell off and disappeared as we turned our course northward and sailed into warmer latitudes. The rest of the voyage was uneventful; fine weather prevailed, and we arrived at the mouth of the Hooghly River on the 28th of June 1856.

Several of us went ashore at Kedgeree in one of the ship's boats, while she lay at anchor waiting till the tide should serve for going up the river. When we started to return, both wind and tide were against us, and it was only with great difficulty and after a long weary pull that we at length regained our vessel. We then continued on our way up the muddy waters of the Hooghly, anchored at Diamond Harbour on the 29th, and reached Calcutta on the 30th of June.

I was much struck by the beauty of the river banks for some distance below Calcutta, the Botanical Gardens and Bishop's College occupying the right bank, while the mansions of Garden Reach were scattered at intervals along the left. The appearance of the city from the river was very imposing, and at a distance it seemed indeed a 'City of Palaces.' A closer view, however, produced a very different impression, and we were disappointed as well as disgusted with the state of the city, where foul odours and loathsome sights met us at every turn. At that time the river was used by the natives for the disposal of their dead, and corpses

in different stages of decay were continually floating about, with vultures devouring them. The drains of the city were exposed, refuse of all sorts remained in the streets, there was no proper water-supply, and hardly any attempt at sanitation. Scavenging was partly performed by the gigantic storks (*Leptoptilus argala*), popularly termed 'adjutants.' These immense birds, five or six feet high, were to be seen in all directions walking about the streets, or perched on the buildings, where they would often stand motionless for hours on one leg. They speedily disposed of dead animals and offal, and so useful were they found that a legal enactment was passed for their protection, and any person destroying one of them was rendered liable to a fine of fifty rupees. Of late years they have mostly left Calcutta, probably owing to the improvement in the sanitary state of the city, and it is rather rare to see any of them there. Numbers of jackals and 'pariah' dogs were also to be met with about the city, the former usually appearing in the evening and making night hideous by their unearthly cries. The latter prowled about the streets in the daytime in search of food, or lay curled up, sleeping on the heaps of dust and refuse lying about in all directions. They took no notice of the natives among whom they lived, but the appearance of any one in European dress was quite sufficient to provoke their hostility and raise a chorus of shrill angry barks. These animals performed an important part in consuming the offal and refuse of the city, in conjunction with the 'adjutants,' kites, and crows, which abounded everywhere.

Calcutta was founded in 1686 by Governor Charnock, whose name is still preserved in 'Achānak,' the native appellation of the neighbouring station of Barrackpore. By 1700 the place had increased in importance, in consequence of the Mogul Emperor Aurungzebe having granted the Company three villages around their factories. These were fortified and named Fort William, in

honour of King William III. The settlement continued to increase in population and importance until 1756, when it was suddenly attacked by the forces of Suraj-ood-Daula,[1] Nawab of Bengal, and taken after a brief defence, which was rendered unavailing by the cowardly desertion of the Governor. Most of the garrison perished in a room, since known as the 'Black Hole,' where they were confined during the night, and Calcutta remained in the power of the Nawab for several months, when it was retaken by Clive and Admiral Watson. From that time its progress was rapid and unchecked, and in 1772 it became the seat of the Supreme Government of British India. The population, including that of Howrah and the other suburbs, is now in all probability little short of a million.

The city extends for several miles along the banks of the River Hooghly, and is connected with Howrah by a splendid bridge. It contains many fine buildings, notably Government House, the residence of the Viceroy of India, built in the beginning of this century by the Marquis Wellesley, the Cathedral, the High Court, the Medical College, Post Office, Museum, etc. A prominent feature of Calcutta is the 'Maidān,' an extensive grassy plain lying between the city and the river. In this plain, near the river, stands Fort William, the largest and most important fortress in India, covering a space of about two square miles. A broad road, the Esplanade, stretches along the bank of the river, passing Fort William and the Eden Gardens; it is continuous with the Strand, which is carried on for a considerable distance further between the city and the river. On the land side the 'Maidān' is bounded by another fine thoroughfare called Chowringhee Road, containing many of the best houses in Calcutta. In front of this

[1] The British soldiers of the period are said to have turned the Nawab's name into Sir Roger Dowler!

road are seen, in different parts of the 'Maidān,' the Presidency Jail, the Cathedral, and a lofty column erected in honour of General Sir David Ochterlony, the conqueror of Nepaul. Facing the 'Maidān' to the north are the High Court, Government House, and other imposing buildings, while to the south are seen the General Hospital, the Lunatic Asylums, and the suburb of Kidderpore. East of Chowringhee Road are many streets, consisting chiefly of European residences, and to the north of Government House lies the business quarter of Calcutta, containing handsome shops, large hotels, splendid banks, and extensive houses of business of every description. Beyond these is the large and densely populated native city, with its crowded lanes and busy markets, and surrounding the whole is Circular Road, which may be regarded as the boundary of the city on the land side.

Calcutta has been vastly improved in many respects since I landed there in 1856, and perhaps the most important and valuable alteration was the introduction of a supply of excellent drinking water in 1865. Previously cholera had always been very prevalent and fatal in the city, but since that measure was carried out the disease became less frequent and less severe, and a steady improvement took place in the general health of the population.

On landing I at once reported my arrival to the military and medical authorities, and received orders to do duty in the General Hospital of Calcutta, where quarters were provided for newly joined medical officers. I accordingly took up my abode there and commenced my duties, which at first consisted merely in visiting the wards with the resident medical officers of the hospital, observing their practice, and making myself acquainted with Indian hospital routine. I also engaged a 'moonshee' (native teacher of languages), and set to work to learn Hindustani, in which I had to pass an examination before I could hold any native medical

appointment. As I had taken a few lessons in the language before leaving home, and had worked at it during the voyage, I soon made satisfactory progress, and by the time I quitted Calcutta I was nearly ready to pass the colloquial examination in Hindustani, which at that time qualified Indian medical officers for native charges.

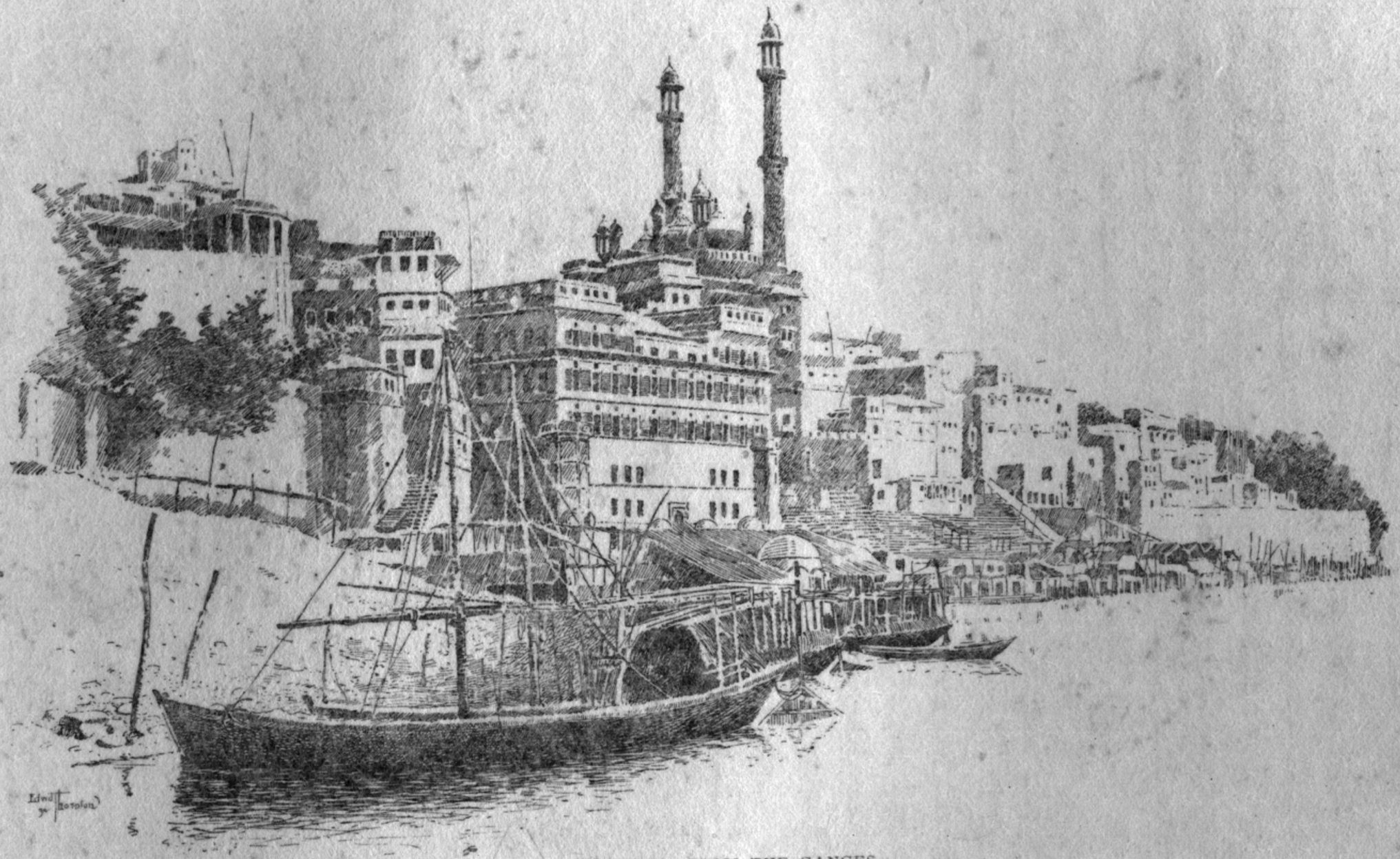
After remaining at the General Hospital for about two months, I received orders to proceed to Benares, and to report myself to the superintending surgeon (administrative medical officer) of that circle for duty. I left Calcutta by train in company with a brother officer of my own standing who was also ordered to Benares. At that time railway construction had but recently commenced in India, and the East Indian Railway, by which we travelled, did not extend beyond Raneegunge, a distance of about 120 miles. Crowds of natives assembled to witness the arrival and departure of the trains, and hung over the bridges to see them pass. The prevailing notion among them on the subject of railways appeared to be that the British were powerful magicians, who had demons imprisoned in the engines, and compelled by enchantments to run the trains in obedience to their masters' will!

A few hours' journey through the rice fields and palm groves of Bengal brought us to Raneegunge, then the terminus of the railway, where we had to leave the train and do the rest of our journey in a four-wheeled conveyance known as a 'palki-gharry.' This resembled a large palanquin on wheels, and accommodated two persons, who could lie at full length side by side without inconvenience. The baggage was placed on the roof, and in a well below the centre of the carriage, covered by a stiff cushion, which with two others formed a bed for the travellers. The conveyance was drawn by a pair of ponies, usually half starved and in wretched condition. When the ponies were harnessed and put in it was

often very difficult to get them to start. They would back, rear, lie down, and play all manner of tricks to avoid starting, so that for some minutes the united efforts of the driver and several other men would be unavailing. At last the ponies would spring forward with a jerk that occasionally snapped the traces, and would tear away along the road at the top of their speed with the heavy carriage swaying and jolting behind them in a way that was rather trying to the nerves of the passengers, though as a matter of fact accidents very rarely happened. This speed was often kept up for the whole stage, the ponies only stopping when the next halting place was reached. There the panting, perspiring animals were unharnessed and turned loose to graze, while a fresh pair was brought forward to take their place.

Three days of such travelling brought us to Benares, where I was kindly received and put up with the old-fashioned hospitality then prevailing in India by Dr. Broughain, the surgeon of the 37th Regiment of Bengal Native Infantry, to which corps I was attached for duty. At that time the garrison of Benares consisted of the 37th and 67th Regiments of Bengal Native Infantry, the Loodhiana Regiment (chiefly consisting of Sikhs), the 13th Irregular Cavalry, and the Second company, Third Battalion of Bengal Artillery (British soldiers). The cantonment of the troops, the Courts of Justice, the Treasury, and the residences of the civil and military officers were situated on a plain called Secrole, a little distance to the north of the city, which extended for several miles along the north bank of the Ganges.

Benares is one of the most ancient cities in the world, and was founded in prehistoric times. It is known to have been a large and populous city twenty-five centuries ago. For several centuries it was the centre of Buddhism, but subsequently Brahmanism gained the upper hand, and ever since Benares has been the chief



BENARES, FROM THE GANGES

seat of that religion. Hiouen Thsang, the Chinese pilgrim who visited Benares in the seventh century A.D., described it as containing thirty Buddhist monasteries with three thousand monks, and about one hundred Hindu temples. It now contains considerably more than two hundred thousand inhabitants, four-fifths of whom are Hindus. The buildings are mostly constructed of Chunar stone, the houses are several stories high, and the streets are narrow and winding, so that wheeled conveyances cannot pass, and it is often difficult to ride. There are a great number of Hindu temples, often profusely decorated with carvings of flowers, palm branches, animals, and scenes from Hindu mythology. One of these temples has its domes covered with gold leaf, presenting a dazzling appearance. The monkey temple is, perhaps, the most remarkable of all; it contains innumerable monkeys, which are continually receiving food from the crowds of worshippers who come to pay their devotions to the monkey god, Hanumān. There are also many Mohammedan mosques in the city, the principal one being the celebrated mosque of Aurungzebe, whose lofty minarets, 150 feet high, overlook the whole city, and are visible at a great distance. At the base of this mosque are many carved stones taken from Hindu temples, which were built into the foundation of the mosque by order of the Mogul Emperor to signify the triumph of Islamism over Hinduism.

The appearance of Benares from the Ganges is very imposing; the city rises from the river in the form of an amphitheatre with many fine 'ghats,' or flights of stone steps, descending into the water. These are generally crowded with bathers and worshippers. The streets of the city present a busy and animated scene, being thronged with buyers and sellers, religious mendicants of every sort, and pilgrims from all parts of India. Brahminy bulls, set free as a meritorious act by pious Hindus, wander slowly through

the streets, eating their fill from the baskets of the grain dealers, who dare not prevent them, but humbly entreat them to pass on, saying, 'O great king, be pleased to depart from me'! Benares is a wealthy city and has a considerable trade. Silk, shawls, brass ware, lacquered toys, gold filigree work, and embroidered cloths are manufactured there, and quantities of English piece goods are sold. There is also a large trade in the saltpetre, indigo, and sugar produced in the surrounding district. Many rich Hindus in the decline of life retire to Benares to spend their remaining days in this holy spot and to wash away their sins in the sacred Ganges. They give away much money in charity, and so attract numbers of religious mendicants from all parts of the country.

A MENDICANT

Soon after my arrival at Benares I passed the colloquial examination in Hindustani, and as Dr. Brougham had taken leave of absence, I obtained the temporary medical charge of the 37th Native Infantry and the Brigade Staff. At the close of the year I was transferred to the 67th Native Infantry, which was about to march to Agra in course of relief. I proceeded with this regiment as far as Allahabad, where I was relieved by another medical officer and directed to return to Benares. I returned by regular marches, taking my baggage with me in a bullock cart, and halting for the night at the dâk bungalows, or travellers' rest houses, along the road. These dâk bungalows have been built at regular stages along all the principal roads in India, and many of the district roads also. They usually contain separate accommodation for two persons, and are provided with bedsteads,

tables, chairs, crockery, glass, knives, forks, and spoons, and cooking utensils, all of which are in charge of a 'khansāma,' or butler, who receives travellers, shows them their rooms, and prepares their meals. Bedding is not provided in these establishments, as it is the custom in India for travellers to use their own. The daily charge for a room in any dâk bungalow is one rupee, and it is customary to give a small present to the khansāma on leaving. No traveller is allowed to remain beyond twenty-four hours if his room should be required for a later arrival, but generally a compromise is effected and the room shared.

On reaching Benares I was placed in temporary medical charge of the Regiment of Loodhianâ, an irregular corps principally composed of Sîkhs, but also containing in its ranks a considerable number of Hindustanis. I remained with this regiment until the arrival of the medical officer who had been permanently posted to it, and who proved to be Dr. H. D. Jones, an old King's College man, whom I had known when we were both students at that institution. I was then appointed to the medical charge of the Second company, Third Battalion Bengal Artillery, with which corps I remained for the rest of my stay at Benares.

CHAPTER II

Commencement of the Indian Mutiny—Its causes—Alarm at Benares—Fire in the native lines—We are reinforced from Dinapore—Outbreak at Benares ending in repulse of the mutineers—Arrival of General Havelock—Good conduct of the native servants in 1857—News of the fall of Cawnpore—I am ordered down to Calcutta and attached to H.M. 5th Fusiliers—I accompany their first detachment, proceeding up the Ganges by steamer and flat—We reach Dinapore the day after the mutiny there—We land at Buxar and join Major Vincent Eyre—Defeat of the mutineers near Arrah and relief of the garrison—Capture of Jugdispore—We return to Buxar and resume our voyage up the Ganges—Cholera among our men—Incident at Mirzapore—We reach Allahabad, where I am laid up for some time from the effects of an accident.

In the meantime the preparations for the great outbreak of mutiny in the native army had been going on quietly for several months. They were conducted with such secrecy that our Government had no suspicion of what was impending, although the mutiny of the 19th Bengal Native Infantry at Berhampore, and that of the 34th at Barrackpore a little later, ought to have opened their eyes to the real state of the native army. These events, which happened several months before the general outbreak, astonished me considerably and roused an uneasy feeling in my mind, though I had no idea of what was coming.

Various causes have been assigned for this singular upheaval, such as the great preponderance of Brahmans in the ranks of the native army; its great superiority in numbers over the British forces in India; the impairment of its discipline by injudicious curtailment of the powers of commanding officers; the withdrawal of various privileges previously enjoyed by the native soldiers; the injury to our prestige caused by the disasters in Afghanistan in

1842; the alleged wrongs of certain native chiefs; the supposed interference of the British Government with the right of adoption; the annexation of Oudh; and lastly the introduction of the greased cartridges, which raised a suspicion among the native soldiers that the Government were plotting to destroy their caste. All these causes, no doubt, had their share in bringing about the Indian Mutiny, but they would scarcely have done more than produce discontent, or perhaps one or two isolated outbreaks, had they not been cleverly taken advantage of by Mohammedan conspirators, who succeeded in producing a temporary union with the Hindus, both parties sinking their respective differences in order to destroy British rule. This combination met with a large measure of success, and would doubtless have been still more successful had not the outbreak of mutiny at Meerut taken place several weeks before the appointed time, and so upset the plans of the conspirators, who had arranged that the native troops should mutiny simultaneously at every station on the same day.

The news of the mutinies at Meerut and Delhi on the 10th and 11th of May 1857, and the massacre of so many of our people without distinction of age or sex, came upon us at Benares like a thunderclap, and showed us at once the peril of our own position. We had three native regiments at Benares, the 37th Native Infantry, the Regiment of Loodhiana, and the 13th Irregular Cavalry, while to hold them in check we only had the British battery to which I was attached, and half of this had been sent to Dinapore a short time before. However, it was hoped that the Sikhs of the Loodhiana Regiment would remain faithful and prevent any rising among the other native troops. The anxiety and alarm among the British residents at Benares during this period of suspense may be readily imagined. Some took a very gloomy view of our situation, and I remember one of them remarking, 'It is

a mere question of time; we shall be all massacred.' The station was full of European women and children, and there was no fort or strong position where they could be placed in safety and successfully defended. Any attempt to fortify a house for this purpose would very likely have precipitated the outbreak, so we could do nothing but await British reinforcements, which it was hoped would arrive from Dinapore in time to prevent or suppress any hostile movement among the native troops.

One night a fire broke out in the native lines, and as this was generally the precursor of mutiny, we quite expected that our turn had come; indeed there could not have been a better opportunity, as most of the British officers of the garrison assembled at the scene of the fire, and might have been easily disposed of. Fortunately for us no outbreak took place and the night ended quietly.

For ten days we were literally at the mercy of the native troops, but dissensions among them most probably delayed the mutiny and so saved the British residents at Benares from a general massacre. At length, to our great relief, we were reinforced by about 200 British soldiers from Dinapore, chiefly men of the 10th Foot. Colonel Neill arrived from Calcutta a day or two after with a few men of his regiment, the 1st Madras Fusiliers, and he induced Brigadier Ponsonby, who commanded the station, to order a parade on the following day for the purpose of disarming the native troops. The necessary arrangements were made and the parade was held on the afternoon of the 4th of June 1857, but as soon as the men of the 37th Native Infantry perceived that they were to be disarmed, they broke out into open mutiny and fired upon their officers and the British troops. A sharp engagement followed; the fire of the British infantry and guns soon drove the mutineers into the shelter of their lines, where they maintained themselves until the thatched roofs were set on fire,

and the mud huts thus rendered untenable. Then they retreated from the station by the Jaunpore road, most likely with the intention of marching into Oudh and joining the mutineers in that province. In the meantime the Loodhiana Regiment and the 13th Irregular Cavalry also mutinied; the former shot several officers and charged the guns, but were repulsed by volleys of grape, and at last retreated from the station, taking the Jaunpore road. The Irregular Cavalry killed their commanding officer, plundered a few houses, and then left the station.

As medical officers had not been ordered to attend the parade I had remained at home, but on hearing the firing I knew what had happened and started immediately, in company with another medical officer, to join the British troops. Before we had gone half way to the barracks we met numbers of the 37th Sepoys retreating from the scene of action, and we were thus compelled to take refuge in the house of Colonel Gordon, commandant of the Loodhiana Regiment, where we found several ladies and other people assembled under the protection of a Sikh guard. We had to remain there until the mutineers had quitted the station, and then we proceeded to the barracks of the British soldiers, where most of the European residents had already collected. I found that several men of my battery had been wounded in the action, and that some officers of the garrison had also been wounded, one of them dangerously. Attending to them kept me employed up to a late hour, and it was near midnight before I could think of sleep. Then I lay down to rest in a masonry gutter outside the barracks, having fortunately found a piece of a kus-kus tattie[1] which served me as a mattress, and slept soundly till daybreak.

Next day and for some time afterwards we remained at the barracks, and the ladies of the station with their families were

[1] See p. 174.

collected at the Mint under a guard, as it was not considered safe for them to remain in houses at a distance from the quarters of the British troops. The country around Benares was in a state of anarchy, and frequently we saw in the distance the flames of burning villages which had been set on fire by bands of robbers. However, no attack was made upon the station, though there were frequent reports describing an attack as imminent, and it was soon ascertained beyond a doubt that the Benares mutineers had marched into Oudh to join the rebel army in that province.

Shortly after the occurrence of the mutiny at Benares, General Havelock arrived there from Calcutta. He reviewed the troops and gave them great praise for their gallant conduct on the 4th of June in repulsing and driving from the station a rebel force so greatly superior in numbers. The general soon after went on to Allahabad, to which point all available British troops were being pushed on as rapidly as possible.

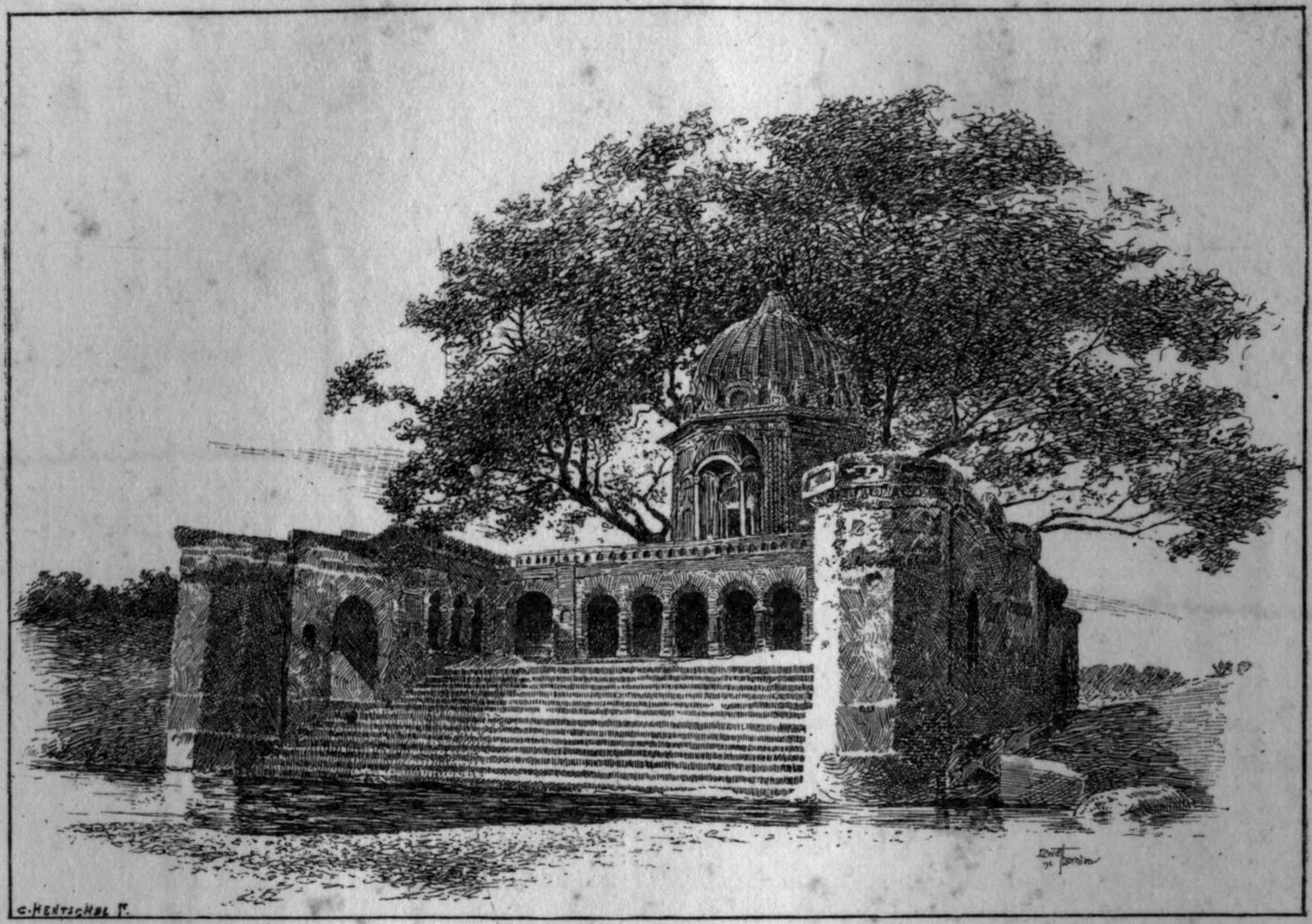
A prophecy had long been current among the natives, declaring that the dominion of the East India Company would come to an end in a century from the date of the battle of Plassey, 23rd of June 1757. As the 23rd of June 1857 drew near, a report became prevalent in the Benares garrison that the native cooks and table servants had formed a plot to poison the British officers and soldiers on that day. Some actually believed this and altogether abstained from food and drink on the appointed day. The great majority, however (including myself), took their meals as usual and remained unharmed, so that the plot evidently never existed save in the imagination of some alarmists. The credit of the prophecy was considered to have been saved by the transfer of the government of India to the Crown of Great Britain in 1858, which put an end to the rule of the East India Company.

I must here pay a tribute of praise to the admirable conduct of

the majority of native domestics in the service of Europeans in India during this crisis. With few exceptions they remained faithful to their employers, and in many cases they displayed great courage and devotion at the risk of their own lives. During the night which followed the mutiny at Benares it would have been easy for the native servants to have plundered the houses of the British residents (who were collected at the barracks) and to have speedily decamped, but they all remained at their posts and took care of their masters' property.

About the beginning of July we received the first intelligence of the fall of Cawnpore and the destruction of its unfortunate defenders. Intense and painful excitement was caused by the magnitude of the disaster and the horrors by which it was attended. The massacre of nearly a thousand people, more than half of them women and children, was an appalling catastrophe which overshadowed all others and cast a deep gloom over the whole Anglo-Indian community.

In the early part of July I received orders to go down at once to Calcutta, medical officers being required there for duty with British troops proceeding up country to join General Havelock's force. I was accompanied by Dr. Hayes, a brother officer who had received similar orders, and we travelled to Raneegunge by palki-gharry. The journey down was attended with considerable risk, as the whole country was in a disturbed state, and armed bands of rebels were prowling about in different directions. However, we had to take the risk, as no escort could be spared to go with us, and after several alarms, which fortunately proved groundless, we arrived safely at Raneegunge, and went on by train to Calcutta. There we found a discreditable panic prevailing among the European residents, many of whom actually lived on board the ships in the river, not thinking themselves safe on shore!



MASSACRE GHAT, CAWNPORE

They would hardly believe that we had come down from Benares by ourselves in a palki-gharry.

After staying a day or two at Calcutta, I was directed to do duty with H.M. 5th Fusiliers at Chinsura, a few miles north of Calcutta, and I joined the same evening. After two or three days I left Chinsura with the first detachment of that regiment, 160 strong, which was sent up the Ganges to Allahabad in a flat towed by the river steamer *James Hume*. The party was commanded by Captain L'Estrange (mortally wounded at the relief of Lucknow soon afterwards), and accompanied by five other officers. The rainy season had set in, and the river was full, so that we had no difficulty from sandbanks or shoal water. But the strength of the current delayed us considerably, and sometimes our steam power was insufficient to tow the heavy flat against it, so that we were actually at a standstill, or even slowly forced back, though steaming our hardest. On one or two occasions of this kind we were compelled to anchor, or to avoid the main current of the river by using other channels, or by passing across the inundated plains on either side of the river.

On reaching Caragola Ghaf in the Purneah district, we received an urgent application for help from the residents of the station of Purneah, and a small party of our men were accordingly sent to their assistance. After this nothing of any consequence occurred until we reached Dinapore, at that time the headquarters of a division of the Bengal army. We found the station in a state of great excitement and confusion on account of the mutiny of the native troops (the 7th, 8th, and 40th Regiments of Bengal Infantry), which had occurred the day before. The mutineers had got off without any loss, and had taken the road to the River Sone, intending to cross into the Shahabad district. The *James Hume*, with part of our detachment, was sent round into the Sone (which

falls into the Ganges a few miles to the west of Dinapore) to prevent the rebels from crossing, but unfortunately we could not go up the Sone far enough owing to the shallowness of the water, and we were forced to return, after seeing the mutineers crossing the river in great numbers and burning the houses of some European planters and engineers that stood near. Next day we left Dinapore, and continued on our way up the Ganges, making rather slow progress in consequence of the strength of the current.

On reaching Buxar we found another steamer there with a half battery of Bengal Artillery, under the command of Major Vincent Eyre. That officer at once entered into communication with Captain L'Estrange, and an expedition was concerted to relieve the residents of Arrah, who were still closely besieged in a fortified house, the relieving force from Dinapore having been completely defeated by the enemy. We accordingly set out from Buxar the same evening, the strength of our little force being about 140 British infantry, 40 artillerymen, and perhaps 20 mounted volunteers, in all about 200 men, with two 9-pounder guns and a 24-pounder howitzer drawn by bullocks. We took hardly any baggage with us except tents, bedding, and commissariat stores for the expedition.

We made three marches towards Arrah, which is about forty-five miles distant from Buxar, without seeing anything of the enemy, except one of their spies, who was pursued and killed by the volunteer cavalry. But soon after we had quitted our encamping ground, early on the morning of the fourth day of our march, we encountered the enemy in force near the village of Gujrajgunge, a few miles to the west of Arrah. The road passed through a flat country, thickly studded with groves of mango trees, which were occupied by the enemy on every side, so that as our little force advanced, we were soon attacked on both flanks as well as in front.

A heavy fire of musketry was opened upon us from the woods, but fortunately it was ill directed and produced little effect. We replied with a steady artillery fire of shell and round shot, which cleared the woods near us, and our infantry, disposed in skirmishing order, kept up a fire with their Enfield rifles upon such bodies of the enemy as were in sight. As we advanced along the road, the rebels closed in upon our rear, capturing the elephants that carried our tents and baggage, which we were unable to protect with our scanty force.

We were soon completely surrounded by large masses of the enemy, including the 7th, 8th, and 40th Regiments of Bengal Native Infantry, who had mutinied at Dinapore, the irregular forces of Kooer Singh, an insurgent landholder of the district, and great numbers of pensioners and sepoys on leave of absence, making up an armed multitude of about 6000 men, many of whom had Enfield rifles, which they had taken from the unfortunate Dinapore force. Our position was very critical, and had the enemy made a proper use of their immense superiority of numbers and boldly closed in upon us, we must have been overwhelmed. Fortunately for us they had no artillery, and our three guns, which were admirably served, made such havoc among them that they did not attempt to close, but kept up a heavy fire of musketry upon us on every side. We suffered from their fire much less than might have been expected, and we continued to advance in the direction of Arrah until our progress was arrested by a small river, the bridge over which was broken, while the village of Beebeegunge, on the opposite side, was occupied by the enemy in force.

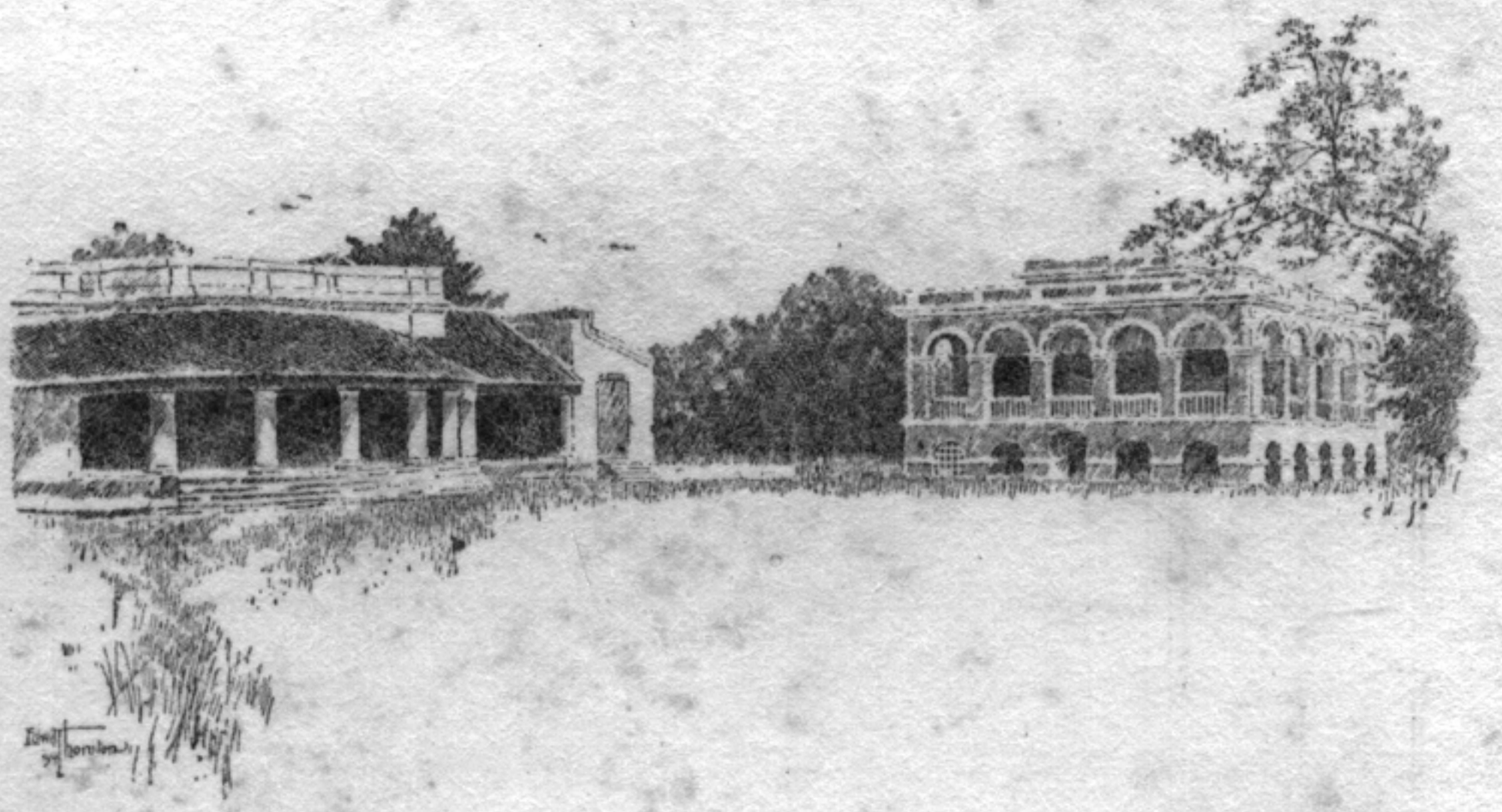
As this position appeared too strong to be carried without heavy loss, Major Eyre ordered a movement to our right in order to gain the railway embankment, distant about a mile, and proceed along

it to Arrah. This movement was masked at first by the artillery fire, which occupied the attention of the enemy, but as soon as they perceived what we were doing, they hurried to intercept us, and came up with us near the railway. Having occupied some woods and broken ground through which we had to pass, they opened a heavy fire upon us, and made several attempts to capture the guns. This was the most critical moment of the day: the enemy surrounded us and were gradually drawing nearer under cover of the trees, the fire of our artillery and rifles failed to drive them back, and several of our men were killed and wounded. At this crisis Major Eyre ordered the infantry to charge with the bayonet, and this charge was decisive. The enemy, completely repulsed, fell back on all sides and abandoned the field of battle, while our force, gaining the railway embankment, marched along it towards Arrah.

The action had lasted nearly ten hours, and at its close I felt greatly exhausted, having been unwell since we left Buxar. I became seriously affected by heat and exertion, my head swam, and my senses seemed to be leaving me, when fortunately I saw a 'bheestie,' or water-carrier, belonging to the force. He came at my call, and poured the contents of his mussuck (water-skin) over my head. This greatly refreshed me, and in all probability saved me from sunstroke.

We were unable to reach Arrah that evening owing to an unbridged stream which crossed our way, so we halted there for the night, and marched into the station next morning. On arriving there we found that the enemy, discouraged by their defeat and the heavy losses they had sustained, had retreated to Jugdispore, a place about sixteen miles distant, where they resolved to make a stand. The surprise and joy of the little band who defended the Arrah House, on seeing the enemy leave the station, may be more

easily imagined than described, particularly as they had despaired of rescue after the defeat of the relieving force sent from Dinapore a few days before. Our victory saved them from speedy and inevitable destruction, for the enemy had run a mine under a corner of the building occupied by the defenders, and in a day or two it would have been fired and the house destroyed. The small party, consisting of 15 civilians and 45 men of Rattray's Sikh Police, had made a noble defence, and they were warmly thanked and well rewarded by the Government of India. Strange to say,



THE ARRAH HOUSE
From a photograph by the Rev. H. Sealy, M.A., Chaplain of Arrah.

however, nothing has ever been done for the force that so gallantly saved them, though a clasp might well have been granted to signalise a victory which not only rescued the garrison of Arrah, but crushed the rebellion in the province of Behar.

We remained at Arrah for a few days to rest the men and to await reinforcements from Dinapore before marching against the enemy at Jugdispore. After several days we were joined by the expected reinforcements, consisting of 200 men of H.M. 10th Foot and about 100 Sikhs. Our force was thus raised to about 500 men, and on the 10th of August we marched from Arrah

towards Jugdispore, passing the late battlefield on our way, and halting for the night on a plain a few miles from the enemy's position, which was a very strong one, being surrounded and concealed by a thick jungle presenting great difficulties to the movements of regular troops. Early on the following morning the force advanced against the enemy's entrenchments, which extended across the road covering the approach to Jugdispore. They were carried after a faint resistance, and the rebels, closely followed up, were driven in rout and confusion through the town and fled southward in the direction of Sasseram. Kooer Singh was nearly taken, but managed to escape from the town and accompanied the flying rebels, who still acknowledged him as their chief and kept together under his leadership. They made no further stand against us in Behar, but soon effected their retreat from the province, marching in a north-westerly direction to reach Oudh.

This body of rebels held together under Kooer Singh in an extraordinary manner. After the capture of Lucknow by the British army under Lord Clyde in March 1858 they returned to Behar, crossed the Ganges into Shahabad, and made a last stand in the jungle around Jugdispore. The brave old chief Kooer Singh was mortally wounded while crossing the river, but his followers defeated with heavy loss a small force sent against them from Arrah under Captain Le Grand of H.M. 35th Foot, who was killed in the action. They were eventually dislodged from their stronghold and finally broken up by the protracted operations of a considerable force under the command of Brigadier-General Douglas.

In a few days our force left Jugdispore, after blowing up Kooer Singh's palace and some other buildings, and marched back to Arrah, where it was broken up, the Dinapore troops returning to that station, while the artillery and my detachment of infantry

proceeded to Buxar. During our return march to Buxar a slight accident happened to me: one evening in camp I tripped and fell, cutting my left leg on a broken bottle. The injury was apparently trifling, but it would not heal, owing to my indifferent state of health and the hardships I was undergoing (*e.g.* no tents, no bedding, coarse food, bad water, etc.). After we had reached Buxar I was so unfortunate as to receive another slight injury to the same leg lower down, and this also would not heal. At Buxar we re-embarked in our steamer and flat, which had waited there for us, and continued our voyage towards Allahabad. Our marching and other privations were now over for a time, and had I been able, like the other officers, to take rest and keep quiet, I should probably have been all right in a little time. But unfortunately our men were sickly and required much attention, several cases of cholera occurred among them, I got no rest day or night, and the consequence was that the wounds on my leg grew worse every day and the performance of my duties became more painful and difficult.

After passing Benares the steamer grounded on a sandbank and the flat she was towing ran into her, doing a little damage. This was soon remedied, and we went on, shortly arriving at Mirzapore, a large town on the south bank of the Ganges, where a more serious accident befel us. The steamer and flat were moored under the bank of the river, which was of considerable height, and was supported by a wall. This had been undermined by the rapid current, and suddenly next morning a great part of it came down. Fortunately the steamer and flat had just before been moved out a few yards from the bank, otherwise they would have been much damaged, if not sunk. Even as it was, part of the falling mass of masonry struck the steamer, almost laying her on her beam ends and doing much injury to the vessel.

A few days after we arrived at Allahabad and found a considerable force assembled there and about to march to Cawnpore under the command of Major-General Sir James Outram, G.C.B. Among these troops were the headquarters of H.M. 5th Fusiliers, and on landing we joined them at once. By this time the wounds on my leg were in such an aggravated state that I could hardly stand and was quite unable to walk. Nevertheless I accompanied the regiment (carried in a doolie) on its first march towards Cawnpore, but as it then became evident that I should not be fit for duty for a long time, I was sent back to Allahabad and took up my quarters in the fort. I was obliged to remain there on the sick list for nearly six weeks, during which time we heard the news of the capture of Delhi by the British army under General Sir Archdale Wilson, and the relief of the garrison of Lucknow by the force under Generals Havelock and Outram.

CHAPTER III

On recovery I proceed to Cawnpore with troops—My impressions there—Action of Soorajpore—Our march to the Alum Bagh—We are besieged there for some weeks—Relief of Lucknow by Sir Colin Campbell, the commander-in-chief—I am attached to H.M. 90th Light Infantry, and placed in medical charge of the fort of Jellalabad—Engagement at the Alum Bagh—Capture of Lucknow.

I was impatient to move on to the front, but it was not until October that I was sufficiently recovered to return to duty. I was then appointed to the medical charge of a detachment of ninety men proceeding to Cawnpore to join their respective regiments. I received the order at half-past one on the 10th of October, and we commenced our journey the same evening, travelling up the Grand Trunk Road in covered carts drawn by bullocks (usually called the 'Bullock Train'). On the second day after leaving Allahabad we received an express message from Futtehpore (a station between Allahabad and Cawnpore) urging us to push on with the utmost expedition, as a large force of the rebels was in the neighbourhood and was preparing to attack the station. We accordingly went on as fast as possible and reached Futtehpore by midnight, when we found that the alarm was false and everything was quiet. On the 14th we entered Cawnpore, passing the ruined buildings in which General Sir Hugh Wheeler and the British garrison made their stand. On reporting my arrival I was ordered to do duty at the General Hospital, and I put up with an old college friend, Dr. Kendall, who very kindly invited me to share his tent as I did not possess one. I took the earliest opportunity of visiting the

shattered buildings where the small British force had defended an untenable position for several weeks against the overwhelming numbers of the rebels. At the time of my visit the intrenchment surrounding the buildings was so low that any one could easily jump over it, and it could evidently have afforded very little protection to the defenders. The two buildings were completely riddled with shot, and filled with heaps of débris, consisting of broken brickwork, shattered beams and rafters, splintered doors and window frames, pieces of shell, etc. Among this wreck were fragments of clothing, some of them covered with dark stains which told too plainly the fate of their last possessors.

As I gazed upon this scene of desolation I felt impressed with deep sympathy for the unfortunate victims of Nana Sahib's treachery, and profound astonishment at their having taken up so completely untenable a position. Had they occupied the magazine containing the guns and ordnance stores, which was situated on the river bank and surrounded by a lofty wall, it is very probable that their defence would have been successful, or at any rate that most of them would have been able to escape down the river. As it was, they abandoned the magazine to the enemy with all its artillery and munitions of war, and they occupied a position commanded on all sides by the guns of the rebels, which inflicted terrible losses and soon made the intrenchment untenable.

From this spot I went to the house where the women and children, who were brought back from the boats, had been confined, and subsequently massacred by order of Nana Sahib the day before General Havelock's force entered Cawnpore. The walls and floor of this building still showed traces of the massacre, and fragments of women's and children's clothing stained with blood were scattered about the place. Filled with horror at the sight and sick at heart I quitted the spot, but the recollection of it

haunted me for many years, and indeed it was a sight which could never be forgotten.

I had not been many days at Cawnpore when news arrived that a large body of the enemy with several guns were in the neighbourhood of Bithoor, a place about eighteen miles west of Cawnpore. A force under the command of Brigadier-General Wilson marched out to meet them, and I accompanied it as a field assistant-surgeon (that is, not attached to any particular regiment, but to the field hospital of the force). We started at 2 A.M. on the 18th of October, and after a long and fatiguing march we encountered the enemy near the village of Soorajpore. Their guns were in position to the right of the road in a field of Indian corn, which concealed them from observation, and as we were marching in a dense column along the road we suddenly received a discharge which killed and wounded several men and caused some confusion as it was still dark. An indecisive engagement ensued; the enemy attempted to hold the village, but were soon driven out of it, and, drawing off their guns, retreated in a westerly direction along the Grand Trunk Road. There was hardly any pursuit owing to the exhausted state of our infantry and our want of cavalry; hence the result of the action was unsatisfactory, as the enemy retired with slight loss and carried off their guns, while we had suffered equal loss and gained no material advantage.

Next day the force marched towards Bithoor, and on the way surrounded and burned a village, the inhabitants of which were known to have taken part in the Cawnpore atrocities. The place was full of men who made a desperate defence, but their resistance was of no avail. During this terrible scene I rescued two native women from a burning hut; they were crouching in a corner and seemed paralysed with terror, so that I had to drag

them forcibly out. We reached Bithoor in the afternoon without encountering the enemy, and on the following day we returned to Cawnpore.

A few days after a force of about five hundred men, composed of detachments from different regiments, was placed under the command of Major Barnston, H.M. 90th Light Infantry, to escort a large convoy of provisions to the Alum Bagh, and to reinforce the garrison of that post. My friend Dr. Kendall and I received orders to accompany the party. We left Cawnpore on the 21st of October, crossed the bridge of boats which had been thrown over the Ganges, and marched along the Lucknow road as far as Mungulwar, the scene of one of Havelock's victories, where we encamped for the night. As this march had been a very short one I went with Dr. Kendall to a village not far from our camp to see if we could procure some supplies for our mess. We found the village deserted, and while exploring it we discovered in one of the houses a quantity of European furniture and other articles which had evidently been plundered. Among these things was the cover of a parcel addressed to a young lady who had perished in the massacre at Cawnpore.

A false alarm occurred in the course of the night, and great confusion prevailed for a time among the soldiers suddenly roused from their sleep by the tumult. Order was at length restored, and then it was found that some baggage animal had got loose and wandered among the sleeping soldiers, who sprang up shouting that the enemy were upon us.

We made two more marches without seeing anything of the enemy, but on the fourth day, when we expected to reach the Alum Bagh, we were attacked on the line of march. The rebels were in considerable force, swarms of cavalry appeared on both sides of the road, and some infantry and guns to our right opened

fire upon us. A few shots from our guns dispersed the cavalry and made them keep at a respectful distance, while a party of our men soon drove off the rebel infantry, who withdrew their guns before we could reach them. One of the enemy, probably drugged with bhang (a mixture of opium and Indian hemp), stood at bay, defying us to come on. An officer of H.M. 90th L.I. attacked the fanatic, sword in hand, but was wounded and disabled, and would most likely have been killed, had not another officer saved him by shooting his opponent. For the remainder of our march the enemy's cavalry hovered round us, and the length of our convoy, which extended along the road for several miles, gave them many opportunities for attack, which nevertheless they failed to take advantage of. When we were close to the Alum Bagh the enemy were reinforced and attacked us again, but they were repulsed with loss, and we nearly succeeded in capturing one of their guns. After this skirmish we entered the Alum Bagh and brought in the convoy without having sustained any material loss.

A FANATIC AT BAY

The Alum Bagh was a garden belonging to the late King of Oudh, and was surrounded by a masonry wall seven or eight feet high. The enclosure was about four hundred yards square, and at the centre of it there stood a large two storied house, which was used during the siege as the hospital for the sick and wounded of the force and the residence of the commanding officer (Major M'Intyre, H.M. 78th Regiment) and his staff. The Alum Bagh lay to the right of the Lucknow road, and on the left of it was a mosque then occupied by a picket of our men. When Generals

Havelock and Outram advanced in September to the relief of the Lucknow garrison, they left their sick and wounded, baggage, transport, and camp followers with a small body of troops in the Alum Bagh. After a time the garrison became very short of provisions and forage, which they could not obtain from without as they were closely blockaded. By the time we arrived from Cawnpore they had been reduced to great straits, and many of the baggage animals and camp followers had perished from starvation and disease. On our arrival with the convoy of supplies this scarcity was partially relieved, but the place was excessively crowded with men and animals, and had the enemy's artillery been well served our losses must have been terrible. Fortunately for us their firing was very inaccurate, and they had only a few guns in position from which we received any particular annoyance, namely a 32-pounder about three-quarters of a mile away near the canal, and two 24-pounders at a house on the Lucknow road about eight hundred yards distant. These guns often sent their shot into the enclosure and nearly always caused some casualties, owing to the crowded and unprotected state of the place. Occasionally round shot from these guns passed through the hospital, killing and wounding some of the patients. Our guns replied, but being only light fieldpieces they could not silence the hostile artillery. Cannon firing went on, in a desultory and intermittent sort of way, day and night, but we soon grew quite accustomed to it, and unless on duty we hardly noticed it at all.

The day after our arrival a sortie was made in order to procure forage for the transport animals, many of which were in a starving condition. The enemy were taken by surprise and driven out of some of the neighbouring villages, where large quantities of grain and forage were captured. The rebels, however, were speedily reinforced and obliged us to retire into the Alum Bagh, which we

regained without serious loss. The post was surrounded on all sides by bodies of the enemy, and they frequently intercepted and cut to pieces our native camp followers who ventured out to get food for themselves and grass for the cattle. An officer of the garrison was nearly cut off one day, and was saved only by his own coolness and the cowardice of the enemy. He had gone out very early in the morning to a pool of water about a mile from our post, hoping to shoot some snipe or duck. He was mounted, but his syce (native groom) was with him on foot, so that when he perceived a party of the rebel cavalry trying to cut him off, he could not trust to the speed of his horse, as his servant would have been left to the mercy of the enemy. He therefore put a bold face on it, and returned slowly towards the Alum Bagh, sometimes halting and levelling his gun at the enemy, who, to the astonishment of us all, did not venture to approach too closely and allowed him to retire safely.

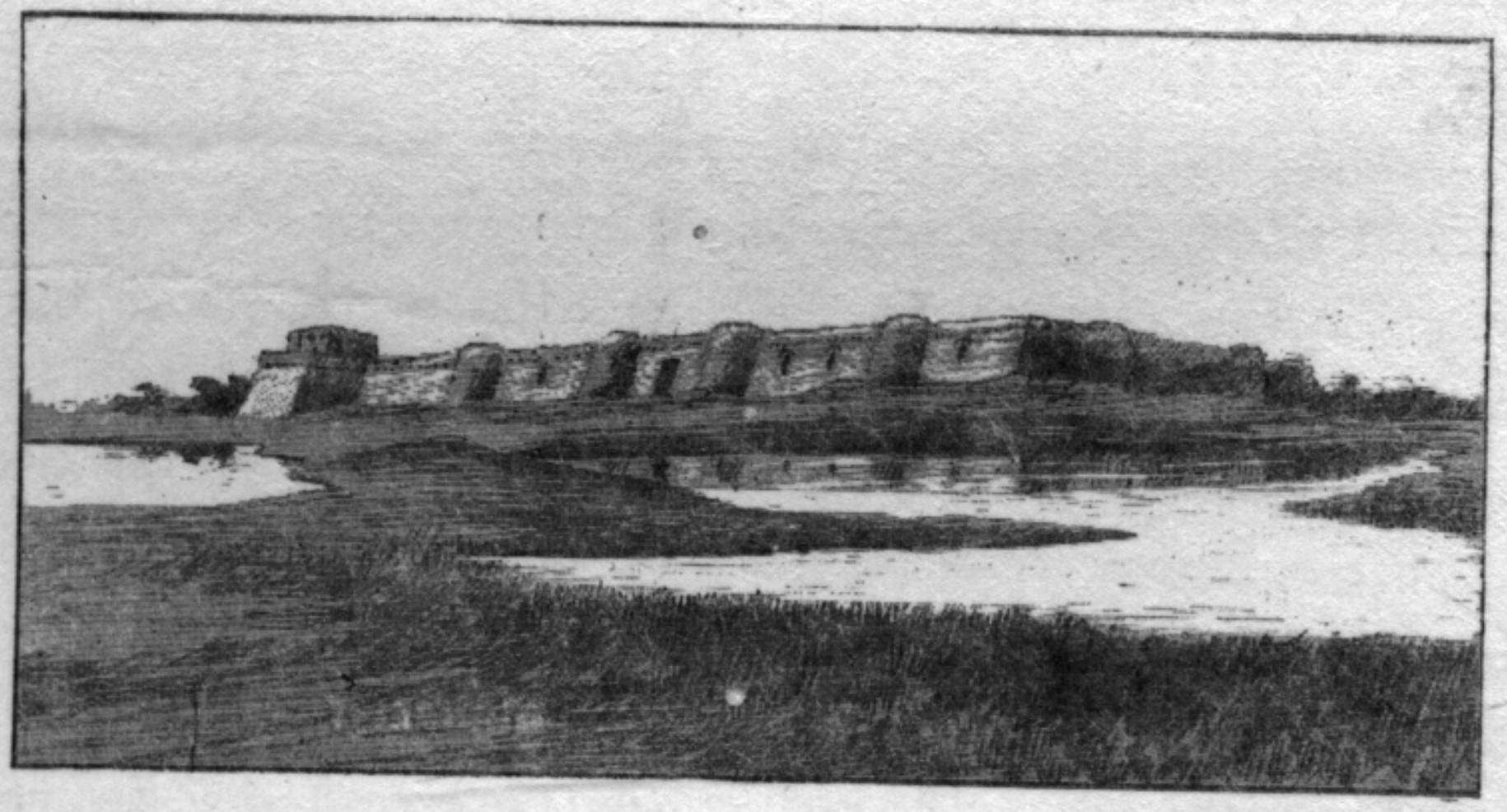
After some time a party was sent from our garrison to Cawnpore with most of the baggage animals and camp followers, the blockade having been considerably relaxed by the enemy. My friend Dr. Kendall was ordered to accompany this party, and before leaving he asked me to do what I could to assist his wife (who was in the Lucknow Residency) when the expected relief of the garrison took place. Soon after this portions of the army under Sir Colin Campbell, the commander-in-chief, arrived from Cawnpore, and encamped on the plain behind our post, putting an end to the state of siege which had kept us confined within its walls for several weeks. Nevertheless the enemy still held their positions in our front, and cannonaded us as usual from their guns at the canal and the Yellow House, particularly when the commander-in-chief and his staff went up to the roof of the hospital to view the country.

As soon as the army was concentrated at the Alum Bagh, Sir Colin Campbell prepared to advance to the relief of the garrison of Lucknow. Some of the troops occupying our post were withdrawn and attached to the relieving army. I was at first in hopes of accompanying this detachment, but a senior officer was appointed instead of me, and much to my disappointment I had to remain on duty with the Alum Bagh garrison. However, we were considered as a part of the relieving force, and so became entitled to the clasp granted for the relief of Lucknow.

On the departure of the army we were again surrounded by parties of the enemy. For some time we could trace the progress of the relieving force towards Lucknow by clouds of dust raised by the advancing troops. Soon heavy firing was heard in the direction of the city, and a tremendous cannonade ensued, continuing almost without intermission for several days. Then the commander-in-chief and his army returned, bringing with them the rescued garrison of Lucknow and all those who had been shut up in the Residency with them. A large camp was now formed in rear of the Alum Bagh, and the plain was everywhere covered with tents, carts, horses, and baggage animals of all kinds. I went to the encampment without delay to look for Mrs. Kendall and to help her if she required assistance. After searching for some time I found her in a covered cart with another lady whose husband had been killed in the siege. They were very badly off in every respect, so I procured for them what they required and informed Mrs. Kendall that she would probably meet her husband at Cawnpore.

In a day or two the army was divided into two parts, one of which, numbering about 4000 men under the command of General Sir James Outram, G.C.B., remained at the Alum Bagh to watch and hold in check the rebel forces in Lucknow. The remainder,

under the commander-in-chief in person, marched towards Cawnpore, escorting the numerous families and other non-combatants who had been brought away from the Residency. I remained behind, having been attached to H.M. 90th Light Infantry, which formed part of General Outram's force. The position we occupied was too extensive for adequate defence by our numbers, but it was materially strengthened by an intrenched village and embankment on our left with the Alum Bagh post in front. Extensive swamps lay to the rear, and an old fort stood on our right, besides abatis and earthworks wherever they seemed necessary.



JELLALABAD FORT

I was detached from my regiment and placed in medical charge of the garrison of Jellalabad, as the above mentioned fort on our right was named. The enemy in Lucknow from time to time made desultory attacks upon different parts of our position, but they were always easily repulsed and they never made any serious impression. Their cavalry, however, ranged over the country all round us, and rendered it extremely dangerous for any one to venture far from our lines. I had a narrow escape on one occasion when I had gone out with a friend in the hope of

shooting some game for our mess. We were, of course, well armed, and my companion had taken his orderly (a soldier acting in that capacity) with him. We had gone about a mile from our fort when a party of the enemy's cavalry suddenly appeared, issuing from a wood about 200 yards from us. Knowing that we had no chance of escape by flight, as we were on foot, we stood our ground and fired upon them, when to our astonishment and relief they at once took to flight.

I spent several weeks on duty in Jellalabad Fort and then rejoined the headquarters of my regiment in camp. Soon afterwards I was sent down to Cawnpore in charge of a detachment of sick and wounded soldiers. On the way I met my friend Dr. Brougham, who had put me up on my first arrival at Benares. I reached Cawnpore (which seemed to have suffered considerably from the attack of the Gwalior mutineers in November 1857), made over my charge, and was soon on my way back without any escort, as the road was supposed to be safe, owing to the large number of troops passing up to join the army for the expected attack upon Lucknow. Still the journey was not without risk for a single traveller, as the hostile cavalry were all over the country and frequently crossed the road. However I reached our camp at the Alum Bagh without seeing anything of them.

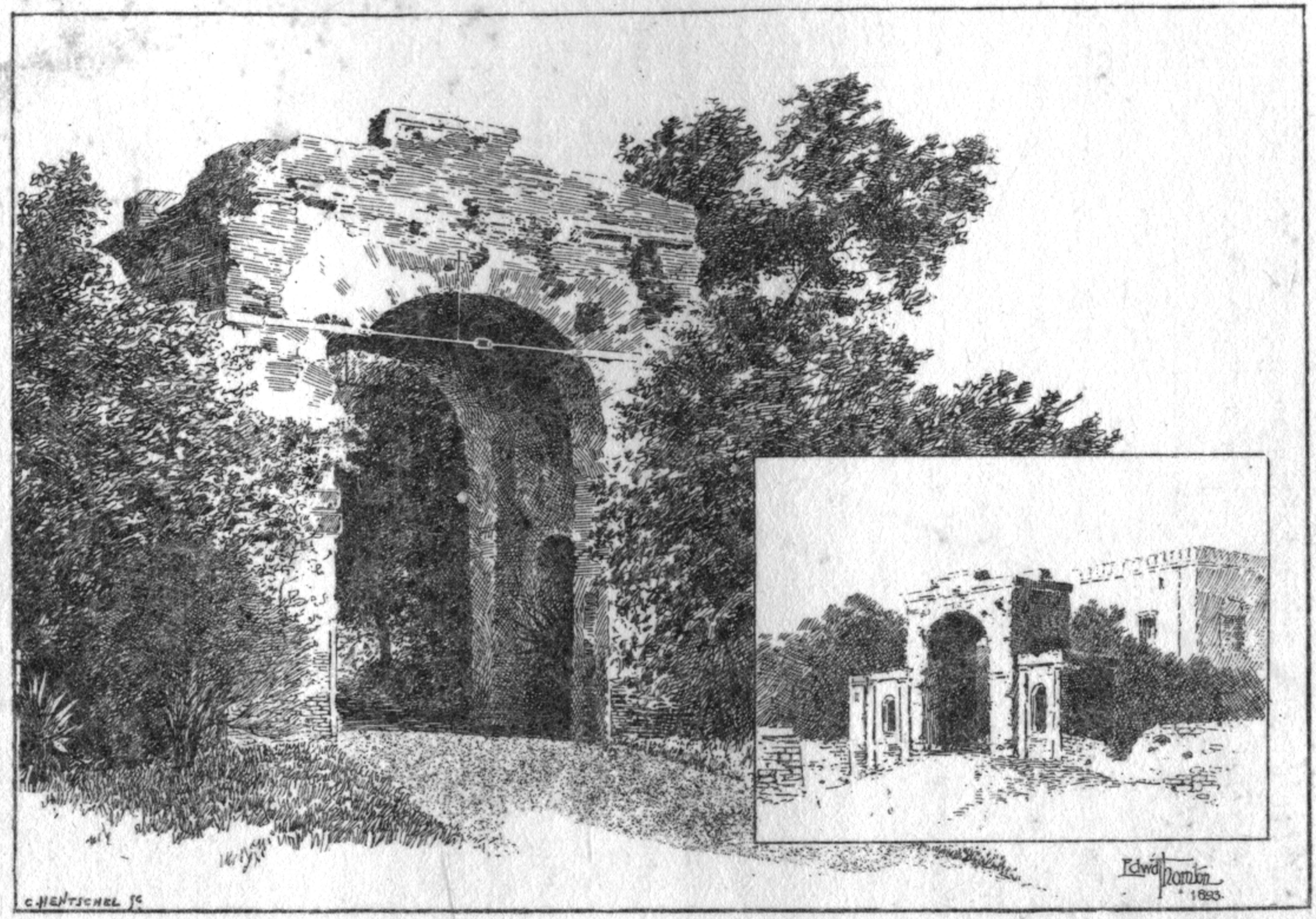
On the day following my return the enemy attacked us all along the line, bringing forward field guns on both flanks of our position. They were everywhere repulsed, and on the right flank our cavalry made a splendid charge, capturing two of their guns. Late in the afternoon they renewed the attack, directing their chief efforts towards our left. The 90th Light Infantry were ordered to line the embankment covering our left flank and to assist in the defence of a fortified village at that point. I was sent with the former detachment. The enemy at first came on boldly and

opened a heavy fire of cannon and musketry upon us, but with little effect as we were well sheltered by the embankment. The troops in the village, being more exposed, suffered some loss, but maintained their position successfully. Night came on and the action still continued; the scene being constantly illuminated by the flashes of cannon and small arms and the explosions of shells, while the din caused by the firearms and the shouts and yells of the combatants resounded on all sides. At length the enemy, having lost heavily and gained no advantage, withdrew their troops and gave us a chance of getting food and rest, of which we were much in need. A few hours later our wearied soldiers were again turned out and kept under arms to repel a fresh attack, as the rebels had opened a heavy cannonade and sent some round shot through the camp. Our men were much harassed by these frequent alarms, and all eagerly looked forward to the arrival of the commander-in-chief to lead the army to the assault of the rebel stronghold at Lucknow.

This city became the capital of the kingdom of Oudh in 1775, and rapidly increased in extent and importance from that time. It is said to have contained upwards of half a million inhabitants at the time of the British annexation of Oudh in 1856, but the removal of the native court, the long siege, and the subsequent demolitions greatly diminished the population, which now probably falls below 300,000 persons. The native sovereigns of Oudh erected many splendid buildings at Lucknow, and though some were destroyed or injured during the siege, most of them still remain. The most remarkable, perhaps, is the Great Imambara, which was built at enormous cost by the Nawáb Asf-ood-Daula. The Shah Nujeef, the mausoleum of Ghazi-ood-deen-Haidar, the first king of Oudh, is a massive and imposing structure. It was strongly held by the rebels in November 1857 against the relieving army,

who very nearly suffered a repulse there, but at last it was stormed and taken by the 93rd Highlanders. The ruins of the famous Residency still exist, and have been preserved as far as possible as they existed at the termination of the siege. The Baillie Guard Gateway (so called after a former Resident) was the principal entrance to the Residency, and was held throughout the whole siege by a small band of faithful sepoys of the 13th Native Infantry under Lieutenant Aitken.

By the end of February the commander-in-chief had collected a very large force for the attack on Lucknow, and on the 2nd of March 1858 the advance commenced. The Dil Khusha Palace was occupied after slight resistance, and batteries were then erected to silence the enemy's fire from their works beyond the canal, and to cannonade the Martiniere College, a large and solid building held in force by the rebels. After the occupation of the Dil Khusha position, a considerable force under the command of General Sir James Outram, G.C.B., was sent across the River Goomtee, to act against the rebels in that direction, and to co-operate with the main army in its attack upon the enemy's works by taking them in flank. After the Martiniere had been cannonaded for some time without effect, the 93rd Highlanders were ordered to storm the position, and the 90th Light Infantry (to which corps I was still attached) were directed to support them. As we descended the hill from the Dil Khusha we sustained some loss from the fire of the enemy's first line of works, but the advance was not checked, and in a very short time the Martiniere was carried by the 93rd Highlanders and our men. On the following morning the cannonade was renewed, and in a short time the whole of the first line of works was taken, the enemy having evacuated them without showing much fight. This was mainly due to the operations of the troops under Sir James Outram on



THE BAILLIE GUARD GATEWAY, ENTRANCE TO THE RESIDENCY, LUCKNOW

the other side of the river, who had made such progress in that quarter that these works were outflanked, and the enemy, having prepared no flanking defences, were forced to evacuate them. Had it not been for this very efficient co-operation we should doubtless have sustained heavy loss in capturing these earthworks, which were of astonishing strength and solidity.

No time was lost in commencing the attack on the second line of the enemy's defensive works, which included a strongly fortified building called the Begum's Palace. A heavy and well-directed cannonade was kept up for some hours until a breach was made in the gateway of the palace, when the 93rd Highlanders, supported by the 90th Light Infantry, were ordered to the assault. At this moment I was with a detachment of the 90th occupying some houses facing the palace to keep down the musketry fire of the enemy, and I saw the assault delivered. The storming party rushed on through a heavy musketry fire, surmounted all obstacles, and poured in through the breach with irresistible force, while my detachment leaving the houses followed them in support. The fight was nearly over when we passed through the breach and entered the palace. The enemy had made a desperate resistance in an enclosure surrounded with small dark rooms. Being unable to retreat in time, they had crowded into these recesses which were afterwards found to be heaped with their dead bodies. Our own loss was rather severe, as several officers and a considerable number of men were killed and wounded in the assault, besides others (including the famous Captain Hodson of Hodson's Horse) who were killed after the capture of the place by shots from those of the enemy who still remained in hiding. Next day I was sent with three companies of the 90th to the Secundra Bagh, where we remained for two days, while a heavy bombardment was kept up by our batteries and those of Sir James Outram's force upon the

enemy's third line of defences and the Kaiser Bagh, an extensive range of strongly fortified palaces. The buildings between the Begum's Palace and the Kaiser Bagh were taken without much difficulty, and then, to the astonishment of all, the Kaiser Bagh itself was occupied with but trifling loss by the 90th Light Infantry, Brasyer's Sikhs, and a few other troops. Our three companies at the Secundra Bagh had been ordered up to join in the attack, and we entered the Kaiser Bagh soon after the other troops. Terrible scenes were enacted in the palaces and courts of the Kaiser Bagh after its capture. Discipline became lax, and the soldiers hurried in search of plunder, dispersing themselves through the magnificent rooms, slaying every rebel they encountered, seizing the more portable valuables they found, and smashing the gorgeous furniture, splendid mirrors, and costly vases and statues with the butts of their muskets, or hurling them into a bonfire which had been kindled in one of the courts. The roar of cannon, the rattle of musketry, and the shouts of the combatants were heard on all sides and formed a fitting accompaniment to the dreadful spectacle. A band of desperate rebels attempted to blow up the great magazine which contained many tons of gunpowder, but they were (fortunately for us) intercepted and slain by the Sikhs. The enemy were not cleared out of the Kaiser Bagh for several days, and several of our men fell by the bullets of hidden foes who were lurking in the recesses of the palace and the surrounding buildings. After the capture of this stronghold the enemy in Lucknow made little further resistance, but evacuated the city in large bodies and retreated in different directions. Scattered parties of rebels, however, still remained in some quarters, and it was not till the 21st of March that the city was finally cleared of them.

After remaining three days in the Kaiser Bagh the 90th

Regiment was relieved by another corps, and returned to its camp near the Dil Khusha Palace. Being desirous to see what was going on in the front, I obtained leave of absence for a few hours and went down into the city to visit our advanced posts, but somehow missed my way and wandered into a quarter still in the possession of the enemy. A volley of musketry from one of their pickets gave me the first intimation that I had gone astray. I fortunately escaped untouched, and took refuge in an empty house, whence after a short delay I succeeded in effecting a safe retreat to our lines. Two officers lost their lives at that time under very similar circumstances; having ventured, like myself, too far into the city before it was completely cleared of the rebels, they were surrounded and killed by a party of the enemy.

CHAPTER IV

I join the 1st European Bengal Fusiliers—We march to Chinhut to oppose an expected advance of the rebels and suffer much from heat—We are subsequently stationed at Durriabad—I accompany a party of convalescent soldiers to Fyzabad and Sultanpur—Adventures on the way—Engagement near Durriabad—A narrow escape—I obtain temporary medical charge of the regiment—We proceed to Bhyram Ghat on the River Gogra—Incident there—I am relieved by Dr. Harrison and appointed to the 1st Sikh Irregular Cavalry at Gonda—Final operations against the rebels in 1859—The war is ended and we return to quarters at Lucknow.

I was now transferred to the 1st European Bengal Fusiliers, one of the most distinguished of the local European regiments in the service of the East India Company. They were stationed at the Hoosseinabad Imambara at Lucknow, and on joining them I was pleased to find that my friend Dr. Brougham was the surgeon of the regiment. In a few days they received orders to march to the old cantonment, a few miles from the city, and join a field force which was to operate against a body of rebels in the neighbourhood. I was left behind in charge of about seventy sick and wounded soldiers until the return of the regiment to Lucknow, when I rejoined it, and we then had quarters assigned us in an extensive building near the Begum's Palace.

In May 1858 we again took the field, and marched to Chinhut, a place a short distance from Lucknow, where a force was assembled to oppose the rebel army at Nawabgunge, a few miles distant, which was reported to be preparing for an advance on Lucknow. We remained at this place for some days, and suffered greatly from the intense heat. Our camp was pitched on a sandy plain, and the heat in the tents was almost insupportable, so that men were seen

lying under bedsteads and tables in order to get some shelter from the burning rays of the sun, which seemed to strike through the tents like fiery arrows. Every one was prostrated by this heat in the daytime, and could do nothing until the shades of the evening brought a little relief. The temperature in the tents often exceeded 120°, and many fatal cases of heat apoplexy occurred among the soldiers. After some days it became evident that the rebels at Nawabgunge had no intention to take the offensive, and to our great relief we were ordered back to Lucknow, where we remained in our quarters for some weeks. The heat was still very great, and the solid masonry buildings occupied by our men were like so many ovens, as they were heated throughout by the sun's rays during the day, and they had not time to cool at night, so that the men were continually in an overheated atmosphere, and many deaths resulted.

Towards the end of July 1858 my regiment was ordered to march to Nawabgunge, from which the rebels had lately been dislodged by a force under Major-General Sir Hope Grant. We found the 90th Regiment there, and encamped beside them for some days, when we received orders to march to Durriabad and fix our camp there. By this time the rainy season had set in, and much rain had fallen, so that the country was in an unfavourable state for marching. The road was a mere track, full of ruts and holes, and every now and then deep pools of water were met with, through which the soldiers had to wade as best they might. The baggage animals plodded slowly along under their heavy loads, the camels frequently slipped and fell down, and the bullock carts stuck fast in the mire. However, the distance was not great, and in due time we arrived at our destination, where we pitched our camp and made ourselves as comfortable as our surroundings permitted.

Two bodies of rebels of considerable strength, and possessing artillery, were reported to be in the neighbourhood a few miles off, but they never ventured to attack our camp. The troops of our ally, the Kapurthala Raja, who were encamped at Durriabad at the time of our arrival, had a slight skirmish with a party of rebels who had come down to plunder the commissariat carts which were continually passing along the road with supplies for the army, but the enemy soon retired into the jungle, and little harm was done on either side.

Shortly after our arrival at Durriabad, a party of convalescent soldiers came from Lucknow on their way to join their respective regiments with the field force. The officers who had accompanied this party from Lucknow to Durriabad made them over to us, and were replaced by myself and two other officers of the 1st Bengal Fusiliers. We received orders to take the men on to Fyzabad, distant about forty miles, and we reached that station in four easy marches. We then found that the field force had gone on to Sultanpur, about forty miles further, leaving a garrison to hold Fyzabad, from which the rebels had lately been expelled. We halted there a few days to rest our men, and during the halt we visited Fyzabad, a very interesting town, which previous to 1775 was the capital of Oudh, and a very large and important place. Close by is the site of Ajodhya, the ancient capital of King Dasaratha, the father of Rama, the hero of the celebrated Hindu epic poem, the *Ramayana*. According to tradition, Ajodhya was once a very great city, covering nearly 100 square miles, but now hardly a trace of it remains. There is, however, a modern town, full of Hindu temples and Brahman priests.

At a short distance from Fyzabad we saw a fine Hindu temple which had been built by Man Singh, a wealthy and powerful chief of that part of the country, who had recently come over to the

side of the British Government. We also visited the Hanuman Garhi, a temple devoted to the worship of Hanuman, the monkey god, who is described in the *Ramayana* as aiding Rama to conquer Ravana, the demon king of Lanka (Ceylon). It was a massive and imposing edifice, more like a fortress than a temple, with lofty walls and towers, all loopholed for musketry, and the only approach to it was a long and steep flight of steps which could have been easily defended. Images of the monkey god abounded in the temple, and the surrounding wood was full of monkeys, which were very tame, coming up to us boldly as we were taking our lunch under the trees.

On the following morning we intended to resume our march, but heavy rain delayed us for one or two days. A singular incident occurred at our first encampment. Just as we were about to march off, a convalescent soldier, who had passed the night in a doolie, was discovered to be dead, and on a close examination I found that he had been bitten in two places by some venomous snake, and had died in the night without calling for help. Most likely the poor fellow thought he had merely been bitten by a rat, and so raised no alarm.

When about half way between Fyzabad and Sultanpur, we came upon the charred remains of a number of hackeries (country carts drawn by bullocks) which had evidently been quite recently burnt, and the dead body of a man who had been shot through the head. Presently two wounded men were brought to us from a neighbouring village, with the information that this had been done by a party of the enemy the previous day. A spy who came in told us that the enemy, about 2000 strong, were four miles off, and intended to attack us during the night. We now held a sort of council of war to consider whether we should go and attack them or not, and at last our commander decided not to do so, as

our numbers were very small, and our men still rather weak from their late illnesses. We accordingly pursued our march with great caution to guard against a sudden attack, but we saw nothing of the enemy, and reached the camp of the field force at Sultanpur without any further adventure. There we made over our men to their respective corps, and prepared to set out on our return. We could only get an escort of six sowars (native cavalry), notwithstanding the dangerous state of the road from the close proximity of the rebels, so we had to push on as rapidly as possible, and by doing so we fortunately slipped past the enemy's position without discovery, and after some days we rejoined our regiment at Durriabad.

Soon after this adventure I accompanied an expedition led by our commanding officer against a body of rebels who had approached within a few miles of our camp. Our ally, the Rajah of Kapurthala, joined our force with some of his native troops led by British officers. We left our camp at a very early hour, and encountered the enemy at daybreak. After a slight engagement they were put to flight, with trifling loss on our side, but many of the rebels were killed, and two of their guns were taken by our cavalry. We then had breakfast, and after our meal we lay down under the trees to get a little repose before commencing our march back to the camp. I was lying half asleep on the grass when I became conscious of something under my leg, and on putting my hand to the spot, my fingers touched the cold clammy body of a snake! It operated like an electric shock. I bounded from the ground and gained my feet, and then saw how narrowly I had escaped death, for on the spot I had just quitted was a krait (*Bungarus cæruleus*), one of the most deadly of the Indian venomous snakes. Had it bitten me a fatal result would have speedily followed; as it was, I remained untouched, and seizing a stick, I quickly demolished the reptile.

In October 1858 my friend Dr. Brougham, the surgeon in medical charge of the 1st European Bengal Fusiliers, received an appointment at Lucknow, and quitted the regiment. His successor, Dr. Harrison, was with the 73rd Native Infantry at Julpigoree, in Bengal, and could not join immediately, so as I was the senior assistant-surgeon with the corps, the medical charge temporarily devolved upon me. This was a piece of unexpected good fortune, as I had not then been three years in the service. The 1st European Bengal Fusiliers were stationed at Durriabad from August to December 1858, and did excellent service in clearing the surrounding country of the enemy. The regiment many times marched out and defeated bodies of the rebels, captured about twenty guns from them, and so terrified them that at last they would not come anywhere near the station.

In December the regiment was ordered to march to Bhyram Ghât on the river Gogra, to protect the bridge of boats which was in process of construction there. We covered the distance, twenty miles, in one march, and it was fortunate we did so, as heavy rain set in the day after our arrival and continued for some time. There was nothing to do here, as no rebels remained in the neighbourhood, so we amused ourselves by boating on the river and shooting crocodiles. These huge reptiles were in the habit of lying on the sandbanks, where we used to stalk them, but though nearly always hit, and often badly wounded, they almost invariably succeeded in reaching the water, where, of course, we lost them. Wolves were very common in the vicinity of our camp. One night when playing at whist in my tent we heard a gurgling noise outside, and on rushing out we saw a large wolf making off: it had seized a goat which was tied up close to the tent, and tried unsuccessfully to drag it off. The wolf, of course, escaped, the goat died, and so for some time we had no milk for our morning tea.

A tragical event occurred during our stay at Bhyram Ghât. A soldier of the regiment had been reprimanded on parade for some trifling fault, and the public reproof affected him to such a degree that he determined to destroy himself. When the parade was over he returned to his tent, loaded his rifle, and deliberately shot himself through the head by placing the muzzle of the rifle in his mouth and pulling the trigger with his toe. We were at breakfast when this occurred, and were startled by the report of the rifle and the whizz of the bullet, which passed over the mess-tent, after having traversed the head of the wretched suicide.

Early in 1859 we left our station at Bhyram Ghât, crossed the River Gogra, and marched northward past the town of Baraitch towards Nepal, as bodies of rebels who had taken refuge there were reported to be again advancing into our territory. A singular incident happened during one of our marches. The regiment had halted in a grove of trees to rest the men, and presently we were assailed by a swarm of bees, which, having been somehow disturbed, attacked us with such fury and pertinacity that all took to flight, and officers, men, camp followers, horses, and baggage animals were scattered over the plain in all directions. When we had made several marches, the Himalaya mountains were dimly seen, and after a shower of rain the snowy range became visible, and in particular one magnificent peak far to the eastward, which rose high above the other snowy mountains. After some unimportant operations in the vicinity of the Raptee River, the 1st European Bengal Fusiliers were relieved and ordered to proceed to Dugshai, near Simla, where the corps was to be stationed. I accompanied them as far as Seetapur, where Dr. Harrison joined, and took over from me the medical charge of the regiment.

I then found that I was appointed to the medical charge of the 1st Sikh Irregular Cavalry (now the 11th Bengal Lancers) at

Gonda, and was ordered to join at once. Accordingly I took leave of my friends in the 1st Fusiliers, and proceeded by regular marches towards Bhyram Ghât, taking my baggage with me. After crossing the River Gogra at Bhyram Ghât, I turned to the right and marched towards Gonda. On my way I passed through the ruins of Secrora, one of the stations which had been occupied by the Oudh Irregular Force. My friend Dr. Kendall was at this place with his regiment when the mutinies broke out, and he and the other officers were made prisoners by their own men, who confined them in their bungalows. Fortunately all the ladies had been sent to Lucknow a little time before, and the officers, watching their opportunity, contrived to slip away, mounted their horses, and escaped to Gonda, and subsequently to Goruckpur, whence they made their way to Benares, thinking themselves fortunate in having saved their lives, though they had lost all their property.

I reached Gonda in one march from Secrora, and joined my regiment, which was then commanded by the late Colonel L. B. Jones. It was a very fine body of native cavalry, principally composed of Sikhs, and it had done excellent service during the campaigns of 1857-58 under the command of Major Wale, who raised the corps, and was killed at its head during the operations against Lucknow. The native officers were nearly all men of very good family, and one of them had been a brigadier-general in the army of Ranjit Singh, the former ruler of the Punjab. I found my brother officers and the other residents of the station still living in tents, but houses and barracks were in course of construction. For some time after my arrival I had little to do; the men were very healthy, and we remained in camp as nothing had been heard of the enemy. Towards the end of March 1859 we were ordered out after a body of rebels who were reported to be in the neighbourhood of Gonda. We were out for some days

scouring the country, but we could not find the enemy, as they took refuge in a dense jungle where cavalry could do nothing.

Early in April we again marched into the district in company with H.M. 20th Regiment, the whole force commanded by Colonel Cormick of that corps. After several marches we surprised a party of the enemy who were concealed in the jungle, and were cooking their food when we came upon them. They fled after firing a few shots, and left their cooking utensils and food behind them. On the following day we encountered a different enemy in the shape of a swarm of hornets, which having been accidentally disturbed. attacked us with great fury and forced us to make a hasty retreat. One of our officers was so severely stung on the face that he was quite disabled and had to be placed in a doolie, and a horse was stung to death. On the morning of the 13th of April we came in sight of a large body of the enemy, consisting chiefly of the regiments that mutinied at Cawnpore, the 1st, 53rd, and 56th Native Infantry and the 2nd Light Cavalry. The 1st Sikh Cavalry, being in advance, had to halt under fire to let the infantry and guns come up, as they were a good way behind. We could not make out the strength of the enemy, as they were concealed behind brushwood and broken ground, whence they kept up a heavy but ill-directed fire upon us. Presently our artillery appeared on the scene and opened fire upon the enemy's position, but did not succeed in dislodging them.

At length our commander, perceiving that the artillery fire was ineffective, that the British infantry were still some way behind, and that the enemy were endeavouring to draw off, ordered the cavalry to charge. On we went over very rough ground full of holes, banks, and wells into which some of our men nearly fell, and in spite of a heavy volley of musketry which killed and wounded many of our men and horses, we broke the enemy, who were not

in any regular formation, and drove them back into the Puttra Nuddee, a shallow stream full of rushes and high grass in rear of their position. We followed and crossed the stream to cut off their retreat, while the guns and infantry coming up opened fire upon the disordered masses of the enemy, who soon broke up and fled across country in different directions pursued by our cavalry. The furious gallop through clouds of dust and smoke, the whizzing of musket balls through our ranks, the fall of wounded men and horses, the shouts and cries on every side, and the confused mêlée among the broken ranks of the enemy, all made up a scene that could never be forgotten. This was my first experience of a cavalry charge, and although we were successful it showed me plainly that a square of good steady infantry may laugh at cavalry charges so long as their ammunition lasts.

This action inflicted a well-merited retribution upon the Cawnpore mutineers. They had treacherously attacked and massacred the remains of the British garrison of Cawnpore at the Sati Chowra Ghât in June 1857, violating the capitulation and slaying indiscriminately men, women, and children, and now they received the just punishment for mutiny and murder. More than 500 of them were left dead on the field, and the rest completely broken up and dispersed. The loss on our side was severe, and it fell almost entirely upon the cavalry, as the British infantry coming up at the end of the action had only two or three men wounded.

After collecting our wounded and attending to them as well as circumstances would admit, we marched back to Gonda. Several of our men were very badly wounded in this affair; two of them were shot through the lungs but eventually recovered. We also had a good many horses with bullet and bayonet wounds, which required much attention, so that for some time I had my

hands full of work. I must here explain that as there was no veterinary surgeon with the regiment I had to look after the wounded horses as well as the men.

Towards the end of April we again marched from Gonda with the 20th Regiment, and some other troops, to attack a mud fort in a jungle about ten miles off, in which Gujadhur Singh, a noted rebel leader, had taken refuge with a body of his followers. It was arranged that the British infantry should storm the fort while the cavalry watched the approaches, to intercept the rebels should they attempt to escape. As the fort was situated in the midst of a dense jungle this was no easy task; however, our men were disposed around the jungle which concealed the enemy's position, and we remained on the watch for the greater part of the day. Late in the afternoon the infantry having made their way through the jungle with considerable difficulty, attacked the fort and took it by storm. The rebel leader was killed with many of his followers, but a considerable number of them made their escape from the fort and presently issued from the jungle near us. We immediately charged them; but although they were in full retreat they suddenly came to a stand, gave us a volley of musketry which did considerable execution, and received our charge at the point of the bayonet. As they were a confused body without any regular formation, they were broken and put to flight, most of them escaping over a nullah (watercourse) which our horses could not cross. We had a good many men and horses wounded by bullets and bayonet thrusts, and I nearly came to grief myself, as the troop horse I was riding bolted with me during the charge and I had some difficulty in regaining control of him.

After this engagement we returned to Gonda for a short time, but in May we again took the field as part of a force under the command of Major-General Sir Hope Grant, who was to operate

territory of them. We marched from Gonda to Bulrampur, crossed the Raptee River, and proceeded eastward into the Goruckpur district, where we joined a force under the command of Colonel Pinckney, consisting of H.M. 73rd Regiment, a detachment of the Sikh Regiment of Ferozepur, two guns, and a part of the Bengal Yeomanry Cavalry. We now made long marches in different directions along the foot of the hills, but we saw nothing of the enemy except a few of their horsemen, who always managed to get away. We passed through immense grassy plains abounding in deer and wild cattle, which were so free from fear that they could be closely approached without their taking the alarm. Had we not been making very long and fatiguing marches we could have had capital shooting in these parts, but as it was we were generally much too wearied after our marches to go in quest of game.

After some time spent in this kind of work, the 1st Sikh Cavalry were ordered to rejoin the force under General Grant, as an action with the rebels was imminent and our services were required. We made forced marches, hoping to arrive in time, but unfortunately we were a day too late. We heard the sound of cannonading when we were still many miles from the field, and we could not effect our junction till the following morning. This action was the closing scene of the campaign; the enemy were driven back to the hills and retreated through the Jerwah Pass into Nepal. Our force soon afterwards marched back towards Lucknow, and the troops composing it proceeded to their respective stations. My regiment returned to Gonda, but were almost immediately ordered to Lucknow, and stationed in the old cantonment, from whence, after some weeks, we were moved to a position on the banks of the Goomtee River, close to the Chukkur Kothi, or Yellow House, and nearly opposite to the Secundra Bagh, two spots where severe conflicts had occurred during the war.

So ended my experiences of the Indian Mutiny Campaigns. They comprised two years' continuous service in the field, during which I had done much hard marching, had seen many actions, and had been for several weeks a member of a besieged garrison, thus acquiring much valuable professional experience and becoming thoroughly versed in the multifarious duties of a military surgeon in time of war. Though I was unavoidably under fire on all these occasions, owing to the paucity of our forces and the overwhelming numbers of the enemy, I escaped without a wound, and also kept my health fairly well throughout the progress of the war.

I received (after some years) the medal granted for the Indian Mutiny Campaigns, with the clasps for the relief and capture of Lucknow, as well as a grant of one year's service towards pension. This might have been a great boon had failing health or any other cause compelled me to retire before completing my prescribed period of service for pension, but as events turned out it was of no use to me at all. I also received the 'batta,' or allowance of money which is usually granted by the Government of India to the troops engaged in any severe and long-continued campaign as some compensation for the losses which they unavoidably sustain during these operations. I further obtained my share of the Lucknow prize money, but although an enormous amount of valuable property was taken and sold by auction for the benefit of the prize fund, yet the proceeds, owing to causes which I need not here particularise, were unexpectedly small, and a subaltern officer's share was only three hundred rupees. It had been anticipated with good reason that the shares would be much larger, and the feelings of a disappointed speculator who had purchased beforehand the share of one of his brother officers for a thousand rupees, and found it worth only three hundred, may be readily imagined.

CHAPTER V

News of the Peiho disaster—Rumour of war with China—We go down to Calcutta, where I am transferred to the 15th Punjab Infantry—We embark for China, and touch at Singapore and Hongkong—Our landing and encampment at Talien-whan Bay—We again embark and steam across to the coast of Pecheli—Our landing near Pehtang, and occupation of that town—We advance and defeat the Chinese forces at Sinho—Capture of the Taku Forts—Our gunboats enter the Peiho River.

Soon after our return to Lucknow we read in the newspapers accounts of the disastrous and unsuccessful attack on the Taku forts by the British squadron under Admiral Hope, in which two of our gunboats were sunk and six or seven hundred men were killed and wounded. It was speedily rumoured that there was to be an expedition to China next year, and that the 1st Sikh Irregular Cavalry was to be one of the regiments composing the force. These reports eventually proved correct, and in February 1860 my regiment left Lucknow, and marched by way of Sultanpur to Benares, where we halted a few days. Resuming our march we crossed the Ganges, and proceeded down the Grand Trunk Road to Raneegunge, where we took the train for Calcutta. Our men had never seen anything of the kind before, and were greatly astonished at the engines and the rapid motion of the train.

On our arrival at Calcutta we encamped on the extensive grassy plain around Fort William, and I then found that I had been transferred to the 15th Regiment of Punjab Infantry (now the 23rd Pioneers), while Dr. Macaulay, a surgeon considerably senior to me, had been appointed to the 1st Sikh Cavalry. I

joined my new regiment at once, as it had already reached Calcutta, and was encamped close by. The corps consisted almost entirely of Muzbee Sikhs, and was very strong, numbering nearly 1100 men. It was commanded by Captain Shebbeare, an able and experienced officer, who had served with distinction at Delhi and elsewhere during the Indian Mutiny campaigns. Both men and officers were eager to start for China, but there was much delay, and some weeks elapsed before we finally embarked.

MUZBEE SIKHS

The regiment was distributed among three transports, the headquarters with about 700 men going in the capacious old paddle steamer *Bentinck*, which had previously been a passenger ship in the 'Peninsular and Oriental' line. I of course accompanied the headquarters of the regiment, and Dr. Harris, an assistant-surgeon doing duty with the corps under me, embarked with another detachment in the steamer *Viscount Canning*.

While we were making our way down the River Hooghly we suffered slightly from cholera, which had already attacked some of the troopships of the expedition, but when we got out to sea the disease soon disappeared, and the men became very healthy. They had never seen the sea before, hence their astonishment may be imagined when they beheld the boundless ocean around them, sometimes as smooth and shining as a bright mirror, at others swelling with white crested billows, and tossing the great ship about like a toy boat.

During the voyage to Singapore an accident occurred which might have been very serious. One night we were obliged to stop suddenly, something having gone wrong with our engines, and the two transports we were towing very nearly ran into us, one of them, indeed, coming so close as to crush a boat which hung at our stern.

We reached Singapore in ten days or so after leaving Calcutta, and anchored there for a short time to coal and take in supplies. I was much pleased with the appearance of this place; the general situation was enchanting, the beautiful bay was studded with wooded islands and crowded with vessels of all sorts from Chinese junks to British warships, the houses of the town looked neat and clean, the streets and roads were wide and well kept, and the lovely forest-clad hills of the island formed a charming background to the whole scene. Although only a degree and a half from the equator Singapore seemed to possess a comparatively cool climate, as there was always a sea breeze blowing, and it was frequently cloudy with slight rain.

The town contained a considerable population, amounting even then to about 70,000 people, mostly Chinese and Malays; there were also many European merchants and traders as well as natives of India. Since that time Singapore has greatly increased in

population and importance, and now contains about 200,000 inhabitants, quite half of them being Chinese, a large proportion Malays, and a good many natives of India. It is now one of our principal coaling stations and naval depots, and it possesses extensive dock accommodation. The city contains many fine public buildings, including two cathedrals and a number of Chinese joss houses, Hindu temples, and Mohammedan mosques. Singapore is now provided with an extensive and elaborate system of defence, which renders it practically secure against attack.

After some days we left Singapore, towing two large transports and a gunboat in addition, and continued our voyage towards Hongkong, where we arrived without accident in about a fortnight. Hongkong is a mountainous island of irregular shape, and about thirty square miles in extent, lying off the southern coast of China, and separated from the peninsula of Kowloon by a strait only half a mile wide. The arm of the sea between Hongkong and the Chinese coast is so well sheltered by mountains on every side that it forms an extensive natural harbour, and on our arrival we found a large number of vessels lying in it, most of them transports and men-of-war employed in the China expedition, as well as merchant ships and Chinese junks (piratical or mercantile). Part of the army had been disembarked on the mainland, near a place called Kowloon, and their camps were scattered over the country, near the landing place. As a move to the north was to be made almost immediately, we did not disembark our men, but we visited the camps at Kowloon and the city of Victoria in Hongkong several times before our departure.

Victoria is built on the lower slopes of a hill about 1800 feet in height which rises close behind, and it extends for a considerable distance along the shore. It is perhaps the principal trade centre in Eastern Asia, and it is also a very important naval station and

coaling depot. The city is of considerable size and contains several fine buildings, in particular the cathedral. It has a large population, consisting chiefly of Chinese, but there are also a great many European officials, merchants, traders, and professional men. The curiosity shops at this place are worth a visit: they contain all sorts of curious ornaments in carved ivory, sandal wood, and tortoise shell, lacquered ware of all kinds, Chinese pictures, puzzles, etc. The climate of Hongkong is hot, damp, and relaxing. Malarial fevers were very prevalent there at the time of my visit, and seemed to be caused by emanations proceeding from the disintegrating granite of which the whole island consisted. I was informed that when the granite was cut into for the foundation of any new building it was necessary to leave the building unoccupied for several months, otherwise the inmates would certainly suffer from fever.

The weather had been getting rather squally, and the day we left Hongkong with two transports in tow it became so boisterous that we could make hardly any way at all, and after struggling slowly on for a few miles, we had to give up the attempt and return to our anchorage between Victoria and Kowloon. While returning we again collided with one of the ships we were towing, and this time the results were more serious. One of our boats was smashed, part of the mizzen-rigging destroyed, and the mizzen-mast itself nearly carried away, while the ship that fouled us lost her jib-boom, besides receiving other damage. In a day or two the weather improved, and we again started with better success, and continued our voyage to the north. Nothing of any interest occurred, except a meeting with a Russian frigate cruising in Chinese waters, and after a voyage of nine days, we arrived at Talien-whan Bay, in the province of Liautung (Lat. 39° N., Long. 122° E.), which had been selected as the rendezvous of the British

expedition. Meanwhile the French had assembled at Chefoo, in the province of Shantung.

No better place could have been chosen for our concentration; the spacious bay, having several islands at its entrance, was almost completely landlocked, and formed a natural harbour capable of sheltering any number of vessels, while the gentle slopes of the hills around it afforded suitable sites for the encampments of the troops. At the time of our arrival there were about forty sail of men-of-war and transports lying in the bay, and most of the troops had landed and were encamped at various places along the shore. The surrounding country appeared to be bare, rocky, and sterile; it consisted of endless ranges of low hills covered with a scanty vegetation, but hardly any trees or shrubs were to be seen except here and there in the valleys. There was great difficulty in procuring water, as no streams could be found near the camps, and numerous working parties had to be employed in digging wells. The natives of the country, who were Tartars rather than Chinese, had driven away their cattle into the interior in obedience to the orders of their headmen, who had forbidden them to give us any assistance or sell us any supplies, so that we could at first get nothing from the neighbouring villages, and had to depend entirely upon our own resources. Subsequently, however, the country people became more friendly, as they found that they were not molested, and that no plundering was allowed.

A few days after our arrival at Talien Bay, our other two transports came in with the rest of the regiment, and having received orders to disembark, we landed and pitched our camp on the slope of the hills about a mile from the beach. We remained in camp at this place for about three weeks, and found it an agreeable change, after having been pent up on board ship for more than two months. We passed our spare time very pleasantly

in rambling about the country and along the beach, bathing in the sea, and paying visits to the ships and to the other regiments of our division. Our camp consisted of bell tents both for officers and men. Each regimental commanding officer was allowed a tent to himself, but the other officers had to live three in a tent. The three beds formed a triangle round the and, as may be imagined, there was very little space for baggage, and none at all for the ordinary tent furniture. Fortunately we each had in addition one of the French *tentes d'abri*, which served to shelter our servants and baggage. A considerable number of Chinese coolies had been brought up from Hongkong to carry the tents, stores, and baggage of the army, but many of them had deserted, and the 'transport' was now so inadequate that it seemed probable we should hardly be able to take anything with us for the campaign but a bundle of bedding. However, I succeeded in purchasing a good mule for forty dollars at a village some distance inland, and having thus obtained my own transport, I was quite independent.

Towards the end of July we received orders for embarkation, and we soon reoccupied our old quarters in the *Bentinck*. The steamers took the sailing vessels in tow, and the whole fleet directed its course across the Gulf of Pecheli towards the mouth of the Peiho River. On the way we were joined by the French fleet from Chefoo, conveying their contingent. The combined fleet now presented a truly magnificent spectacle, the ocean all round us being crowded with men-of-war and transports almost as far as the eye could reach. The sea was calm and the weather beautiful, so that we were able to enjoy this grand sight to our hearts' content. We soon arrived off the coast of Pecheli, and anchored several miles from land on account of the shallowness of the water.

Preparations were now made for the landing which was to take

place near the town of Pehtang, a few miles to the north of the Peiho River. The second brigade of the first division (to which my regiment belonged), and some of the French troops, had the honour of being the first to disembark. We were transferred from the troopships to several gunboats and a number of large launches towed by them. All of us, both officers and men, were in heavy marching order, and we all carried three days' provisions in our haversacks. In addition to this load we had each a waterproof sheet (to sleep on) over our shoulders, and the usual encumbrances of a sword, revolver, and flask of brandy.

The gunboats steamed on, and as we approached the land we came in sight of the forts defending the entrance of the Pehtang River. They were situated on both sides of the river, and seemed formidable obstacles to our landing. The shore was everywhere low and flat, and appeared to be literally a bank of mud. The gunboats anchored in a line about half a mile from the shore, and perhaps a mile from the nearest fort, which remained silent, though we every moment expected it to open fire upon us. We all crowded into the boats and pulled inshore until they grounded, when we had to get out and wade the rest of the way. Hoping to reach the shore dry, I got on the back of a powerful Sepoy who had offered to carry me, but after a few steps he slipped and fell, so that we both got drenched. No enemy appeared except a few horsemen in the distance, who watched the landing, but did not venture to approach. The mud was our worst enemy, and greatly impeded our movements: we sank over our ankles at every step, and sometimes over our knees, so that we could now understand the difficulties our men had to contend against at the Peiho in 1859, when they made the gallant, though unsuccessful, attempt to capture the Taku Forts.

As each regiment landed, the men formed up as well as they

could, and floundered through the mud until they reached firmer ground, where they halted for a time. When the whole force had disembarked, we marched on towards the town of Pehtang, until we reached a road raised a few feet above the wet, muddy ground, and there we made our bivouac for the night, spreading our water-proof sheets on the road and lying down on them, wet as we were. Luckily the weather was warm and fine, so this exposure did not harm us. During the night we were twice roused up by alarms. On one occasion a small party of the enemy's cavalry came round our flank, but when fired upon by the 60th Rifles, they fled, carrying off with them one of their number who had fallen.

In the morning we took regular possession of the town and forts, which had been evacuated by the enemy on the previous day, and the gunboats were brought into the river and anchored under the forts. The latter contained no guns, only a few dummies (wooden imitations of guns), but a great number of very well-constructed mines were discovered by our engineers. I went back to the *Bentinck* in a gunboat, together with another officer, to bring on shore our baggage and medical stores. We had to spend the night on board and return the following day. On getting back to Pehtang I found the officers of my regiment comfortably located in a pawnbroker's shop, which was a large establishment and afforded ample accommodation for all of us, and for many of our men as well. Some of the rooms were filled with goods left in pledge, chiefly articles of clothing.

The whole of the allied army—British, French, and Indian—amounting to more than 15,000 men, together with their camp followers, were crowded into this small town, and its narrow streets soon became ankle deep in mud, from the rain and the incessant traffic. My regiment, being a pioneer corps, was told off in working parties to clear the streets of the mud and refuse with which

they were obstructed. This unpleasant work was done, but the stench while it was going on was almost unbearable, and several of the officers superintending the work were quite upset by it. Our men, however, continued very healthy, and hardly any of them were in hospital.

After remaining about ten days in Pehtang we received orders to advance, and on the 12th of August the allied army, leaving a garrison of 1000 men in the town, moved out and marched inland along the causeway previously mentioned. We followed this road for several miles before we found the enemy in our front: they were holding intrenched camps on both sides of the road, but were speedily driven out of them by the fire of our artillery. They retired upon their main body, which occupied a position at the village of Sinho—a place defended by formidable intrenchments and cannon, while their cavalry hovered in large numbers on both flanks. Our force was now disposed for attack, and the second division was sent against the left flank of the Chinese, while the first division (including my regiment) advanced against the intrenchments in front. These were speedily carried without much loss, and we then pursued the flying enemy through the village of Sinho, while the French division on our left followed them up to the fort of Tangku, from which the enemy opened an artillery fire upon the French troops and forced them to retire.

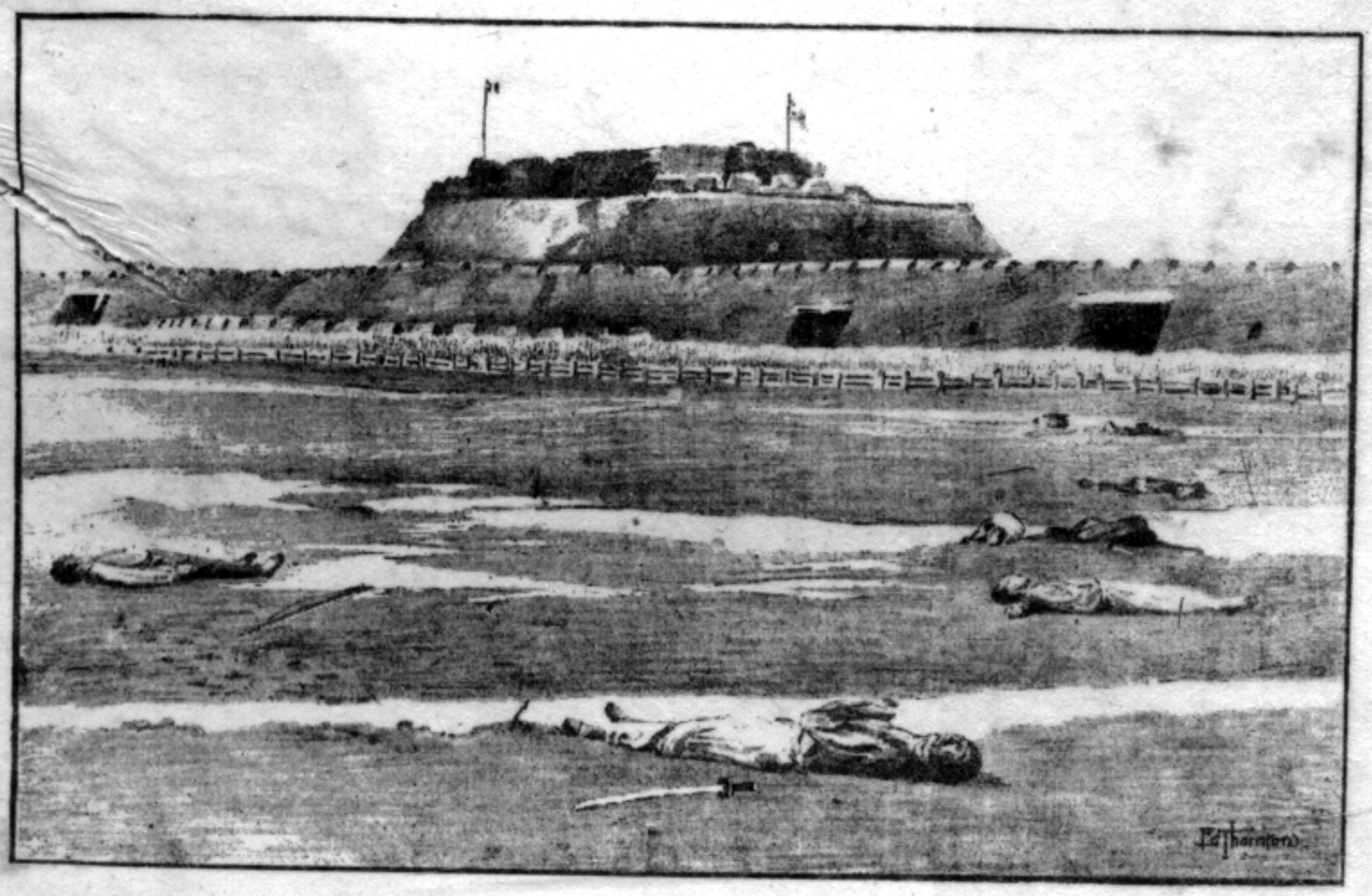
On the right our second division had been equally successful, in spite of the swarms of Tartar cavalry that hovered about them, and sometimes essayed an attack. My regiment halted and made their bivouac on the field a little beyond the village of Sinho; our pickets were attacked during the night, but held their positions successfully. Early next morning I was so fortunate as to secure a loose mule which had belonged to the enemy's cavalry and had strayed near our camp. As I already had the mule I purchased at

Talien Bay, this fresh acquisition provided me with ample means of transport for my belongings. The mules were both fine strong animals, and I kept them in use all through the campaign. I subsequently contrived to procure a couple of light carts to which the mules were harnessed, and driven by my two servants, so that I was enabled to take with me as many things as I required.

The day after the action of Sinho we marched in the direction of the enemy's intrenchments, and halted for the night just out of range of their cannon. Early on the following morning we were in motion and marched across the plain which borders the Peiho River to attack the Fort of Tangku, a massive earthwork surrounded by a wet ditch and other obstacles. Our first division and part of the French troops were employed in this operation. As we advanced the enemy opened fire upon us from some war junks in the river and from a battery of several guns on the other side. Upon this Captain Willes, of H.M.S. *Chesapeake*, crossed the river in a boat with some sailors and set fire to the junks. The battery on the other bank still kept up its fire and some of our guns were sent to the river side to silence it. In the meantime we had been approaching the enemy's fortified position at Tangku, and they opened an ill-directed fire upon us from a good many guns of various calibres placed at intervals along the wall. Our batteries replied, and a heavy cannonade from about fifty guns (British and French) was kept up for nearly two hours, by which time the enemy's fire was entirely subdued. Our infantry then advanced and entered the fort without having to fire a shot, as the garrison had been driven out by our cannonade, which had dismounted most of their guns and killed many of their men. The Armstrong segment shells were especially destructive, and caused a general panic among the Chinese soldiers.

Our loss in this affair was about thirty killed and wounded.

The enemy retired into the other forts and set to work to strengthen them as much as possible. We, on the other hand, busied ourselves in getting up our heavy guns and ammunition from Pehtang before attacking the remaining forts, and several days were spent in these preparations. In the meantime a detachment of troops was sent across the river and drove the enemy out of a succession of gardens and orchards on the other side, and captured a battery mounting several guns. My regiment mean-

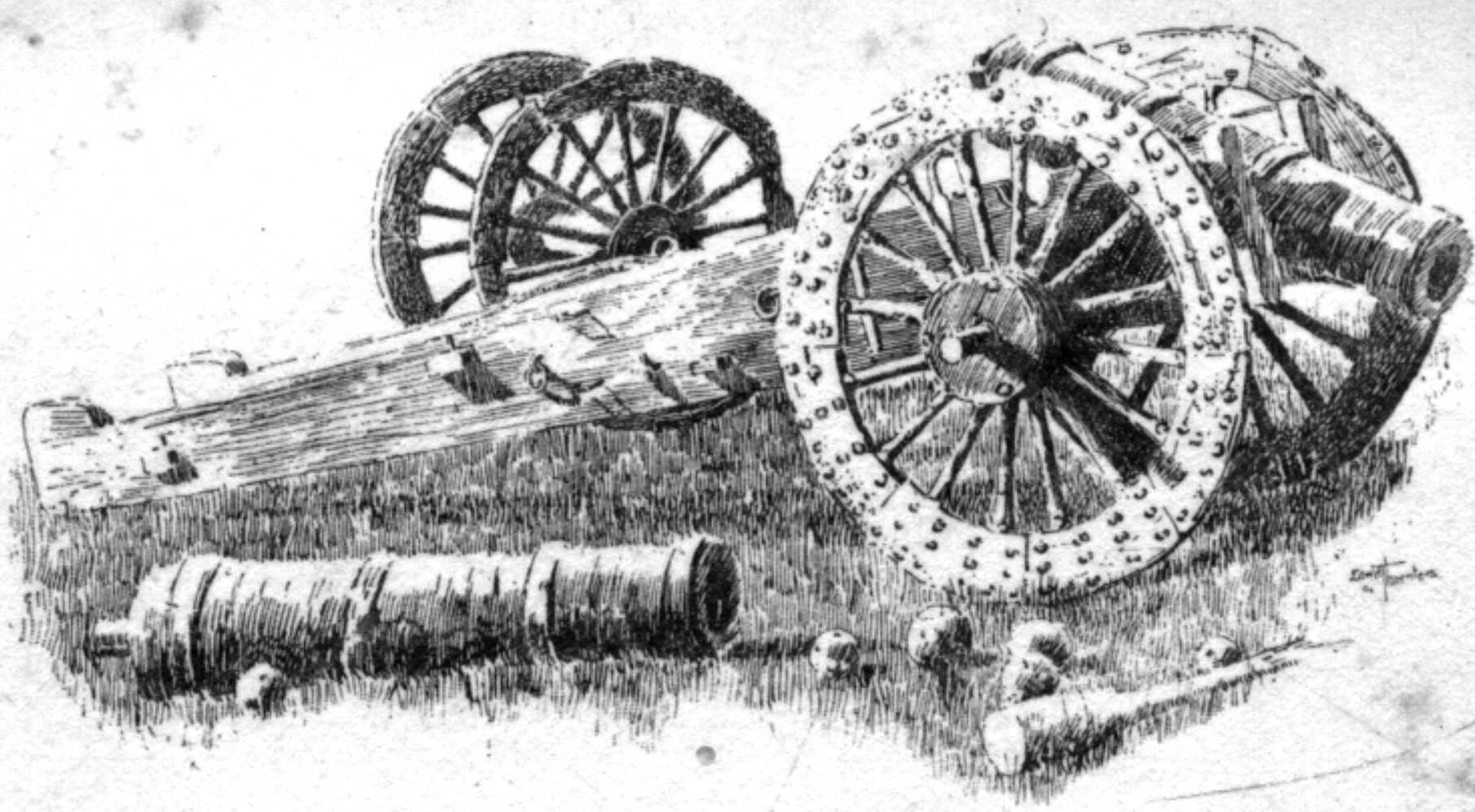


EXTERIOR OF TAKU FORT

while returned to camp, which was pitched on some low ground near the Peiho River. An inundation occurred soon after, owing to a sudden rise of the river, and our camp was flooded. We had much difficulty in keeping the water out of our tents, but we managed to do so by throwing up banks of earth around them.

By the 21st of August everything was ready for the attack of the next fort, which was about a mile from Tangku and nearer the mouth of the river. It was smaller but much stronger than the fort already taken, and it contained a strong garrison and many

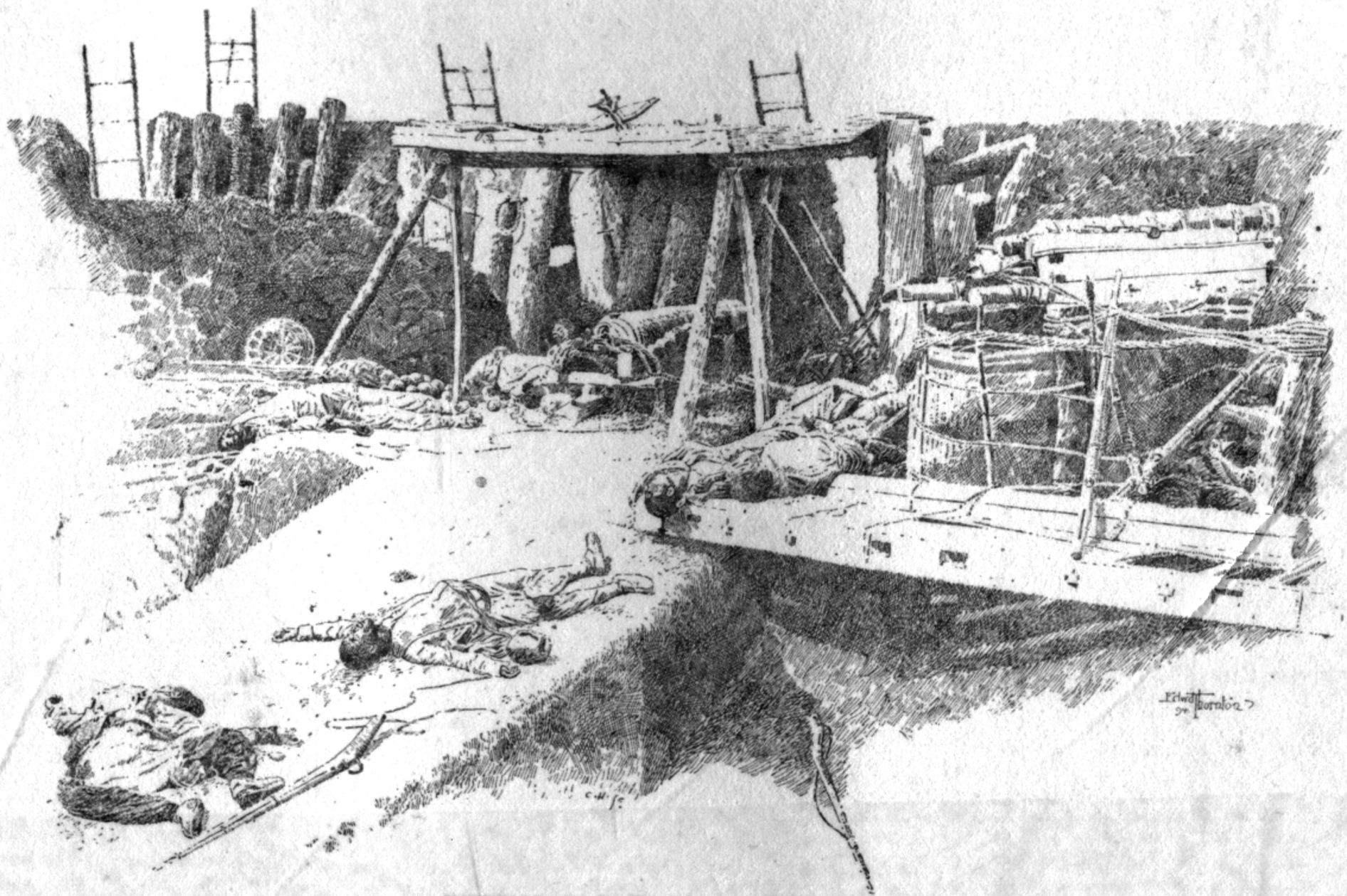
guns, most of which, however, were pointed towards the sea; for the Chinese had expected us to attack from that direction and never supposed we would march round and attack the forts from the land side. The attacking force on this occasion consisted of our second division with some of the French troops, while the first division, much to our disappointment, remained in camp. This time the Chinese troops made a much better defence than they did at Tangku, but it was of no avail. The principal magazine of the fort was blown up by a shell from one of our gunboats which co-operated in the attack. The shock of the explosion was



CHINESE GUNS

sensibly felt in our camp more than two miles distant, and we saw a dense mass of black smoke rise high into the air above the fort. Our troops suffered heavy loss while approaching the walls and passing the ditches, thick set spikes, abatis, and other obstacles in their way. At length they made good their entrance, and a terrible slaughter of the garrison took place, only a few of them making their escape to the next fort.

The loss on our side, including that of the French, was about 400 men killed and wounded; that of the enemy was far heavier, and their commander-in-chief was among the slain. This victory



INTERIOR OF TAKU FORT AFTER CAPTURE

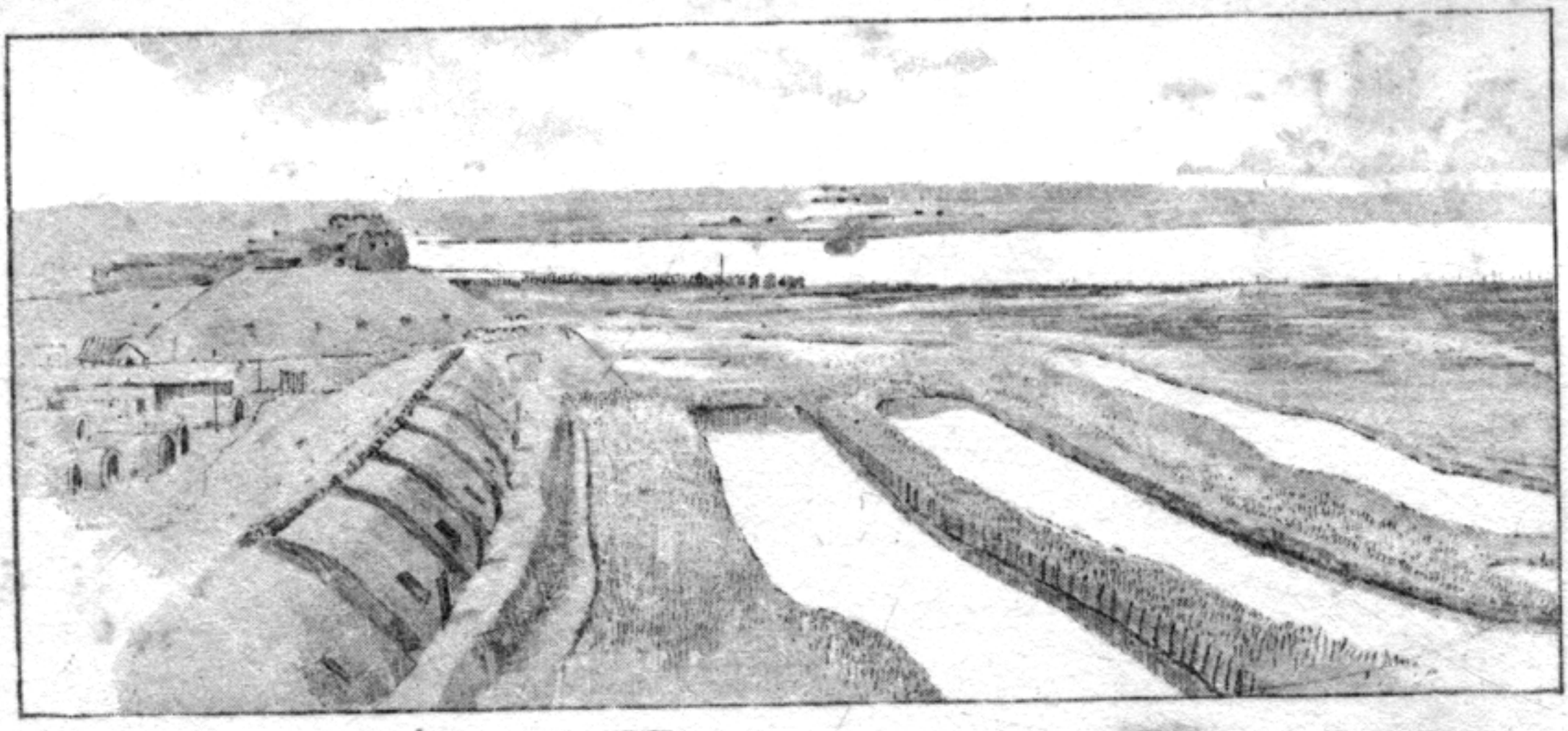
produced such an effect upon the Chinese, that although they were still in possession of four strong forts, two of which completely commanded the mouth of the river, their hearts failed them and they evacuated all their remaining fortifications without further resistance, and retired into the interior of the country. Thus all these formidable works, which contained upwards of 600 cannon of various calibres, fell into our hands, and were occupied by our troops. On the day following the attack the sailors of the fleet arrived in boats and removed all the obstacles, such as booms, stakes, etc., which the Chinese had placed across the river to obstruct its entrance, and the gunboats and small steamers immediately came up as far as our camp and anchored abreast of it.

CHAPTER VI

Suspension of hostilities—Visit to the Taku Forts—We march to Tientsin and enc near the city—Our advance northward—Treacherous capture of the political officers by the Chinese—We attack and defeat the Chinese army on the 17th and 21st of September and occupy the suburbs of Peking—Capture of the Imperial Summer Palace by the French and our cavalry—Surrender of Peking —Cruel treatment of the captives by the Chinese—Destruction of the Summer Palace ordered by way of punishment—Our visits to Peking—The treaty of peace is signed and we march back to Tientsin—We re-embark in the *Bentinck* and meet with a severe storm—Our arrival at Hongkong—We land and encamp at Kowloon—My visit to Canton—Incidents during our stay at Kowloon—We resume our voyage and reach Calcutta in February 1861.

THE capture of the Taku Forts terminated hostilities for a time, and it was thought by many that the object of the expedition had been fully attained, and that peace would soon be concluded and the troops re-embarked. We remained in our camp on the banks of the Peiho River, and I took advantage of this quiet time to pay many visits to the captured forts, which were objects of great interest to everyone. There were six forts, three on the north side of the river, and three on the south. The largest and strongest were the two at the mouth of the river, and it was in attacking them that our squadron under Admiral Hope met with such a disastrous repulse in 1859. A very large number of guns of various sizes were mounted in these forts, and I noticed in particular some of our own 68-pounders, which had been taken by the Chinese from the disabled gunboats the year before. Another object of interest was a large piece of ordnance constructed entirely of copper; the value of the metal in this gun was estimated at £1500.

The forts at the mouth of the river were enormous earthworks, and were strongly defended by double ditches, abatis, sharp stakes, and the soft mud forming the shore in which the seamen and marines of Admiral Hope's squadron sank up to their waists when they landed to storm the forts. The mouth of the Peiho River had been obstructed, and in fact everything had been done to repel a front attack upon the forts from the direction of the sea. All these preparations, however, were rendered useless by our landing at a distance and marching round to attack the forts on the land side, where no assault had been expected.



THE TAKU FORTS AT THE MOUTH OF THE PEIHO RIVER

After a time the force was ordered to march to Tientsin, a large city 30 or 40 miles up the Peiho river. We left our camping ground on the 30th of August, and after crossing the river we marched northward along a very good road passing through a rich and fertile country abounding in gardens and orchards, fields of Indian corn, and large populous towns and villages. Our tents and baggage did not come up that day, for, soon after we had crossed the river, the pontoon bridge was carried away by a gunboat running against it, and some hours were required to re-establish the communication. We usually encamped near a town or village,

and as no plundering was allowed, we always had a market formed close to the camp, where the country people brought all manner of supplies, particularly meat, poultry, fruit, and vegetables, and sold them at very reasonable rates. Even ice was often to be had, and grapes, peaches, apples, and pears were always to be found in abundance.

After a few days' march, during which no opposition was encountered, we arrived at Tientsin, and encamped on a spacious plain about a mile from the city. Some troops had already arrived, others followed, and soon the plain was covered with an

BARRACKS IN TAKU FORTS

extensive camp, presenting a gay and animated scene. Tientsin, which some years after was the scene of a cruel massacre of Europeans by a Chinese mob, was at this time as safe as any town in Europe, the presence of the allied army being a sure warrant against violence. The city was of considerable extent and contained a large population. Part of it was surrounded by a massive wall, between thirty and forty feet high, with a loopholed parapet on the top and bastions at intervals. The portion of the city thus enclosed formed a square, and had four gates, one in the centre of each face of the square. A large part of the city was outside the walls, and extended down to the river and along its banks for a

considerable distance. The place contained many good shops, and I saw great quantities of Manchester and Birmingham goods, such as prints, cottons, cutlery, slop jewellery, etc., exposed for sale. Provisions of all kinds were abundant and cheap, particularly excellent fruit, such as pears, apples, walnuts, melons, grapes, peaches, etc., which we found a great treat. The weather was still very warm, and iced drinks were most grateful and refreshing. The ice was kept in subterranean receptacles throughout the hot season.

After a stay of some days at Tientsin, the allied army marched northward along the road to Peking. All the sick and the heavy baggage were left behind under a suitable guard, as the peace negotiations had failed, and we expected to encounter the Chinese forces before reaching the capital. On the 17th of September, after we had made several marches from Tientsin, we found the Chinese army in our front, occupying an extensive position among villages and woods, and we perceived their intrenchments stretching away on both sides of the road. Our troops were then halted, and communication having been opened with the enemy, a deputation of political officers and others, with a small escort, proceeded on the following morning to their position to resume the peace negotiations. While this was going on we had breakfast, and most people thought that the Chinese would agree to our terms of peace, and that there would be no more fighting. Suddenly we saw some officers and men of the escort galloping back to us, and when they came up we heard that Mr. Parkes and Mr. Loch, the political officers, had been treacherously seized by the Chinese, together with Captain Brabazon, R.A., Lieutenant Anderson, Mr. Bowlby, the *Times* correspondent, and others who were with them.

On this we immediately prepared to attack the enemy's position, their artillery opened fire upon us, and the battle commenced. My

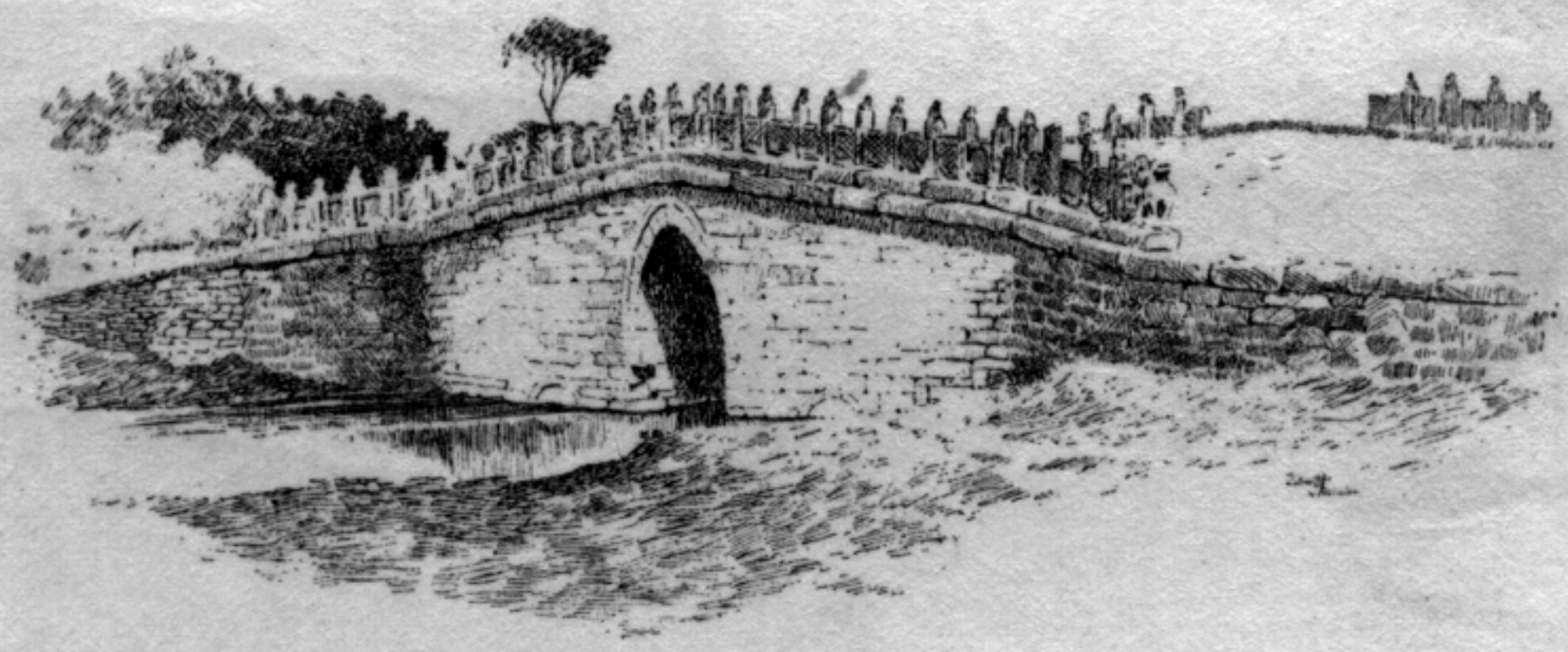
regiment advanced in support of our guns, and soon became exposed to the fire of one of the enemy's batteries, by which we had several men killed and wounded. In a short time, however, this battery was silenced, and we continued our advance, driving the enemy before us. At length we reached a town, which was undefended, and after marching through it, we came suddenly upon a large encampment of the enemy. They were engaged in cooking their food, and were completely taken by surprise. They fled at our appearance, leaving their camp with all their provisions, baggage, and eighteen guns in our possession. We then halted, and established ourselves in the deserted camp, where our men found all sorts of provisions in abundance, particularly some excellent mutton. In other parts of the field our troops had been equally successful, and the engagement ended in the complete defeat of the Chinese army, with the loss of their camps, artillery, and baggage. They retreated in the direction of Peking, and took up another position near the town of Tungchow.

The day after the action of the 18th of September an officer, with an escort and a flag of truce, was sent to the enemy's position to request the liberation of the officers who had been treacherously captured on the previous morning, but as they approached the Chinese camp they were fired upon, and compelled to retire. On the 21st of September the allied army again advanced, and attacked the enemy in their new position, which was speedily forced, their camps and artillery taken, and their troops driven in confusion from the field, leaving their capital uncovered. After a short halt we advanced towards Peking, which was only a few miles distant. The French contingent and our cavalry were on our right, and by some accident they lost their way and missed Peking altogether, perhaps owing to the country being thickly wooded. Towards evening they arrived at the Summer Palace of

PAGODA AT TUNGCHOW

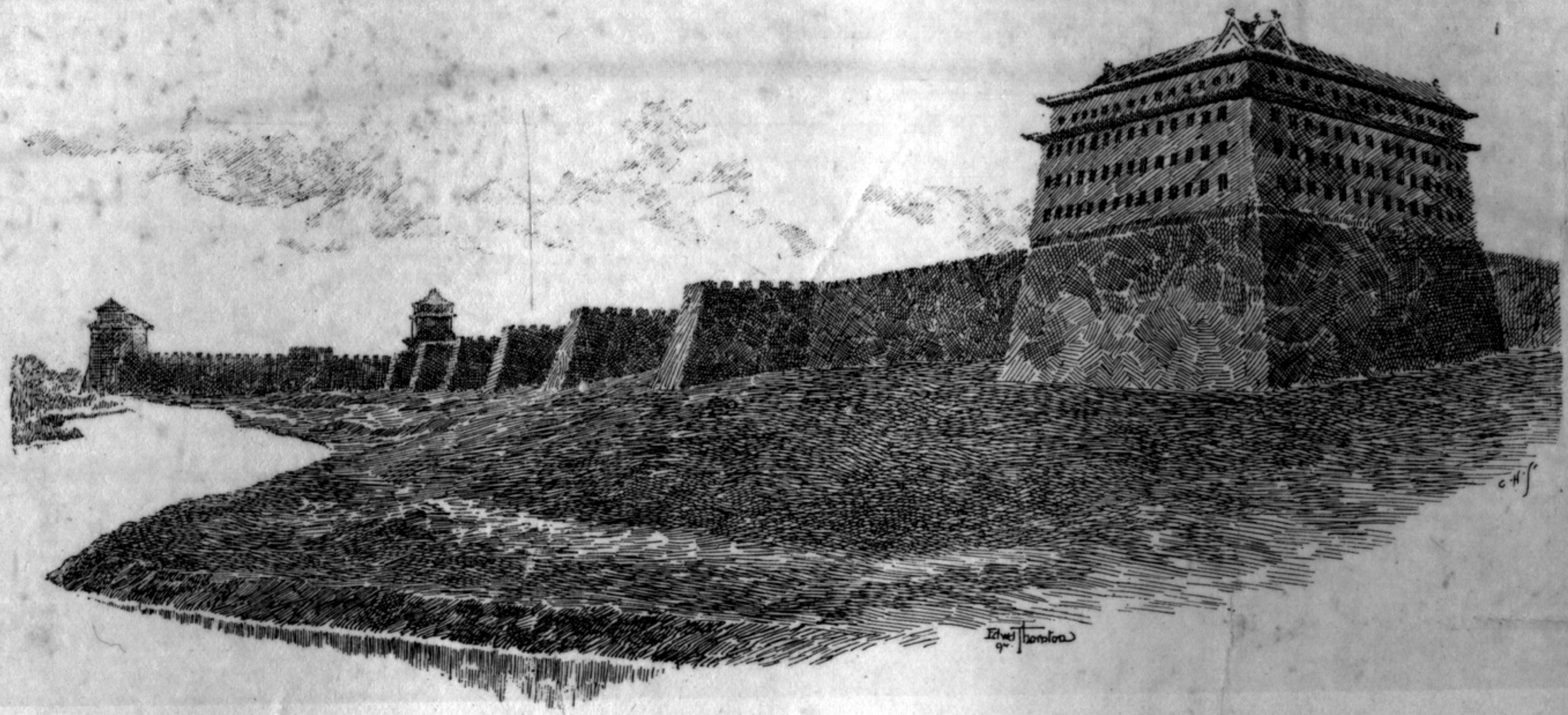
the Emperor of China, five miles to the north of Peking, and finding it unguarded, the French immediately entered the palace and plundered to their hearts' content.

Meanwhile the bulk of the army, after a slight skirmish, had occupied the suburbs of Peking on its northern side. The city, however, was surrounded by lofty and massive walls, and appeared determined to hold out, so preparations were forthwith commenced to establish breaching batteries near the An-ting Gate. The next day our camp was full of reports of the plunder got by the French in the Summer Palace, and all who could obtain leave were soon



BRIDGE NEAR PEKING

on their way thither to see the place. I went among the rest, and on arriving there I was filled with astonishment and regret that so lovely a scene should have been ruined by plunder and devastation. I wandered through a beautiful and well-timbered park several miles in circumference, with numerous ornamental buildings of various kinds scattered through it. There were palaces, temples garden houses, etc., all of which had been filled with articles of value, such as splendid furniture, exquisite wood carvings, delicate ornaments in jade stone, ivory, etc., curious works of art in old enamel on copper, embroidered dresses, rich silks, valuable furs, and, in short, every conceivable variety of 'loot.' Many of



THE WALL OF PEKING

these things had been carried off, but much still remained, and great numbers of valuable articles, such as china vases, etc., had been wantonly destroyed. Everything taken by the British officers and soldiers on this occasion was made over to the prize agents, sold by public auction, and the proceeds divided among the troops as prize money.

A PAGODA IN THE GROUNDS OF THE SUMMER PALACE, NEAR PEKING

In the meantime a battery had been got ready to breach the wall of Peking, but the Chinese authorities averted further hostilities by surrendering the An-ting gate of Peking to the allies, and giving up their surviving prisoners. They had already liberated Mr. Parkes and Mr. Loch, the political officers, and they now gave up some men of the escort who had been captured with them, as well as the dead bodies of Captain Brabazon, R.A., Lieutenant Anderson of Fane's Horse, Mr. De Norman of the Consular Service, Mr. Bowlby, the *Times* correspondent, a soldier of the King's Dragoon Guards, and several sowars of the escort. From the accounts given by the survivors, it appeared that these unfortunate men had been literally tortured to death while in the hands of the Chinese. They had been tightly bound hand and foot, and

repeatedly flogged, and their guards actually gave them boiling water to drink when they were almost dying from thirst. Most of the survivors had to be taken to hospital as soon as they reached our camp, and several had quite lost the use of their limbs from the tortures to which they had been subjected. When all this became known throughout the army, a general feeling of indignation was excited, and it was hoped that condign punishment would be inflicted upon the authors of these atrocities. Our political and military authorities, however, merely demanded a pecuniary compensation for the families of the murdered officers and soldiers, and gave orders for the destruction of the Summer Palace by way of punishment.

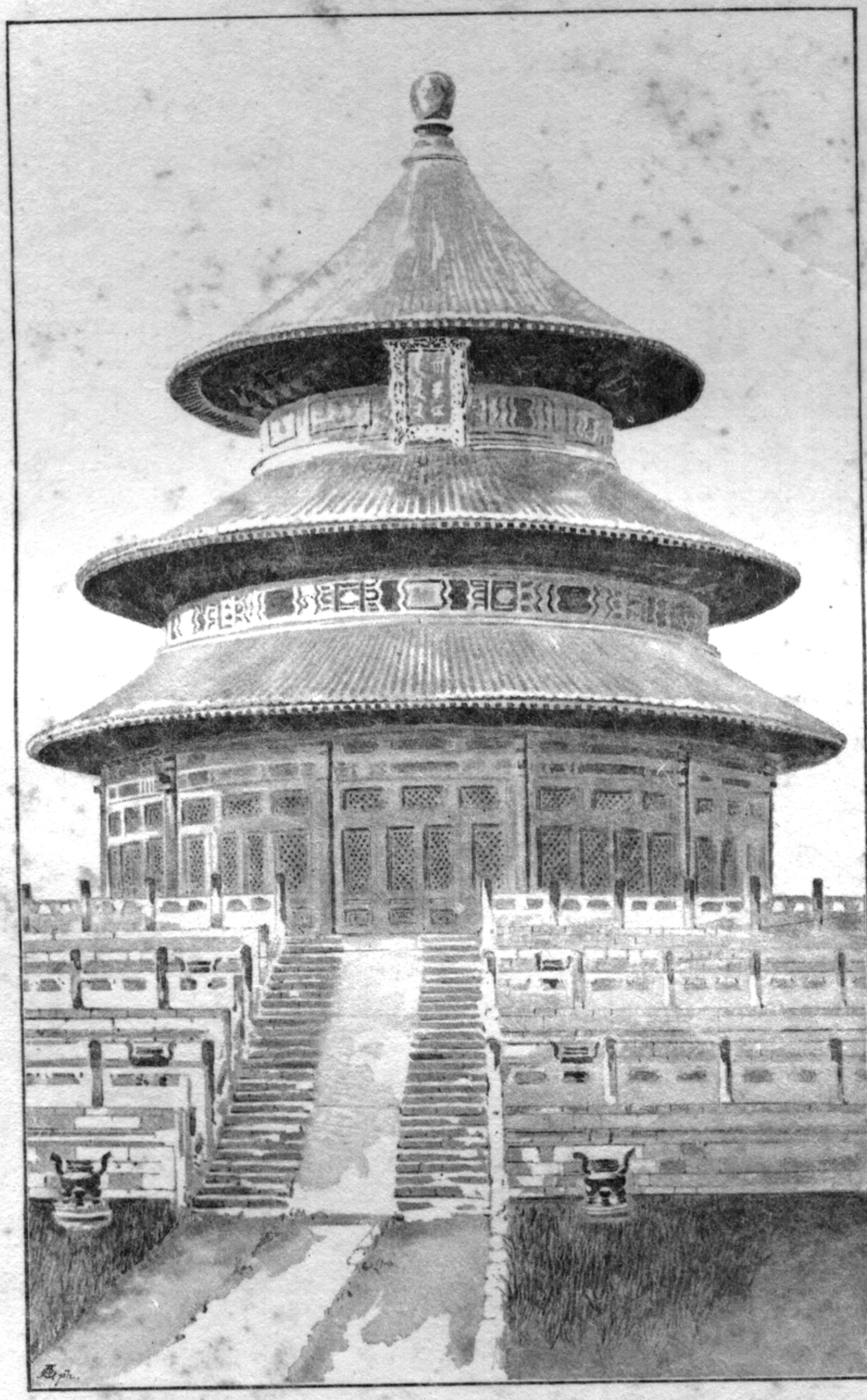
The bodies of the unfortunate victims were buried in the Russian cemetery, and the funeral was attended by nearly all the British and by many French officers. Next day the whole of the first division and the cavalry marched down to the Summer Palace to carry out the order for its destruction. For two days it was given up to plunder, and on the evening of the second day the different buildings were set on fire, and the force returned to camp, leaving nothing but blackened smoking ruins to mark the spot where these palaces and temples had once existed. I have always considered the burning of the Summer Palace as a regrettable and useless act of vandalism. It involved the destruction of many beautiful buildings and priceless works of art, and it was altogether futile and ineffectual as a punishment for the treachery and cruelty of the Chinese.

After our return to camp I made frequent visits to the city of Peking, and explored it throughout. The city was surrounded by a massive wall about fifty feet high, sixty feet thick at the base, and forty feet at the top, consisting of earth faced on both sides by courses of brick masonry. The part of the city close to which

we were encamped was a square, measuring about four miles in each direction: it was called the Tartar City, and it contained the Emperor's Winter Palace, situated in an extensive park and surrounded by a wall. There were several gates on each side of the city, and above each gate and each corner of the square there was a lofty structure serving as barracks for the Chinese soldiers, and carrying a number of dummy guns, apparently intended to terrify an approaching enemy. From each gate a broad street ran through the city. The houses were mostly only one story high, and those of the better sort were in the form of a quadrangle, with a courtyard in the centre containing plants and flowers. The better class of houses were well furnished, very much in European style, and contained chairs, tables, couches, mirrors, book-cases, and various other articles. Many of the shops had fronts highly ornamented with carvings in wood, and the goods exposed for sale were frequenty of a very superior description. I saw some beautiful sables and other furs, and also many curious ornaments and works of art in jade, agate, onyx, etc., as well as old enamel on copper.

ORNAMENT OF SHOP FRONT, PEKING

The other division of Peking, styled the Chinese or Outer City, was oblong, and about five miles in length by two in breadth; it was surrounded and divided from the Tartar City by the wall previously mentioned. It contained, near the southern wall, an imposing structure surrounded by marble terraces and steps, and provided with three roofs, covered with dark blue tiles, which produced a striking effect. This building, we were informed, was the Temple of Heaven. It was accidentally destroyed by fire a few years ago. Both divisions of Peking seemed populous, but from



THE TEMPLE OF HEAVEN, PEKING

the width of the streets and the large space occupied by the grounds of the Imperial Winter Palace and by private gardens, it appeared to me improbable that the population of the city could amount to a million persons, much less three millions, as stated in old works on geography. Peking is a very ancient city, and its origin is lost in the mists of antiquity. It would appear to have been founded earlier than the twelfth century, B.C. At first sight its appearance is very grand and imposing, but a closer view reveals the ruinous and dilapidated state of the buildings and the dirty and insanitary condition of the streets. Like most Oriental cities Peking is best seen from a distance, which, in such cases, assuredly lends enchantment to the view.

Towards the end of October the weather became much colder, and we were glad of all the coverings we could procure for our beds at night. During our occupation of the suburbs of Peking we lived in the deserted houses, most of which had a singular contrivance for keeping the inmates warm during the cold winter nights. The bed places were built of masonry, and contained arrangements for keeping up fires so as to heat the whole mass of brickwork forming the bed, which would retain the warmth for many hours. I used one of these masonry bed places, and often had a fire under me when the nights grew cold. We found them most comfortable, and it was easy to regulate the fire so as to maintain a moderate degree of heat.

The treaty of peace with the Chinese Government was signed on the 24th of October, and early in November we quitted Peking and commenced the march back to our ships. We found the little bell tents very cold at night, and although three of us were together in a single tent we could not keep warm except by means of the somewhat dangerous expedient of burning a charcoal fire in the tent all night. In the middle of the day the sun was still

powerful, and our men felt it a good deal on the line of march. We arrived at Tientsin without mishap, and found, to our great satisfaction, that we were to embark on board the gunboats in the river, and go down to our transports by that route, instead of continuing our march to the Taku forts.

After disposing of our mules and carts as best we could, we embarked with our baggage, and in a few hours reached the mouth of the Peiho River, where we anchored for the night. Next day we crossed the bar after some tossing about, and in the afternoon we were transferred from the little gunboat, where we had been so crowded that there was hardly space to move at all, to the capacious *Bentinck* with her large saloon and roomy cabins. In the evening we proceeded on our return voyage, after taking in tow a sailing ship which had a part of our regiment on board. There had been a good deal of wind when we came out in the gunboat, and during the night it became very stormy, so that we were forced to cast off the vessel we were towing.

In the morning it was blowing a gale, and we experienced a heavy sea. The old *Bentinck* laboured very much and rolled frightfully, so that most of us felt very ill, and one was so bad that he took to his berth and remained there all day. Towards noon the weather became worse, hardly any sail could be carried owing to the violence of the storm, and heavy seas frequently broke over the ship. At length a tremendous sea struck her bows, smashing the bulwarks and sweeping overboard the boxes containing the officers' horses. A deluge of sea water descended like a cataract into the engine-room and extinguished the fires, so that steam could no longer be kept up, and the ship began to drift in the direction of the land. Our situation was now full of peril as all command over the ship was lost, every sail having been split or carried away by the furious wind. The Gulf of Pecheli is every-

where shallow, and large vessels cannot approach within several miles of the coast, so that we were in imminent danger of being driven to some point where the ship would have grounded, and would soon have been beaten to pieces by the waves, when all on board must have perished. Happily for us the storm abated towards evening, and we were then able to get up steam again and resume our course. After this the weather became fine, and in a few days we arrived at Hongkong, where we had to remain for some weeks, as the old ship had suffered so severely during the storm as to require extensive repairs.

The troops were accordingly landed at Kowloon, opposite the city of Victoria, and we encamped on a grassy slope close to the sea. I took this opportunity to pay a visit to Canton, to see an old acquaintance who was quartered there, and, having obtained leave of absence for a few days, I embarked at Hongkong in the *Willamette*, a very fast steamer, built like the American river steamers, and fitted out with the greatest comfort and elegance. On our way up the Canton River I saw the ruins of the celebrated Bogue Forts, which were intended to close the way to Canton by the river, but had been destroyed some time before by the British squadron. Further on the land on each side of the river was intersected by numerous creeks which at that time afforded cover and refuge to swarms of pirates. In the afternoon we passed the town of Whampoa, where many ships and great numbers of junks were lying. Another hour's steaming brought us to Canton, and the steamer cast anchor amid a multitude of boats of all shapes and sizes.

The city extended densely along both banks of the river and looked almost as large as Peking itself. I landed on the northern bank, where the bulk of the city lay, and made my way through the narrow winding streets to the 'Heights,' the designation given

to some rising ground beyond the walls, where the British troops were stationed. There I found my friend Captain Hallowes of the 87th Fusiliers, and was hospitably received by him. I stayed a couple of days with him, and saw as much as I could of Canton in that time. The city was closely packed with houses, many of them several stories high, intersected by narrow and tortuous streets, or rather lanes, and surrounded by a wall about thirty feet high, which was quite lost among the buildings. This wall was entirely useless as a means of defence, for the houses of the suburbs overlooked it in many places. The population appeared to me greater than that of Peking, and it was certainly more crowded, being contained in a smaller area. The river which ran through the city was everywhere covered with boats, and a considerable part of the population—more than 100,000 persons I was informed—lived permanently in them. The shops were of a very superior description, and were well worth visiting, especially those dealing in curiosities, which were full of beautiful works of art in ivory, sandal wood, and tortoise shell, embroidered crape shawls, lacquered boxes and cabinets, and other curious and interesting objects. The skill of the Chinese workmen is really wonderful, especially in carving, and a small fortune might easily be spent at Canton in purchasing specimens of it.

A SIKH SEPOY

After my return from Canton we remained for some weeks longer in camp at Kowloon, as the repairs of the *Bentinck* took longer than had been expected. The country near our camp was in a disturbed state, and one of our men, who had gone about half a mile from camp, was suddenly attacked by six or seven Chinese

armed with swords, and received several severe wounds before he could do anything in self-defence. But though unarmed and very badly hurt, the brave fellow wrested a sword from one of his assailants and wounded him, upon which they all fled, and he was just able to regain the camp, where he was taken to hospital almost in a dying state, but, I am glad to say, eventually recovered. A party of our men was immediately sent in pursuit of the perpetrators of this outrage, but they could not be found, nor was any attempt ever made (so far as I heard) by the authorities at Hongkong to discover them and bring them to justice.

Those authorities, however, acted very differently in another case that happened about this time. A collision had occurred during the night between a party of men of the 8th Punjab Infantry, who were patrolling the vicinity of the camp at Kowloon, and a band of Chinese pirates or robbers prowling about in search of plunder. Two of the latter were killed, and although the guard had acted only in self-defence, the Hongkong authorities ordered their arrest and trial, and incredible as it may appear, the unfortunate men were sentenced to four years' imprisonment! This sentence excited general astonishment and indignation throughout the army, particularly as a Chinaman, convicted of piracy and murder about the same time, received the same punishment as was inflicted upon these innocent men, merely for obeying their orders and defending their lives! The Hongkong judges and juries at that time seemed to act upon the principle that if a Chinaman killed a foreigner it was hardly a crime at all, but that if a foreigner killed a Chinaman it was wilful murder. The same kind of thing may often be observed in India, where some officials seem to be possessed by the idea that they cannot be just towards the natives unless they are unjust to foreigners. When the repairs

of the *Bentinck* were completed we re-embarked and after a pleasant and prosperous voyage we arrived at Calcutta early in February and encamped on the 'maidan' near Fort William, preparatory to going up the country to our appointed station.

CHAPTER VII

I obtain six months' leave of absence and proceed to England—My marriage—My wife and I start for India and reach Calcutta in September 1861—I am ordered to Jessore—A fatiguing night ride—A fever-stricken station—I return to Calcutta—My appointment to the 28th Native Infantry proceeding on active service to Sylhet—Rebellion among the Khasia and Jyntia Hill Tribes—Causes which led to it—I part from my wife, who remains with friends in Calcutta, and join the left wing 28th Native Infantry—Our voyage through the 'Sundarbans'—The Burrisal guns—We land at Luckaie and march across country to Sylhet—Our march towards Cherra Poonjee—My attack of sunstroke—We are ordered to Nongtalong in the Jyntia Hills—Our difficult and dangerous march across country—We reach Jyntiapur and ascend the mountains to Nongtalong—I accompany Captain Robinson in a reconnaisance during which we are attacked by the enemy and nearly cut off—Assault and capture of the enemy's stockade at Ooksai—I am wounded in action next day—Captain Robinson and I visit the headquarters of the regiment at Jyntiapur and are badly scared while returning—I am appointed to the 44th Native Infantry, and join them at Jowai.

About the middle of March 1861 I obtained six months' leave of absence on urgent private affairs, and left Calcutta for England by the P. and O. Company's steamer *Malta*. At that time a trip from India to England and back by P. and O. steamer was an expensive business, a single first-class passage from Calcutta to Southampton costing no less than £117. Since then the P. and O. fares have been greatly reduced, and in course of time they will no doubt be brought still lower by the pressure of competition, as there are now several other lines of steamers providing good accommodation and an excellent table for passengers at very moderate rates.

The overland route was new to me as I had come to India *viâ* the Cape, and I was much interested by all I saw at Madras, Point de Galle, Aden, and especially in Egypt, where we were

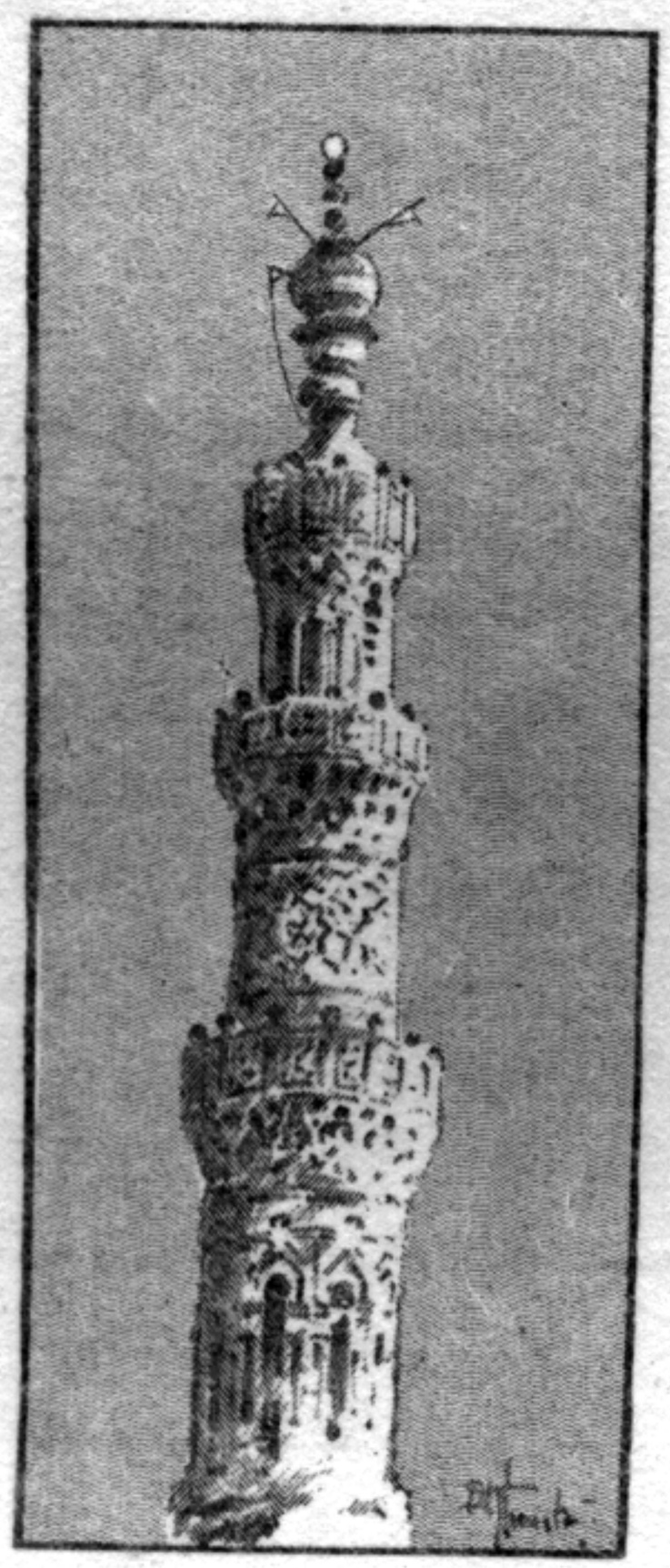
delayed for several days, so that I was able to visit the Pyramids and to see a good deal of Cairo and Alexandria. I continued my homeward journey by steamer to Marseilles through the straits of Messina and Bonifacio, passing Caprera, the island home of Garibaldi, who was then at the zenith of his fame. I stayed a couple of days at Marseilles and visited Toulon, where I saw part of the French fleet, including the famous ironclad *La Gloire* and some floating batteries which had been used in the Crimean war and were dinted by Russian shot. I then travelled by train to Paris, and after spending a couple of days there in seeing all I could of the beautiful city, I went on to London by way of Dieppe and Newhaven.

SPHINX AND PYRAMID

EGYPTIAN LADIES

I had little more than three months at home, and my time was fully taken up in paying visits to different relatives and friends. In June 1861 I married Miss Mary Astor, youngest daughter of the late Joseph Astor, Esq., of Jersey, and niece of the late John Jacob Astor of New York, and in the beginning of August my wife and I started

from Southampton on our voyage to India by P. and O. steamer. We had a pleasant journey, and saw a good deal of Gibraltar, Malta, and the other places where the steamers stopped to coal. One day some excitement was caused by a Lascar falling overboard; the sea was pretty calm and the man was able to keep up until rescued by a boat from the steamer. His accident did not seem to have done him any harm, for on being brought on board again he immediately asked for food. We arrived at Calcutta early in September, and remained there for some time, as there was no appointment immediately available for me.



MINARET IN CAIRO

Being thus unoccupied, I resumed the study of Hindustani with the assistance of a moonshee, and early in November I passed the language examination then known as the P.H. ('passed in Hindustani'). A day or two after I received a sudden order to proceed at once to Jessore, a civil station some distance north-east of Calcutta, to take the duty of Dr. Morgan, the civil surgeon, who was dangerously ill. As the order was urgent and admitted of no delay, my wife went to stay for a time with some friends in Calcutta, while I started for Jessore alone. I travelled for some distance by palanquin, but on arriving at a place about forty-five miles from Jessore I received a letter from the magistrate of the district, urging me to come on as quickly as possible and telling me horses had been sent out for me. It was growing dusk, and a ride in the darkness over a road

which had been cut up by the rains was anything but safe or easy. Still the case was urgent, so I mounted and started off, and after a very fatiguing and risky ride I reached Jessore a little after midnight, and then found that my unfortunate predecessor had died several hours before. In the morning I assumed temporary medical charge of the station, and went to live with Mr. Dale, judge of the small cause court, who had very kindly offered to take me in.

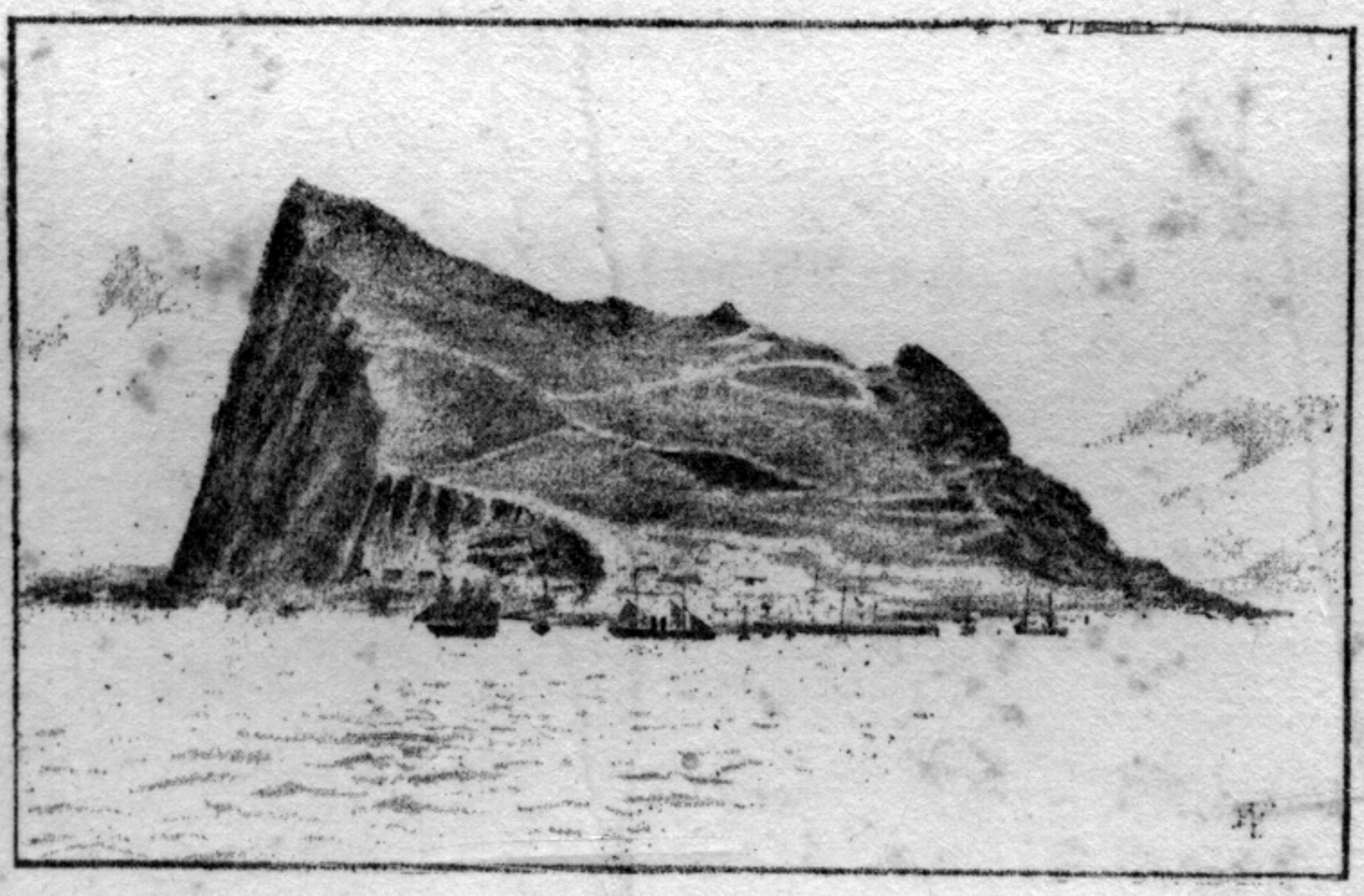
Jessore was at that time a very unhealthy station; it was surrounded by swamps and rice-fields and intersected by a stagnant river, which generally exhaled a horribly offensive odour. The inhabitants of the station and district, both natives and foreigners, suffered repeatedly from malarious fever, and I had several attacks of the prevailing malady during my short residence there; indeed I never felt well throughout my stay at Jessore. To my great satisfaction I was relieved at the end of January 1862 by another medical officer who had been permanently appointed to the station, and I at once returned to Calcutta.

ASCENT OF THE PYRAMID

A few days after I found myself appointed to the medical charge of the left wing 28th Regiment Native Infantry, which was under orders to proceed to Sylhet, by steamer, to assist in suppressing a rebellion which had broken out among the tribes inhabiting the Khasia and Jyntia Hills in Eastern Bengal. I was thus compelled a second time to part from my wife, who was unable to accompany me, as I was going on active service. She accordingly

remained at Calcutta with some friends, and I joined the wing to which I had been appointed.

The rising of these hill tribes was mainly due to the ill-advised action of the Bengal Government in imposing the income-tax (then first introduced into India by Mr. Wilson, the Finance Minister) upon the simple inhabitants of the hills, who had no incomes in the proper sense of the term and could not understand the meaning of such a tax. It so happened that, at this very time, the Sylhet Light Infantry Battalion, stationed at Cherra Poonjee in



GIBRALTAR

the Khasia Hills, was being reduced in strength with a view to its conversion from an irregular local corps into a regular regiment of the Bengal Native Army. The hillmen, in their ignorance and simplicity, believed this regiment to be the only force at the disposal of Government, and, seeing it considerably reduced in numbers, imagined that the ruling power was growing weak and might be successfully resisted. The Bengali tax-collectors and other subordinate officials began in their customary way to practise oppression and extortion upon the hillmen, and so, in the

beginning of 1862, a revolt began, which continued for fifteen months, caused heavy losses, and was finally suppressed, with much difficulty and great expense, by the employment of 5000 or 6000 troops and police.

CAIRO

The day after I joined the wing of the 28th Native Infantry we started from Calcutta in a river steamer, towing a flat with our men on board, and proceeded down the Hooghly River in order to reach the 'Sundarbans,' through which our course lay. This name is applied to the curious maze of islands and channels lying be-

tween the Hooghly on the west and the Megna on the east, a distance of more than 150 miles. Through these innumerable channels the waters of the great rivers Ganges and Brahmaputra find their way to the ocean. The islands are covered with dense jungle down to the water's edge, and are the home of the tiger, buffalo, rhinoceros, etc. Wild pig, deer, monkeys, and serpents abound in these islands, and the channels between them swarm with crocodiles. We took several days to traverse this intricate network of channels, which in some places were so narrow as hardly to admit of the passage of the steamer and flat abreast, and so tortuous that in turning some of the bends we touched the bank on both sides. Several times we grounded or ran ashore, and once or twice we collided with native boats, but no great damage was done, and on the 10th of February we reached Burrisal, and remained there the rest of the day waiting for a pilot.

Burrisal is a small civil station in the Sundarbans, the centre of a district in which communication is almost entirely carried on by water. It is chiefly remarkable on account of the curious and hitherto unexplained phenomenon known as 'the Burrisal guns.' These are noises resembling the distant reports of heavy cannon which are occasionally heard in this district. The cause producing these sounds has never been discovered, and various opinions have been put forward regarding them. Some think the sounds are caused by the fall of large masses of the river bank, others believe them to be due to submarine explosions caused by volcanic action, but the phenomenon is not satisfactorily explained by either theory, and its nature and cause still remain matters of conjecture.

We left Burrisal on February 11th, and though frequently aground through the carelessness or ignorance of our pilot, we succeeded in reaching Dacca, the chief city of Eastern Bengal, on the following day. This was once a place of great extent and

importance, as the governors of Bengal under the Mogul emperors made it their residence and seat of government. Extensive ruins buried in the surrounding jungles still attest its former magnificence, but its prosperity departed during the troublous times of the last, and the beginning of the present century, and its trade and population became very much diminished. After staying a day at Dacca we continued our voyage, but the river grew shallow, and on February 15th we were obliged to land at a place called Luckaie and march across country to Sylhet, a distance of about fifty miles. At Luckaie we received a letter from the magistrate of Sylhet, urging us to march on with all possible speed, as the rebels had come down from the hills and burned a police outpost, killing several police and villagers. Our march occupied several days and was very fatiguing on account of the number of rivers and streams we had to cross, and the state of the country, which in most parts resembled the bottom of a dried-up cattle pond. Supplies for our men and ourselves were obtained with great difficulty, as the country people, unaccustomed in this remote district to the passage of troops, deserted their villages at our approach and fled to the jungle, as if we had been an invading enemy.

On the 22nd of February we crossed the Soorma River and reached the station of Sylhet, where we found that we were to march up to Cherra Poonjee, in the Khasia Hills, as that station had been almost entirely denuded of troops, its ordinary garrison having taken the field against the rebels. We were detained at Sylhet several days by difficulties of transport and by heavy rain, but we commenced our march on the 25th, and on the following day we passed through a dense jungle consisting of grass and reeds ten or twelve feet high, with a few trees here and there, until we reached a place called Companygunge. From thence the Khasia

Mountains were plainly visible stretching east and west, like a gigantic wall of rock, seamed here and there by magnificent waterfalls and covered in many parts by luxuriant vegetation.

As I had charge of the officers' mess, I went into a neighbouring village immediately after our arrival, in order to purchase supplies. The sun was very hot, and though my head was well guarded by a felt helmet, I had imprudently taken off my coat, so that my back was insufficiently protected, and I soon began to feel sick and giddy. I was just able to regain the mess tent when I fell insensible to the ground, much to the astonishment and dismay of my comrades. The application of cold water to my head soon brought me round, and in a day or two I quite recovered from the effects of this slight attack of sunstroke.

Heavy rain fell during the night and wetted our tents, so we could only make a short march on the 27th, and we encamped at Pundua, a place a few miles nearer the hills. It was surrounded by swamps, and looked as if it must be a very hotbed of malarious fever, yet none of our men fell sick, and though I visited Pundua subsequently on several occasions, I never contracted fever there. It appears that, for some unexplained reason, the country lying below the southern border of the Khasia and Jyntia Hills is far less unhealthy than that extending along their northern margin. The remarkable immunity of Pundua from fever was noticed by Sir Joseph Hooker, K.C.S.I., and was recorded in his well-known work, *Himalayan Journals*, p. 480.

At Pundua an order reached us from Colonel Richardson, who commanded the troops in the field, desiring our commanding officer to send one company up to Cherra Poonjee, and to join him at Nongtalong, in the Jyntia Hills, with the remainder of the wing as speedily as possible. Upon this Captain Robinson, who commanded us, determined to march eastward across country to

the point indicated, instead of returning to Sylhet and proceeding by the regular road. We took this line accordingly, but met with great difficulties from the nature of the country, which was traversed by numerous rivers and streams from the hills swollen by the recent heavy rain, all of which we had to cross by boat or by fording, as they were at right angles to our line of march. One night our camp was nearly inundated by a stream which suddenly rose more than twenty feet in consequence of a storm. During one of our marches we had to ford a mountain torrent about four feet deep, running with a force and rapidity that would have instantly swept any single man off his legs. We were only able to wade across by linking arms and thus opposing the united strength of ten or twelve men to the force of the torrent.

The country in many parts was so swampy that we were unable to proceed, and were forced to traverse the skirts of the hills to avoid the morasses. On one occasion we nearly lost one of our baggage elephants in a deep bog; the great beast sank up to its belly and seemed unable to extricate itself, till large branches of trees were cut and thrown within its reach. The elephant seized these branches with its trunk and thrust them beneath its body and legs, so that eventually it got firm footing and dragged itself out of the bog. At length, after having spent a week in marching a distance of about forty miles, and endured much toil and many hardships and privations, we arrived at the old town of Jyntiapur, situated at the foot of the hills and only a few miles from our place of rendezvous. The Rajah of Jyntiapur was formerly the ruler of a considerable territory in this part of India, and had his residence and seat of government in this old town. It was in a very decayed and ruinous condition when I saw it, and contained hardly anything worthy of notice except some enormous stones, over 20 feet in length, which had been set up in past ages, possibly for sacri-

ficial purposes, or to commemorate some distinguished man or some important event.

On the 7th of March we left Jyntiapur and proceeded in boats up a river for some distance, then across a 'jheel,' or shallow lake formed by the late heavy rains, and then through a narrow channel barely wide enough for small boats, with high grass jungle on both sides, sometimes meeting overhead. The water became very shallow as we approached the hills, and at length we had to leave the boats and march along a pathway that soon brought us to the foot of these hills, which rise abruptly from the plain. A very steep ascent for about 1500 feet through the forest covering the hillside was succeeded by several slight ups and downs, ending in a stiff climb of a few hundred feet. This climb brought us to the plateau on which was perched the village of Nongtalong. We took up our quarters in this village, a very commanding position on the edge of a precipice, for it overlooked the plains at an altitude of about 2500 feet. The people of the village were friendly, but they would most probably have been forced to join the rebels had we not arrived to protect them. Major Rowlatt, the chief civil officer of the Khasia and Jyntia Hills, and Colonel Richardson of the 44th Regiment Native Infantry, with a party of his men, met us at this place, and arrangements were made for a combined attack upon a strong stockade erected by the enemy in a difficult position at Ooksai, a few miles distant.

Early on the morning of the 9th of March, Captain Robinson with about thirty men left Nongtalong to reconnoitre the enemy's stockade at Ooksai, and I accompanied the party. We marched in single file along a narrow path which ran through dense jungle in a westerly direction, and after many ascents and descents we reached a narrow valley more than 1000 feet deep, the sides of which were so steep that in some places we had to let ourselves

down holding trees and creepers, and in going up the other side we were sometimes forced to climb hand over hand. A dense forest covered the hills and obstructed our view, but soon after we had passed the ravine we became aware of the presence of the enemy, who sent a flight of arrows at us from the cover of the jungle. No one was hit, and a volley of musketry from our men drove off the rebels. It was evident, however, that they were all round us in numbers, as we could hear them calling to each other from the neighbouring hill tops, so Captain Robinson determined not to advance any further. We accordingly commenced our retreat, followed by the enemy, who attacked us in flank just as we reached the ravine, but were driven back by a few shots from my rifle and the muskets of our men. As we descended the steep hill side our movements were quickened by a shower of rocks which came crashing like round shot through the jungle. When we reached the bottom, the enemy assailed us with arrows and stones from both sides of the ravine, and raised yells of triumph, evidently thinking they had caught us in a trap. It was plainly impossible to return by the direct path in the face of the enemy, so after a hurried consultation we struck off to the right, and after much difficulty and many narrow escapes from the masses of rock which the enemy incessantly precipitated upon us, we at length succeeded in reaching the top of the steep ascent and extricating ourselves without loss from this dangerous spot. Then the enemy drew off, and we reached our camp without any further molestation. It was most fortunate that no one in our little party was disabled on this occasion, for every man had to fight, and it would have been equally impossible to carry on with us any badly wounded men, or to abandon them, so that the affair might have ended in the complete destruction of our little party.

On the following morning we marched with nearly all our men

to co-operate in the attack on the enemy's stockade at Ooksai, as previously arranged. We crossed the ravine without opposition and soon arrived in front of the stockade, which was built of stout palisades about nine feet high, bristling everywhere with sharp bamboo spikes. It was carried across a neck of level ground with a precipice on each side which effectually prevented any attempt on our part to turn the defences, and the ground in front of it was everywhere stuck full of 'panjees'—lancet-shaped bamboo spikes several inches long, which would penetrate the upper leathers of our stout walking boots. As we came up we heard the sound of musketry on the other side of the stockade, showing that Colonel Richardson had already commenced his attack. The rebels seemed confused by an assault from two opposite points, and we met with only slight resistance on our side. We soon entered the stockade by scrambling over the palisades, and presently met our friends, who had been equally successfull, though their loss had been greater than ours. A few of the enemy were killed, but most of them escaped by going down the precipices where our men could not follow them. A small detachment was left to hold the captured stockade, and the remainder of the troops, after a halt for rest and food, took the roads to their respective camps. During our return to Nongtalong, while crossing the deep ravine already mentioned, we were again attacked by the enemy with arrows and large masses of rock, and several of our men were wounded.

Next morning we marched towards Ooksai with a supply of provisions for the party left there, and met with no opposition until we were ascending the further side of the ravine. We had got about half way up when a crashing noise was heard in the jungle above, and the next instant some large masses of rock came down upon us. The men in front of me managed to get

out of the way in time, but I was less fortunate, and before I could do anything to avoid it I was struck down senseless by a large fragment of rock. When I regained consciousness I found myself lying in the jungle in rather a sorry plight. My head was dizzy from the blow it had sustained, my body and limbs were badly bruised, and I presently found that the last joint of the middle finger of my left hand was completely crushed. My felt helmet (one of Ellwood's) was quite flattened: it must have borne the weight of the blow, and most probably it saved my life. I rose with some difficulty and made my way to the top of the ascent where the rest of the party were assembled. The enemy had disappeared, and after a short rest we went on to Ooksai, where I had my wound dressed by a native medical subordinate, and as it was rather late we remained there for the night. On the following morning we returned to our camp at Nongtalong by a different route, so as to avoid the dangerous ravine where we had been so often attacked.

Soon after this the right wing of the 28th Regiment Native Infantry, under the command of Colonel Dunsford, C.B., arrived at Jyntiapur, and Captain Robinson, taking me with him, went down to see them and to obtain orders as to our future proceedings. We spent the day with them very pleasantly, and Dr. Jowett, the surgeon of the regiment, after examining my wound, reassured me by deciding that amputation of the injured finger was not required. Next morning we started on our return to Nongtalong, having an elephant to convey us as far as the foot of the hills. As we approached the ascent we were startled to perceive a party of men apparently waiting for us about half way up. This made us very uneasy, as, although bands of rebels were known to be near our post, we had imprudently neglected to bring arms with us, and the two Sepoys who accompanied us were also un-

armed. However, there was no help for it, so we armed ourselves with heavy sticks which we cut in the jungle, and then proceeded on our way. On reaching the spot where the men had been observed, we found, to our great relief, that they were some of our own coolies, engaged in carrying stores up to our post. Had they been a party of rebels we should most likely have lost our lives in consequence of our carelessness.

In a few days more I received orders to proceed to Jowai in the interior of the Jyntia Hills, and to take medical charge of the 44th Regiment Native Infantry, which was vacant, as the medical officer of the corps had received the appointment of Political Agent of Manipur. I accordingly quitted Nongtalong on March 17th, with my baggage and a small escort who were to accompany me to Umwai Poonjee, where I should receive a guard of the 44th to take me on to Jowai. I saw nothing of the enemy on this journey, but while passing through some dense jungle I perceived the tail of a python or rock snake hanging down the side of a large rock which overtopped the bush. As we came up it glided over the rock and was lost to view on the other side. I found Major Rowlatt, the Deputy-Commissioner, at Umwai Poonjee, and went on with him to Jowai, where we arrived rather late in the evening, and I joined my new regiment, which consisted chiefly of Goorkhas, and had been an irregular corps styled the 'Sylhet Light Infantry Battalion.' It had remained faithful during the mutinies of 1857, and had defeated and broken up a body of mutineers who entered the Sylhet district. When the native army was reorganised, this corps was included as the 44th Regiment of Bengal Native Infantry.

CHAPTER VIII

Our military operations in the country around Jowai—Arrival of General Showers, C.B., with full civil and military powers—I am sent to Cherra Poonjee with our sick and wounded—My wife joins me there in June—A false alarm—Prodigious rainfall at Cherra Poonjee—Return of the general and temporary cessation of military operations—Close of the rainy season—Grand scenery at Cherra—The Moosmai Falls—Coal Mine Hill and its caves—I am ordered to Jowai in October—A body of the rebels destroy Terria and threaten to attack Cherra—Alarm of the residents—Military operations recommenced in January 1863—We attack and destroy the rebel stockades at Oomkoi and Nonglaraí.

On the following morning a force consisting of part of the 28th and 44th Regiments, under the command of Colonel Dunsford, marched out to examine some of the neighbouring villages and to destroy the stockades which the enemy were reported to have built there. Leaving the plateau on which Jowai is situated, we descended into the valley of the Montadoo River which winds round it, and continued our march, following the river for some distance, after which we ascended the other side of the valley and entered a large village which was nearly deserted. Two or three miles further on we found the village of Latoobir, where the enemy had erected stockades but had not stayed to defend them. We destroyed these abandoned stockades, and returned to Jowai by the Montadoo valley. The hills we had traversed were very bare of trees and covered with short grass, the villages were few and of small size, and the country seemed to be very thinly peopled.

Next day we again marched from Jowai, taking the same direction, but keeping along the valley until the Montadoo River

turned southward. Then we continued our march towards the east over undulating hills with isolated groups of pine trees scattered over them, and towards evening we arrived at the village of Shamfong, where one of the enemy's stockades had been recently taken by a party of the 44th under Colonel Richardson. At this place, which was quite deserted, we passed the night, though not without disturbance, as there was a party of the enemy in a jungle close by who sent arrows and matchlock balls at us as we sat round a fire after dinner, and also shot at our sentries during the night, but fortunately did no mischief. In the morning we marched on to a village called Ralliong, and as we advanced the scenery became finer and the hills more thickly wooded. We crossed a deep ravine, and on reaching the crest of the hill we saw Ralliong in front of us at a short distance. It was stockaded and occupied by the enemy, who opened fire upon us as soon as we came within range. An immediate assault was ordered, and the stockades were carried in a short time with trifling loss on our side. The enemy mostly escaped into the jungle which surrounded the place, but they remained in close proximity to us, and gave some annoyance during the night by shooting at our sentries.

Next day we halted and destroyed the stockades at Ralliong, while a reconnaissance was pushed forward towards a village called Munsoo, which was reported to be strongly fortified and held by the enemy in force. As our party on their return confirmed this report, the whole force marched to Munsoo on the following morning, expecting to meet with considerable resistance, but to our surprise the rebels, after firing a few shots, abandoned their stockades and escaped into the jungle. Our only casualty was the commanding officer's dog: the poor animal received a bullet through his face and had to be destroyed. We occupied the village and its defences, and next day marched back to Jowai,

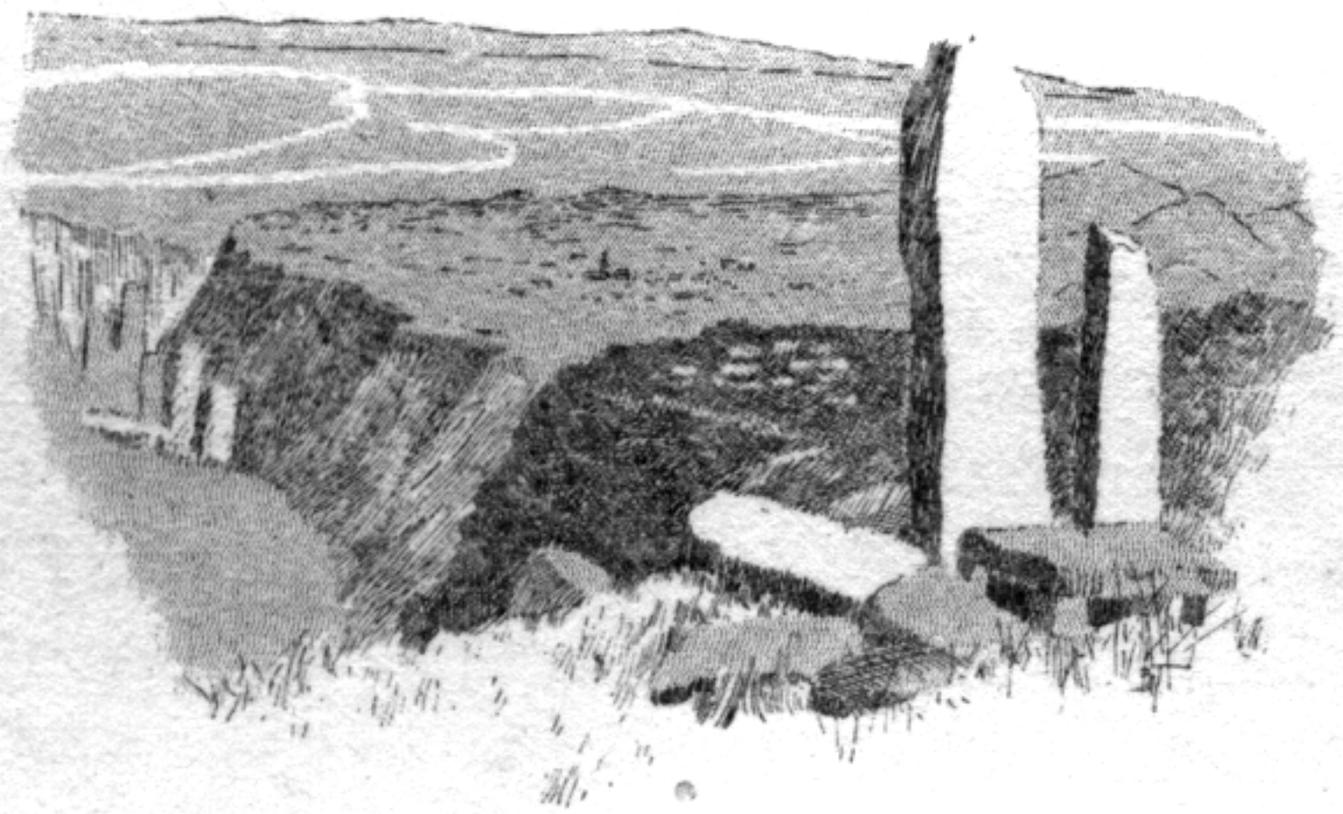
leaving a small garrison in Munsoo to prevent its re-occupation by the enemy, which had already occurred more than once. To my great satisfaction I now learned that I had been permanently appointed to the medical charge of the 44th Regiment Native Infantry in general orders by the commander-in-chief, so that I could remain with the regiment as long as it suited me to do so.

Soon after our return to Jowai, General Showers, C.B., arrived to take command of all the troops in the field and direct the operations. He had also received from the Government of Bengal the civil powers of a commissioner (or chief civil officer of a division), so that his authority was supreme both in civil and military matters. As my wound was still very painful and my left hand quite disabled from it, the general allowed me to go to Cherra Poonjee, the permanent station of my regiment, with the sick and wounded of our force, and I accordingly left Jowai on March 29th in company with Captain Buist, the adjutant of the 44th Native Infantry, who had been appointed by the general to act as commissariat officer to the field force.

We left Jowai early in the morning, taking with us the sick and wounded and a suitable guard, and crossing the Montadoo River we continued our march along the undulating hills until we reached the deep valley of the Mungut, into which we descended, and crossing the river pursued our way to the west along a ravine flanked on both sides by lofty and precipitous hills. Emerging from the ravine we reached our halting place at Dingling, and put up in a shed which had been built on the bleak hill side for the accommodation of travellers. Next day we made a long march of about eighteen miles over an undulating country, very bare of trees and apparently thinly inhabited. About half way we passed the Rablong Hill, one of the highest points in the country. We

halted for the night at the village of Lailingkot, remarkable for its iron works, and on the following day we made another long march of nineteen miles to Cherra Poonjee, passing through some grand and beautiful scenery on the way. The country was intersected by huge ravines with steep precipitous sides, which in some instances fell perpendicularly for several hundred feet.

As we approached the station the road passed along the side of a forest-clad hill on which stood the Khasia village, or 'Poonjee,' of Cherra, and after winding round some lower hills, on which we saw the Mission Station and the European cemetery, emerged



CHERRA POONJEE

upon a plateau about three miles in length and two miles in breadth, upon which the station was spread out before us. The lines of the native troops, the regimental hospital, and the huts of the grain dealers, oil sellers, and other petty tradespeople, who supplied the wants of the soldiers, lay to our right; the white houses of the European residents, some of them prettily situated among trees and shrubberies, were scattered over the plateau in different directions; and in the centre stood the church with its lofty spire overlooking the settlement.

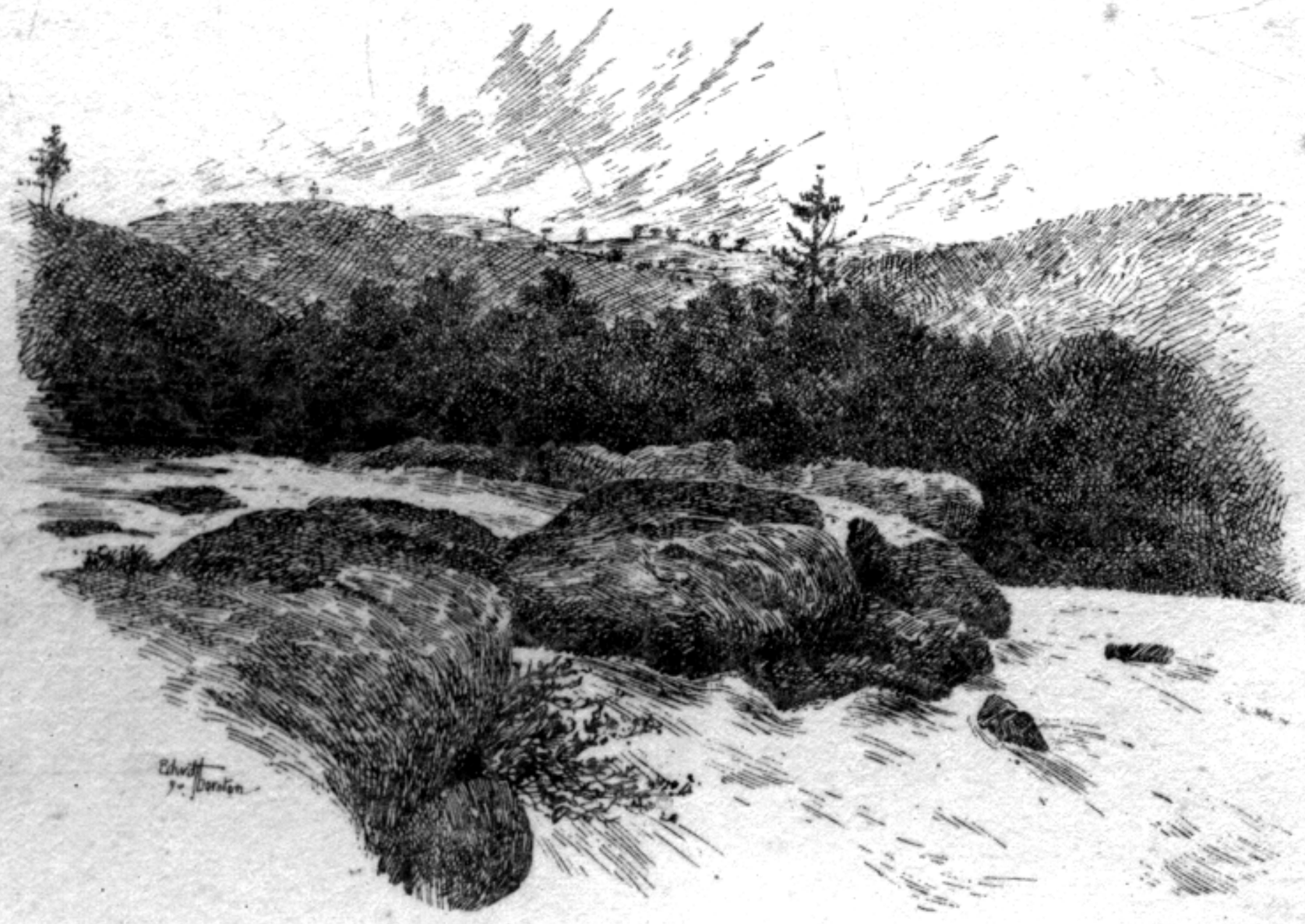
On our arrival Captain Buist and his wife very kindly invited

me to stay with them until I could take a house for myself; they had a charming residence embosomed in trees and reminding one of English homes far more than houses in India generally do. I was now appointed to the medical charge of the jail, police, and other civil establishments at the station, in addition to my military medical duties. In many Indian stations the medical officers of the Indian service hold civil appointments as extra charges, in addition to their regimental duties, and of course this is necessarily the case at places where only a single medical officer is stationed. These combined civil and military appointments are much appreciated, not only on account of their extra allowances and emoluments, but also on account of the greater opportunities of medical and surgical practice which they afford.

After a time I moved into a small house near the regimental hospital, and proceeded to get it ready for my wife's arrival. She had remained with friends in Calcutta, and came up by steamer as soon as I was ready to receive her. In June I went down to Chattuck, where the river steamers stopped, met my wife there, and brought her up to my little house at Cherra, where we settled down very comfortably.

In July we were alarmed by a report that a body of the rebels had reached the village of Moflong, about eighteen miles distant, and intended to attack the station during the night. The danger appeared serious, as most of our troops were absent, and there were only a few Sepoys of the 44th and some native police available for the protection of the station, which was far too extensive to be properly guarded by so small a number. In this unlooked-for emergency we armed our native servants and kept on the watch during the greater part of the night. All remained quiet, however, and in the morning we ascertained that it had been a false alarm.

The rains set in early in this part of India, and the rainfall is really prodigious, as the southern face of the Khasia and Jyntia Hills receives the contents of the heavy clouds which come up from the Bay of Bengal. They break upon this rocky wall, 4000 feet high, in torrents of rain, which, from the commencement of the rains in April to their termination in September, amount to some hundreds of inches, and are probably unequalled in any other part of the world. Sir Joseph Hooker, during his visit to Cherra,



NEAR CHERRA POONJEE DURING THE RAINS

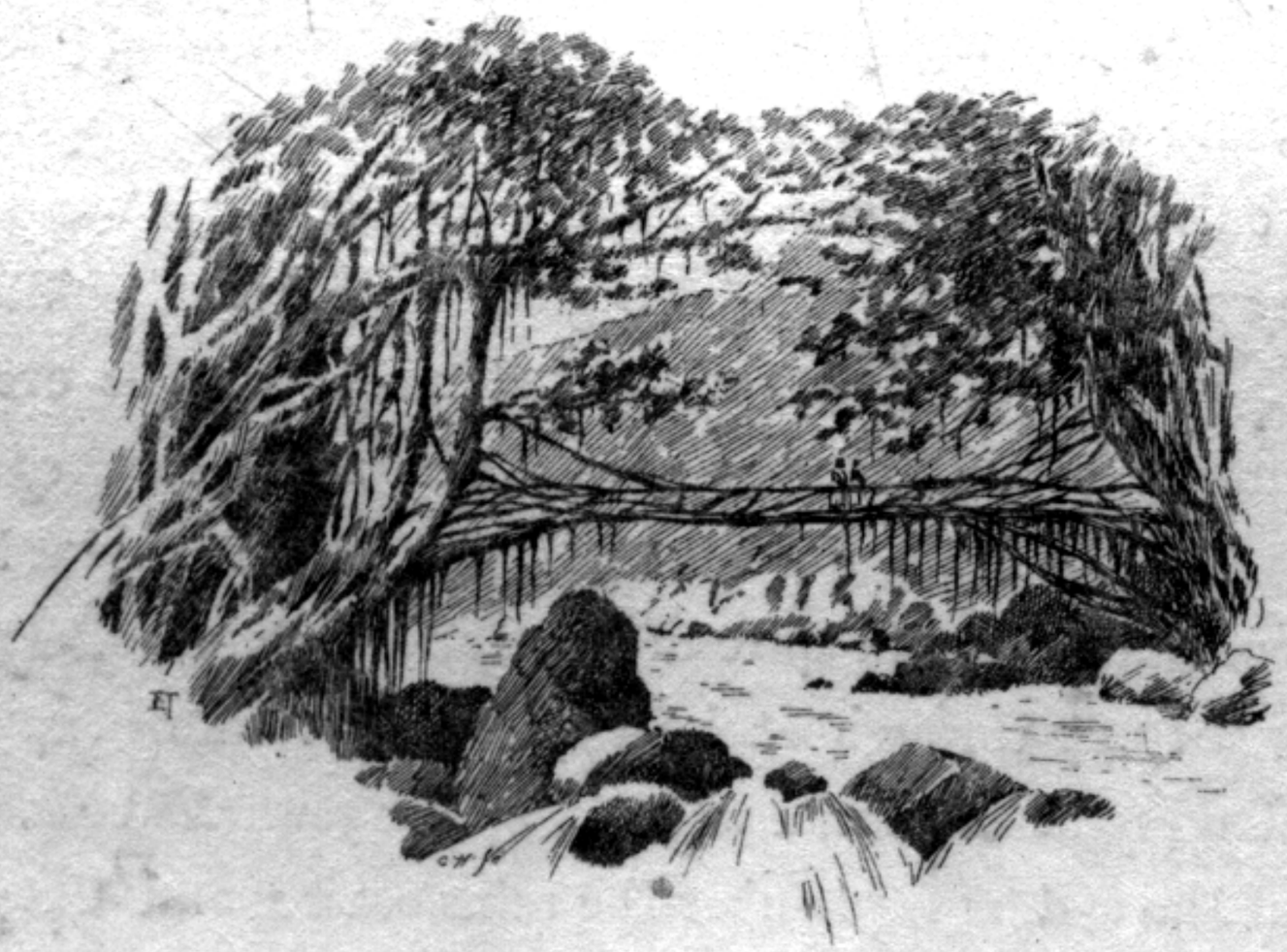
recorded a rainfall of 30 inches in one day and night, and upwards of 500 inches during the seven months of his residence there (Hooker's *Himalayan Journals*, p. 491). This enormous rainfall has swept away most of the soil on the Cherra plateau, so that large areas of bare rock are to be seen in many places. The numerous streams are raised many feet in a few hours, and become raging torrents precipitating themselves over the sides of the plateau at different points, and carrying off the deluge of rain so completely that an hour or two after the rain ceases the roads are

dry enough for comfortable walking. The setting in of the rains is generally accompanied by violent storms in which the thunder and lightning are incessant, and the wind so strong that even buildings of solid masonry may be felt to tremble under it!

During the rainy season the military operations against the rebels were necessarily discontinued, and the general with his staff returned to Cherra, leaving the troops to occupy certain selected positions in the Jyntia Hills until the cessation of the rains should permit the resumption of active operations. I may here explain that the sick of my regiment were sent to Cherra as opportunities occurred, and were treated by me in the regimental hospital: this was the only practicable arrangement, as the corps was split up into many separate detachments to garrison different points in the Jyntia Hills. As my duties compelled me to go out every day, and frequently several times a day, I was much exposed to the weather. During June, July, and August it rained in torrents almost incessantly, and in spite of (so called) waterproof clothing I generally got wet through at least once a day. This exposure at last affected my health and I was laid up for several weeks.

About the end of September the rains ceased, and the weather became very fine, so that we could fully enjoy the views of the splendid scenery around us. Towards the east the rocky plateau of red sandstone on which the station was situated sank abruptly into a magnificent ravine 3000 feet deep; its sides were almost everywhere clothed with forest, but in some parts they were sheer walls of rock for hundreds of feet. During the rains many cascades fell down the sides of this ravine, uniting at the bottom to form a river which pursued its rapid course to the plains. This river was spanned in one spot by what was called 'the living bridge,' which was formed by the interlaced and united roots of two fine banyan or Indian fig-trees, one of which grew on

each bank of the stream. This was just below the station, but a descent of 3000 feet had to be made to reach it. Nevertheless it was occasionally visited, and a more charming spot for a picnic was not to be found in the neighbourhood of Cherra. Numerous pathways intersected the sides of the ravine and were used by the natives of the country, who carried heavy loads on their backs up and down with perfect ease and security, though in some places the only pathway was a bamboo ladder tied to the face of a perpendicular cliff.



THE LIVING BRIDGE, BELOW CHERRA POONJEE

To the south the Cherra plateau was bounded by another similar ravine in which were some very remarkable waterfalls called the Moosmai Falls. During the rains these falls were a magnificent spectacle, but they could very seldom be seen owing to clouds and mist. On rare occasions they became visible, and then many great bodies of water would be seen falling into the ravine at different points, bounding from ledge to ledge, dashing over immense masses of rock, and finally falling down a tremendous precipice more than 1000 feet into the valley below. So great was the fall that the water was dispersed in mist and spray before

it reached the bottom. The Khasia village of Moosmai was situated at the head of this ravine, and the road from Cherra to the plains passed through the village.

To the west of the station was a long wooded eminence commonly called the Coal Mine Hill. It consisted chiefly of limestone, and contained some curious caves, which I took pleasure in exploring. One of these caves was a circular hole in the limestone rock, about 30 feet in diameter and 100 feet deep, and had apparently been formed by the action of a small stream of water which trickled down one side of it. The floor of this cave could be reached from below by an opening in the rock, and it was a favourite spot for picnics, although the surrounding jungle was infested by tigers. During the rains these animals were driven by inundations from their usual haunts in the plains, and came up into the hill country. They found shelter in the numerous forest-clad valleys, and frequently made their way into the station, where they prowled about the roads, killed and devoured any stray cattle they found, and sometimes even preyed upon the natives themselves. They were occasionally caught in traps built of stout logs, with a sliding door at one end, which was so contrived as to fall behind the tiger after he had entered the trap and seized the animal (usually a goat) which had been tied up inside to serve as a bait.

The Coal Mine Hill derived its name from a large seam of coal existing there close to the surface of the ground. It was worked in a rude fashion by the Khasias, partly for their own use and partly on account of the European residents, to whom the coal was sold at a very cheap rate (Rs. 8 per 100 maunds of coal, or about four shillings a ton). The coal was reached by horizontal borings into the hill side, wherever the mineral showed itself. It was present in considerable quantities and its quality was excellent.

This seam of coal apparently extended along the southern border of the Khasia and Jyntia Hills for a great distance, as I met with it subsequently at Satoonga more than sixty miles to the east of Cherra. We thus had close at hand an abundant supply of cheap and excellent fuel, and were able to keep up coal fires in our houses all through the year. They were especially necessary in the rainy season on account of the excessive humidity of the air at that time.

A pleasant walk over the grassy hills to the west of the Sepoy lines led to the Khasia village of Mamloo, situated on the edge of a magnificent valley with perpendicular cliffs of red sandstone seamed by numerous cascades. Mamloo was closely surrounded by trees and defended by a stone wall, beneath which a sort of tunnel through the rock gave entrance to the village. The great valley which lay below extended down to the plains of Sylhet, and contained many plantations of orange trees. At its entrance was the large village of Chela perched on the steep hill side just above the Boga Panee River, which there enters the plains. Chela is an important trading mart of these parts, and it contains a considerable population. A great trade is carried on there in lime, oranges, potatoes, betel nut, and other produce of the Khasia hills and valleys.

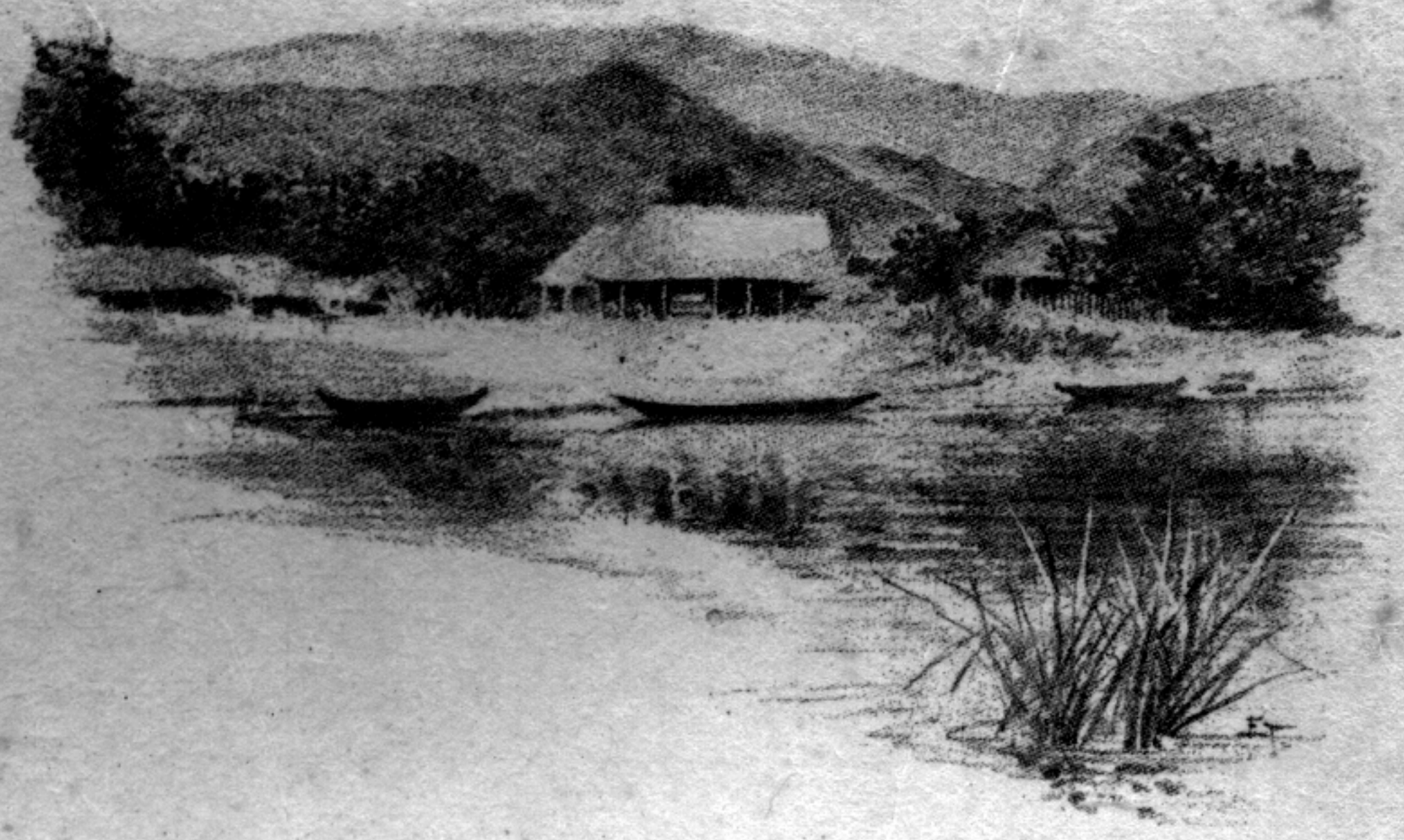
The neighbourhood of Cherra is remarkable for the richness of its flora, and it is a paradise for the collectors of ferns and orchids. Sir Joseph Hooker found more than 2000 flowering plants within ten miles of the station, besides 150 varieties of ferns and a profusion of orchids, mosses, lichens, and fungi (Hooker's *Himalayan Journals*, p. 490). There are no rhododendrons at Cherra, but several species occur in the interior of the hills further north. English garden plants for the most part do not thrive there, owing to the excessive humidity of the air in the rainy season and the

rarity of sunshine. We did our best to make a owing to these causes we met with very indifferent success. The scarlet salvia, however, grew luxuriantly, and petunia, chrysanthemum, and fuchsia also did well. Most garden plants left out were destroyed by the deluge which came down upon them during the rainy season, and even when placed in pots and boxes under cover they would often rot from the amount of moisture in the air.

Towards the end of October orders were received directing several officers, myself among the number, to proceed to Jowai in the Jyntia Hills, and join the troops in the field, as the rebels still held out and fresh operations were about to be undertaken for their suppression. We accordingly left Cherra on the 4th of November, and on reaching Jowai, after a pleasant three days' march, we found nothing going on, as Colonel Dunsford, who had been appointed to command all the troops in the hills, had not yet arrived. About a fortnight after I was sent with an escort to inspect a detachment of the 33rd Regiment Native Infantry, stationed at Munsoo, which had been garrisoned since its last capture to prevent the rebels from reoccupying and stockading it, as they had done more than once before. I found the detachment in a very bad state, nearly all the men having been attacked with malarious fever and so debilitated that they were quite unfit for military duty. They had lost several men by the fire of the enemy who still lurked in the jungles about the place, and they were so weakened and demoralised that they could not have resisted a serious attack upon their post had any been made. On my return I reported the sickly state of the detachment, and it was at once relieved and withdrawn.

About this time the residents at Cherra Poonjee, most of whom were ladies and children, were seriously alarmed by the movements

of a body of rebels, who, having contrived to elude the troops in the Jyntia Hills, made their way as far as Terria Ghât, at the foot of the Khasia Hills, and only ten miles from the station. They surprised and burned the place, killing some of the inhabitants, several police, and two or three unfortunate Bengali traders (called 'box wallahs') who were on their way up to Cherra to sell their wares. It was feared that the rebels would come up the hill and



TERRIA GHÂT, BELOW CHERRA POONJEE

attack the station during the night, and had they done so they might easily have plundered and burned the houses and killed many of the residents, for the scanty garrison of Sepoys and police was quite insufficient for the protection of the whole station, the houses being widely scattered over the plateau. Fortunately the rebels did not make the attempt, but one night a false alarm was raised, and one of the residents, an old lady of eighty-eight, was

hurriedly taken out of bed by her friends, wrapped in a blanket, and carried away for protection to the regimental quarter-guard. She had previously been kept in ignorance of the rebellion, and the shock and exposure of that night were too much for her, so that she died very soon after. As already stated, I had joined the troops in the field before this incident occurred, and my wife, being quite alone in the house, was naturally frightened. Our Khasia ayah, Kapoo, tried to reassure her by promising to dress her in native clothes and take her into the jungle if the rebels attacked the station, but this alternative was almost equally alarming, as the jungles in the neighbourhood of the station were infested by tigers.

By the end of December a considerable force was assembled at Jowai, the 21st Regiment Native Infantry, under Major Thelwall, and the Eurasian Battery of Artillery, under Captain Cordner, having recently arrived. In the beginning of January 1863 the whole force, under the command of Colonel Dunsford, C.B., marched to Umwai, and thence to a village called Padoo, in the neighbourhood of which the rebels had built several stockades. One of these was distinctly visible from our camp. It was situated on a wooded hill opposite to us, but separated by a deep and almost impassable valley, with wooded and precipitous sides. We could even see some of their men observing us, and we tried a few shots with a long range rifle, which caused them to vanish in the jungle.

Next morning we marched to attack the enemy's stockades at Oomkoi and Nongbarai. The path was in some parts exceedingly difficult, and I was astonished at the elephants carrying the guns being able to get on at all in some places. At last we approached the stockaded villages, which were situated among thick jungle, in very broken and difficult ground. They were shelled by the

artillery for some time without much effect, and then the infantry attacked and carried them with trifling loss, the defenders as usual escaping into the jungle. After destroying the stockades we returned to camp. On our way back the enemy fired upon us from the jungle, but without effect.

CHAPTER IX

We reconnoitre the stockade at Oomkrong and nearly fall into a trap—Capture of the stockade—Colonel Richardson severely wounded—We return to Jowai—I accompany a detachment to Barato and return with a small escort by way of Nurtiung—Curious bridge and stone monuments there—Similar monuments at Cherra and elsewhere in these hills—I accompany Colonel Richardson to Cherra and rejoin the field force at Surtiong—Coal at Satoonga—Two officers wounded—Operations against the rebels in the north-east country—Close of the rebellion—Our heavy losses—We return to Cherra—One of our detachments struck by lightning—I build a house on the verge of the great ravine—Splendid views from our windows—Some adventures with tigers—Difficulties of tiger-shooting at Cherra—Characteristics of the Khasias and Jyntias.

On the following day we marched to reconnoitre the stockade at Oomkrong, opposite to our camp. To reach it we were forced to make a long détour, as the intervening valley was almost impassable from its depth and steepness. We therefore passed round the head of it, and marched along the spur on which the stockade was situated until we reached it, when we found it deserted. The ground in front of it was thickly covered with 'panjees,' and there were several ingeniously concealed pitfalls, which might have proved very troublesome and dangerous in the hurry of an assault. We clambered over the stockade, and, seeing nothing of the enemy, concluded that they had dispersed, so we set to work getting the stockade destroyed, and proposed to have lunch afterwards. Meanwhile I and two other officers, being fond of exploring unknown regions, took a stroll along a pathway which ran down the spur. The hill was covered with high grass reaching above our heads, so that we could not see where we were going, and a turn in the path suddenly brought us in front of a formidable stockade.

For a moment we thought it was empty, but shots were immediately fired at us, and loud yells arose within. We were fortunately untouched, and made a hasty retreat to our party, who were quietly eating their lunch without any idea that the enemy were so near them. Our commander, on hearing what had occurred, advanced with the whole party, but after viewing the stockade, he decided that an immediate assault was unadvisable, and that it would be best to retire and bring a stronger force, with artillery, to attack the place next morning. We accordingly retreated, followed by the yells of the enemy, who seemed to think they had beaten us off.

In the morning the whole force, including the artillery, marched to attack the enemy's position. Colonel Richardson of the 44th commanded on this occasion, as Colonel Dunsford was indisposed and could not leave camp. We followed the same path as on the previous day, and on approaching the stockade we found it still occupied by the enemy. The troops were then halted, and the guns were got into position to shell the stockade. A heavy bombardment was kept up for about an hour, but no impression was made, and several of our men were wounded by the enemy's fire. Colonel Richardson then ordered the infantry to attack and carry the stockade, and he led them on to the assault himself, but fell severely wounded and was carried to the rear. Major Thelwall then took the command, and after some further resistance the stockade was taken. The defenders mostly got away before our men had effected an entrance, and aided by the jungle and the precipitous sides of the hill, they easily made their escape. The space within the stockade was full of immense masses of granite with hollows under them, in which the enemy had evidently taken shelter while the bombardment was going on. On both sides of the spur were precipitous slopes covered with jungle and high

grass, which afforded ample cover. After destroying the stockade we returned to camp with our wounded, whose safe transport was a matter of some difficulty owing to the extremely rugged and broken country we had to traverse.

In a day or two we marched back to Umwai, as there were no more stockades near Padoo, and resistance seemed to have ceased in that part of the country. After a few days' stay at Umwai to rest the wounded, we returned to Jowai. Colonel Richardson's wound was very severe: a musket ball had struck him close to the knee, wh his leg was bent in the act of running, and had passed completely through the whole length of the calf of the leg, coming out near the ankle. I had considerable trouble and difficulty with his case, but he got on slowly and eventually made a good recovery, though at first his condition looked rather unpromising, considering his age and long service in India.

Soon after my return to Jowai I was ordered to accompany a detachment of troops, under the command of an officer of the 21st Regiment Native Infantry, to an outpost at Barato, about thirty-five miles from Jowai, in a north-easterly direction. Our first march was to Munsoo, where we halted and passed the night in an open spot, taking every precaution against an attack, as parties of the enemy were known to be in the neighbourhood. The night ended quietly, and in the morning we resumed our march, passing through Munsoo, which apparently was quite deserted. We then descended into a deep valley and crossed a mountain torrent, after which a few miles' march through an undulating thickly-wooded country brought us to a village called Shilliang-montong, then occupied by a party of the 44th under an officer of that corps. We passed the night there, and continued our march next morning, traversing extensive forests of oak, and reaching Barato in a few hours. There I quitted the detachment and returned with a

small escort to Shilliang-montong, where I spent the night. On the following morning I set out on my return to Jowai by a different route, as the Munsoo road was not considered safe for a small party. I proceeded very cautiously for some miles through a broken and thickly-wooded country, from which we at length emerged into open ground, consisting of grassy undulating hills almost completely bare of trees. A few miles' march then brought us to the large village of Nurtiung, where I met Colonel Haughton, Commissioner of Assam, Colonel Dumsford, and other officers of our force.

There was not much to be seen at Nurtiung, which was as dirty and as full of pigs as most Khasia villages, but at a short distance stood a curious old bridge which deserves mention. It consisted of three enormous blocks of stone, the middle one upwards of 20 feet in length, the other two rather less; the stones were placed upon smaller ones set upright in the bed of the stream to serve as piers. There was a somewhat similar bridge on the road between Jowai and Umwai, but the stones in that instance were not quite so large as those of the bridge near Nurtiung. There were also around the village a great number of the curious stone monuments so common everywhere in these hills, consisting of enormous flat slabs of stone placed upon several upright stones like a table on its legs, with gigantic head stones (some nearly 30 feet high) standing behind them. It seems probable that these stones were set up as memorials of great events, or of distinguished men, whose ashes were sometimes deposited near them.

Groups of similar stones of various dimensions were to be seen all over the Khasia and Jyntia Hills. They generally consisted of a row of five or seven upright stones, the middle one being the largest, and usually there were also flat ones below, as at Nurtiung. On a hill above Cherra there were a great many of these stone

monuments, and one great slab I particularly remember, as its dimensions were so enormous that we used to have picnics upon it, twenty people or more being able to sit on it comfortably. It must have been upwards of 20 feet in diameter each way, and more than 2 feet thick, and it was supported by several short stones sunk in the ground, above which this huge slab was elevated only 2 or 3 feet. Nearer the station there was another remarkable stone, which had been used as a bridge over a narrow chasm. It was about 20 feet long, 4 feet broad, and 2 feet thick, and it rested securely for about a foot upon the edge of the chasm on each side. It is extraordinary that a people like these hill men, possessing no knowledge of the mechanical arts, should nevertheless have been able to erect such remarkable monuments, and to place in accurate position stones of such prodigious size and weight.

Next morning, after a rather tedious and uninteresting march of ten or twelve miles through an undulating country very bare of trees, I arrived at Jowai and found Colonel Richardson considerably better, so that after a few more days he was able to bear the journey to Cherra. I accompanied him to the station and remained there with him for a few days, when I was obliged to return to the field force. On reaching Jowai I found that Colonel Dunsford and the greater part of the force had marched to attack some stockades which the rebels had built at the village of Surtiong, about thirty miles distant in an easterly direction, and I followed them, availing myself of a guard that was escorting supplies for the troops. Our road for several miles lay along the valley of the Montadoo River; then we left the valley and continued our march in an easterly direction over many miles of an undulating country, very bare of trees, until we reached the village of Satoonga, where we halted for the night. The seam of coal previously mentioned made its

appearance near this place, and being quite superficial, was used as fuel by the villagers around.

Next morning we continued our march, and after passing a beautiful little lake formed by the Kopili River, we ascended a ridge, and then gained a view of an extensive valley, in which the camp of our force was plainly visible. Nearly in the midst of the valley was a curious eminence entirely covered with trees, among which thatched roofs and jutting points of rock were visible here and there. This was the stockaded village of Surtiong, and on reaching the camp I found to my disappointment that it had been attacked and taken on the previous day. I went to see the place and found that the hill was a mass of limestone rock, covered with forest and pierced with numerous caves and hollow ways. The village was on the summit and could only be approached by very narrow and intricate passages through the limestone. These roads had been strongly barricaded, and trunks of trees had been suspended above them to be let fall, at the proper moment, upon the crowd of embarrassed assailants. But the fire of our artillery rendered all these preparations useless and caused such a panic among the defenders that they soon abandoned all resistance and took refuge in the caves, where they remained until night gave them the opportunity of escape. Our troops occupied the place with trifling loss, but had it not been for the guns there would doubtless have been serious resistance and many casualties. An officer of the 21st Native Infantry fell into a concealed pit full of sharp spikes, one of which penetrated his leg, inflicting a severe wound. This device was employed by the hill tribes of the Eastern Frontier both in hunting and in war, and we lost several men in this manner during the campaign.

After a few days we returned to Jowai, where we found that Lieutenant Collett, of the 21st Native Infantry, the officer with

whom I had gone to Barato a short time before, had been brought in very severely wounded by a shot from the jungle. The bullet had struck him a little above the ankle and had completely shattered the larger bone of the leg. Our efforts to save his leg were successful, but he was laid up for a long time, and eventually obliged to take sick leave to England.

By this time (March 1863) the rebellion was almost at an end, but a few parties of rebels were still in arms in the wild jungly country around Barato and Nongfloot in the north-eastern part of the Jyntia Hills, and an expedition was sent against them consisting chiefly of men of the 21st and 44th Regiments Native Infantry under the command of Major Thelwall. We left Jowai early in March, taking the road to Nurtiung and from thence to Shillianggmontong and Barato, where the force was divided into several detachments with the view of thoroughly scouring the country and dispersing any bodies of armed rebels that might still remain. A large detachment with several officers, including myself, was sent forward to Phlong, a village lying some distance away to the north-east. The country we passed through was covered with thick forest, and there appeared to be very few inhabitants. We met with no opposition and soon arrived at Phlong, where we established ourselves comfortably.

We remained there about a week, and during this period we were occupied every day in making marches through the country in different directions, the detachment having been broken up into several distinct parties for this purpose. The country around was a vast jungle of forest trees and bamboos, intermixed with all sorts of creepers and small shrubs. Here and there we found small clearings for cultivation, and sometimes a deserted hut or two. Occasionally we surprised and dispersed parties of rebels, who fled into the jungle at our approach. On one occasion we marched for

many miles in an easterly direction, and found ourselves in a labyrinth of hills covered with bamboo jungle, in which no tracks but those of wild elephants and other animals could be found. The result of our combined operations was that the enemy were completely demoralised and disheartened, and abandoned all idea of further resistance. We then marched back to Jowai the way we had come, arriving there about the end of March 1863, and thus the tedious operations against the insurgent hill tribes were at last brought to a close, after having continued, off and on, for fifteen months.

The losses of the troops and police employed in the suppression of the rebellion were very heavy. My regiment (the 44th Native Infantry) which took part in the operations from first to last, had four officers wounded and about two hundred men killed and wounded in its various engagements, besides a large number of men whose health broke down from exposure and privations. Nevertheless no medal, or reward of any kind, was granted to the troops in recognition of their services in this trying campaign.

The field force was now broken up, the 21st Regiment Native Infantry remaining at Jowai, while the 44th returned to its old quarters at Cherra, and the other troops departed to their respective stations. I left Jowai with a part of my regiment in April and reached Cherra in two days, very pleased to find myself at home again. Another detachment of our men, who left Jowai a day or two after us, were overtaken at the first halting place by one of the terrible storms which usher in the rainy season in the Khasia and Jyntia Hills. The hut they occupied was struck by lightning, and two soldiers, several camp followers, and a number of baggage animals were killed on the spot, and many others injured. The officer in command of the party was himself struck

down, and though not fatally injured he suffered for a long time from the effects of the severe shock his system had sustained.

After the termination of this long protracted campaign we had a considerable period of peace and quietness, and we lived a happy life in our pleasant little hill station. In the beginning of 1864 I built a house on the edge of the great ravine to the eastward of the station, where I had taken up a piece of land for the purpose. The view from our windows was magnificent, including the great valley, 3000 feet deep, the undulating country for many miles beyond, and to the south the plains of Sylhet, which in the rainy season resembled a sea dotted with innumerable green islands. Further south still were seen the hills of Tipperah and the country of the Lushais. Our house was built upon a rocky eminence; in front of it was a small space which was laid out as a garden, and beyond this was a steep declivity with grassy slopes, the commencement of the great valley. At a very short distance from the house was found the jungle, which in most places covered the sides of the valley and gave ample shelter to tigers and other wild animals which frequently prowled round the house during the night, leaving their footmarks in the mould of the garden.

One morning we found, close behind our house, the carcass of a cow which had been killed by a tiger during the night. Knowing that the animal would most probably return during the following night to finish its meal, I remained with some friends in the back verandah of the house, intending to shoot it. The tiger came, as we expected, but unfortunately the night was so dark that although we could hear the beast tearing the carcass of the cow, we could not see it and could take no aim. At length some shots were fired almost at random, and the tiger went off untouched. Tigers were so common in the neighbourhood of Cherra that I once saw one lying asleep on a rock in the jungle,

OUR HOUSE AT CHERRA POONJEE

just below the regimental mess house, and on another occasion, as I was riding along the Assam road a few miles from the station, I saw a tiger walking leisurely over the hills about a hundred yards to my left; he was pursued at a very respectful distance by a mob of shouting natives, and presently disappeared over the brow of the hill.

One day a report was brought in that a boy, the son of one of our Sepoys, had been seized by a tigress and carried into the jungle, so I started in pursuit in company with another officer and several of our men. We followed the trail into a jungle so dense and thorny that walking was impossible, and we could only get through it by crawling on the ground under the bush. At last we came upon the mangled and lifeless body of the unfortunate lad, which our approach had forced the tigress to drop. As we were too late to save him, and as it was useless to search further for the tigress in that horrible jungle, which was so dense that we could hardly see a yard in any direction, we returned to the station bringing with us the body of the boy. Although tigers were so common we rarely got a chance of killing one, except in a trap, as it was impossible to use elephants owing to the nature of the ground, and to go after tigers on foot in dense and almost impenetrable jungle was too dangerous to be attempted except on such an occasion as the above when we had a slight hope of saving human life.

Tigers were occasionally caught in the traps previously mentioned, several of which had been placed at likely spots around the station. One of these traps was movable, being on wheels, and I remember once a tiger being caught in it and then dragged round the station by a throng of excited natives, who could not refrain from thus triumphing over their dreaded enemy and loading him and his race with unsparing abuse. The Khasias had a curious idea about tigers somewhat similar to the werewolf superstition which

prevailed in Europe during the middle ages. They believed that certain persons possessed the power of transforming themselves into tigers, in which guise they would prowl about during the night seeking prey, while in the day time they would appear and behave as human beings.

The inhabitants of the Khasia and Jyntia Hills belong to the Indo-Chinese race: they are really the same people, though there are differences of dialect and custom. They are, like most of the hill men on the eastern frontier of India, short in stature, but very sturdy and muscular, with highly-developed calves, narrow eyes, and flat noses. They have no caste prejudices, like the Hindus, but consume all kinds of food, except milk, to which they have an extraordinary and unaccountable aversion. They are very superstitious, believing in the existence of countless demons who are supposed to haunt particular localities, but they have no religion, in the strict sense of the word, and hence the missionaries, who have been settled at Cherra for many years, have been very successful and have a large following. The Khasia language is monosyllabic and is quite unlike the other languages of India. It has been studied and reduced to writing by the missionaries, who have published a grammar and dictionary of it, as well as a translation of the New Testament, and other works.

GROUP OF KHASIAS

The Khasias cultivate rice, millet, potatoes, etc., very successfully. They carry quantities of produce down to Chela, Terria Ghât, and other places along the foot of the hills, where a brisk

trade is carried on with the Bengalis of the plains. In their villages they keep goats and cattle, as well as plenty of pigs and fowls, but they use the eggs only for purposes of divination. They are very fond of chewing a mixture of betel nut, lime, and pepper leaves called 'Pān,' which reddens their saliva and leaves unmistakable traces on the paths they follow. They carry very heavy loads up and down the hills in wicker baskets which rest on their backs and are supported by a broad plaited strap passing round the basket and across the forehead of the carrier. Most of our wounded men were carried along in this way during the campaign in these hills, as the nature of the country rendered the employment of the ordinary means of transport impracticable. When men were so badly wounded as to be unable to sit upright it became necessary to make rough litters for them with bamboos and branches of trees, and they were thus carried along with much difficulty by a number of men. The Khasias are fond of archery, and I used sometimes to attend their meetings and watch their shooting. They appeared to be indifferent marksmen, and their shooting range was only fifty or sixty yards. In hunting they have recourse to traps, pitfalls, and snares of various kinds, some of which devices they employed against us during the campaign. The Khasia women are almost as ugly as the men; they are very fond of ornaments, and on certain festive occasions they appear loaded with gold and silver coronets, necklaces, bangles, and other ornaments, and keep up a slow, ungraceful kind of dance, while the men move more rapidly round them.

CHAPTER X

Difficulties with Bhootan—Our mission maltreated, and a disgraceful treaty extorted by the Bhootias—War with Bhootan—Early successful operations—The Bhootias surprise our posts—Disaster at Dewangiri—Fresh troops sent up and General Tombs appointed to the chief command—I accompany the left wing of my regiment to the seat of war—Our march to Koomreekatta—We force the Durrunga Pass—Assault and capture of Dewangiri—We remain at Koomreekatta and suffer severely from malarious fever—Our withdrawal to Gowhatty—I return to Cherra on two months' sick leave—News of a fresh invasion of Bhootan in the cold weather—I rejoin my regiment at Gowhatty in October.

EARLY in 1864 we began to hear rumours about difficulties with Bhootan, a wild mountainous country lying between Assam and Thibet, and it was reported that the mission which our Government had sent to that country had met with an unfriendly reception. At length it became known that the members of the mission had been grossly insulted and maltreated by the Bhootias, who had compelled the envoy (the late Sir Ashley Eden) to sign a treaty ceding a large tract of our territory to Bhootan. War with Bhootan was of course unavoidable after this, and preparations for the campaign were forthwith commenced. It was decided that the field force should consist of two separate columns, the right column under Brigadier-General Mulcaster, having its base of operations at Gowhatty in Assam, while the left column under Brigadier-General Dunsford, C.B., was to operate from Julpigoree in Bengal against the western part of Bhootan. These forces were to occupy certain posts in the mountains of Bhootan, and it was expected that this occupation of part of their territory would

compel the Bhootias to make a treaty of peace on satisfactory terms.

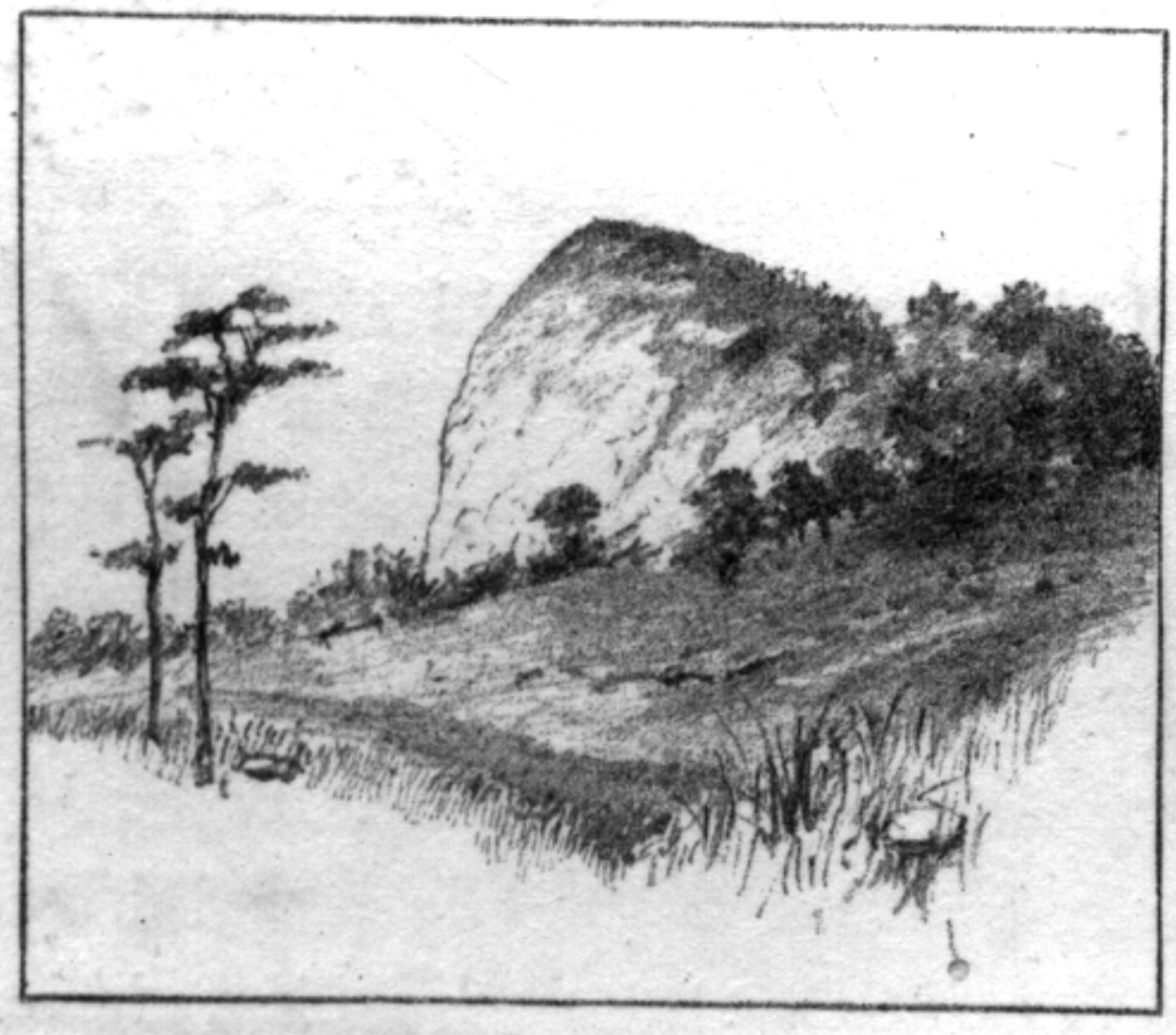
As the Eurasian Battery of Artillery and a wing of the 44th Regiment Native Infantry were ordered down to Gowhatty to join the right column of the Bhootan Field Force, I fully expected to receive orders to accompany them. I was, however, directed to remain at Cherra with the other wing of the regiment and the civil establishments until further orders.

The Bhootan war commenced, as is well known, with the easy capture and occupation of Bala and Dhalimkote by the left column, and of Dewangiri and Bishen Sing by the right column, after which it was generally believed that the campaign was over and peace close at hand. The Bhootias, however, had at first been unprepared, and the advance of our troops took them by surprise, but now finding that we made no further advance, and that the garrisons of the captured positions used little vigilance, they assembled in considerable bodies, under the Penlow of Tongso and other leaders, and prepared to take the offensive. Suddenly and almost simultaneously the positions in the hills occupied by our troops were attacked all along the line. At Bishen Sing, which was garrisoned by the 44th Native Infantry, the Bhootias were repulsed with severe loss, but at Bala and Dewangiri they were successful, and the officers commanding at those posts were compelled to evacuate them and retreat into the plains.

The affair at Dewangiri was a serious disaster, as two guns fell into the hands of the enemy, besides the sick and wounded of the garrison, and all their stores and baggage. Measures were at once taken by Government to reinforce the troops in the field; fresh regiments, including a wing of H.M. 55th Foot, were sent up to Assam, and Major-General Sir Henry Tombs, V.C., K.C.B., who had highly distinguished himself in the mutinies, was appointed to

the chief command. Our wing at Cherra was now ordered to march down to Gowhatty to join the force assembling there for the recapture of Dewangiri, and I of course accompanied the wing after making over my civil charges to the medical officer of the 39th Native Infantry, a regiment that came up to take our place.

After some days of needful preparation we left our pleasant little hill station on the 14th of March 1865, and commenced our march towards Assam. We traversed the beautiful forest-clad hill of Cherra, rounded the head of the great Temshung valley, and after a steep ascent we came to a stretch of bare open country about 5000 feet in elevation. Several miles further on we crossed the steep and narrow ravine of the Kala-panee (Black water) River, and entered a beautiful valley where the over-hanging masses of rock on either side presented a very wild and picturesque appearance. Beyond this we reached the great valley, 1000 feet deep, in which the Boga-panee River pursues its course to the plains, and a very steep ascent from it brought us to our halting place, Moflong, eighteen miles from Cherra. This place is at an elevation of 6000 feet, and commands a beautiful view of the snowy mountains of Bhootan, which are seen to the northward.



THE KOLLONG ROCK, KHASIA HILLS

From Moflong a march of about sixteen miles over a succession of grassy undulating hills brought us next day to Myrung. A few miles to the south-west is an enormous mass of red granite called

the Kollong Rock, which rises in the form of a dome 500 or 600 feet above the level of the surrounding hills, and apparently must have been forced up by volcanic action through the sandstone of which they are composed. During our next day's march from Myrung to Nunklow more trees were seen, the country gradually declined towards the north, and the streams ran in that direction, indicating that we were approaching the northern slopes of the range. On reaching Nunklow, a village eight or nine miles from Myrung, we found that a steep descent lay before us, as the whole range of hills appeared to sink abruptly at this point to a much lower level. We halted at this place and visited a monument erected close by to the memory of Lieutenants Bedingfeld and Burlton, of the Bengal Artillery, who were murdered by the Khasias at Nunklow in 1829, and of Assistant-Surgeon Beadon, who was killed in action near Myrung the same year. A splendid view of the Bhootan Himalaya is obtained from the vicinity of Nunklow; the snow-clad mountain chain is seen stretching east and west for a great distance, and far away to the east are three gigantic pyramidal mountains which are apparently far loftier than the rest of the snowy range.

Early next morning we resumed our march, and after descending the slopes beyond Nunklow by a succession of zig-zags carried through the dense forest which covered the hills at this point, we arrived at the Bor-panee, a considerable stream, which we crossed by a handsome iron suspension bridge. We then found ourselves traversing an open country consisting of grassy undulating hills almost devoid of trees. This continued for several miles, and then we entered a dense jungle, chiefly bamboo, which appeared to cover the hills in every direction towards the north. The road was in many places obstructed by masses of fallen bamboos, which had to be cut through before we could pass. After a long and

fatiguing march we reached Oomloor, where we found a rest house, built of wood, and a small collection of native huts. We halted there for the night and next morning resumed our march, passing through the same interminable jungle, in which hardly any signs of the presence of man were to be seen.

Wild elephants appeared to be common in this forest, as their tracks were frequently seen on both sides of the road. The next halting place was Jyrung, a small village buried in the jungle, but on arriving there we received an order to push on with the utmost expedition to join the army under General Tombs. We therefore pressed on, and after marching some miles further we arrived at the limits of the hills, and descending their last slopes found ourselves in the valley of Assam. We pitched our camp near an extensive tea garden close to the foot of the hills, and towards evening we all had to turn out to beat back a bush fire which had crept up through the dry grass and jungle rather close to our camp. After a good deal of hard work we succeeded in extinguishing the fire in our vicinity and saving our camp, which at first appeared to be in considerable jeopardy.

Next day we marched into Gowhatty, a distance of seventeen or eighteen miles, and encamped on the parade ground there. This was the principal station of Lower Assam, and extended for some distance along the south bank of the great River Brahmaputra which flows through that province. The appearance of Gowhatty from the river was exceedingly beautiful, but at that time the station was one of the most unhealthy in Assam, probably owing to an extensive marsh which lay behind it. The lower ranges of the Khasia Hills were only a few miles distant, and the intervening space was a low swampy tract almost impassable in the rainy season. After remaining a few days at Gowhatty to rest the men and procure supplies and transport, we crossed the river and marched on

towards Koomreekatta, where the army under General Tombs was assembling. We arrived there in a few days and found a large encampment covering the plain. The force included a wing of H.M. 55th Foot, two batteries of artillery, the 12th, 29th, 43rd, and 44th Regiments of Bengal Native Infantry, and some cavalry, sappers, etc., forming a body of more than 4000 men. The camp was pitched on a grassy plain six or seven miles from the foot of the Bhootan mountains, which extended east and west in a succession of ranges. The ridge on which Dewangiri was situated was distinctly visible, and at night the camp fires of the enemy occupying the position illuminated the hills in that direction. We found that the five passes leading up to Dewangiri were in the possession of the Bhootias, who had strongly stockaded them, and were expected to offer a serious resistance when the force advanced. Parties were frequently sent up the passes to reconnoitre, and in order to deceive the enemy a small camp was established in front of the Soobunkatta Pass, though it was not intended to take that route to Dewangiri.

Soon after our arrival a reconnoitring party, consisting of some of our men and some of the 12th Native Infantry, was sent up the Durrunga Pass; they returned after some hours' absence with twelve wounded, most of whom were men of the 12th, who were very conspicuous in their scarlet coats, while the 44th men, being dressed in dark green, were much less noticeable and had fewer casualties. Nevertheless one of our men was mortally wounded on this occasion, and died in hospital a day or two after. In a short time orders were issued for a general advance. A body of about 700 men, consisting of a party of H.M. 55th Foot, detachments from several native regiments, and some guns, the whole under the command of Colonel Richardson, were to advance first and capture the stockades in the Durrunga Pass. After

getting through the narrow and difficult part of the pass they were ordered to halt at an open space below the enemy's position at Dewangiri, and await the arrival of the main body of the force. Accordingly, on the morning of the 1st of April 1865, the force under Colonel Richardson (which I accompanied as senior medical officer) began its march at a very early hour and reached the entrance of the Durrunga Pass about daybreak. After a short halt we entered the pass, which was about a quarter of a mile wide at its mouth, but soon became narrower, so that we were frequently obliged to cross and recross the mountain stream which flowed down the pass, and sometimes we had to wade up it for a considerable distance. The sides of the gorge were at first a succession of sloping grassy hills with a few trees and shrubs scattered over them. Further on the hills became more abrupt and thickly clothed with jungle, and in some parts the pass was overhung by precipices from which great masses of rock had fallen into the bed of the river.

We pursued our way up the pass for several miles without meeting the enemy, but on reaching a very narrow part, shut in on both sides by precipitous walls of rock, we were fired upon, and found that the pass was obstructed with logs of wood and other impediments, and that the enemy were posted in a stockade upon a little eminence which completely commanded the narrow defile up which we were advancing. Their position was very strong, and we must have suffered heavy loss in taking it had it been well defended. A few shells from our guns, however, speedily dislodged the enemy, who fled up the pass, while we continued our advance, scrambling over the logs and abatis in our way, and entered the stockade without any loss. Beyond this point the pass became wider and was no longer shut in by precipices. We found no more stockades, and a little further on we reached the level space

THE DURRUNGA PASS, BHOOTAN

where we had been directed to halt and wait for the rest of the army.

We had thus got through the formidable Durrunga Pass without losing a man, and we were struck with astonishment that the Bhootias should have allowed us to advance thus far with such very trifling opposition. The natural difficulties of the pass were so great that it would have been almost impregnable had the enemy defended it with vigour and resolution. In some parts it was only a few yards wide with perpendicular precipices on both sides, so that by merely rolling rocks over the verge the defenders might have stopped our advance, particularly as, owing to the nature of the country, it was very difficult if not impossible for us to reach the summit of the cliffs flanking the pass. General Tombs and the main body of the force came up in the afternoon, and it was decided that the enemy's position on the ridge of Dewangiri should be attacked on the following morning. The general, desiring to reconnoitre the position of the Bhootias, ascended the hill above our camp until he got clear of the jungle and was within gunshot of the enemy, who fired several shots at the party. It was then ascertained that a great stockade had been built in the centre of the ridge and several smaller ones to the right and left of it, and from what we could see the enemy appeared to be in considerable force. A picket was left at this point and we then returned to camp.

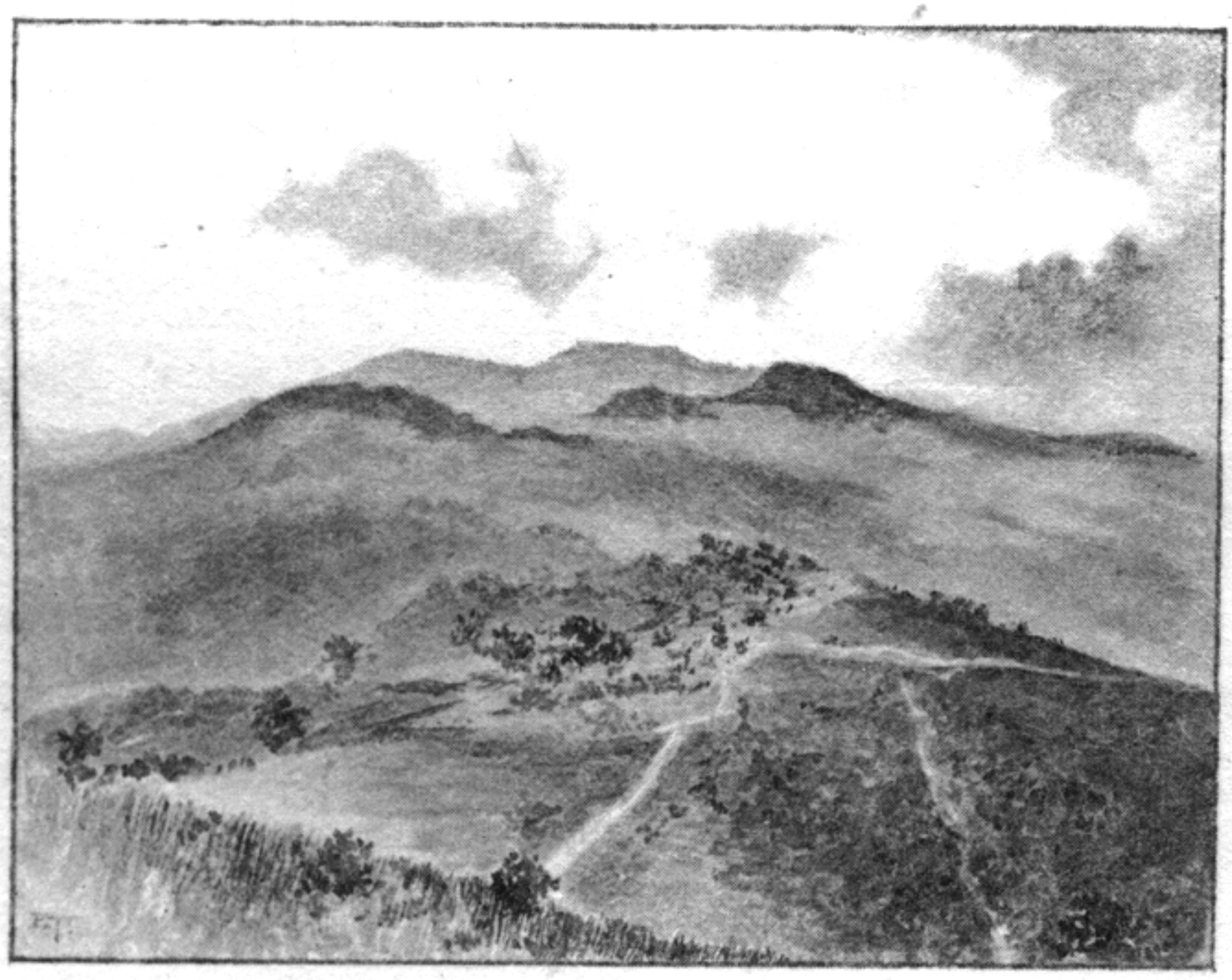
Early next morning the force was in motion, passing up the narrow pathway which led to the spot where the picket was stationed. The ground beyond that point was open, and a steep ascent led up to the Bhootia stockades. The wing of H.M. 55th Foot and the Native Infantry were sent forward in skirmishing order, while the artillery were directed to shell the stockades, and if possible drive out the defenders. The artillery fire, however,

was very wild, and nearly all the shells either burst short or went over the stockades, producing no effect whatever. This was probably due to the position of the guns, which were posted on uneven ground far below the objects aimed at. The infantry skirmishers, nevertheless, pressed rapidly forward, keeping up a brisk fire, and the whole hill side was soon dotted over with the scarlet coats of H.M. 55th Foot and the 12th Native Infantry, the dark green uniforms of the Goorkhas, and the 'Khakee,' or dust-coloured ones of the Punjabis. The enemy's fire soon slackened, many of their men having been shot through the loopholes of the stockades by the skirmishers of H.M. 55th, whose aim was most accurate and deadly.

A column of attack was now formed to storm the principal stockade; it advanced up the mountain, surrounded the enemy's stronghold, and in a few minutes carried it by escalade with slight loss. The other stockades were also taken after a feeble resistance, and the remains of the enemy's army fled from the scene of action, escaping without difficulty in the surrounding jungles. After the termination of the engagement, which had cost us less than a hundred men killed and wounded, part of our force was ordered to encamp on the ridge of Dewangiri, while the rest were sent back to the camp in the valley below. The wounded, including those of the enemy, were sent off in doolies to the field hospital, which had been established near the mouth of the Durrunga Pass.

I returned with Colonel Richardson and the 44th Native Infantry to the camp in the valley, where we remained several days, suffering great hardships and privations, as we had neither tents nor baggage with us. We had to sleep on the ground, sheltered only by small huts roughly made with branches of trees and grass, and we received rations from the Commissariat Department, as no supplies from our regimental mess stores could be procured where we were.

The weather changed and rain began to fall, which rendered our situation much worse. One night heavy rain fell, so we had to leave our beds, roll them up in waterproof sheets to keep them dry, wrap ourselves in our cloaks, and sit in the rain round a fire till day broke. The health of the men as well as our own began to suffer from these hardships, but fortunately after some days it was decided to withdraw the force from Dewangiri, and we were ordered to march back to our camp at Koomreekatta, where our



DEWANGIRI, BHOOTAN

tents and baggage had been left. Soon after this the force began to break up: the British troops were sent away almost immediately after the capture of Dewangiri and the others followed, until at length my regiment, the 44th Native Infantry, alone remained in the almost deserted camp.

In the meantime much rain had fallen and the country became swampy and very unhealthy. Notwithstanding the utmost care and the daily administration of quinine as a prophylactic to every

soldier and follower, our men came into hospital by dozens every day with malarious fever. They had been strong and healthy when they came down from the Khasia Hills in March, but in a month's time more than half of them had fallen sick, and the rest were so debilitated as to be hardly fit for any duty. Owing to the departure of the other troops it became necessary to take some defensive measures in case of an attack by the enemy, and accordingly an old fort close to the camp was occupied and all the sick were moved into it. As the season advanced rain became more frequent, and at length the whole plain around us became a vast swamp covered with rank vegetation and reeking with malaria. Sickness increased among the troops and camp-followers to such an extent that hardly any remained fit for duty. For some time I was the only officer able to do duty, but at last I was quite worn out with incessant labour and anxiety, and was myself laid up with the prevailing fever for several days. Our miserable condition may be realised when I state that I was left entirely to myself during this illness, all the other officers, my two native assistants, and even our private servants being ill at the same time, but thanks to my strong constitution I soon pulled through.

I had written to the military authorities some time before this, reporting the increasing sickness among the men, and strongly recommending the withdrawal of the regiment from this unhealthy spot. At last orders came for us to move to Rungeah, a post some distance further back on the road to Gowhatty, and after obtaining the large amount of transport required (few of our men being able to walk) we left Koomreekatta and proceeded to our new post. At this place some bamboo houses, with raised floors and thatched roofs, had been built for the officers, and barracks and hospital of the same description for the native troops. The change did us all much good and many of the sick recovered, but

it still gave me a hard morning's work to go round the regimental hospital. While stationed at Rungeah we felt slight shocks of earthquake on several occasions, but no mischief was done.

After remaining about six weeks at this station we were ordered to march to Gowhatty and take up our quarters there for the rest of the rainy season. As my health had suffered considerably from hard work and exposure, as well as repeated attacks of malarious fever, I obtained two months' leave of absence on medical certificate, and set out for Cherra in the beginning of September 1865. I was so weak that at starting I could hardly sit on my pony, and I accomplished the first two or three marches with the greatest difficulty. But when I reached Nunklow and began to breathe the pure invigorating air of the hills, I felt myself a different man. Three more marches brought me to Cherra, where I soon regained my health and became almost as well and strong as ever. After spending some delightful weeks at home I prepared to rejoin my regiment, giving up several days of my leave of absence as I had received notice that there was to be a fresh invasion of Bhootan as soon as the cold season was sufficiently advanced for military operations. My return journey was rapid and uneventful, and on arriving at Gowhatty I found that the 12th and 44th Regiments Native Infantry, under the command of Colonel Richardson, were to march into Bhootan in the course of the next few days and reoccupy Dewangiri.

CHAPTER XI

We march into Bhootan and re-occupy Dewangiri—A false alarm—Our reconnaissance to Rydang—We explore the country and visit a Buddhist monastery—Our men grow sickly and we are sent down to a camp at the entrance of the Durrunga Pass—We re-occupy Dewangiri in February 1866, while Colonel Richardson advances into the interior—End of the Bhootan war—We return to Cherra—Excessive sickness and mortality in the Bhootan Field Force—Removal of the 44th Native Infantry from Cherra to Shillong in 1867—Scenery and climate of Shillong—We build a house there—Our dog carried off by a leopard—Earthquakes in the Khasia Hills—Their probable cause—Cricket at Shillong—The Eurasian Battery—I am promoted and apply for two years' furlough to England—We proceed to Calcutta and embark in the *Superb*—Incidents of our voyage—We reach home in February 1868.

The short time still remaining was spent in preparations for the expedition, and on the 24th of October we crossed the river and commenced our march northward. At Koomreekatta we joined the 12th Regiment Native Infantry, and next day the united force, under the command of Colonel Richardson, marched up to Dewangiri by the Durrunga Pass. On this occasion we encountered no opposition, and Dewangiri itself was found quite deserted and overgrown with jungle, which had to be cleared away before our tents could be pitched. The first few days after our arrival were spent in clearing the plateau of brushwood, arranging the camp, searching for water, and bringing up supplies for the troops. There were no signs of the enemy, though one night we were suddenly aroused from sleep by what proved to be a false alarm. The excellent discipline of our men was well shown on this occasion: they formed up quietly under their officers, there was no noise or confusion, and not a single shot was fired.

After some days we made an expedition into the interior of the country with a view to ascertain whether the enemy were collecting forces in our neighbourhood or not. We descended into a deep valley north of our position and followed it for several miles in an easterly direction, then turning northward we ascended the mountains till we reached the village of Rydang, whence after a short halt we marched back to camp. The country was for the most part an endless succession of steep and lofty ridges thickly covered with forest. Few villages were seen, and only small patches of cultivation here and there. It appeared from this reconnaissance that the Bhootias had no force anywhere near us, and that no attack upon our position was likely to be made. Soon afterwards our political officer contrived to open communication with the Bhootia rulers, and commenced negotiations with a view to the recovery of the lost guns and the conclusion of peace. Finding that there was no probability of any hostile proceedings on the part of the Bhootias for the present, we began to explore the country around our position more freely. In company with an officer of my regiment, whose tastes were similar to my own, I took many long walks and went over much of the neighbouring country. It was almost completely covered with forest except in some of the valleys where high grass was the only vegetation. The ridges were singularly abrupt, and often quite precipitous, so that it was no easy matter to climb them. They frequently ended in veritable knife edges with a precipitous slope on each side, and a flat space only a foot or so broad on the summit. To the right of our position was a lofty wooded mountain rising to a height of about 5000 feet, and on this commanding position stood a Buddhist monastery which overlooked the plains and the lower intervening ranges. One day we had a picnic at this spot, and most of the officers of the force joined in the excursion. We

followed a steep and rugged footpath carried in zigzags through the dense forest covering the mountain, and after a long and fatiguing climb we reached the place. The view from the summit was magnificent, extending far over the grassy plains of Assam to the Brahmaputra River and the Khasia Hills in the distance beyond. The monastery itself was not in any way remarkable; it accommodated a considerable number of monks and contained a large image of Buddha.

In the meantime the men of my regiment, who had not completely recovered from the effects of their previous sickness and privations, had been rapidly falling ill and were suffering greatly from scurvy owing to the impossibility of procuring supplies of milk and fresh vegetables. Lime juice and potatoes had been supplied by the commissariat department on my recommendation, but proved insufficient to maintain the health of the men under the existing conditions. In December, therefore, it was decided that the regiment should be sent down to a camp at the entrance of the Durrunga Pass, where a commissariat depot had been formed. I went forward with the sick and the hospital stores, and the regiment followed a day or two after. We remained at this camp for some weeks, and the health of our men improved considerably, as they had very little work and were able to procure supplies from the neighbouring villages. The surrounding country abounded with game of various kinds, and as the commissariat elephants were stationed at our camp we often made use of them in hunting expeditions. They were indeed indispensable for this purpose, as the plain around our camp was covered with grass 8 or 10 feet high and could not be traversed by men on foot. Visitors from the force at Dewangiri often came down to see us, and sometimes we returned their visits or met them at picnics half way up the pass.

While we remained in this camp several fresh regiments came up to reinforce Colonel Richardson, and as the Bhootias had not yet come to terms it was resolved to penetrate some distance into the country so as to compel them to accept the conditions of peace proposed by our Government. Accordingly in February 1866 we were ordered up to Dewangiri again to garrison the post, while Colonel Richardson with a considerable force advanced into the interior, and after a trifling skirmish occupied Saleeka and the bridge over the Monass River below. This demonstration was decisive and at once put an end to the hesitation and delays of the Bhootias. They immediately sent in the two guns which had been lost by the garrison of Dewangiri more than a year before, and agreed to our terms of peace, which included the cession to us of their territory in the plains, generally called the Bhootan Dooars. The force under Colonel Richardson then returned to Dewangiri and was soon broken up. We received orders, much to our satisfaction, to return to Cherra Poonjee forthwith, and we lost no time in commencing our return march. After a short halt at Gowhatty we journeyed to Cherra by the Nunklow road, and reached our station in March 1866, heartily glad at the termination of a campaign which had been so full of sickness, privation, and suffering.

The Bhootan war was remarkable, among the many little wars which have taken place on our Indian frontiers, for the excessive amount of sickness that occurred among the troops composing the field force. My regiment, about 750 strong, which took the field in the highest state of health and efficiency, had more than 3000 admissions into hospital during the campaign and lost upwards of 100 men, nearly all of whom died from disease, very few having been killed in action. All the troops in the field suffered in a similar way, some of them much more

severely than we did. One regiment in particular, which had been stationed at a very unhealthy place called appropriately 'Putla Kowa' (the lean crow), lost no less than 250 men from disease, and became quite unfit for duty owing to the extraordinary prevalence of malarious fever. The troops kept well during the cold season, but sickness appeared among them as soon as rain began to fall. It seemed, indeed, as though some noxious agent had been liberated from the ground by the rain, for as soon as rain came down, the troops, who had remained healthy up to that time, began coming to hospital in continually increasing numbers with malarious fever, so that in a few weeks hardly any of them remained fit for duty. The officers suffered almost as much, and there was hardly one of them who did not break down from sickness sooner or later during this very trying campaign. Our experience was quite sufficient to convince the most sceptical person of the existence of some special agent, commonly called Malaria, as the chief cause of intermittent and remittent fevers. The 'chill' theory entirely failed to account for the facts, and it was, I believe, discarded by all or most of the medical officers who served with the Bhootan Field Force.

In 1867 it was decided to move the 44th Regiment Native Infantry from Cherra Poonjee to Shillong, which had already been selected as a new site for the civil station, and had been occupied for some time by the chief civil officer and his subordinates. The site chosen for the new station was in the centre of the Khasia Hills, about thirty miles north and a little east of Cherra, and consisted of a series of undulating hills thickly covered with pine trees. The elevation was about 4900 feet, and to the south and west extended a range over 6000 feet high, which culminated at its western end in Shillong Hill, 6660 feet high. The view from this summit is truly magnificent, as fully 30,000 square miles of

country can be seen, from the distant peaks of the Himalaya Mountains in the north to the delta of the Ganges in the south-west, and from the Garrow Hills in the west to those of Northern Cachar on the east. The country lying between Moflong and Shillong was a grassy undulating plateau about 6000 feet high, with scattered pine trees here and there, and rhododendrons on the banks of the numerous streams flowing down the hollows between the hills. At a distance of about a mile and a half from Shillong the country subsided rather abruptly, and a long descent led down to the station more than 1000 feet below.

The right wing of our regiment left for Shillong in February and the left wing and the artillery followed in October. We all chose suitable sites at the new station, and commenced house building with as little delay as possible. Having received orders to remain at Cherra for the present with the left wing of the regiment and the Eurasian Battery of Artillery, I had to commit the building of our new house at Shillong to Pyrbad Sing, an excellent Khasia servant, who had been with us several years, and was thoroughly trustworthy, but I went over from time to time to see the progress of the work. During this time, owing to the paucity of British officers at Cherra, I was frequently put on court martial duty for the trial of men of the Eurasian Battery of Artillery, who were treated as British soldiers. I mention this merely to show the multifarious duties which Indian medical officers may sometimes be called upon to perform.

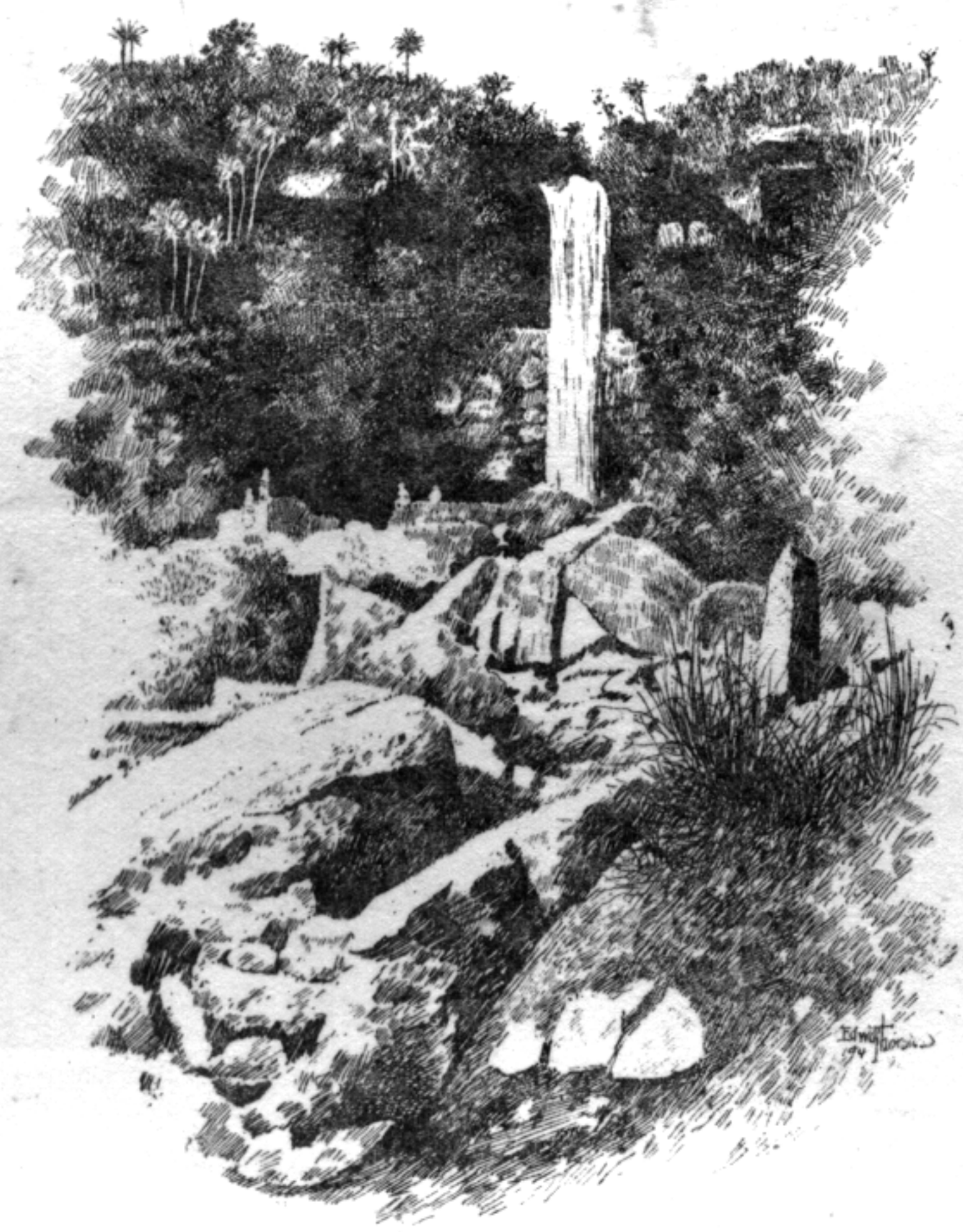
In June I was ordered to Shillong, and in July my wife and children joined me there, although the house was not nearly ready and we had to live in the kitchen and cow-shed. Leopards swarmed in the jungle, which had as yet been very little cleared, and one afternoon, as we were sitting at tea outside the cow-shed, a leopard bounded from the jungle close by and carried off our

little dog from beside us. We had to watch our children carefully and shut them up as soon as evening approached, for there was serious danger from leopards when we first

Our house was finished before the end of the year, and by that time we were very comfortably settled at our new station. The jungle had been mostly cut down, and the leopards destroyed or scared away. Broad roads, as nearly level as possible, had been made throughout the station, many private houses had been built, and the courts of justice, barracks for the troops, regimental and battery hospitals, and various other public buildings, were in course of construction.

Gardens were started by many of the residents and were generally very successful. Geranium, fuchsia, salvia, petunia, heliotrope, hydrangia, and other flowers too numerous to mention, grew luxuriantly and flowered freely in the open air, where they could be safely left all the year round owing to the mildness of the climate and the comparatively moderate amount of rain. The rainfall at Shillong was very much smaller than that of Cherra; indeed it amounted to less than 100 inches in the year. This extraordinary difference was probably due to the clouds having previously parted with most of their rain along the southern border of the Khasia Hills, and on the lofty range of hills to the south of the station. Owing to this greatly diminished rainfall there were many more fine days at Shillong than at Cherra, and the temperature at the former in the hot season was considerably higher than at the latter. The country in the vicinity of Shillong was in some parts extremely pretty, though not on the grand scale of the scenery at Cherra. Two small rivers ran through the station, and at a short distance to the north they formed two beautiful waterfalls, one being an unbroken fall of about 300 feet, while the other consisted of several successive waterfalls of smaller depth.

During our residence in the Khasia Hills, both at Cherra Poonjee and at Shillong, we frequently experienced earthquake shocks, which were usually slight, but occasionally rather severe. In 1869, not long after our departure from Shillong, an earthquake of more than ordinary violence occurred, which cracked the walls of some of the houses and threw down the regimental magazine. It is a curious circumstance that shocks of earthquake, which are rarely, if ever, felt in the plains of India, are comparatively frequent on both the north-eastern and the north-western frontier. Those felt in the former quarter are probably due, as Sir Joseph Hooker remarks, to the volcanic forces operating in the Bay of Bengal and the Malay peninsula.



THE BISHOP'S FALL, SHILLONG

An excellent cricket ground had been formed on the smooth and level floor of a valley within the boundaries of the station, and cricket was played several times a week by the officers and men of the 44th Regiment Native Infantry and the Eurasian Battery of Artillery. The Goorkhas are very fond of games like cricket and football, and sometimes excel in them. I have seen one of these sturdy little hillmen score thirty runs against good bowling without giving a chance. The men of the battery were Eurasians of every shade, some as fair as any European, and others darker than most natives. Several of these men were keen cricketers, and always took part in our matches. It seems a pity that this battery and a regiment recruited from the same class of men could not be retained on the strength of the Indian army, as employment was thus provided for a considerable number of Eurasians, who otherwise would probably have been wandering about the country in a state of destitution, as so many persons of that class do now. I never served with the Eurasian Regiment, and cannot, therefore, say anything as to their military efficiency. But I was in medical charge of the Eurasian Battery of Artillery for several years, and witnessed their behaviour in two campaigns, and I can affirm that they were most efficient and excellent soldiers both in peace and in war. Unfortunately these troops were expensive: they were treated as British soldiers in most respects, and cost almost as much; so first the regiment, and subsequently the battery, were disbanded, and the experiment of employing Eurasians as soldiers of the Indian army was given up.

In 1868, having completed twelve years' service from the date of my commission, I was promoted to the rank of surgeon (with the relative rank of major), and as my health had become somewhat impaired from the hardships and privations of several years of active service in the field, I applied for two years' furlough to

England, to which I was by this time entitled, provided that my services could be dispensed with. While my furlough application was pending we disposed of our houses, furniture, and all superfluous effects, and we made all necessary preparations for the journey to England, whither we had determined to proceed by the Cape route, which, previous to the opening of the Suez Canal, was considerably cheaper than the overland route by Suez and Alexandria. At length, after much delay, my furlough was granted and my successor appointed, and in October 1868 we left Shillong for Calcutta, travelling by way of Moflong to Cherra, whence we descended into the plains and went on by boat to Chattuck. We began this boat journey in the evening, and suffered much from the attacks of legions of hungry mosquitoes, by which the poor children were sadly victimised. From Chattuck we proceeded by river steamer to Kooshtea, and thence by the Eastern Bengal Railway to Calcutta. Our agents had taken two cabins for us in the *Superb*, one of Messrs. Green's ships, which was to sail for London in a few days, and we spent the little remaining time in necessary preparations for the long voyage that lay before us.

The *Superb* was a full-rigged sailing ship of 1700 tons, with poop and forecastle and a deep waist with lofty bulwarks. The poop contained the saloon and the cabins of the ship's officers and those of the passengers. The forecastle accommodated the crew, and the rest of the ship was filled with cargo and stores. We embarked on the 28th of October; our party consisted of myself and wife, our three children, a friend's son, aged eight, going home in our charge, and lastly, a native nurse. There were some other passengers, but the cabins were not all occupied, and those at the stern of the ship were completely filled up with tea chests, which afterwards proved a very fortunate circumstance for all of us.

The first two months of the voyage were not marked by any

incident worth notice, save the deaths of several passengers who had come on board at Calcutta almost in the last stage of disease, in the faint and delusive hope that a long sea voyage might effect a cure. One of these unfortunate persons died from abscess of the liver a few after the commencement of our voyage, and the others did not survive much longer. We sighted the African coast on December 17th, and passed the Cape of Good Hope on the 21st. Three days later some excitement was caused by the capture of a large shark. This was witnessed by our eldest son, then a little boy only three years old, and the scene made such an impression upon him that he never forgot it.

On the 2nd of January 1869 we arrived at St. Helena, and anchored there for the day. From the sea this island appeared as a black volcanic rock with perpendicular cliffs, which seemed to forbid a landing. The town lay in a cleft in the black rocks, and at a distance it could easily be overlooked. On landing we were surprised to see the ravages committed by white ants in the wood-work of the houses. I was informed that these destructive insects had been introduced accidentally from India, and had increased exceedingly and caused immense damage in the island. We visited Longwood, the residence of the Emperor Napoleon I. during his exile in St. Helena, and could well understand that, for such a man as he was, death would have been far preferable to perpetual imprisonment in that gloomy and forbidding spot. The whole island appeared to be a sterile volcanic rock, with very little vegetation except in the interior, where there was scanty herbage in the valleys and small plantations of trees round some of the houses of the residents. All vegetation, unless artificially protected, was speedily eaten down by the numerous flocks of goats which roamed over the interior of the island.

After leaving St. Helena we had favourable winds and made a

fine run northward, passing the island of Ascension on the night of January 6th. On the morning of the 8th our third son (the illustrator of this narrative) was born. Once or twice the wind failed and we were nearly becalmed, but generally there was a steady and favourable breeze until the 28th of January, when the weather changed and some heavy squalls occurred, in which several of our sails were split. On the 29th the wind and sea increased considerably, the barometer fell, and some violent squalls occurred, in which some of our sails were blown to ribbons. Next day the weather became worse, the ship rolled dreadfully, and some heavy seas came on board, inundating the saloon and several of the cabins.

At about 3 A.M. on the 31st, when we were near the Azores, the ship was struck in rapid succession by three enormous waves, which smashed the saloon skylight and nearly filled the main deck. As the ship's bows rose the vast body of water filling her waist rushed with irresistible force against the bulkheads of the saloon and nearest starboard cabin. These at once gave way, and the sea carrying away with it the wreck, the contents of the cabin, and the saloon dining-table (which was torn from its fastenings), completely demolished every cabin on the starboard side of the ship, except the stern cabins, which were full of chests of tea. But for this fortunate circumstance, the sea-water would have forced its way out at the stern of the ship, sweeping away the stern windows and thus leaving us exposed to fresh inroads of the waves. Aroused by the crash, I jumped out of my berth and went into the saloon, which was more than knee-deep in water, and helped to extricate the unlucky occupants of the starboard cabins, some of whom were half-drowned and all more or less bruised and injured. The medical officer of the ship had been jammed in his hammock by a chest of drawers against the deck above, and was so severely crushed and bruised that I had to take his duty for the rest of the

voyage. In this catastrophe we happily escaped, for as the ship lay over to starboard, our cabins, being on the port side, were only partially inundated.

Very fortunately no more heavy seas came on board after this, the water in the saloon and waist of the ship was soon got rid of, the wreck cleared away, and those who had lately inhabited the demolished cabins were put up by those whose cabins remained uninjured. In the morning the sea was still running mountains high, and presented a grand and awful spectacle. We were running before it, and every billow as it overtook the ship rose high above our poop, threatening to break and overwhelm us. But the ship was well handled and behaved admirably. No more waves broke over us, and as the day wore on the wind and sea moderated slightly. In a day or two more the storm had abated, and we then had fine weather and a favouring breeze which carried us on rapidly. We passed the Lizard light on the morning of February 6th, and arrived at Blackwall on the 9th. There we made over our friend's son to his relatives, who came on board to receive him, and we landed ourselves at Greenwich, and went to the house of some of our relatives who resided at Blackheath.

CHAPTER XII

I return to India in 1870 and am appointed to the 2nd Native Infantry—We go by train to Sahibgunge, cross the Ganges by steamer, and march to Julpigoree—Description of the station—I am appointed to the medical charge of the civil establishments there—The rainy season at Julpigoree—Snakes—Hunting excursions in the cold weather—The commander-in-chief inspects the regiment—I apply for civil employ and am appointed civil surgeon of Shahabad—I am relieved of my duties at Julpigoree and proceed to Arrah—Description of the town and district—Indian hospitality—My duties as civil surgeon and superintendent of the district jail—employment of the prisoners—Jail manufactures—Municipal work—Police cases—Quarrels and fights among the peasantry.

AFTER spending nine or ten months at home in recruiting my health and paying visits to sundry relatives and friends, I found it expedient for me to return to India and go to work again. My wife remained at home in charge of our children, and, after bidding them farewell, I proceeded to Southampton and embarked in the P. and O. steamer *Ripon* on November 26th, 1868. I had a pleasant and prosperous voyage, and at Malta I visited some of my relatives who were wintering in the island. I arrived at Alexandria on December 12th, travelled by railway to Suez, and there embarked in the *Surat* for Calcutta, where I landed on the 8th of January 1870, and reported my arrival to the military and medical authorities in the usual manner. After a few days' stay at Calcutta, I was appointed to the medical charge of the 2nd Regiment of Bengal Native Infantry, which was under orders to proceed, in the ordinary course of relief, from Calcutta to Julpigoree in Northern Bengal. This regiment was raised, in 1796, as the 31st Bengal Native Infantry, and had served with distinction throughout many

campaigns during the first half of this century. It not only remained faithful during the crisis of 1857, but attacked and defeated two native corps which had mutinied at Sagur, in Central India. As a reward for this service the regiment was placed second on the list of Bengal native infantry regiments when the native army was reorganised after the mutiny.

I had little time for preparation, as the regiment was to start on the day following my appointment, so I took over charge immediately and made all necessary arrangements for departure. I joined my new corps at the Howrah railway station, the Calcutta terminus of the East Indian Railway, on the evening of the 13th of January, and we proceeded by special train to Sahibgunge, where we arrived next morning. There we left the train and halted for a day, waiting for a river steamer, which was to take us across the Ganges. At this point the last spurs of the Rajmahal Hills approach the river, which soon after passing Sahibgunge turns southward in its course to the sea. Our sick, medical stores, and baggage were placed in sheds on the river bank to be ready for immediate embarkation, and on the morning of January 15th the steamer arrived with a battery of artillery proceeding from Darjeeling to Calcutta.

Some time was occupied in landing the battery with their guns, stores, and baggage, and when this was accomplished we commenced our embarkation. This was rather a long job, and it was past 3 P.M. before we left Sahibgunge. The steamer was very much crowded and heavily laden, though carrying only a part of the regiment. She seemed top-heavy and rolled unpleasantly, so our men were ordered to sit down on the deck and move about as little as possible. The landing-place was some miles further up the river, and as the current was very powerful we could only proceed slowly. When about half way across we ran aground on a

sandbank, but got off almost immediately, and continued our voyage, reaching Caragola Ghât in the district of Purneah at about 8 P.M. The work of disembarkation was at once commenced, but there was much to be done, and it gave us six hours' hard work to get everything landed and the tents pitched. The steamer left early in the morning and returned in the afternoon with the rest of the regiment which had been left at Sahibgunge.

During our halt at Caragola Ghât I picked up a capital pony for Rs. 120, and had him in almost constant use for the next seven years. On the afternoon of January 18th, having received from the commissariat department a number of elephants and bullock carts for the transport of the regimental baggage, we commenced our march towards Julpigoree, following the Darjeeling road, which passes through the Purneah District in a north-easterly direction. It was very hot and dusty, as no rain had fallen for some time and the country looked parched and burned up. There were not many trees until we had gone some distance from the river, then the country became well wooded and the road was bordered on both sides with fine trees, which afforded a pleasant shade to weary travellers. On the 20th we arrived at the station of Purneah, where we halted a day to rest the men and the transport animals, and to enable us to attend a ball to which we had been invited by the residents of Purneah.

We resumed our march on the 22nd, and next day we crossed a large river, the Mahanadi (great river), by means of boats on which the men, horses, and loaded carts were embarked, while the bullocks swam over and the elephants waded across. On the 25th we reached Kishengunge, a considerable town in the northern part of the Purneah district, where we received intelligence that the India Medal was to be granted to the troops who had been engaged in the Bhootan war of 1864-66. As we advanced

northward the climate became more humid and the vegetation more luxuriant, and we caught sight of ferns and mosses on all sides. Long sheds for the cultivation of pepper plants were frequently seen. On the 29th we reached Titalya, where we quitted the Darjeeling road, and, turning eastward, marched towards Julpigoree by a rough unmetalled road, which passed through a rather wild and jungly country thinly inhabited.

We arrived at Julpigoree on the 1st of February, and occupied the empty barracks and houses which had been tenanted by our predecessors. The station was situated on the west bank of the Teesta, a large river coming from the Sikkim Himalaya, and at that time it consisted of the lines of the native regiment stationed there, the houses of the officers, the courts of justice, jail, police lines and hospital, and the houses of the civil officers of the district. Colonel Haughton, C.S.I., the commissioner or chief civil officer of the Cooch Behar Division, resided at Julpigoree and held his court there. The station was divided into two parts by a considerable stream, which joined the Teesta at a point nearly opposite the regimental mess house, and was crossed near its junction by a wooden bridge. The dwelling-houses of the residents, as well as the Sepoy lines and hospital, and all the other public buildings, were at that time of the most primitive description, being simply huts built of wood and bamboo, with walls of matting, and roofs thatched with grass. They were all raised several feet from the ground on account of the excessive rainfall and the danger of inundation from the swollen rivers during the rainy season.

To the best of my recollection there was not at that period a single brick building in Julpigoree. By far the best house in the place was that of Colonel Haughton, upon which a good deal of money had been spent. It had glass windows, wooden doors, cloth

ceilings, and whitewashed walls, and it was a very comfortable residence even in bad weather. I had bought a small house from my predecessor for Rs. 400, but found on taking possession that it was a mere shed which would scarcely keep out the rain, and which admitted the wind freely through crevices in the mat walls and chinks in the boarded floor. There were no glass windows or wooden doors, but merely openings in the mat walls which could

MY HOUSE AT JULPIGOREE

be closed by shutters and doors of the same material, and of course there were no cloth ceilings. I also found that the two massive wooden posts, which mainly supported the roof, were not firmly fixed in the ground, so that in a storm the whole building would sway backwards and forwards like a ship at sea!

On our arrival at Julpigoree I was immediately put in medical charge of the civil establishments there, in addition to my other

duties. These civil charges comprised a small jail with about a hundred prisoners, a charitable dispensary for indoor and outdoor patients under charge of a native medical subordinate, a small hospital for the sick of the district police, and the medical charge of the civil officers of the division and district with their families and subordinates. As I was the only commissioned medical officer at Julpigoree all the medical arrangements, both civil and military, were in my charge, and I had also to pay visits of inspection to two outlying dispensaries, one at Titalya and the other at Boda, each about thirty miles distant from the station. I had plenty of work, professional and miscellaneous, in this appointment; so much indeed that although I was very anxious to visit Darjeeling, the chief hill station of Bengal, which was only a little way off, I was never able to do so, there being no one at Julpigoree competent to take my duties during my absence.

Indian medical officers are not unfrequently placed in a similar predicament, and are compelled to go on working year after year without cessation simply because there happens to be no one available to take their duties while they take rest and change. They are thus perpetually chained to their posts, and it too often happens that they go on working until their health breaks down completely and they have to be sent on sick leave to Europe for a long period. A month's holiday each year would in most cases prevent this disastrous collapse, and such a period of leave should, if possible, be granted yearly to every medical officer.

The rainy season commenced early at Julpigoree, and was ushered in by heavy storms with violent wind and rain and much thunder and lightning. The river Teesta rose rapidly and soon became a vast and turbid flood carrying down with it quantities of drift wood, logs, fallen trees, and other débris. Notwithstanding the swift and powerful current, our men were continually

plunging into the river to secure the drifting logs and thus provide themselves with firewood gratis. The river water almost reached the top of the broad embankment which protected the station from being inundated, and sometimes it seemed as though the swollen river would overpass this barrier. Had it done so, not only the station but much of the surrounding country would have been submerged. The rain came down in torrents and no less than forty-two inches fell during the month of June. The ground was nearly everywhere a sheet of water, even under our houses, and it was impossible to go anywhere without getting wet. During this season we endured great discomfort owing to the houses being unfit to resist such weather. If we closed every opening we were in darkness, and if a door or window were opened to admit light, the violent wind immediately burst in, bringing the rain with it and making the house almost uninhabitable.

Of course the heavy rainfall soon brought the snakes out of their holes, and they sought the houses as the only dry places left. We were obliged to carry lanterns at night when going to mess or proceeding on any duty, and it was quite a common thing on these occasions to find snakes of various kinds lying on the drier parts of the path we were pursuing. Most of these reptiles were harmless, but sometimes we came across the cobra (*Naja tripudians*), krait (*Bungarus cæruleus*), and Russell's viper (*Daboia Russellii*), all of them exceedingly venomous and deadly.

When the rains were ceasing towards the end of September we began to get magnificent views of the snowy range of the Himalaya. The great mountain Kinchinjunga near Darjeeling, upwards of 28,000 feet high, was especially remarkable, being nearer than the others, and it almost seemed to overhang the plains. In November the cold weather commenced and the climate of Julpigoree became very pleasant. We made up shoot-

ing parties from time to time, as the surrounding country abounded with game, especially towards the east and north, in which directions were immense plains covered with grass ten feet high, which afforded cover to the tiger, buffalo, rhinoceros, wild boar, and deer of various kinds. We used the commissariat elephants in our hunting excursions, as it would have been impossible to traverse this heavy grass jungle in any other way; indeed even when mounted on the elephants we sometimes found the grass above our heads.

Hardly a mile from the station there was a piece of swampy ground covered with high grass and reeds, and intersected by watercourses; this was the abode of a very wary and sagacious tiger who preyed upon the cattle of the neighbouring villagers, but never ventured far from his stronghold. Many a time we pursued him, and sometimes fired a hurried shot at him as he disappeared in the high grass, but though his tracks were always to be found we very rarely got even a glimpse of him, and we never succeeded in killing him. We had some exciting hunts after buffalo and rhinoceros, and on one occasion my elephant was charged and put to flight by a rhinoceros I had fired at and wounded, but not disabled.

In the beginning of 1871 Lord Napier of Magdala, then commander-in-chief of the Indian army, visited Julpigoree with his staff, and made an inspection of the regiment, after which they dined at the mess as our guests, in accordance with the general custom in the Indian army on such occasions. I did not remain much longer in military employ. I had previously sent up an application for civil employ in Bengal, considering that a settled appointment would now suit me better than regimental duty, and in April I was offered and accepted the civil surgeoncy of Shahabad, a district in the province of Behar. It did not take me long to

wind up my affairs at Julpigoree; my successor arrived early in May, and, after making over charge of my duties to him and bidding farewell to all friends in the station, I travelled by way of Titalya, Purneah, and Caragola Ghât to Sahibgunge, where I took the train, and arrived at Arrah, the principal station of the Shahabad district, on the afternoon of May 12th.

This district comprised an area of about 4000 square miles and was bounded on the north by the Ganges, on the east and south by the Sone, and on the west by the Kurumnasa Rivers. The population were mainly agricultural and raised abundant crops of rice, wheat, barley, Indian corn, etc., while here and there European indigo planters had established factories and cultivated indigo more or less successfully. At least three-fourths of the district was a fertile plain of alluvial soil, the remaining fourth being taken up by the Kymore Hills, a low range under 2000 feet in elevation, an offshoot of the Vindhya Mountains. The chief town was Arrah, which at that time contained a population of nearly 40,000 persons, and was the place of residence of the principal European officers of the district. Though nearly fourteen years had elapsed since I went to Arrah with Vincent Eyre's force during the mutinies, I found little sign of change, except the completion of the railway, which had taken place in the interval. The native town and the residences of the European officials presented much the same appearance as before, but a memorial church and parsonage had been built, and the small two-storied house in which the residents defended themselves in 1857 had since been repaired and showed no traces of the famous siege.

There were no particular features of interest to be met with in the native town; it contained several fairly good streets, and was intersected by the road from Buxar to Dinapore. The houses occupied by the wealthier classes, such as merchants, shopkeepers,

money-lenders, lawyers, etc., were several stories high, built of brick, with whitewashed walls and flat roofs. The dwellings of the lower classes, such as small shopkeepers, agriculturists, artisans, etc., were mud huts one story high, with sloping tiled roofs, and these formed the greater part of the town. They were intersected by narrow lanes, which were filthy and insanitary in the highest degree, as up to that time little had been done in the way of sanitation in Indian country towns. Through the town from north to south extended a shallow 'nullah' or watercourse, which was nearly or quite dry most part of the year and was then under cultivation, but during the rainy season it was filled by the flood water from the Ganges, and it then seemed a considerable river. The Buxar-Dinapore road was carried over this nullah by means of a masonry bridge of several arches.

The railway station, the courts of justice, the police lines and hospital, the district school, the church, the cemetery, and the houses of the European residents were situated just outside the town to the west and south. Broad well-kept roads ran through the station in every direction, and fine trees were planted on each side of them, forming pleasant shady avenues. Each European residence stood in its own 'compound' or enclosure, which also contained a range of servants' houses, stables and coachhouse, flower and vegetable gardens, and a grass field of greater or less extent beyond. The compound of the judge's house was far larger than any of the others, and must have contained eighty or a hundred acres; it was planted with many beautiful trees, and presented quite a park-like appearance.

On my arrival at Arrah I was very kindly and hospitably received by Mr. W. H. D'Oyly, the magistrate of the district, who put me up till I could get a house of my own. Up to the mutiny time this kind of hospitality was almost always extended by Indian

officials, not only to each other, but also to any stranger arriving at their stations. Since then, however, owing to the great influx of Europeans of all classes into India, the steadily growing cost of living there, the depreciation of the rupee, and, lastly, the great increase in the number of hotels and boarding-houses, this profuse hospitality has been greatly restricted, and travellers in India can no longer expect to be put up wherever they go, as in the old times.

The day after my arrival I took over my duties, which included the management of the district jail, containing more than four hundred prisoners, as well as the superintendence of the Arrah dispensary, and several branch dispensaries in different parts of the district, the medical charge of the district police and other civil establishments, and a fair amount of private practice in the station and neighbourhood.

The jail work took up a great deal of my time, as much of it was new to me, and I had to make myself acquainted with it as quickly as possible. The whole superintendence and management of the jail was in my hands, and every detail in the discipline, employment, feeding, and clothing of the prisoners had to be arranged by me, of course in conformity with the orders and regulations on the subject issued by the Inspector-General of Jails in Bengal. An unpleasant duty which occasionally devolved upon me as the officer in executive charge of the jail was the superintendence of executions, but fortunately these were rare, capital punishment being seldom inflicted, and only in the worst cases. I will say nothing more on the subject but this, that I always took the utmost care and precaution against the occurrence of accidents, and so I never had any.

My ordinary morning's work, after visiting the sick in the police and jail hospitals, was to walk round the jail and see all the

prisoners and their employment, inspecting at the time the various jail buildings, work sheds, yards, and gardens (where vegetables were grown for the use of the prisoners, or for sale). Then I went to the jail office, superintended the reception of new prisoners and the release of those whose terms had expired, heard the jailors' reports, and, after due inquiry, inflicted suitable punishments upon such prisoners as were proved guilty of idleness, breaches of discipline, or other jail offences. This done, I got through official correspondence and returns, and inquired into the state of the jail manufactures, and the sales of the different manufactured articles. These consisted for the most part of carpets, druggets, rugs, sheets, blankets, towels, dusters, and various articles of prison clothing. In some of the larger jails, containing more than a thousand prisoners, these manufactures were carried on profitably and successfully, but this was rarely the case in the district jails, on account of the impossibility of securing a sufficient supply of skilled artisans among their limited and fluctuating prison population. Brick and tile-making, pottery, basketwork, and gardening also gave employment to many of the prisoners, and were fairly remunerative. The manufacture of mustard oil from crushed mustard seed provided a sufficient amount of severe labour for the requirements of the Arrah jail, including the punishment of refractory prisoners.

After doing all I had to do at the jail, or as much of it as time permitted, I went on to the dispensary, where there would usually be several police cases and surgical operations awaiting my arrival. A native medical subordinate of considerable standing and experience was medical officer of the dispensary, and carried on the work of the institution under my superintendence. I paid a visit of inspection every morning and performed some of the more important surgical operations. On finishing my work there I used to

visit private patients, and then return home to a late breakfast, after which I sometimes had to go to the jail again in the afternoon, and to pay other professional visits to people in or near the station.

In addition to the various duties pertaining to the office of civil surgeon which have been already described, I was one of the municipal commissioners of the town of Arrah, in which capacity I was sometimes charged with assessment duty in the town, and I frequently had to inquire into cases of alleged encroachment, nuisance, and other breaches of municipal regulations. I had also to attend the municipal meetings, and to serve on various sub-committees connected with the municipal government of the town. For a time I was a member of the municipal bench appointed for the trial of persons charged with offences against the municipal laws and regulations. I was also a member of the district school committee: I paid visits of inspection to the school from time to time, and occasionally took part in the examinations of the boys.

I was, *ex officio*, police surgeon, and all examinations of police cases, as well as *post mortem* examinations, had to be performed by me, or (if I were otherwise engaged) by my assistant, the native medical officer in charge of the Arrah dispensary. Quarrels and fights about boundaries, water, straying cattle, grazing rights, and many other disputed matters were so common in that part of India, that nearly every day I had to examine persons who had been injured in these conflicts. The peasantry all had 'lathis' (heavy bamboo staves, often bound with iron), and could use them with great effect. Their agrarian disputes generally ended in lathi blows, causing severe bruises and often fracture of bones. Not unfrequently men were brought to the dispensary in an insensible state from lathi blows on the head, and sometimes these injuries caused death. All these cases involved my subsequent attendance in the

different courts of justice for the purpose of giving medical evidence.

It will thus be seen that the time of a civil surgeon in India is pretty well occupied, even in an ordinary station like Arrah. In a large station like Patna, where the civil surgeon has in addition a lunatic asylum under his charge, and a medical school to superintend, the work is much heavier, and some of it must necessarily be left in the hands of subordinates.

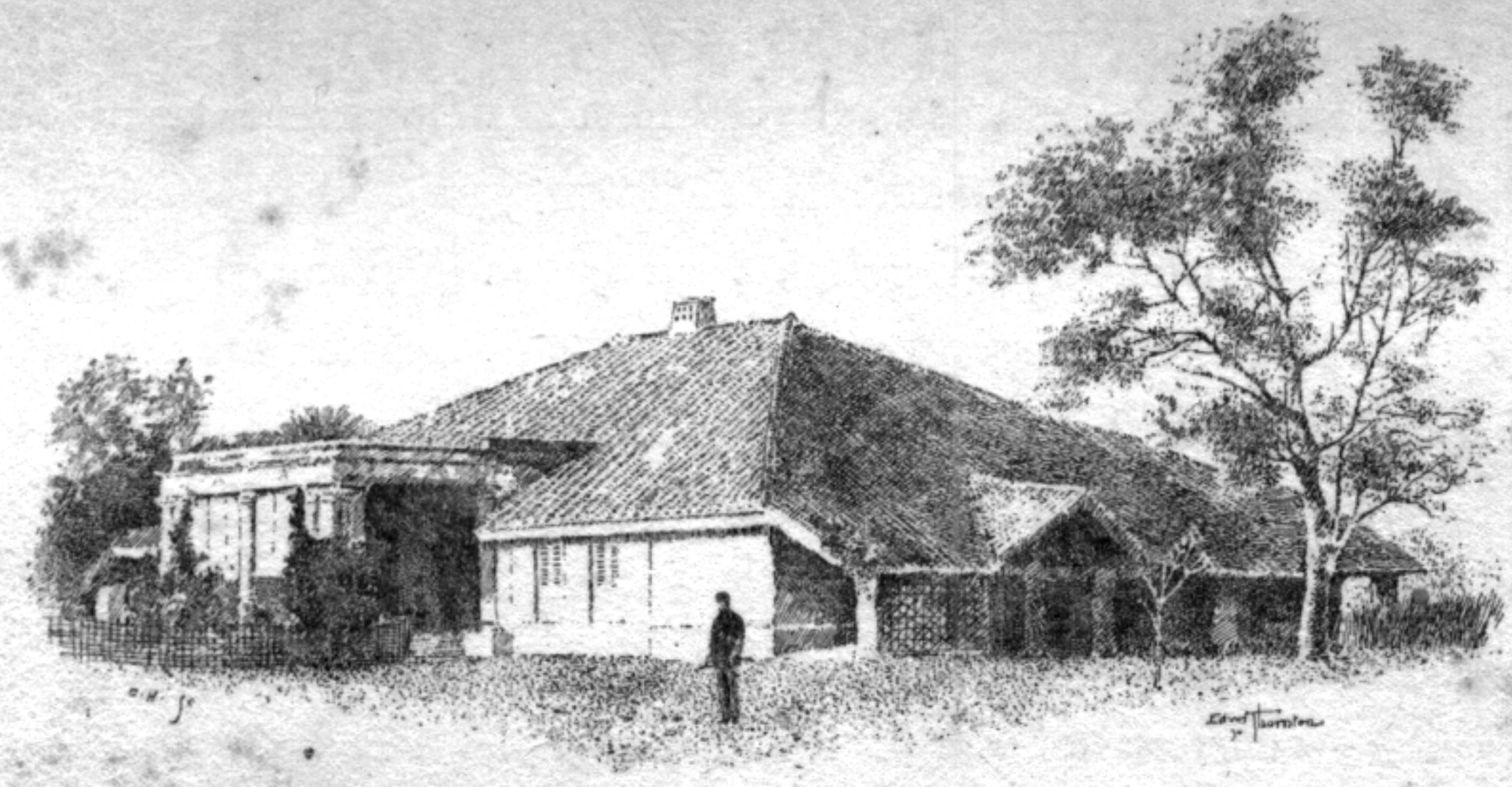
CHAPTER XIII

I take a house at Arrah—My wife joins me there—Station society—Croquet parties—Gardens—Climate of Arrah—The cold weather there—The hot weather—Kuskus tatties—The rainy reason—Snakes—Remarkable case of snake-bite—My visits to the branch dispensaries—Jugdispore—Doomraon—The Maharajah's garden and jungle—His hospitality—Sasseram—Mausoleum of Shere Shah—Subterranean passages—Dehree—Sone irrigation works—My visit to Rhotasgarh—Tradition respecting the capture of that fortress—Its extent and fortifications—Our unsuccessful beat—An indigo planter killed by a tiger near Rhotas—My visits to Bhubooah and Buxar.

Soon after my arrival at Arrah I took a commodious bungalow near the church, which had been the residence of my predecessor; it suited me very well, and was my home for six years. This house was a typical Indian bungalow, such as may be seen in most of the stations in the plains of Bengal. It had a sloping tiled roof and contained twelve rooms, namely, drawing-room, dining-room, two small offices or writing-rooms, four bedrooms, and four dressing-rooms, and there was a small bathroom at each corner of the house. These rooms were all on the same floor, which was raised two or three feet above the level of the ground. The house was whitewashed inside and out, with the exception of the drawing-room and dining-room, which were colour-washed, with some attempt at decoration. All the rooms had cloth ceilings, and were provided with punkahs for use in the hot weather. At the front entrance was a large porch, capable of sheltering a carriage, and at the back of the house was a long verandah, below which lay the flower garden. Near the house was the usual range of outhouses, comprising stable, coachhouse, kitchen, and servants'

houses. The 'compound,' or enclosure, was pretty large, and contained some very fine trees ; one splendid banyan, or Indian fig-tree (*Ficus indica*), in particular.

In November 1871 my wife, having placed our children in her sisters' charge, came out by the Suez Canal route to Calcutta and joined me. The society at our station, though not large, was very cheerful and pleasant, and people used to meet several times a week at croquet or badminton parties, and other social gatherings, at the different houses. The judge and his wife were both good



OUR BUNGALOW AT ARRAH

croquet players, and they had a very smooth and well-kept lawn, where the game could be played under the most favourable conditions. Several of the residents had similar lawns and paid great attention to them, having them frequently mown, watered, and rolled. Some of the people at Arrah had beautiful gardens, particularly Mr. Levinge, the superintending engineer of the Sone irrigation works, who devoted much care and attention to rose cultivation, and every season had a splendid show of many choice varieties, such as Marshal Niel, Cloth of Gold, Gloire de Dijon,

Black Prince, Souvenir de Malmaison, etc. I never saw finer roses than his in any part of the world, not even in England.

The climate of Arrah during the cold season was, at that time, very dry, healthy, and pleasant. It was colder in the houses than outside, so that fires in the sitting-rooms were necessary in the mornings and evenings, and sometimes all through the day. Warm clothing and plenty of bedding were required during the cold season, and brisk exercise during the day was both agreeable and beneficial. The district officials spent a great part of the cold weather in travelling through the district, paying visits of inspection, and inquiring into the state of the crops, the condition of the people, and all other matters about which the Government required information. This pleasant time of the year lasted during the months of November, December, January, and February.

In March the temperature rose rapidly; the hot wind from the west set in, and it became necessary to shut up our houses in the day time and resort to punkahs. Flies appeared in swarms in the day time and caused great annoyance, while mosquitoes at night prevented sleep, unless kept out by mosquito curtains or driven off by strong currents of air from the punkah. The hot wind blew vigorously from morning till evening, and sometimes at night also. It was an intensely dry, hot blast, and it produced a very unpleasant sensation of choking in those who were directly exposed to it. All vegetation withered under it, and the grass assumed a brownish hue. The atmosphere was filled with clouds of dust, which penetrated into the houses and covered everything with a dusty film. The extreme heat and dryness of the air caused paper to curl up and ink to dry rapidly, so that writing became a matter of difficulty and discomfort.

Some people kept their rooms cool at this time by the use of what were called kus-kus tatties; these were screens of the fragrant

grass kus-kus (*Andropogon muricatus*) which were fixed in the door or window openings and watered outside continually throughout the day by men employed for the purpose. The hot wind was cooled by passing through the wet grass and diffused a delightful coolness through the house. But though its immediate effect was very pleasant, this method of cooling houses was somewhat dangerous to health, being apt to cause sudden chills, and to bring on severe colds, rheumatism, neuralgia, and other derangements. Hence, after one or two trials, we gave it up and resorted only to the punkah as a slight alleviation of the intense discomfort of the Indian hot weather, which went on increasing during April and May, with only an occasional temporary alleviation by a dust storm.

Towards the end of June the rainy season set in and brought great relief to the exhausted dwellers in these burning plains. Heavy storms with thunder and lightning ushered in the rains, the temperature fell considerably, the hot wind ceased, and all nature became animated and joyous. The frogs began to croak loudly, insects appeared in swarms, and the kites, crows, mynas, and other birds flew briskly about, evidently enjoying the change in the weather. The air soon became charged with moisture, clothes felt damp, and boots were apt to become mildewed. This state of things continued till October, when the rain ceased and the weather became cooler, though the sun still had great power, and punkahs were not discontinued till the end of the month.

During the rainy season the snakes were driven from their holes and sought shelter in the houses to the great peril of the inmates. These reptiles were not so common at Arrah as in many other parts of India, but every now and then the cobra or the krait would be met with, and usually when least expected. On one occasion a cobra was found and killed while actually coming up the steps in front of our house to avoid the rain.

Another time, when I was in my bath I saw a krait on the floor of the bathroom, and several times during my residence at Arrah kraits were found in different places about the house and out-houses. But though several persons had narrow escapes at different times no European resident was bitten while I was at Arrah. Great numbers of natives, however, perished from snake bite, mostly during the rains.

One case which occurred soon after I came to Arrah was very striking, as it showed the value of a tight ligature in preventing the absorption of the venom. The 'syce,' or groom, of one of the European residents having been bitten in the hand by some snake (probably a krait) at 6 P.M. or thereabouts, was brought to his master, who at once applied a tight ligature above the bitten part, gave the man a dose of ammonia, and then let him go to his home, without informing me of the accident. The man remained apparently well during the night, but in the morning, feeling his hand painful, he removed the ligature, and in a very short time symptoms of poisoning set in. His friends, finding him growing rapidly worse, brought him to me, but by that time he was at the point of death, and he expired a few minutes after I saw him. In this instance the ligature effectually prevented the absorption of the venom, and if the bitten part had been amputated above the ligature the man's life would probably have been saved. When I saw him it was too late to do anything.

Several times a year I had to pay visits of inspection to the branch dispensaries throughout the district, and these excursions formed a very agreeable change from the regular routine of station life. One of these branch dispensaries was established at Jugdispore, a small town about fifteen miles distant, where the rebels under Kooer Singh fought against us in 1857. At that time the town was buried in a vast forest which extended for many

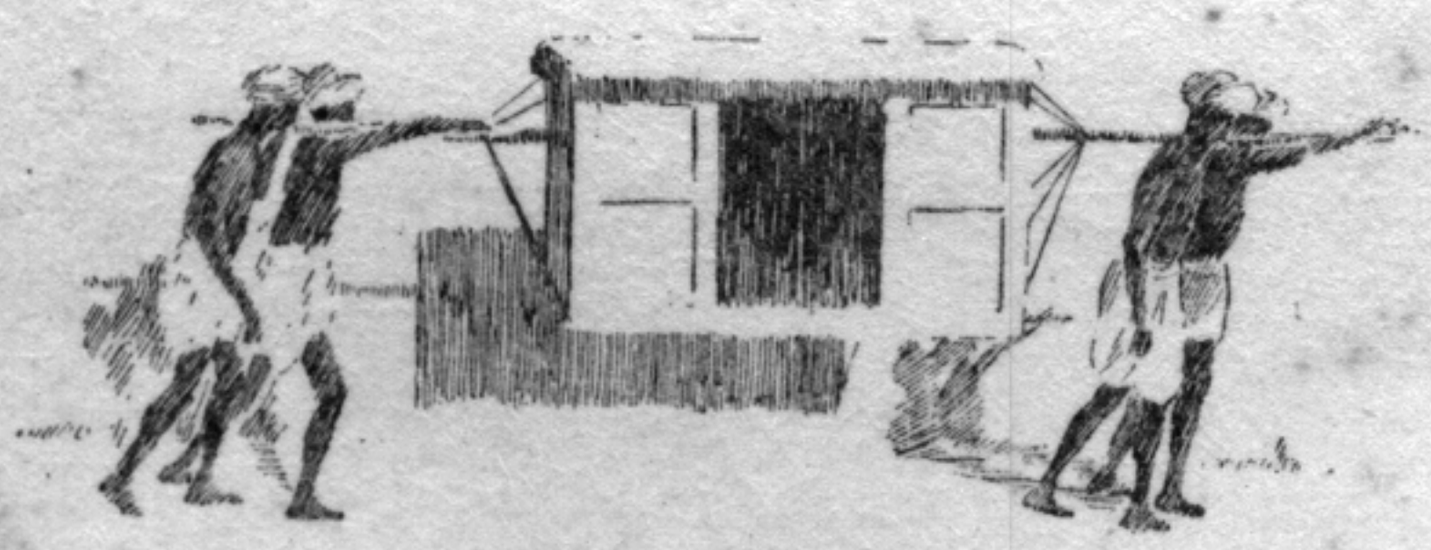
miles in every direction. After the restoration of order this forest was almost entirely cleared away and the land brought under cultivation. It was fertile and produced abundant crops, and many fine trees were still remaining, as relics of the great forest which had formerly covered the country. When visiting this dispensary I generally travelled by train to Beheea, the next station west of Arrah, and then drove in a dogcart to Jugdispore along a straight and well-kept road which passed through the remains of the intrenchments thrown up by the rebels in 1857. The dispensary was in the centre of the town, and was in the charge of a native hospital assistant of some standing and experience. It was well attended by the people of the town and neighbourhood.

Another branch dispensary under my superintendence was situated at Doomraon, a considerable town on the railway, about thirty-five miles west of Arrah. This dispensary had been built and was maintained by the Maharaja of Doomraon, a wealthy native nobleman who possessed large estates in different parts of Behar, and usually resided at Doomraon. A native assistant-surgeon was in charge of the dispensary, which appeared to be popular and well attended. The Maharaja had also built and furnished a large house in a beautiful garden close to the town for the reception and accommodation of European visitors, and the district officials generally went there when they visited Doomraon. The garden was extensive and was kept in excellent order; it contained some very fine trees and many beautiful flower beds. The native gardeners had formed the words (in English) 'God bless the garden' in colossal letters on a lawn in front of the house, the grass having been cut so as to shape the letters. Adjoining the garden was a large piece of land covered with jungle, which was kept by the Maharaja as a preserve for deer and other wild animals,

which, however, were never hunted or shot. This jungle had several good roads passing through it, and visitors to the 'Garden House' were usually invited to drive along these pleasant shady avenues in carriages provided by the kindly and hospitable Maharaja.

A good deal of indigo was cultivated near Doomraon; the factory and the manager's residence were on the Buxar Road, about a mile from the town.

An important branch dispensary under me was situated at Sasseram, a large town on the Grand Trunk Road in the south of the Shahabad district. Sasseram was a very interesting place on account of its antiquity and its ancient importance, and I always enjoyed my visits there, though the palki journey of sixty miles



A PALKI AND BEARERS

was anything but pleasant. I usually started from Arrah in the afternoon so as to get through the journey by the next morning, and had I been left undisturbed I should have slept through it comfortably. But at every stage, when the relays of palki bearers were changed, they woke me up with clamorous demands for 'bakshish' (a present), so that I had to get up and satisfy them with some coppers, and then get to sleep again as best I could. Sasseram was the headquarters of one of the four sub-divisions into which the district was divided, and two or three European officers were generally stationed there. The dispensary was in the charge of a native assistant-surgeon, who also had medical charge of the police, the lock-up, etc. Sasseram was a very old town, and appeared to

have been at one time a place of some importance, from the number of ruined buildings in and around it. The town lay in a forest of palm trees close to the Kymore Hills, the last spurs of which come down to the Grand Trunk Road between Dehree and Sasseram.

Close to the town on the west side was a large tank, in the middle of which stood the magnificent mausoleum of Shere Shah, the Afghan chief, who was Viceroy of Bengal under the Emperor Baber four centuries ago, and who revolted against Humayūn, the son and successor of Baber, defeated and expelled him, and became Emperor of Hindustan in his room. The tombs of Shere Shah and several members of his family were to be seen under an immense dome which rose in the centre of the building and was the habitation of innumerable pigeons. A causeway extended from the north side of the tank to the mausoleum, and had an imposing but ruinous pile of buildings at its entrance. The banks of the tank were covered with ruins, which had evidently been imposing structures in their day. Tradition asserted that a subterranean passage existed, passing from the mausoleum beneath the tank and under the principal street of the town to the palace of the governor; I visited the ruins of the palace, and found some subterranean rooms, but they were nearly filled with sand which had drifted in through crevices, and I could find no passage leading out of them in the direction of the mausoleum. There must have been such a passage, nevertheless, as certain openings in the pavement of the principal street were pointed out to me which evidently communicated with an underground passage. Each opening was covered with a circular stone, and when that was removed an aperture was seen, through which a slim person could descend. I felt strongly inclined to explore, but was deterred by the serious risks to life from foul air and venomous snakes, both of which are often found in such places.

Dehree on the Sone, ten miles east of Sasseram, was at that time the headquarters of the Sone irrigation works, which had been commenced by order of Government with the view of preventing failures of the crops in Southern Behar by the construction of a system of canals for irrigation to be supplied with water from the great river Sone at Dehree. An immense and massive wall, about two miles long, was built across the Sone at Dehree in order to retain sufficient water for the canals which were being constructed on both sides of the river through the districts of Shahabad, Gaya, and Patna. These vast and important works took several years for their completion, and during the time they were in progress Dehree presented a busy and animated appearance. Extensive workshops had been established, and a large number of engineers and artificers were maintained there for a considerable time. A large convict camp was kept at Dehree, the convicts being employed as unskilled labourers chiefly in the work of excavation. Another medical officer was in charge of the convict camp and the Dehree irrigation works, but sometimes I was sent for to meet him in consultation, and generally during my periodical inspections at Sasseram I used to pay a short visit to my colleague at Dehree. Subsequently, after the completion of the canals, I often travelled from Arrah to Sasseram, by way of Dehree, in a small passenger steamer which used to ply regularly on certain days between Arrah and Dehree, and did the distance—sixty miles—in a few hours. This was a very pleasant way of travelling and much to be preferred to palki journeys.

On one occasion I made a very interesting excursion to Rhotasgarh, an ancient fortress on a spur of the Kymore Hills about twenty-four miles south-west from Dehree. The hills at this point are under 1500 feet in height, but their sides in some parts are perpendicular precipices for many hundred feet, and they present a

very grand and imposing appearance. Below the precipices are jungle-covered slopes descending towards the Sone River, which flows near the southern border of the Kymore range. The hills consist of a great mass of sandstone lying upon beds of limestone, which crops up below at various points. The spur of Rhotas is partially isolated from the main range, and being nearly everywhere surrounded by precipices, it must have been an almost impregnable stronghold in the times when firearms were unknown. The summit of the spur is fairly level, and is about twenty-five miles in circumference, so that the garrison must have been able to cultivate extensively and perhaps grow sufficient grain and vegetables for their own consumption.

Tradition relates that some centuries ago a Mohammedan chief captured this impregnable fortress by an ingenious stratagem from a Hindu Raja who possessed it. He informed the Raja that he was about to march on an important expedition, and asked his permission to send the ladies of his harem and the wives and daughters of his followers to the fortress of Rhotas for safety during his absence. Permission was given, and at the appointed time a long procession of palanquins ascended the hill by the steep and difficult track, and reached the gate of the fortress. The Raja seems to have had some suspicion of treachery, for he examined the first three palanquins. This search had been anticipated by the wily Mohammedan, and only women were found in them, so that the Raja's suspicions were dispelled, and he permitted all the rest to pass in without any examination. But all the other palanquins contained armed men, who suddenly attacked and overpowered the guard at the gate, admitted their friends who were in readiness outside, and speedily got entire possession of the fortress.

Rhotas was a favourite stronghold of the Afghan chief Shere Shah, and he built very strong and solid fortifications at every

point that was not sufficiently defended by precipices. He formed the design of isolating Rhotas by cutting through the narrow neck which joins the spur to the main range of hills, and he actually commenced the work and cut through the rock for some 20 or 30 feet in depth and still more in breadth, but then gave it up, having, I suppose, recognised the practical impossibility of fully carrying out his plan. The marks left on the rock by the tools of the workmen are still plainly visible, notwithstanding the lapse of several centuries. The fortifications of Rhotas are now in a ruinous condition in many places, but I saw some massive walls and towers which had successfully resisted the ravages of time, and looked as if they had been only just built. The palace is situated in the interior of the Rhotas plateau, some distance from the gateway of the fortress. It is very extensive, and though now in a ruinous condition it bears distinct evidences of its former grandeur and magnificence.

Towards the south and east the Rhotas plateau ends abruptly in stupendous precipices overhanging the Sone valley and commanding extensive views of the country beyond the river in the Gaya district. I visited a ruined Hindu temple at the southern edge of the plateau overlooking the valley; it was evidently of great antiquity and had been built long before the Mohammedan occupation of Rhotas, as a small mosque had been erected close to it, resting upon part of the verandah of the temple. This mosque, though of much more recent date, was more dilapidated and ruinous than the temple it was intended to supplant. Game used to be abundant in the neighbourhood of Rhotas in former days; tigers, bears, leopards, wild dogs, wild cats, and deer of various kinds were found on the plateau and the slopes of the hills. At the time of my visit (about twenty years ago) they had grown scarcer, and I spent some hours with a friend vainly hoping to get a shot

at something, while a number of beaters swept through the jungle towards us; but nothing came in sight and we had to return empty-handed. A year or two before my visit an indigo planter of the neighbourhood was killed by a tiger near Rhotas; he was posted in a tree at a safe distance from the ground, but rashly descended to a lower branch in order to get a better view. The tiger, furious from wounds, made a prodigious bound and reached the unlucky sportsman, inflicting severe injuries which proved fatal in the course of a few days.

From Sasseram I used to travel in a westerly direction along the Grand Trunk Road to visit Bhubooah, the chief town of a subdivision which comprised the south-western part of the district. At Jehanabad I had to leave the main road and follow a cross country track for many miles, crossing several rivers and streams by boat or by fording, as none of them were bridged. In the rainy season, when they were in flood, it was sometimes neither safe nor easy to cross these rivers, particularly as the only ferry-boat was a leaky and clumsy dug-out, so narrow that I had to hold both sides of it to keep my balance. Sometimes the boatmen failed to reach the regular landing place, the boat being swept past it by the strong current, and once or twice when this accident happened I had to scramble up the muddy bank as best I could. There was nothing of any interest to be seen at Bhubooah; it was an ordinary native town of small size and population. The civil officer in charge of the subdivision resided and held his court there, and in addition there was a police station, a lock-up, and a small dispensary in charge of a native hospital assistant. From this place I generally returned by striking northward to the Kurumnasa, crossing that river, and then reaching Zamaniah, a station on the East Indian Railway, whence I travelled comfortably by train to Arrah.

In passing up the Grand Trunk Road from Sasseram I noticed an old bridge at some distance on the right, which from its style of architecture appeared to have been built in the time of the Mogul Emperors of Hindustan. I went up to it and found that the river over which it had been built had changed its course and left the bridge high and dry and completely isolated, as the road embankment on each side had been swept away by rain and floods. But the massive masonry of the bridge was as hard as rock and still remained almost intact as a monument of the skill of the native architects and the excellence of their materials and construction. Not far from this ancient bridge I found a ruined mosque with an inscription setting forth that it had been built in the reign of the Mogul Emperor Jehangir, about the beginning of the seventeenth century.

I occasionally visited Buxar, a town situated on the Ganges, in the north-west of my district. This place was not in my charge, another medical officer being stationed there, but I sometimes was called for a consultation. Buxar was once a place of some importance, and the headquarters of a division of the Bengal army. In 1765 it was the scene of a great victory gained by the British army under Major Munro over the forces of Kasim Ali and the Nawab Vizier of Oudh. In 1857 it was the starting point of Major Vincent Eyre's little force for the relief of the Arrah garrison. It possessed a small fort resting on the river, with a moat and high turfed ramparts. The native town was small and unimportant, but there was a large central jail containing about a thousand prisoners. Buxar was the headquarters of a subdivision and possessed a court of justice, police station, lock-up, and a small dispensary, as well as a station on the East Indian Railway.

CHAPTER XIV

An outbreak of Cholera at Arrah—The prisoners suffer severely and are removed into camp—Good result of this measure—Cessation of the epidemic—The Behar famine in 1874—My wife is obliged to return to England—I start a 'chummery'—The rat nuisance at Arrah—I pass a bad quarter of an hour—Visit of H.R.H. the Prince of Wales to India—I attend the Durbar at Bankipore—My visit to the Sonepur fair—I apply for furlough to Europe in 1877—My week at Bombay—I visit the rock-hewn temple of Elephanta and go over the ironclad turret-ship *Magdala*—Her defenceless state—My voyage home—I pass eighteen months with my wife and family and return to India in 1878—I am warned for field service in Afghanistan, but not sent up to join the army—Completion of the Sone Canals—Effects on the climate produced by irrigation—Poppy cultivation in Shahabad—The Opium Question.

In 1873 the rainy season set in unusually late, and no rain fell at Arrah till the 9th of July. The heat was intense and the sanitary condition of the town exceedingly bad, in spite of all we could do to improve it. I fully expected an outbreak of cholera, and my expectations were soon realised. The epidemic commenced in June, and before the end of the month a great number of cases had occurred in the town, and the prisoners in the jail had been attacked, although I had done everything in my power to isolate them. As fresh cases occurred each day and many proved fatal, I shortly decided, after consultation with the magistrate of the district, to move all the prisoners out of the jail and to place them for a time in some empty sheds at a little distance from the town. This measure was carried out nine days after the first appearance of cholera in the jail, and it was attended with complete success, as no fresh cases occurred after the removal, although the whole of the prisoners, including those still suffering from cholera, were

confined in the sheds. After remaining there for a fortnight, during which time the jail buildings were thoroughly cleaned, fumigated with sulphur, and newly whitewashed, the prisoners were brought back, and no recurrence of the disease took place. The epidemic in the town subsided when the rains set in and soon ceased altogether. No European was attacked during this epidemic, but while it lasted nearly every one in the station (myself included) felt more or less unwell.

The beneficial result which followed the removal of the prisoners into camp was very striking, especially as the cholera patients could not be effectually separated from the others. It has long been understood by the authorities in India that removal from the affected locality is the most serviceable measure that can be adopted when cholera attacks a body of troops, or a jail, school, lunatic asylum, etc., and accordingly there are standing orders directing this step to be taken in all serious outbreaks of cholera, the details as to time, place, etc., being of course left to the discretion of the local authorities. But for the general population this plan is impracticable, and special sanitary measures must be relied on with a view to the prevention of cholera outbreaks. Chief among these measures is the provision of a pure and uncontaminated water supply, and I am strongly of opinion that, could this inestimable blessing be everywhere secured, we should hear little more of cholera. A good deal has already been done to improve the water supply of the Presidency towns and of many other Indian stations, and wherever a supply of good water has been provided the result has been most gratifying, both as regards the prevention of cholera and the improvement of the general health of the troops and population. Another important matter to which attention has been paid for some time is the due regulation and sanitation of great gatherings of people, such as the

Hurdwar and Sonepur fairs, where disease has frequently originated and whence it has been disseminated over a wide extent of country. The sanitation of Indian towns and villages is a work of such magnitude that little more than a beginning has as yet been effected, and many years must elapse before their sanitary condition can be brought up to the European standard.

In 1873 the rains in Behar not only set in late but were less than usual in amount and ceased earlier. In consequence of this deficiency in the rainfall there was a partial failure of some of the crops, particularly the rice crop, which requires much moisture, and in 1874 there was some scarcity and distress in the northern parts of Behar, amounting to a positive famine in certain portions of the districts of Tirhoot and Chumparun. In this emergency the Indian Government acted with energy and promptitude: a civil officer of high rank was appointed to superintend the famine campaign, relief works were started, grain was poured into the distressed districts, and every effort was made to save the people and to prevent such disasters as formerly occurred in Indian famines. Unhappily an exaggerated estimate of the situation was formed, a lavish and unnecessary outlay took place, and a prodigious waste of money resulted. In my district there never was any distress at all, yet we were constrained to do something, as otherwise we should have been regarded as careless and inefficient. So we collected a lot of beggars (plenty of whom are always to be found in every district in India) and fed them for several months as a famine relief measure.

After some years' residence at Arrah my wife's health began to suffer from the severe and long-continued hot weather of Behar, and in 1875 she returned to England with our infant daughter. These painful separations in families are perhaps the worst feature of an Indian career, but under existing circumstances they are apparently unavoidable. European children, as a rule, cannot

long endure the climate of the plains of India without injury to their health; they must be sent home or to one of the Indian hill stations, and for many reasons the former alternative is preferable. When the children are sent home it becomes a doubtful question whether their mother should accompany them or remain with her husband in India. This question must be decided according to the circumstances of each case, but it is in every case a choice of evils. If both father and mother remain in India, the children are liable to forget them and grow up strangers to them—a very distressing result for the parents. If the children are accompanied by their mother, and she remains with them at home, then it is a hard case for the husband, who is deprived of the society of his wife and has to rub on alone as best he may. We adopted the second alternative, as the state of my wife's health rendered it necessary for her to go home in 1875, and circumstances prevented her from again returning to India.

Finding myself thus left alone in a large house, I started what in India is commonly called a 'chummery,' by getting a friend to come and live with me and share expenses. After a time another friend joined us and at last a third, who however had to sleep in a tent as there was no spare bedroom for him in the house. This was a very pleasant, as well as a very economical arrangement; I had the management of the establishment, and my friends left everything in my hands, declaring that they had never lived so well and so cheaply before.

At many Indian stations the houses are infested by rats, which do much damage, gnawing their way into storerooms and sideboards, devouring everything edible they can discover, and even eating holes in boots, clothing, etc., which they find lying about. Arrah was as bad in this respect as any Indian station I ever saw, and my house, having a sloping roof and cloth ceilings, harboured

more rats than the rest, which were mostly flat-roofed houses. They were continually scampering about the roof, and few nights passed without my being disturbed by the horrid rasping noise caused by their gnawing the furniture or the woodwork of the house. On such occasions I often used to rise and light a candle, and then carefully close every door and window before I looked for the intruder. If the rat happened to be in my bedroom I generally managed to kill it after an exciting chase, during which it would fly round the room, run up the doors, hide behind boxes, and conceal itself wherever there was a chance of concealment. I had a black and tan terrier and a yellow cat that had been brought up together; these two animals used to hunt the rats in concert, and seldom failed to catch them unless a hole or other place of refuge were close at hand. But they could not reach the rats that lived in the roof of the house; these were secure from all enemies except snakes, which sometimes gain access to the roofs of houses and then continue to live there and feed on the rats. These animals can easily come down from the roof into the rooms of a house by gnawing holes in the cloth ceilings, and then, descending the ropes by which the punkahs are suspended, they spring down upon any article of furniture that may be below. I have actually seen a rat do this even though the punkah was being pulled at the time.

One night after my wife's departure to England I was aroused, while sleeping soundly in bed, by a sharp bite on one of my fingers. I started up, struck a light, and looked round the room, but could see nothing. I then examined my finger and found two punctures, which looked rather like those generally inflicted by the bite of a venomous snake. Still I could not make sure about it, and I waited with some uneasiness till a quarter of an hour had passed, when, as I experienced no unpleasant symptoms of any kind, I concluded that the bite had been inflicted by a rat, and not by a

snake. My hand had probably been hanging down outside the bed, and some foraging rat had mistaken it for something eatable. It gave me a very bad quarter of an hour, and my feelings towards the rats may be readily imagined.

In January 1876 I attended a durbar, or reception, held at Bankipore, the chief civil station of Behar, by His Royal Highness the Prince of Wales during his Indian tour, and I had the honour of being one of the officers presented to His Royal Highess on that occasion. The durbar was held in a large 'shamiana,' or flat-roofed tent, which had been pitched in a suitable spot for the occasion, and it was attended by the native nobility of most of the Behar districts, as well as by all the Government officers who were not unavoidably kept away by duty or sickness. When the time of the Prince's arrival drew near, H.M. 109th Regiment (which had marched over from the neighbouring station of Dinapore to take part in the ceremony) formed in two lines on each side of the approach to the durbar tent, and behind each line of soldiers there was a line of elephants belonging to different rajas and landowners of Behar. There were about five hundred elephants present on this occasion, all splendidly caparisoned and painted on their foreheads and trunks in various devices. Some of them had ivory or silver howdahs, and trappings of cloth of gold covering their bodies and almost reaching the ground.

A royal salute from a battery of artillery announced the Prince's arrival at the Bankipore railway station, where he was received by Sir Richard Temple, Lieutenant-Governor of Bengal, and some of the principal officials. He came to the durbar tent in a carriage, escorted by the Behar Light Horse, a fine body of volunteer cavalry almost entirely composed of the European indigo planters of Behar. As the Prince drove up the British troops presented arms, and the double row of elephants saluted him by

raising their trunks at the command of their mahouts or drivers. The durbar was a magnificent spectacle, the spacious tent being crowded with native chiefs in the most gorgeous costumes and British officers in full-dress uniform of every description. The native princes, nobles, and gentlemen were presented first, and then the British civil and military officers according to their rank. The presentation was soon over, and the assemblage broke up, as the Prince's party were pressed for time and had to resume their journey up country without delay.

In November 1876 I visited the celebrated Sonepore fair, an immense gathering of natives which is held annually at Sonepore, in the Sarun district, where the River Gunduk falls into the Ganges, nearly opposite Patna. The spot where the two rivers meet is believed by Hindus to be peculiarly sacred, and many thousands of them come there to bathe every day while the fair continues. The fair is held a short distance from the river bank, and is a very busy and lively scene. It is attended by multitudes of people of all trades and occupations. At the time of my visit there were, it was computed, more than two hundred thousand persons assembled at Sonepore, busily engaged all day long in bathing and worshipping, buying and selling. There were endless rows of temporary mat huts filled with goods of every description, including furniture, clothing, lamps and shades, glass and crockery, brass and copper work, mirrors, cutlery, saddlery and leather goods, and many other miscellaneous articles. Tents were sold in one part of the fair, carriages and carts in another; the quarter reserved for horses contained hundreds of fine animals of various breeds, from the beautiful high-caste Arab to the hardy country-bred horse. In another place I saw great numbers of splendid bullocks tethered in rows, while elsewhere camels and elephants were offered for sale. The 'Chiriya-khana,' or bird-sellers' quarter, exhibited

for sale a large stock of parrots, cockatoos, canaries, hawks, and many other birds. Notwithstanding the immense concourse of people from all parts of India there were no disturbances, and perfect order prevailed everywhere.

Not far from the fair were the racecourse and ballroom, and the camps of the various European officials and visitors from all parts of the country. This fair is held during certain Hindu holidays, when the courts of justice are closed and most civil officers are able to leave their posts for a few days, so that all who can get away resort to Sonepore as a pleasant relaxation. Balls and parties, races, cricket, and lawn tennis, with occasional strolls through the fair and visits to the sacred bathing place, make the time fly fast, and an officer's holiday comes to an end when it seems to have only just begun.

In 1875 and 1876 I suffered rather severely from boils, and I felt that my health was somewhat impaired by the seven hot seasons I had passed continuously in the plains. I therefore applied for furlough to Europe in the beginning of 1877, and left my station in March. On my way home I stayed a week at Bombay and saw all I could of the city, which is remarkable for the magnificence of its public edifices. These, as well as many other buildings in the city, are built of stone and embellished with elaborate carving, polished granite and marble columns, and all kinds of ornamentation. The public markets are admirable; they are exquisitely clean and orderly, and have lovely gardens cultivated with the utmost care. The streets are broad, well paved, capitally lighted by gas lamps, and provided with tramways. I went over Malabar Hill, a delightful suburb of Bombay, full of splendid mansions, most of them the residences of wealthy Parsee merchants or bankers. The Governor of Bombay has a charming place at the end of the hill, where it juts out

into the ocean, so that his grounds are washed by the sea on three sides.

I visited the celebrated rock-hewn temple in the island of Elephanta, and enjoyed the trip exceedingly. The distance across Bombay harbour to the island is five or six miles, and the

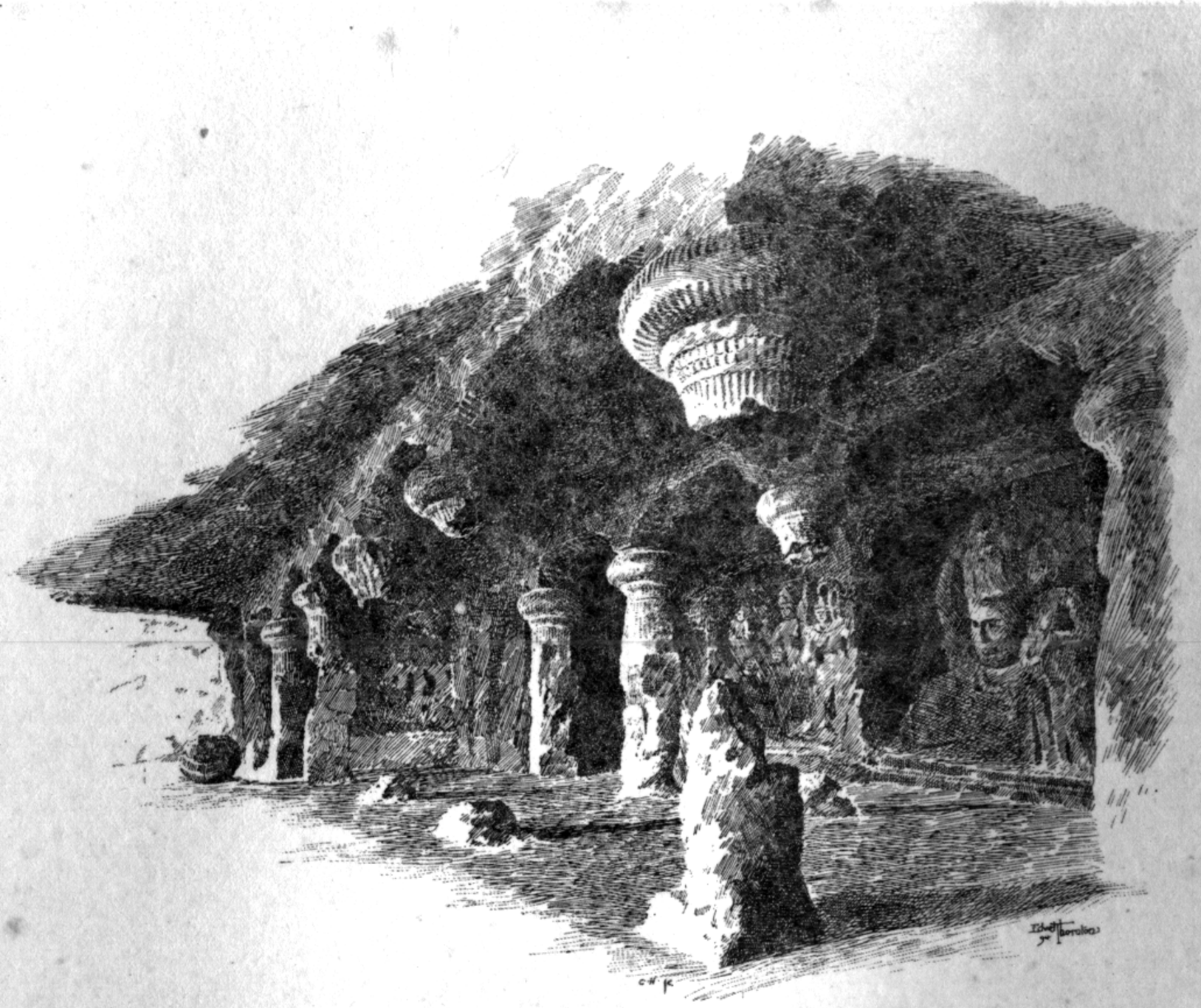
ENTRANCE OF TEMPLE AT ELEPHANTA

views around are most beautiful and picturesque. The shore is everywhere broken by hills, which often have houses perched on them, the wide expanse of the harbour is full of ships of all kinds and innumerable native boats. The city of Bombay covers all the eastern shore for several miles, and beyond there is forest, rock, and hill in endless variety. I landed on the island by a long causeway

built of blocks of concrete, and ascended the hill in which the temple was excavated by a good road constructed of large blocks of stone fitted together. Having paid an entrance fee of four annas (sixpence at that time), I entered the temple and found myself in a spacious cave hewn out of the solid rock, which had been shaped into enormous pillars and colossal figures representing various Hindu deities, such as Siva, Vishnu, Ganesh (with an elephant's trunk), and many others.

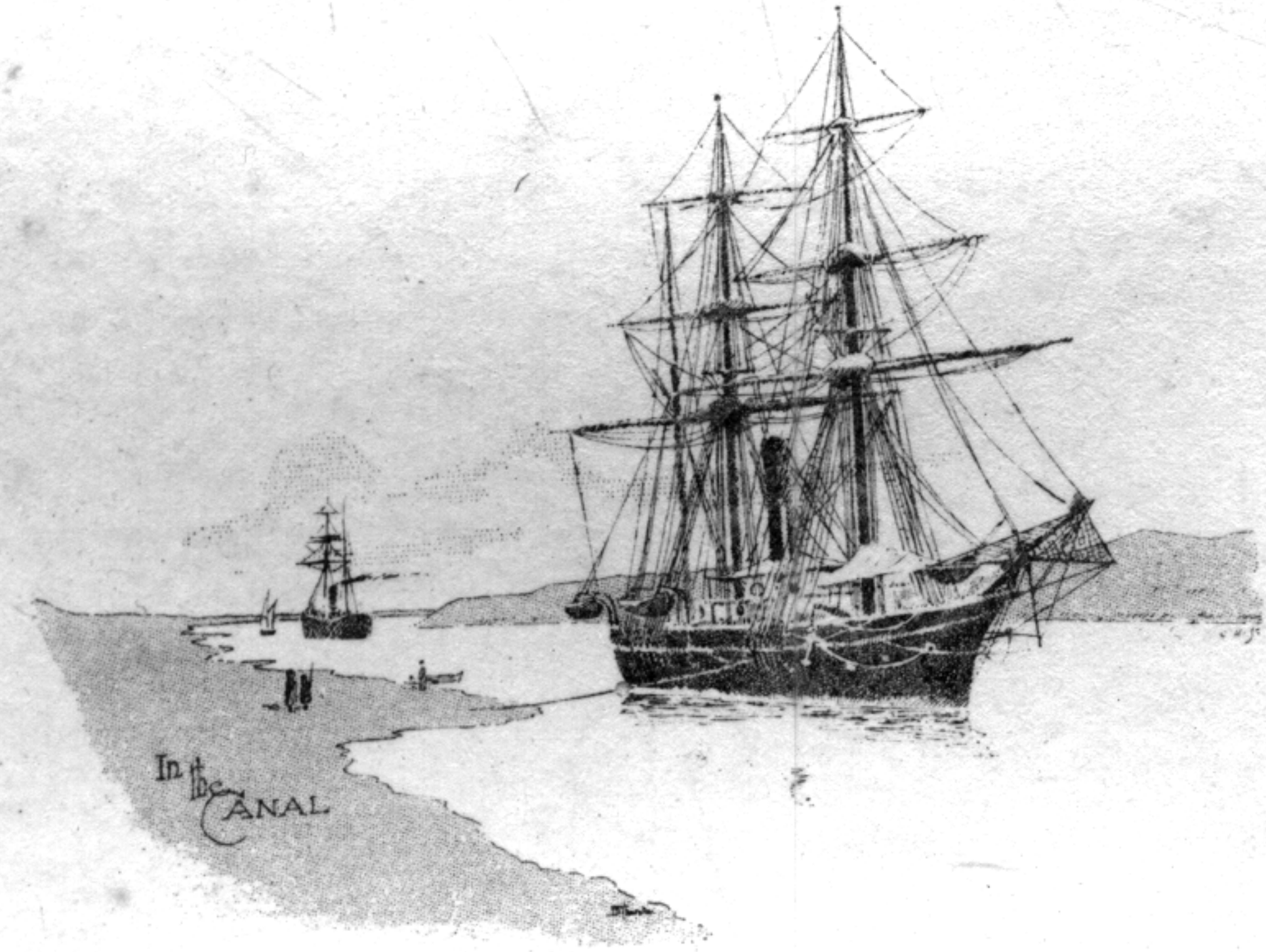
These sculptures must have been beautifully executed, but the whole place had been so much defaced and injured that only one of the colossal figures had escaped mutilation, and some of the massive pillars even had been destroyed. The smaller figures had also suffered sadly, and very few of them remained uninjured. These damages are supposed to have been done in the first instance by the Mohammedans, and subsequently by the Portuguese, both of whom were filled with iconoclastic zeal and never spared idols when they had power to destroy them. The Portuguese are said to have shattered the massive pillars of the temple with cannon shot, and this seems probable, as they could hardly have been demolished in any other way. Our countrymen, too, seem to have done some damage by their inveterate habits of carrying away relics and of cutting their names. I saw the name John Elliott, with the date 1742, cut upon one of the large figures.

While at Bombay I visited the *Magdala*, one of the two iron-clad turret ships permanently stationed there for the defence of the port. I found this powerful vessel left without a crew, from considerations of economy! She was in the charge of a British quartermaster and five or six native seamen, and I was informed that the sister ship, the *Abyssinia*, was in precisely the same condition. The quartermaster showed me over the ship, and explained that, in the event of war with any naval power, these ships would be



ROCK-HEWN TEMPLE, ELEPHANTA

manned by scratch crews taken from the other men-of-war of the East Indian squadron. This appeared to me a very hazardous and uncertain sort of arrangement, as the two ships were quite undefended and were liable to be captured any dark night by an armed boat from a hostile cruiser, in the event of a sudden and unexpected declaration of war; while, even if no such accident happened, it is obvious that the vessels could not be worked with ease and efficiency by crews altogether unaccustomed to them.



STEAMERS IN THE SUEZ CANAL

I left Bombay on March 26th in the P. and O. steamer *Mongolia*, and after a pleasant and uneventful voyage we arrived at Southampton on April 22nd. I spent a very happy time with my wife and children, who were residing in West Brighton, and I paid visits to many friends and relatives whom I had not seen for years. In October 1878 I parted from my family and went to Southampton, where I embarked for India in the P. and O.

steamer *Cathay*. I met several acquaintances on board, and enjoyed the voyage very much. At Madras I paid a visit to my brother, Colonel Thornton, R.A., who was then in command of the artillery there. I was grieved to find him far from well, but I little thought that in a few months' time he would be no more. He died at Malta, on his way home, in February 1879, a victim to the Indian climate. I arrived at Calcutta on the 10th of November, and rejoined my civil appointment at Arrah a few days after.

The Afghan war had only just commenced, and I fully expected to receive orders to join the army, as military medical officers, temporarily employed in civil posts, are always liable to be sent back to military duty should their services be required. In 1880 I was officially instructed to hold myself in readiness to proceed and join the force in the field immediately on receiving orders to do so. I accordingly purchased a charger and provided myself with a camp kit. But time passed on and no orders reached me, and in a few months the war came to an end; so that, to my great disappointment, I had no opportunity of taking part in that campaign.

After my return to Arrah from furlough I found that the Sone irrigation works had been completed during my absence and that irrigation was in full swing in most parts of the district, sugar-cane and other crops requiring much water being grown extensively by the natives. The result was that the climate of the district, which had been dry and hot, but fairly healthy, became humid and insalubrious, and ague, rheumatism, and other complaints prevailed among the native population to a much greater extent than they had before. A similar result has been observed in other parts of India where irrigation from canals has been introduced; and this state of things has been largely due to the profuse irrigation practised by the natives when they can get the water easily. When

they have to draw the water from wells the severe labour of drawing it acts as a salutary check and prevents them from taking more than is absolutely necessary for the crops. But when they can get the water without an effort from the irrigation channels they literally flood their lands and make the whole country damp and unhealthy. It thus appears that canal irrigation in India, though beneficial in preventing famines, is harmful by inducing disease, and I am much disposed to think that the multiplication of wells, and the construction of numerous reservoirs for storing water, would have been a better, and certainly a cheaper, policy than the vast schemes of canal irrigation which have been carried out in India hitherto at such great expense.

Poppy cultivation was extensively carried on in the neighbourhood of Arrah and throughout the Shahabad district generally, and a large quantity of opium was sent to the Government opium factory at Patna, where it was prepared for the market. I may here state that during my long service in India I saw many habitual opium-eaters who not only sustained no injury, but actually derived benefit from the drug. In malarious tracts it is very serviceable as a prophylactic against ague, and it was used for this purpose in the fen country of Lincolnshire and Cambridgeshire in former times. The value of opium in warding off malarious fevers is doubtless due to the narcotine it contains. This alkaloid is an important febrifuge remedy, and I have frequently employed it in cases of malarious fever with excellent effect. What may be termed habitual but moderate opium-eating is very extensively practised throughout India, particularly by the Sikhs, who are a very fine race and furnish many of the best soldiers of the Indian army. The Sikhs insist on having their opium under all circumstances, so that Government found it expedient to order opium to be supplied as a daily ration to the Sikh soldiers when they were on foreign

service and could not procure it for themselves. Were opium-eating in moderation prejudicial to health, its injurious effects would be very noticeable in the Sikhs, but, as it is, no such evil result has been recorded. Hence I do not hesitate to express my conviction that this practice, instead of being injurious, as some persons imagine, is harmless and even beneficial under certain circumstances, unless carried to excess. Even when used immoderately the injury to health is far less grave than that caused by the excessive use of alcoholic drinks, and besides, the injury inflicted is more easily repaired. There is, therefore, no valid reason for interference with the manufacture and sale of opium in India, notwithstanding the outcry that has been raised against it by certain well-meaning but ill-informed and prejudiced persons in this country. Not only would such interference be unnecessary, but also extremely dangerous to the peace and prosperity of India and the stability of British rule, for any attempt to deprive the Sikhs of their opium would undoubtedly provoke a rebellion.

CHAPTER XV

My promotion to brigade surgeon—I am transferred to Monghyr—Description of the station—I volunteer for field service in Egypt—My appointment to the Indian contingent—I proceed to Bombay and embark for Egypt in the *Tenasserim*—A rough passage—I land at Suez and receive charge of the general hospital—Transfer of the general hospital to the P. and O. steamer *Hydaspes* in Suez docks—Hospital arrangements on board—Sanitary precautions—News of the battle of Tel-el-Kebir, the occupation of Cairo, and the end of the war—I return to Bombay in the *Avoca*, and rejoin my civil appointment at Monghyr—Irrigation works at Khurruckpur—The Seetakund hot springs—Singular change in their temperature—Private practice at Monghyr—Reluctance of the natives to pay medical fees—Their extraordinary credulity—Snakes at Monghyr—I meet with a serious accident.

In April 1882 I was promoted to the rank of brigade surgeon, and was transferred soon after to Monghyr, a station situated on the right bank of the Ganges, some distance below Patna. Monghyr was a place of considerable importance in past times, and in the last century Mir Kasim Ali, the last Nawab of Bengal, made it his capital in place of Murshidabad, which he considered too near Calcutta, the seat of the British power. When war broke out between Mir Kasim Ali and the British the troops of the former, after several defeats, made a stand in the formidable fortress of Monghyr, a stronghold built on a rocky eminence washed by the waters of the Ganges, and believed to be impregnable. It was, nevertheless, taken by storm by the British army under Major Adams, and the defenders, leaving the fort by the western gate, retreated hurriedly to Patna. The walls, towers, and gateways of the fort still exist, but it now contains a number of houses occupied by the district officials and other Europeans

residing at Monghyr. Some of the old buildings of the palace occupied by the Mohammedan governors in the times of the Mogul Emperors still remain and form part of the district jail. Many ruined buildings exist in and about Monghyr testifying to the wealth and importance of the place during the period of Mohammedan supremacy, and there are some remarkable subterranean rooms and passages like those at Sasseram. I explored several of them which were below the jail buildings, but made no important or interesting discoveries, and had to give it up on account of the great risk from foul air and from deadly snakes which abounded at Monghyr.

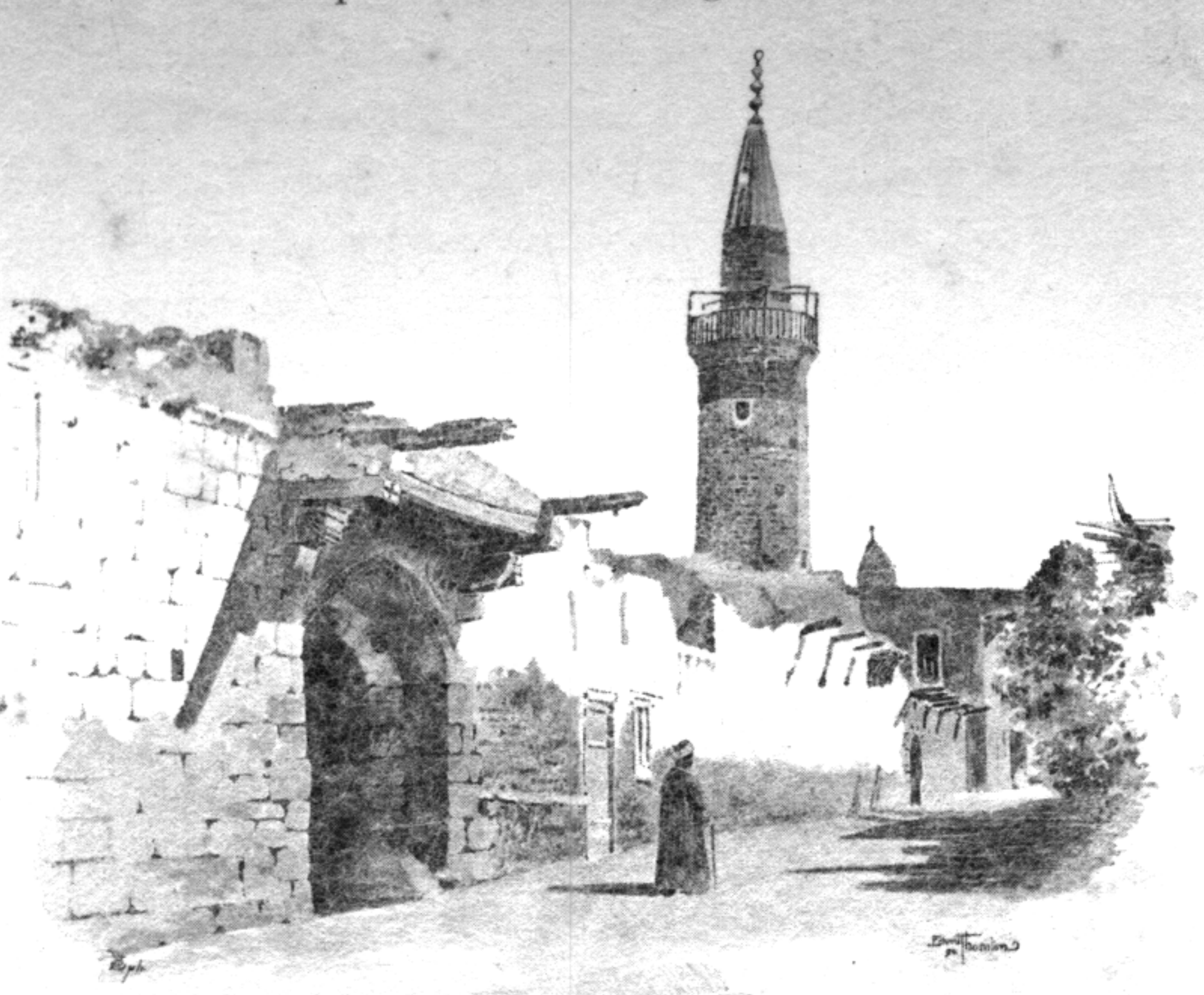
The native city was of considerable size and contained nearly sixty thousand inhabitants. It was formerly noted for its iron manufactures, and particularly for its firearms, in which there was a large trade. It was traversed by a few fairly wide streets, and it contained some good brick houses several stories high, the residences of wealthy natives. But the great mass of the town consisted of the usual mud huts with tiled roofs, and a network of narrow lanes intersecting them. There were hardly any public buildings of any note except the dispensary, which faced the southern wall of the fort, and had been built by Mr. Dear, a wealthy timber merchant of Monghyr, at his own expense. This gentleman had also built a chapel in the fort, and had greatly improved the area within the walls by buying up and clearing away some unsightly native huts which were crowded together near the western gateway. He subsequently built, at his own expense, a clock tower at the southern gateway of the fort facing the town.

Besides the district officials, a considerable number of Europeans resided at Monghyr, having settled there on account of the salubrity of the climate. Their residences were mostly situated in the fort, on the bank of the river, and in a beautiful shady avenue which

ran parallel with the western wall of the fort. When I arrived at the station I did not take a house, but put up at Mrs. Hooley's well-known boarding establishment, where I lived very comfortably and at the same time economically during the whole of my residence at Monghyr. A branch line of railway six miles long connected Monghyr with Jumalpore, a large and important station of the East Indian Railway, containing extensive workshops for the manufacture and repair of locomotives and carriages. In this place there resided a large number of Europeans and natives in the railway employ. The appearance of Monghyr when viewed from the river was truly charming: the walls and towers of the fort rising above the Ganges and ending in a curious Hindu temple on a point of rock jutting out into the river, the white houses of the European residents, and the masses of foliage around some of the buildings, all united to form a picture which I have never seen surpassed.

Soon after my arrival at Monghyr the disturbances in Egypt commenced, and we heard the news of the riots at Alexandria, the bombardment of the forts by the British fleet, and the preparations of the British Government for the despatch of an expedition to Egypt to suppress the rebellion headed by Arabi Pasha. In June I volunteered for employment with the Indian contingent under orders for service in Egypt, and towards the end of July I received orders to proceed to Bombay, and to report myself to the military and medical authorities of the force destined for the Egyptian campaign. I had previously made my preparations, and so was able to start for Bombay on the following morning. On my arrival there I duly reported myself and put up in the Esplanade Hotel. I was informed by Deputy Surgeon-General Colvin Smith, the principal medical officer of the Indian contingent, that I should have charge of the general hospital of the force on landing

in Egypt, and after a few days I received orders to embark in the transport *Tenasserim*, with a cavalry regiment belonging to the force and a few staff officers. The west wind was blowing strongly and we had a very rough passage across to Aden; then it became calm and we had a hot time of it in the Red Sea, but we reached Suez without mishap on the 23rd of August.



THE FISH MARKET, SUEZ

The commander of the Indian Expedition, General Sir Herbert Macpherson, V.C., K.C.B., and part of the army had already arrived, and I found that the general hospital of the force was established in the buildings of the Victoria Hospital at Suez, and was to remain there for the reception of sick and wounded sent back from the field hospitals accompanying the troops in their advance, so that I had no chance of going to the front in this campaign. I

at once took over charge of the general hospital in accordance with orders to that effect which I received from the general and the P.M.O.; there were then only thirty sick, ten of them being British soldiers of the 2nd Battalion Seaforth Highlanders, and the rest natives. The Victoria Hospital was situated at a little distance from the town of Suez, and consisted of spacious wooden buildings one story high arranged in the form of a square with a pretty garden in the centre. The buildings were raised several feet from the ground by means of iron pillars, and were furnished with suitable doors, glass windows, fire-places, bath-rooms, lavatories, and verandahs on both sides. There were also the necessary kitchen ranges, pipes for water supply, and other conveniences. My appointment was mainly of an administrative character: at first I had a single medical officer doing duty under me, and subsequently several others were appointed to the hospital under my orders.

After a few days I received instructions to remove the general hospital to the P. and O. steamer *Hydaspes* in Suez docks, as the situation of the Victoria Hospital was deemed too exposed after the departure of the army, and liable to attack from parties of the enemy near Suez. The *Hydaspes* had brought over cavalry, and was altogether unprepared to receive sick, as the horse fittings had not yet been removed from her main deck. Through the kindness of Captain Hext, R.N., Superintendent of Naval Transport at Suez, I obtained the services of some carpenters, who at once proceeded to remove the horse fittings and to fit out the main deck with beds, etc., in accordance with my directions. The sick were kept on deck as much as possible while this work was going on.

The *Hydaspes* was a steamer of nearly 3000 tons, 375 feet in length and 38 feet broad; she had a flush deck fore and aft with plenty of space, and a main deck provided with numerous large

ports admitting free ventilation. A considerable portion of the main deck was occupied by the engine room and but there was a large space available in front and on each side. This space was used for the hospital, and one hundred wooden beds were constructed in it of such height as to place the occupants almost on a level with the ports, so as to derive the utmost advantage from the breeze blowing through them. A certain number of these beds, on the port side of the ship, were entirely separated from the rest, and were devoted to the use of the sick European soldiers and their attendants, while the remainder were reserved for the native sick. The orlop decks, fore and aft, were also placed at my disposal, but were only used as store rooms, as they were unsuited for hospital purposes, having no ventilation except through the hatchways. A small dispensary was constructed on the main deck close to the fore hatchway and a table for operations was made. This was surrounded by canvas curtains, so as to form a room for operations, examination of patients, and such like purposes. When not required the curtains were rolled up so as not to interfere with ventilation.

The situation of the ship was very convenient: she was moored close to the sea wall on the south side of the Suez docks, and presented her broadside to the prevailing wind, which blew through her large ports, ventilating the main deck so thoroughly that even at night, when every bed was occupied, I found on visiting the hospital, that the air was sweet and not the slightest odour perceptible. As the vessel was close to the quay and was provided with suitable gangways, I made arrangements for all cooking being done on shore, as well as everything else that might injuriously affect the sanitary condition of the hospital. By these means, and by the liberal use of disinfectants in the hospital, the sanitary state of the ship remained perfectly good from first to last. The only

nuisance which could not be prevented was the plague of flies. These horrible insects swarm everywhere throughout the land of Egypt, especially in the towns and villages, and though the ship was a mile and a half from Suez they found us out in a very short time. They were bolder, more active, and more persistent than I ever found them in Europe or in Asia, and it became necessary to provide the patients and attendants with fans or whisks to keep the flies off them; but in spite of everything that could be done they caused great annoyance during the whole time we remained at Suez.

An ample supply of condensed water of good quality was supplied to the hospital from the ship's condensers. The rations furnished by the commissariat department for the use of the sick were of good quality throughout, and I had no occasion to find fault with anything. The heat in the daytime was considerable, the thermometer on deck frequently indicating a temperature of 100°, but the nights were cool and pleasant, and the climate appeared to be very healthy. The sick and wounded improved rapidly, and hardly any cases took an unfavourable course. At one time it was proposed to bring the *Hydaspes* up to Ismailia, where she would have been nearer the scene of military operations, but, taking into consideration the superiority of the climatic and sanitary conditions at the Suez docks, and the convenient situation of the ship, I recommended that she should be allowed to remain where she was, and that the sick and wounded should be sent down to her. This was accordingly done. In a short time the available space in the hospital ship was all taken up, and the patients subsequently received were accommodated in tents which were pitched on the shore a short way off.

Meanwhile the military operations progressed rapidly, and on September 13th we received intelligence of the battle of Tel-el-

Kebir, and soon after we heard of the surrender of Arabi Pasha; the occupation of Cairo, and the end of the campaign. About the same time we heard of some of the earlier successes of the Mahdi in the Sudan, but these reports were somewhat vague, and attracted little notice, as no one anticipated the extraordinary development which the Mahdist movement subsequently attained, and the unprecedented success it ultimately achieved. Early in October orders were received for the removal of the hospital from the *Hydaspes*, as the vessel was required for the transport of cavalry returning to India. Additional tents were accordingly obtained, and the hospital was removed from the ship to the tents, where it remained until all the sick and wounded soldiers were disposed of by transfer to their respective corps as they arrived at Suez on their way back to India. The sick native camp followers, ninety-four in number, were placed on board the transport *Avoca*, under my charge, for conveyance to Bombay. They nearly all recovered during the voyage, and the few sick remaining on arrival at Bombay were sent to the hospitals of that city.

I may here mention an incident which occurred in connection with the landing of these sick. On our arrival in Bombay harbour the commander of the *Avoca* received an order from the port authorities to land the sick by placing them in boats and sending them to the nearest landing-place. I remonstrated against this arrangement on account of the discomfort and exposure to which the sick would be subjected, and I proposed that the ship should be taken into Prince's dock and placed alongside the quay, so that the sick might be landed easily and comfortably. The captain of the *Avoca* stated the orders he had received, but at the same time expressed his willingness to take the ship into the dock if I would consent to take upon myself the responsibility for this deviation from the terms of his orders. I at once agreed to do so, and the

ship was then taken into the dock, where she was placed alongside the quay, and as soon as the necessary doolies and bearers could be procured the sick were landed without the least difficulty, and were at once conveyed to hospital. I reported what I had done, and as I never heard anything to the contrary, I presume my action was approved.

The number of officers, soldiers, and camp followers treated in the general hospital of the Indian division from August 25th to October 13th, 1882, the period during which I held charge, was 323, and only one case terminated fatally. This very favourable result was mainly due to the healthiness of the climate and surroundings, and to the strict enforcement of needful sanitary regulations.

Shortly after my return to Bombay I travelled by train to Allahabad, and there awaited orders from the Bengal Government as to my destination. In a few days I received instructions to proceed again to Monghyr, and to resume the duties of civil surgeon of that district. I accordingly went down by the next tram, put up at Mrs. Hooley's as before, and took over charge from the officer who had acted during my absence in Egypt. My duties at Monghyr were similar to those I performed at Arrah, some account of which has already been given. The greater part of Monghyr lay to the south of the Ganges, but the district also extended for some distance to the north of that river, and this northern portion contained many indigo factories, generally worked by European planters and their assistants, who sometimes applied to me for medical aid for themselves and their families. The southern part of the district was hilly, but the hills were of no great elevation. They stretched away east and west through the district, a few miles south of the Ganges, which they closely approached at some points, the fort of Monghyr being built upon one of their outlying spurs.

There were several branch dispensaries in the district which I had to inspect periodically; one of these was situated at a place called Khurruckpur, about twenty miles from Monghyr in a south-easterly direction and very near the hills. Not far from this place a rather remarkable engineering work had been executed for the purpose of providing the means of irrigating the low-lying country between the hills and the Ganges. Advantage had been taken of the conformation of the hills to collect the water brought down by several small hill streams, and thus to form an extensive artificial lake or reservoir by building a solid and massive embankment across a gap by which the water would otherwise have escaped. A beautiful lake had thus been formed; it was of considerable extent, of very irregular outline, and surrounded by hills wooded down to the water's edge. We sometimes had picnics at this lovely spot, and rowed about the lake and up the little rivers that ran into it. On one of these occasions we found a large crocodile lying asleep on the bank, which sloped rather steeply down to the water, and pulling gently towards it we managed to approach within 30 yards before it was disturbed. Then it woke up and with a hoarse roar precipitated itself into the water and was seen no more. This crocodile had made its way across country from the Ganges, probably during some flood when the low plain between the river and the hills was covered with water, and it had remained in the lake ever since. It had often been seen by people visiting the lake, and it was believed to be alone there.

A few miles east of Monghyr were some remarkable hot springs called Seetakund (the springs of Seeta). The water was clear and almost chemically pure; its temperature was about 104°, and it issued from a number of crevices in a rocky basin surrounded by a wall and railing with a flight of steps leading down to it. This water was believed by the Hindus to owe its purity and excellence

to the ablutions of Seeta, the wife of Rama, the heroine of the great Hindu epic, the 'Ramayana of Valmiki.' The Seetakund water was largely used by the European and native residents of Monghyr and Jumalpur, and it was extensively employed in the manufacture of soda water and other aerated drinks. The water seemed to come from a great depth, for close by were some cold springs, fed no doubt by the river which is at no great distance. A colony of Brahmans was settled at Seetakund, and received plenty of 'bakshish' from the European and native visitors to the sacred place.

While I was at Monghyr a very curious temporary change took place in the temperature of the water of Seetakund. At the very time when the great volcanic eruption occurred which destroyed the island of Krakatoa, between Sumatra and Java, in 1883, the Seetakund water, usually so hot that the hand cannot be borne in it for more than a few seconds, became much cooler and after remaining little more than lukewarm for some weeks, to the astonishment and terror of the Brahmans, who thought their deity and their emoluments were both departing, it gradually regained its original temperature. This would seem to show that the volcanic convulsion which destroyed Krakatoa had an immense range and affected regions many hundreds of miles distant from the principal seat of the disturbance. There are many other hot springs in the hills of the Monghyr and Bhagalpur districts, as well as in the country of the Santhals, but none of them have attained the celebrity of Seetakund.

There was a fair amount of private practice at Monghyr which was usually shared between the civil surgeon and his assistant, the native medical officer in charge of the dispensary. The civil surgeon was, of course, employed by the European residents of the station and district, and sometimes by the wealthier

natives, while the practice of the assistant-surgeon was almost entirely among the natives. In both instances a clever and popular man was able to make a very welcome addition to the pay and allowances of his appointment, without in any way neglecting his official duties. It is customary for European residents in India to pay for medical attendance upon their wives and families by annual arrangements, a certain fixed sum being paid for a year's medical attendance irrespective of the number of visits, and even when there has been no illness and the doctor has not once visited the family professionally. On the other hand if there should be much sickness, and if the doctor should have to attend several times a day for months, he would be entitled to no more than the sum originally agreed upon for the year's attendance. This plan has obvious advantages, as it not only saves much trouble by rendering doctors' bills unnecessary, but it gives the doctor a direct interest in curing his patients as soon as possible and in keeping them well afterwards as long as possible.

The natives of India seldom make arrangements of this kind with medical men; indeed, they often display a singular reluctance to pay medical fees at all, even for the most valuable professional services. On one occasion a wealthy native who had consulted me sent me a letter in which he tried hard to prove, with the help of numerous quotations from the Bible, that it was my duty as a Christian to give him medical attendance gratuitously. Many times I have been told by rich and well-to-do natives that they were very poor men and could not afford to pay anything for medical advice and treatment. It appeared that they had a kind of fixed idea that doctors should work for nothing, since they were liberal enough in their dealings with other professional men, especially lawyers. I could not blame the natives much for this notion about doctors, for the same idea is widely prevalent in England, where

people ought to know better. Rich and respectable natives frequently came to the dispensary for advice and treatment, just as people in this country, who can well afford to pay, resort to hospitals in order to save the doctor's fees. An extraordinary instance of meanness of this kind came to my knowledge while I was at Monghyr. An exceedingly wealthy man from a neighbouring district was staying at Monghyr on business, and being unwell he neither sent for me nor for my assistant, but attended at the dispensary among the native out-patients at an hour when he knew I should not be there, and received advice and medicine gratis from my assistant, who was overawed by his great wealth and did not venture to refuse. This man was said to be worth at least £500,000!

Nothing is more extraordinary than the credulity of the natives of India; they are ready to believe any story, no matter how exaggerated or absurd, if it agrees with their preconceived ideas. About the time when I left Monghyr it was proposed to build a large bridge over the Hooghly River at Calcutta, and somehow or other a rumour spread abroad among the natives in Bengal that a large number of human heads were required by Government to form the foundation of this bridge! One of the Monghyr officials, while travelling in the district with his son, was actually set upon by the country people, who believed they had come to collect heads for this purpose on behalf of Government. In one of the Bengal Administration Reports a curious incident is related showing the ignorance and credulity prevalent even among natives of wealth and position. A lawsuit had been going on between two rich landowners about some disputed estate, and the case, after having been carried through the Indian courts was finally appealed to the Privy Council in England. One of the litigants conceived the idea that a human sacrifice would secure victory to his side, so

he caught a harmless lunatic wandering about the country, and having taken him to the top of a hill, sacrificed him there to propitiate the divinities of the Privy Council! The most extraordinary delusion I ever heard of, and certainly the drollest, was one which grew up during the Franco-German war of 1870-71, when many natives believed that, by order of the British Government, their young men were to be kidnapped and sent to Europe to marry the widows of the French soldiers who had been killed in the war!

When paying professional visits at Monghyr after dark I was always careful to carry a lantern and to walk slowly and heedfully on account of deadly snakes which abounded there, and which were often found lying in the roads. On several occasions I had narrow escapes in spite of my precautions, and once, when I had desired my servant to light the lantern which stood in a corner of my bedroom, the man on taking it up instantly dropped it declaring that there was a snake upon it. On a light being brought we found that a krait about 2 feet long had coiled itself round the handles of the lantern and still remained there. The man must have touched it on taking up the lantern, and it was certainly surprising that he escaped being bitten. The reptile was quickly destroyed, but it was not so easy to banish the sense of insecurity it had excited. It might have coiled itself under my pillow, or in one of my boots, as easily as on the lantern.

While at Monghyr I purchased a tricycle and used it a good deal for work in the station where the roads were good. On one occasion I met with a rather serious accident on this machine. I was returning to breakfast when in turning a corner too rapidly the machine upset, and I came down upon my right shoulder with such force that my arm was dislocated downwards. On getting home I sent for my native assistant, who came and tried to reduce

the dislocation but without success. I then got a friend (a very powerful man) to grasp my right forearm and make forcible extension while the assistant-surgeon manipulated the dislocated bone. In a few moments I felt the head of the bone slip back into its place, and I experienced the greatest relief, both mental and physical. I completely recovered in a few weeks from the effects of this accident, which fortunately caused no permanent injury of the part. Subsequently I was again upset by colliding with a native, who, after going to one side of the road to avoid me, suddenly darted across again in front of me. He was knocked down and I upset, but no great harm was done to either of us. Once or twice I was chased by cattle, and only escaped by going as fast as it was possible for me to drive the machine. On another occasion I was very nearly upset by running over a cow's tail, which I had not perceived, as it was getting dark: the animal was lying down but instantly rose as I passed and almost overthrew me. In short I had so many accidents and narrow escapes during my use of this machine for less than two years that I was not sorry to part with it.

CHAPTER XVI

Successes of the Mahdi—Appointment of General Hicks to command the Egyptian forces in the Sudan—I am inclined to apply for employment there, but refrain from doing so—News of the Mahdist victory at Kasghil—I volunteer for service with Indian troops in the Sudan—Extension of the Mahdist movement—Rising of the Arabs around Suakin—Mission of General Gordon—General Sir G. Graham's first expedition to Suakin—Siege and fall of Khartoum—Death of Gordon—Despatch of another expedition to Suakin—I am appointed principal medical officer of the Indian contingent and proceed to Bombay—Strength of the Indian brigade—Its hospital provision and ambulance transport—Embarkation of the force—We reach Suakin—Description of the town and country—Our camps near Suakin—Night attacks by the Arabs—Our hospital ship—We lend part of our ambulance transport to the British troops—Reconnaissance towards Hashin—Battle of Hashin.

DURING the latter part of 1882 and the beginning of 1883 the Mahdi and his followers gained several important victories over the Egyptian forces in the Sudan, and captured El Obeid, the capital of the province of Kordofan. This led to the appointment of General Hicks, of the Bombay Staff Corps, to the command of the Egyptian army in the Sudan, with several European officers on his staff. On hearing of this I was at first much inclined to apply for employment there on the strength of my previous war services and Egyptian experience. After mature consideration, however, I refrained from doing so, and gave up the idea, chiefly because I had no confidence in the Egyptian troops on account of the want of courage and steadiness before the enemy which they had shown on many occasions. It was very fortunate for me that I was not appointed to the expedition, for after transient success against the rebels in Sennar, General Hicks and his whole army were surrounded by the forces of the Mahdi at Kasghil, near El Obeid in Kordofan.

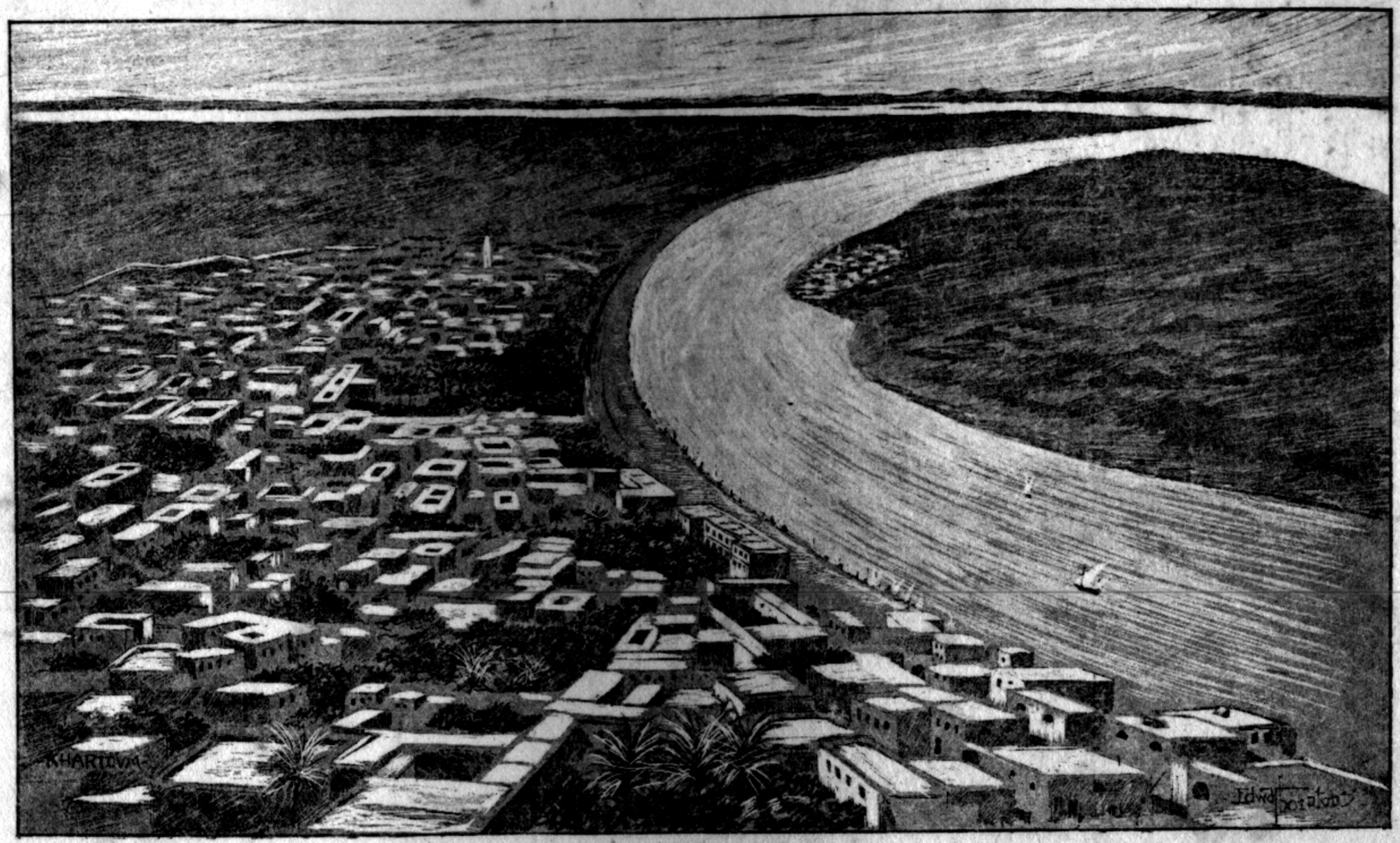
towards the end of October 1883, and were completely annihilated. When this disastrous intelligence was received in India it was generally believed that a British expedition, with a large contingent of Indian troops, would be sent to the Sudan at once to suppress the rebellion and restore order. Influenced by this belief I volunteered for service with any Indian force sent to the Sudan, but was informed in reply that no orders had arrived from home for the despatch of troops to that country.

AN ARAB SPEARMAN

The Mahdist victory at Kasghil gave a great impetus and extension to the movement, and was soon followed by a general rising of the Arab tribes around Suakin, and by an advance of the Mahdist armies towards Khartoum and Berber. The British Government having decided upon the evacuation of the Sudan, sent General Gordon in January 1884 to carry out this policy, and to arrange for the removal of the Egyptian officials and garrisons with their families. But when Gordon arrived at Khartoum in

February he soon found that the task imposed upon him was impracticable, owing to the rapid progress of the rebellion, which gave him neither time nor opportunity to make arrangements for the evacuation of the Sudan by the Egyptian officials and garrisons, and the crowds of women, children, and non-combatants of every sort connected with them. In fact the Mahdist forces appeared before Khartoum in March and in a few weeks the place was completely investdd and all communication cut off. The defeat of Baker Pasha's force near Trinkitat in January 1884, followed in February by the fall of Sinkat and the massacre of its garrison, led to the despatch of a British force to Suakin under the command of General Sir G. Graham, V.C., K.C.B., who inflicted two severe defeats at El Teb and Tamai upon the Arabs under Osman Digna, the insurgent leader. No Indian troops accompanied this expedition, hence I had no chance of going with it; and I did not much regret this, as the expedition was soon withdrawn after having gained no permanent advantage.

The siege of Khartoum commenced in March 1884, and continued without intermission for 317 days, until the 26th of January 1885, when, just as relief was at hand, the city was taken by the Mahdists, through treachery as some believe, or perhaps through the weakness of the garrison, who had been greatly reduced by constant toil and insufficient food. The usual massacre of the garrison and inhabitants ensued, and with them perished the heroic Gordon. Whatever may be thought of Gordon's religious and political views, his protracted defence of Khartoum will for ever remain an imperishable monument of his great military genius and resources. Surrounded by the hosts of the Mahdi, flushed with victory and confident of success, he yet maintained the defence of Khartoum for more than ten months, though his garrison consisted only of black troops disheartened by defeat



KHARTOUM

and despairing of succour. With treachery at work everywhere around him, with no British officer to assist him after the departure of Colonel Stewart, with supplies failing and starvation steadily and surely approaching, he never gave way to despair, but held out resolutely till succour was at hand. His gallant and skilful defence of Khartoum, and the fall of the place when the relieving army was so near, form one of the saddest but most interesting episodes in history, and show plainly the supreme value of time in war. Had the Nile expedition arrived a week or two sooner there is no doubt whatever that Gordon and Khartoum would have been saved.

To effect a diversion it was decided to send a mixed force of British and Indian troops to Suakin, and in February 1885 I was appointed principal medical officer of the Indian brigade detailed for service in the Eastern Sudan, consisting of the 9th Bengal Cavalry, 15th Sikhs, 17th Bengal Native Infantry, 28th Bombay Native Infantry, and F Company Madras Sappers and Miners, under the command of Brigadier-General Hudson, C.B. (late General Sir John Hudson, K.C.B., commander-in-chief of the Bombay army). Having already made necessary preparations, I left Monghyr the day after receiving my instructions, and proceeded by train to Bombay, where I arrived on February 20th, and, after reporting my arrival, I at once commenced to discharge the various duties which devolved upon me in connection with the equipment and despatch of the expedition.

The strength of the Indian brigade was about 3250 officers and men, and a considerable number of camp followers. For this force hospital provision was made on the estimate of twelve per cent. of sick for the troops, and three per cent. for the followers, giving the following accommodation, namely, two field hospitals of 100 beds each, and one general hospital of 288 beds. The rate

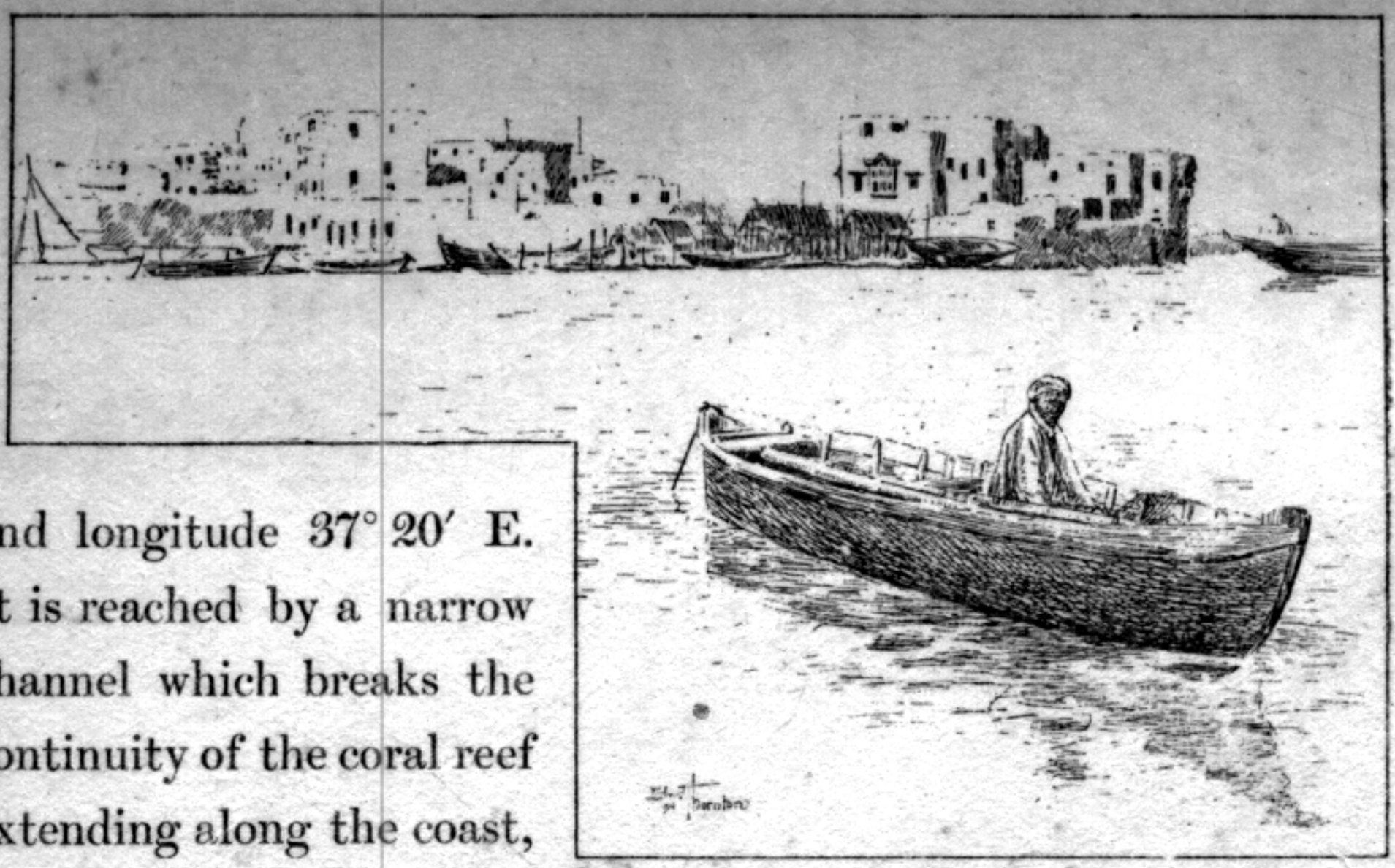
of twelve per cent. for the troops was fixed on the understanding that such sick as were not likely to be fit for duty in the field would be sent back to India every fortnight. The equipments and stores for the hospitals were got ready at Bombay, and were shipped under my superintendence, and, after my departure, under the supervision of the next senior officer (Brigade-Surgeon Morice), who remained at Bombay for this purpose, and came on in the last transport. The troops had previously been inspected by the regimental medical officers and weeded of all weak and sickly men, and previous to embarkation they were again inspected by me, and, after my departure for Suakin on February 24th, by the next senior officer. Due care was also taken that each transport should be provided with a medical officer or medical subordinate, and a suitable supply of medical stores and comforts for the voyage.

The amount of ambulance transport provided was at the rate of five per cent. for troops and one per cent. for followers, and it was intended that the whole should consist of Lushai dandies, which are lighter and more manageable, though less comfortable, than the old-fashioned doolies. By some mistake, however, it happened that twelve doolies were sent from Bombay in addition to the dandies. These, with the kahars (bearers), in the proportion of six per doolie and five per dandy, with their proper number of sirdars and mates (headmen), all under the transport department, were distributed among the ships, care being taken that no transport had less than two dandies and ten kahars.

The expedition left Bombay in seventeen transports, the first three starting on February 22nd, and the last on March 2nd. I accompanied General Hudson and his staff in the *Clive*, which also conveyed part of the 17th Bengal Native Infantry. The voyage from Bombay to Suakin took about ten days, and the troops were

all landed there in good health and condition between the 4th and 12th of March 1885. One case of infectious disease (smallpox) occurred during the voyage in a Sepoy of the 28th Bombay Native Infantry on board the *Chanda*. The case, however, was recognised and promptly isolated by the medical officer in charge, and when the ship arrived at Suakin the man was placed with an attendant on a raft in the harbour, and so isolated until his recovery.

The town of Suakin is situated on the west coast of the Red Sea, about half way between Suez and Aden, in latitude 19° 17′ N.



SUAKIN

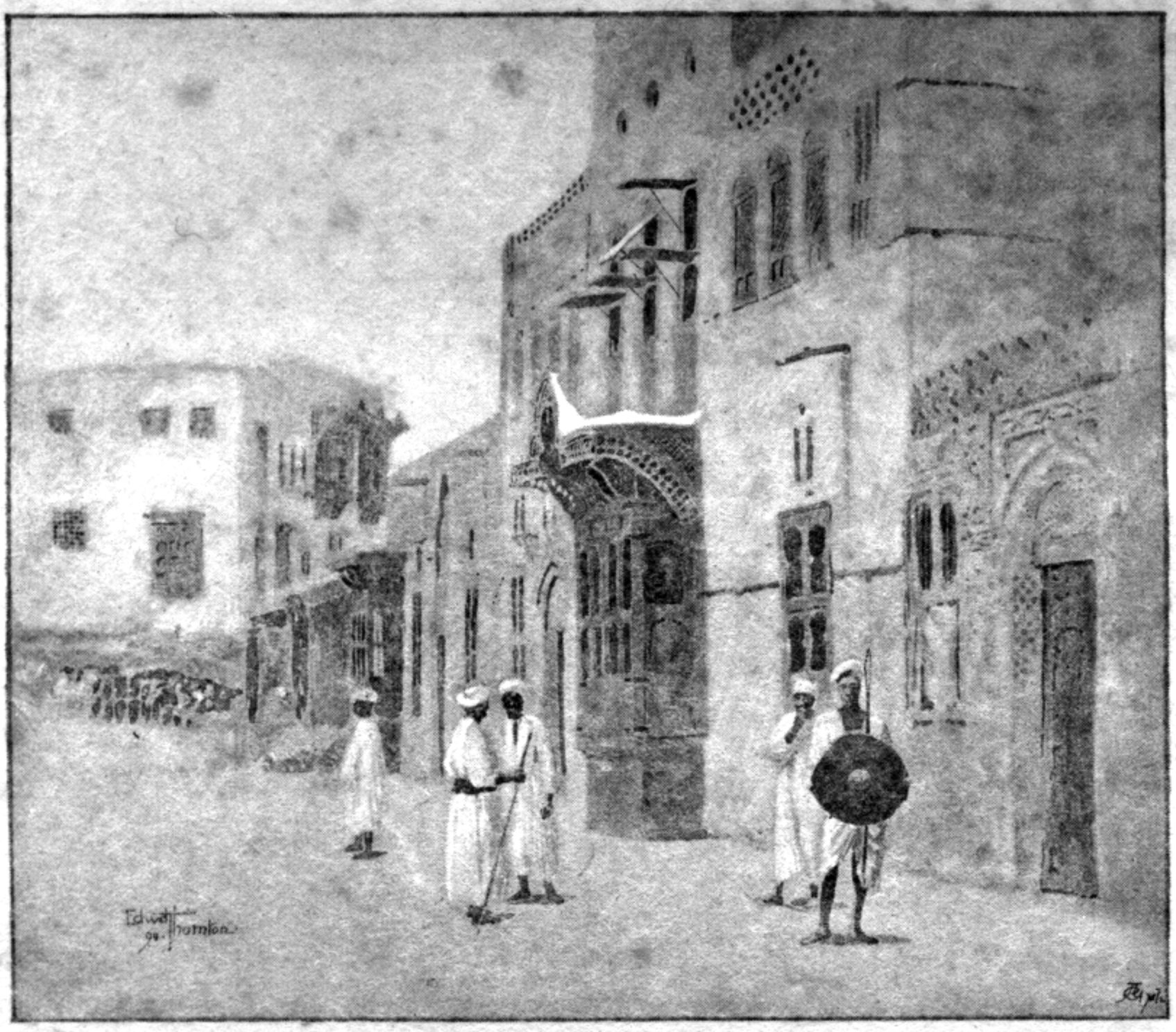
and longitude 37° 20′ E. It is reached by a narrow channel which breaks the continuity of the coral reef extending along the coast, and after a short course expands into a harbour of considerable size. The town is on an island in the harbour; it contains many large houses several stories high, built of blocks of white coral, and numerous shops, both European and native, with ample supplies of all kinds. There is a considerable trade with Jeddah and other places on the Red Sea littoral, and with the interior also in peaceful times. The space in the harbour is still further diminished by another island of considerable size called Quarantine Island, which was occupied during our expedition by a detachment of British troops

and the Madras Sappers and Miners. These islands are both connected with the mainland by causeways; that of Quarantine Island leading to the fortified position then known as H Redoubt, while the Suakin causeway leads to the extensive suburb called El Kaf, inhabited chiefly by Arabs of the Bishareen and Hadendowa tribes, who in time of peace are carriers of goods from the interior to Suakin.

A STREET IN SUAKIN

The inhabitants of Suakin are a very mixed community, comprising Europeans of several nationalities (chiefly Italians and Greeks), Egyptians, Levantines, and Arabs of various tribes. The suburb El Kaf is protected by a chain of forts joined together by a wall. The surrounding country is a stony desert plain, with heavy sand here and there; it extends with a gentle rise from the coast to the Waratab Mountains, a distance of eight or ten miles inland. This plain is bare near the sea, but further inland it is

thickly covered with bushes of the thorny mimosa, 6 or 8 feet high, and other prickly plants, which greatly impede the movements of troops and render cavalry almost useless. The plain is traversed in many places by hollows, which in the rainy season doubtless become watercourses. One of the largest of these comes down between two advanced forts (a little distance to the west of

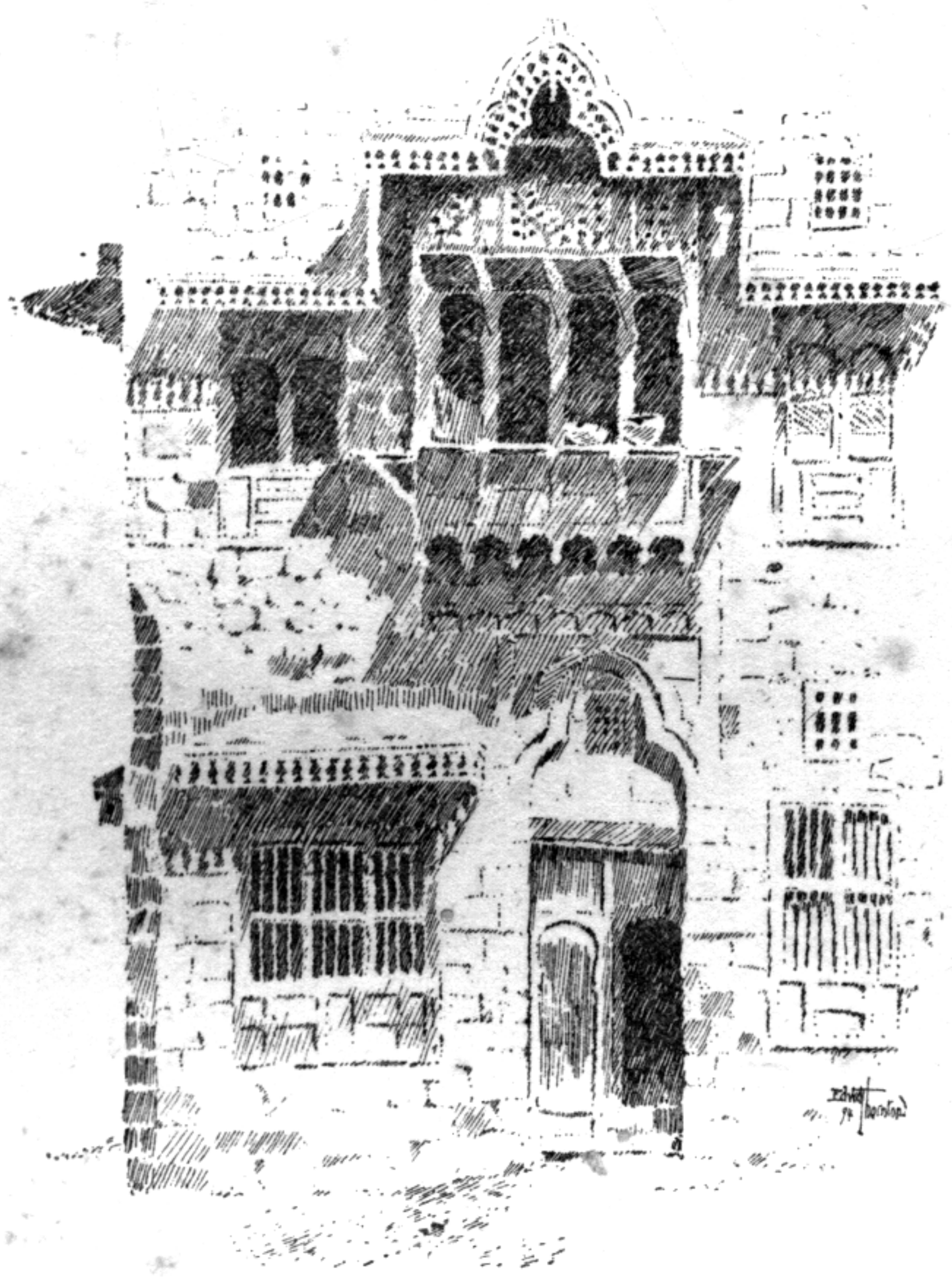


VIEW IN SUAKIN

the suburb El Kaf) called the Water Forts, and it contains a large tree and several smaller ones.

The whole of this plain is evidently part of the coral reef running along the coast, as almost anywhere the coral may be reached by digging down a few feet below the surface. Hares and sand grouse abound on the plain, and deer are not uncommon.

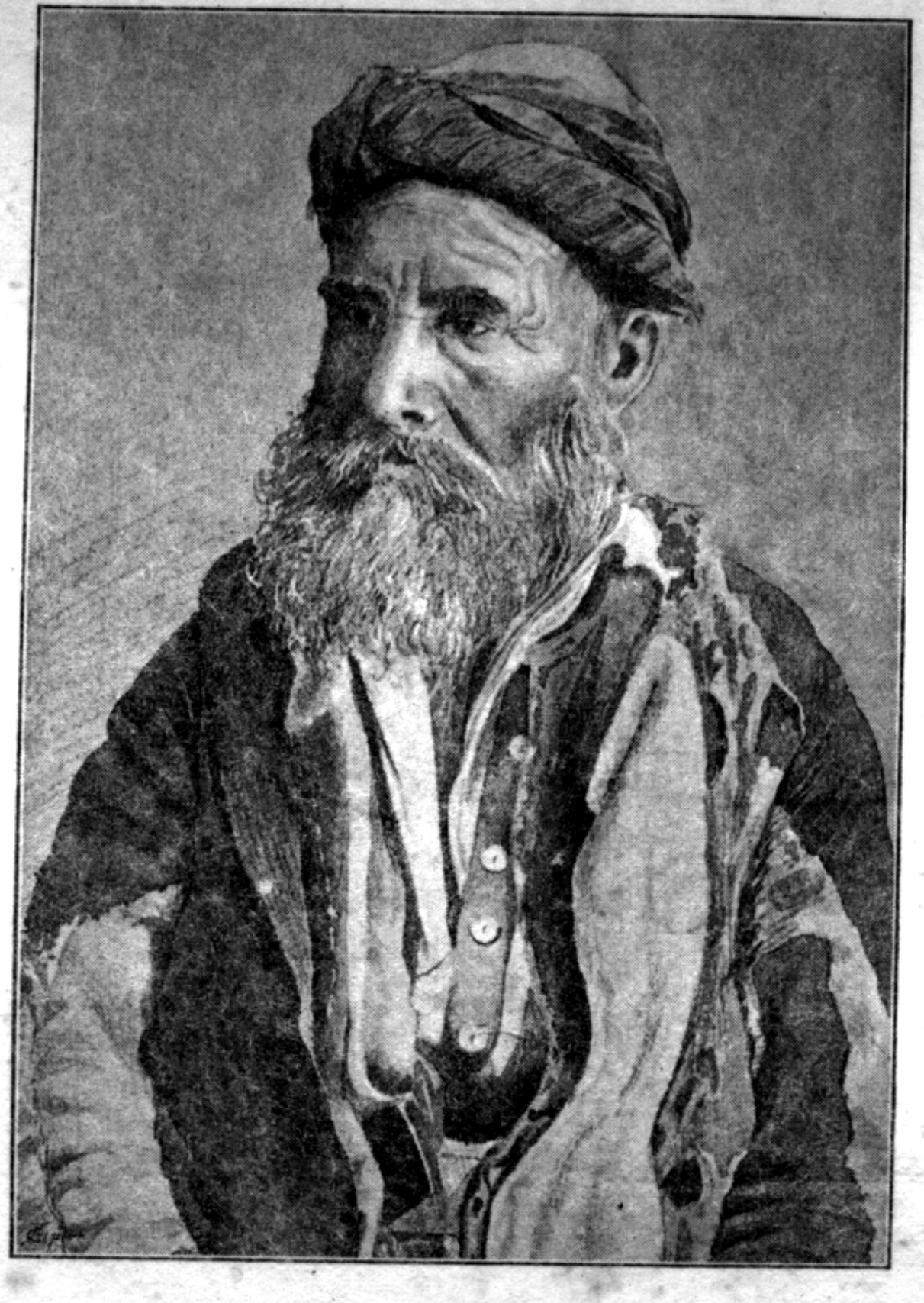
Snakes are met with occasionally, and some of them are said to be venomous, but I have no certain knowledge of this, as no case of snake bite occurred during the expedition. Just outside the western gate of El Kaf there are a few cotton and palm trees with



HOUSE FRONT, SUAKIN

other vegetation forming what was then called Osman Digna's garden, and a little further on, near the Water Forts, are some patches of cultivated ground, doubtless due to the above-mentioned watercourse, which, though usually dry on the surface, contains water a little distance below.

After our arrival at Suakin on March 5th my first care was to collect the stores and equipment of the hospitals in order to get them started as soon as possible. No. 1 field hospital was opened on March 9th and the sick of the regiments were taken over, together with their hospital establishments, leaving them only the establishment allowed on field service by regulations, namely, one hospital assistant and one ward servant for each corps. Our troops were encamped on an elevated piece of ground on the south side of Suakin harbour: it was simply part of an extensive coral reef covered with sand and débris, but it was high and dry, and it formed a better encamping ground than any other spot in the immediate vicinity of Suakin. The camp was protected by a number of small redoubts, which were occupied every night, and also by a chain of pickets and sentries, but very soon the troops began to be harassed by parties of the enemy prowling about at night. During the night of March 10th two followers with a sick



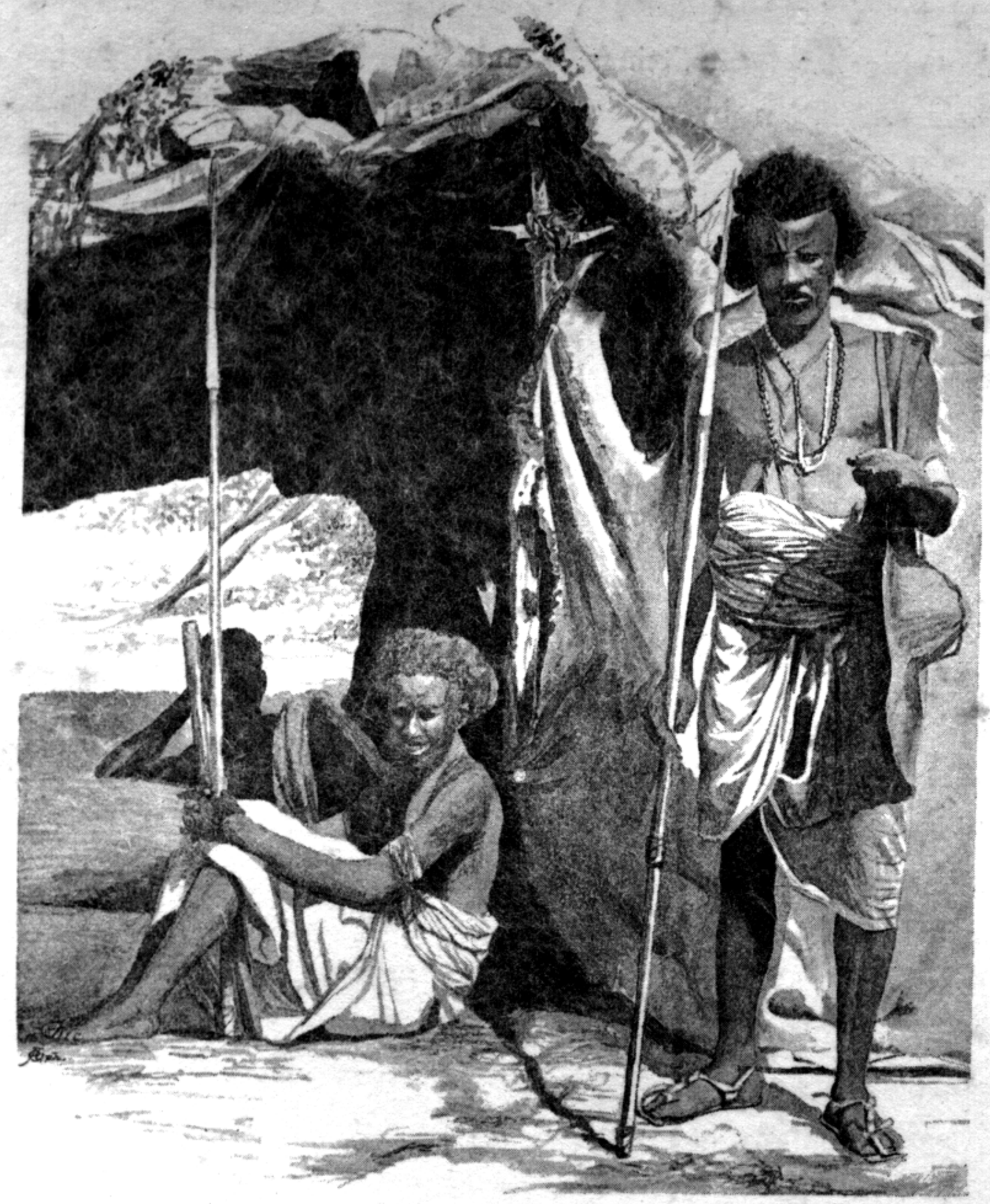
AN ARAB SHEIKH

horse were set upon and speared, and on the next night a sentry of the 15th Sikhs was killed in a similar manner after shooting one of his assailants.

Our men were now very hard worked: they had to furnish fatigue parties during the day for unloading stores at the different piers and bringing them up to camp, and they had to supply numerous guards and sentries for the protection of the camp at night. In addition to all this they had their rest disturbed by night attacks. I represented this state of affairs to General Hudson, and recommended that hired labour should be employed as far as possible in the work of unloading stores, instead of fatigue parties from the regiments. This proposal was agreed to and carried out, but the amount of hired labour procurable at Suakin was so small that very little relief could be obtained in this way.

The camps of the British troops, which were pitched on the plain to the west of El Kaf, were for some time continually disturbed by night attacks: the Arabs crawled along the ground in the darkness, thus eluding the sentries, and rushed through the first tents they came to, stabbing the sleeping soldiers with their spears. Several British soldiers were killed and wounded in this manner, and much confusion and wild firing occurred in consequence. The plain around the camps was frequently swept by the electric search lights of the warships in the harbour and the forts in El Kaf, but generally with little result, as the Arabs instantly remained motionless on the ground till the light had passed, and so escaped notice or were mistaken for bushes. At first the Arabs were much alarmed by the electric search lights, but Osman Digna was reported to have reassured them by saying that it was only the light of ten thousand candles which the British, who were very wealthy, had provided in order to light up their camps at

night. If the enemy had persevered with their night attacks the consequences might have been serious, as the troops were greatly harassed by them, and signs of nervousness and demoralisation



SUDANESE SPEARMEN

were beginning to show themselves. Fortunately one of the Arab leaders was slain in a night attack on the British camp, and after this incident the enemy entirely abandoned this method of attack.

On the 13th of March the sailing transport *Czarevitch*, which had been fixed upon as the hospital ship for the Indian contingent, arrived at Suakin. She was examined by a committee of survey and pronounced fit for the purpose, after which the work of removing her horse-fittings, cleaning her decks, and improving their ventilation by removing planks from the ship's sides, was taken in hand at once under the superintendence of Brigade-Surgeon Morice, in medical charge of the general hospital, and the officers doing duty under him. There was much work to be done as the ship had brought over horses and mules, and nothing had been done at Bombay to fit her for the purposes of a hospital ship. In about ten days, however, she was ready for the reception of patients, her maindeck having been cleared, purified, and fitted up with 125 beds. The accommodation thus provided for the native sick was excellent, but unfortunately that available for sick European officers was inferior, the cabins of the ship being small, close, and badly ventilated, besides being poorly supplied with furniture and necessaries. These deficiencies were subsequently remedied as far as possible, but the cabins were always close and uncomfortable in hot weather. Profiting by my experience at Suez in 1882 I advised that the hospital ship should be moored near the shore in the southern part of the harbour, with her broadside exposed to the prevailing wind. A movable stage, which could be pulled backwards and forwards between the ship and the shore, was provided in order to enable the patients, hospital servants, and others to go ashore when they required to do so for their cooking arrangements and other purposes.

On the 16th of March the second field hospital was opened and received the sick of the 15th Sikhs and 17th Bengal Native Infantry. It was afterwards moved into a building in Fort Euryalus, one of the forts protecting El Kaf, and remained there

permanently, in consequence of the military operations being confined to the neighbourhood of Suakin. On the 17th and 18th of March the camp of the Indian brigade was shifted to ground to the west of Suakin, close to the right water fort and on the left of the British camp. This ground was stony, dirty, and uneven; it was very inferior in every respect to our first encamping ground, but its occupation was a military necessity which could not be avoided. As active operations were now about to commence, the principal medical officer of the British force requested assistance in the shape of ambulance transport, and accordingly, with the sanction of General Hudson, I sent him four doolies and fifty-six dandies, the transport department supplying 300 kahars to carry them. These were of the greatest possible use in conveying the sick and wounded of the British troops in the operations that followed.

On the 19th of March the Indian brigade, with the British cavalry and mounted infantry, made a reconnaissance for several miles in the direction of Hashin, where the enemy were reported to be in considerable force. The weather was cool and pleasant, and the men showed no signs of fatigue. For some distance we marched in a westerly direction across the sandy and stony plain covered with mimosa bushes and other scrub, which became thicker as we approached the mountains. After proceeding about seven miles we came to a group of small isolated hills, on which parties of the enemy were seen, who retreated on our approach. A little further on was a steep and rugged ridge about a mile long quite bare of vegetation: this was Dihilbat or Hashin Hill. To the north of this eminence was a lower hill, behind which lay the village of Hashin, a cluster of miserable huts surrounded by mimosa jungle. The village was occupied by our cavalry without resistance, most of the enemy having retreated towards the west.

Parties of them, however, still remained on the neighbouring hills and maintained a desultory fire, by which one British cavalry soldier was killed, and an officer and a sergeant were wounded, but there were no casualties among the Indian troops. The force withdrew a little after 10 A.M., and reached camp at half-past twelve.

Next day General Sir G. Graham advanced towards Hashin with the bulk of the force, numbering about 8000 officers and men, and a sharp engagement ensued. The enemy, after an obstinate resistance, were driven from their positions on the hills near Hashin by the British infantry supported by the Indian troops, and the cavalry followed in pursuit, but could do little owing to the nature of the ground, which was covered everywhere with thick scrub which effectually concealed the movements of the enemy. The 9th Bengal Cavalry were suddenly attacked by the Arab spearmen, while one squadron was dismounted for the purpose of firing volleys, and they sustained a loss of one native officer and eleven men killed, and one British officer and fourteen men wounded. Their medical establishment was also attacked in the thick bush, several men were killed and some medical stores lost. In the afternoon the force began to retire towards Suakin, leaving the East Surrey Regiment to garrison some redoubts and a 'zeriba' (fence of thorns), which had been rapidly constructed by the Royal Engineers and Madras Sappers and Miners on the low hills to the east of Hashin. As the force withdrew the enemy reoccupied Dihilbat Hill and other eminences, from which they had been driven in the beginning of the action, and kept up a heavy fire upon the retiring troops, which caused some loss before it could be silenced. The force returned to the camp at Suakin at 6 P.M.

CHAPTER XVII

Battle of Tofrik—Repulse of the enemy with great slaughter—Severe loss on our side —Destruction of a great number of our transport animals—I accompany a force to the scene of action next day and return with the wounded to Suakin—Daily convoys to the zeriba—Attacks on them by the enemy—Loss of a hundred laden camels—Captive balloon employed—Arrival of the New South Wales contingent —We march towards Tamai—Destruction of the captive balloon—Our bivouac disturbed by the enemy—Action of Tamai—We march back to Suakin—Our camp again shifted—Extension of the railway to Otao—Advertising extraordinary —The heat increases fast—The plague of flies—Heavy duties—I wear a green silk veil to protect my eyes—We all suffer in health more or less from hard work and exposure—Arrival of Lord Wolseley—He inspects the troops and hospitals—An expedition to catch Osman Digna is proposed but countermanded—The water difficulty—Great danger of the contemplated march from Suakin to Berber owing to the scarcity of water.

On the 22nd of March a combined British and Indian force under General Sir John M'Neill and General Hudson marched from Suakin to establish a post in the desert which should serve as an intermediate depot for water and supplies required for the intended advance to Tamai, where Osman Digna was reported to be with the main body of his followers. The force marched in two great squares, one formed by the British and the other by the Indian troops. The artillery, ammunition, water-carts, and transport animals (1500 camels and mules), carrying food, water, etc., were placed within these squares, while the cavalry went ahead and acted as scouts. Parties of the enemy were seen, but they retired in the direction of Tamai without offering any opposition. Very slow progress was made owing to the thorny jungle covering the plain, which terribly impeded the movements of the baggage animals and often caused their loads to fall off, necessitating

frequent halts. When the force had arrived at an open space known as Tofrik, about six miles from Suakin, the generals decided to halt and establish the post there, after which the Indian troops were to march back to Suakin, taking the transport animals with them, while the British were to remain and garrison the post.

Between 2 and 3 P.M. the British soldiers were busily engaged in cutting down the bush and making the three zeribas, which were nearly completed by that time, and the Indian troops were drawn up in readiness for the return march, while the transport animals had been unloaded in the central zeriba and brought out for the same purpose. About half-past two the enemy, who had been collecting under the cover of the jungle, advanced rapidly to the attack, driving before them the cavalry scouts. A scene of indescribable confusion ensued, the transport animals were stampeded, the kahars dropped their dandies, and, with other camp followers, fled in all directions, trying to make their way to Suakin instead of seeking shelter in the zeribas, so that great numbers of them were overtaken and killed. The enemy attacked the troops with the most desperate courage and determination, and forced their way into the zeribas, where more than a hundred of them were killed. But their fanatical valour was of no avail against the tremendous rifle fire directed upon them. The engagement lasted less than half an hour, when the remnant of the Arabs withdrew, leaving some 1500 dead on the field of battle. The 15th Sikhs bore the brunt of the attack in this engagement and highly distinguished themselves.

As I was not very well that morning I was ordered by General Hudson to remain in camp, but when the firing began I went with some other officers to the summit of a tower near our camp and watched the scene of action, which was only six miles distant. We could easily distinguish the zeribas surrounded by a ring of smoke,

while the sound of the firing was distinctly heard, and a dense cloud of dust coming in our direction marked the line of retreat of the camp followers and other fugitives, who in an hour or so began to come in. I had already ordered all necessary preparations for receiving wounded to be made at the field hospitals, and I then went out a short distance with a medical officer and some dandies and bearers to pick up any wounded fugitives who might arrive. We collected and brought in twenty-four wounded men who had managed to drag themselves so far and to escape the spears of the pursuing Arabs. Several of the British cavalry scouts galloped past us into camp in a frantic state of excitement, declaring that the whole force was cut to pieces, and that they were the sole survivors. The most alarming rumours prevailed in camp and a night attack was expected, so we all slept in our clothes, but no disturbance took place.

Early next morning I joined a convoy and escort proceeding to the scene of action, taking with me a number of dandies and bearers, under the charge of a medical officer, for the conveyance of our wounded to Suakin. We reached our destination unopposed after a slow and fatiguing march, in square formation, over a stony plain, thickly covered with umbrella-shaped bushes of the thorny mimosa. The track for a considerable distance was strewn with the bodies of our unfortunate camp followers and transport animals, and the ground around the zeribas was thickly covered with corpses, mostly those of the enemy. On arrival I found that the loss of our force the previous day in killed, wounded, and missing, amounted to nearly 300 fighting men and 176 followers. The transport had suffered terribly, as about 500 camels and a considerable number of mules had been killed or taken. One of the best of our medical subordinates was missing (doubtless killed), and a quantity of medical stores were lost on this occasion. The

wounded were placed in dandies and brought back to the camp at Suakin; there they were admitted into the field hospitals and treated with all possible care and attention. They were subsequently sent to the hospital ships, where they remained until their recovery or transfer to England or India.

For about ten days after this no further military operations took place, except convoys of water and stores, which were sent out to the zeribas at Tofrik nearly every day and returned empty in the evening. These convoys were sometimes attacked by the enemy, who, on one occasion, killed or captured more than a hundred laden camels, which by some mismanagement had got outside the square. A captive balloon was used in these expeditions to obtain information of the enemy's movements, for which purpose this contrivance is very effective when the conditions are favourable. But the high winds which prevailed at the time were much against this means of observation, and eventually caused its destruction. On the 25th of March the posts near Hashin were demolished, as they were no longer required, and their garrisons rejoined the army. The New South Wales contingent, 500 strong, arrived at Suakin on the 29th of March; they were received with hearty cheers by the rest of the troops, and were inspected by General Sir G. Graham, who welcomed them with a few well chosen words.

On the 2nd of April a force of about 7000 men, under the command of General Sir G. Graham in person, marched from camp at 4 A.M. in the direction of Tamai, where the enemy under Osman Digna were reported to be in large force. I accompanied the Indian troops with several medical officers and a section of a field hospital, together with a proper amount of ambulance transport. We moved on very slowly in the usual square formation, with frequent stoppages, and after several hours' slow fatiguing march,

the stench from unburied corpses warned us that we were approaching the scene of the battle of March 22nd, and presently we sighted the look-out place (or crow's nest as it was called) in one of the zeribas. A short halt was made for rest and food, and then the force resumed its march towards Tamai. The wind was very strong, and the captive balloon, which accompanied the force held by two stout ropes, was blown down upon the thorny jungle through which we were passing. The consequence was that the silk of the balloon was caught and torn by the thorns, the gas escaped, and the balloon collapsed. We were deploring this misfortune when one of the party threw us into fits of laughter by the remark that it did not matter, as there was gas enough among the Head Quarters Staff to inflate a dozen balloons.

We marched on slowly for seven or eight miles further without perceiving any sign of the enemy, and entered a narrow plain between two hills which were immediately occupied by our troops. There we halted for the night and constructed a fence of thorns to protect our bivouac. After our hot, dusty, and very fatiguing march we were all glad to get some refreshment and rest. We had come without tents and almost without baggage. I had nothing with me but my military overcoat, a waterproof sheet, and an old tweed wrapper, all of which had been rolled up and strapped to my saddle, so I put on the overcoat, gave the wrapper to my syce (groom) who had nothing to cover him, spread the waterproof sheet on the sand, and lay down upon it as I was, using a sandy bank as a pillow. We had a pretty quiet night; a few shots, however, were fired by the enemy at long ranges, costing us one British soldier killed and two wounded. I heard several bullets pass overhead, and one struck a metal water-keg close by with great force, but fortunately no one belonging to the Indian brigade was hit. Part of our force remained under arms all

night, in readiness to repel night attacks, but the enemy kept aloof.

Early in the morning everything was ready for the advance to Tamai, and the force moved forward, passing through several Arab encampments which had been recently deserted. Then we came to some rugged hills, on ascending which we became exposed to a dropping fire from parties of the enemy, who skirmished so well that I never got sight of one of them, but only saw the puffs of smoke from their rifles as they fired. We marched on across several low hills and a deep sandy valley, but it soon became evident that the bulk of the enemy's forces had withdrawn, and that there were only a few skirmishers in our front. When this had been clearly ascertained our force retired, burning the enemy's camps on the way back, and so ended the long-expected action of Tamai. We had about a dozen men wounded; what loss the enemy sustained I do not know, as I never saw one of them, dead or alive, that day. At one time their fire upon us was rather heavy, and as we were in large masses it is surprising that our casualties were not more numerous.

We returned to our bivouac of the night before, feeling much disappointed that after all our preparations the enemy had eluded us in this way. After rest and refreshment we again set out and marched back to Tofrik, where we halted, made a temporary zeriba, and established our bivouac for the night. We were closely jammed together, the space being very confined. I lay down on the sand close to my horse, whose head was almost over mine. The air was poisoned by the stench proceeding from the unburied or partially buried corpses of men and animals killed in the action of March 22nd, and we passed a most unpleasant night. Next morning our force marched back to the camp at Suakin, leaving a garrison at Tofrik, which was soon after withdrawn.

On the 9th of April the camp of the Indian contingent was shifted to a position on the railway near West Redoubt, on the left of the British camp, and there it remained for more than a month. During that time detachments were pushed forward to Tambuk, about twenty-five miles from Suakin on the road to Berber, and posts were established at different points to protect the railway works, but no military operations took place except a few reconnaissances and an expedition against a body of the enemy at Takool, eighteen miles west of Suakin, in which no loss was sustained by the Indian troops and hardly any by the British.

The works of the (so-called) Suakin-Berber Railway, which had been commenced at Quarantine Island by the engineers and workmen employed by Messrs. Lucas and Aird, were pushed on to Handub and finally to Otao, twenty miles from Suakin. I made several trips along the railway to Handub and Otao while those posts were held by our troops. The line was very roughly made; the rails were not secured by chairs and fish-plates in the usual manner, but were merely placed on the sleepers end to end and fastened by large nails of this shape , which were driven into the sleepers so as to catch and fix the rails on each side. Of course the trains were driven at a very low rate of speed. The line, starting in Quarantine Island, traversed the causeway, and ran along the plain in a north-westerly direction, gradually approaching the hills. The thorny bushes were cut down for a considerable distance on each side of the railway, and posts were established at intervals with watch towers from which an approaching enemy might be seen while still a good way off.

The original intention regarding this railway was that it should be carried from Suakin to Berber on the Nile, a distance of 270 miles, but this could only have been done had the power of the

Mahdi been destroyed and the Sudan entirely reconquered. As it was, the railway never got beyond Otao, and in a very few weeks it was abandoned, owing to the reduction of our force and the abolition of all posts beyond West Redoubt. The consequence naturally followed that the enemy immediately reoccupied Tambuk, Otao, and Handub, and destroyed the railway by pulling up the rails and burning the sleepers.

At a point near the line of railway between Handub and Otao there was an isolated rock which rose from the plain to a height of 20 feet or more. One day when passing this spot we were astonished to see the words 'PEARS' SOAP IS THE BEST' painted in gigantic capital letters upon the flat surface of the rock. Whether this was a *bona fide* advertisement of the famous firm of Pears & Co., or whether it was done as a joke by some waggish individual in our force, I do not know. It must have been a very perplexing mystery to the Arabs, who most likely ascribed it to the magic of the white men, and carefully avoided the spot.

The weather became much hotter during the month of April, and the high wind, clouds of dust, and swarms of flies rendered our camp life very trying and unpleasant. The innumerable flies in particular were an awful plague; their activity and pertinacity were almost preternatural, it was impossible to keep them off our food and drink, and they tormented us incessantly from morning till night, when, fortunately for us, they desisted from their attacks and went to sleep. They were an intolerable nuisance in the hospitals, and no doubt did much mischief there in spite of all our care and attention. The sick and wounded and their attendants were provided with fly whisks, which were an absolute necessity under the circumstances, and cleanliness was strictly maintained in all the hospitals. Disinfectants were freely used, and everything

was done that experience could suggest to abate the plague of flies in the hospitals as far as possible.

The duties of the officers and soldiers of the Suakin Field Force were very arduous, and tried their strength severely. Many working parties had to be furnished for unloading stores and various other purposes, and in addition there were many pickets, sentries, convoys, camp and other miscellaneous duties, and the average number of nights in bed was often very low. As my own duties included a daily inspection of all the camps and hospitals of the Indian brigade, I had to ride every morning after breakfast several miles across the hot sandy plain and round the harbour of Suakin to the spot where our hospital ship was moored. The glare from the heated sand was almost unbearable, and after trying goggles as a protection to the eyes and discarding them as hot and uncomfortable, I at length resorted to a green silk veil which was fastened round my helmet and tied under my chin. I found this contrivance very comfortable, and most effectual in preserving the face and eyes from heat and glare, and also from the annoyance of flies, and I strongly recommend it to the attention of travellers in hot countries.

Besides this inspection duty I had a certain amount of office work to get through every day, and I had to preside at all medical boards assembled to report on sick or wounded officers, or for other purposes. I also had to see the general daily and keep him well informed of everything affecting the health of the troops and the sanitary condition of the camps and hospitals. All this hard work and privation affected the health and condition of the force to a considerable extent; there was a good deal of sickness among the Indian troops, and, as was to be expected, much more among the British soldiers who had come from England, and were quite

Sudan. The officers also suffered ; some had to be sent to England on sick leave, and there was hardly one of them who was not indisposed at one time or another.

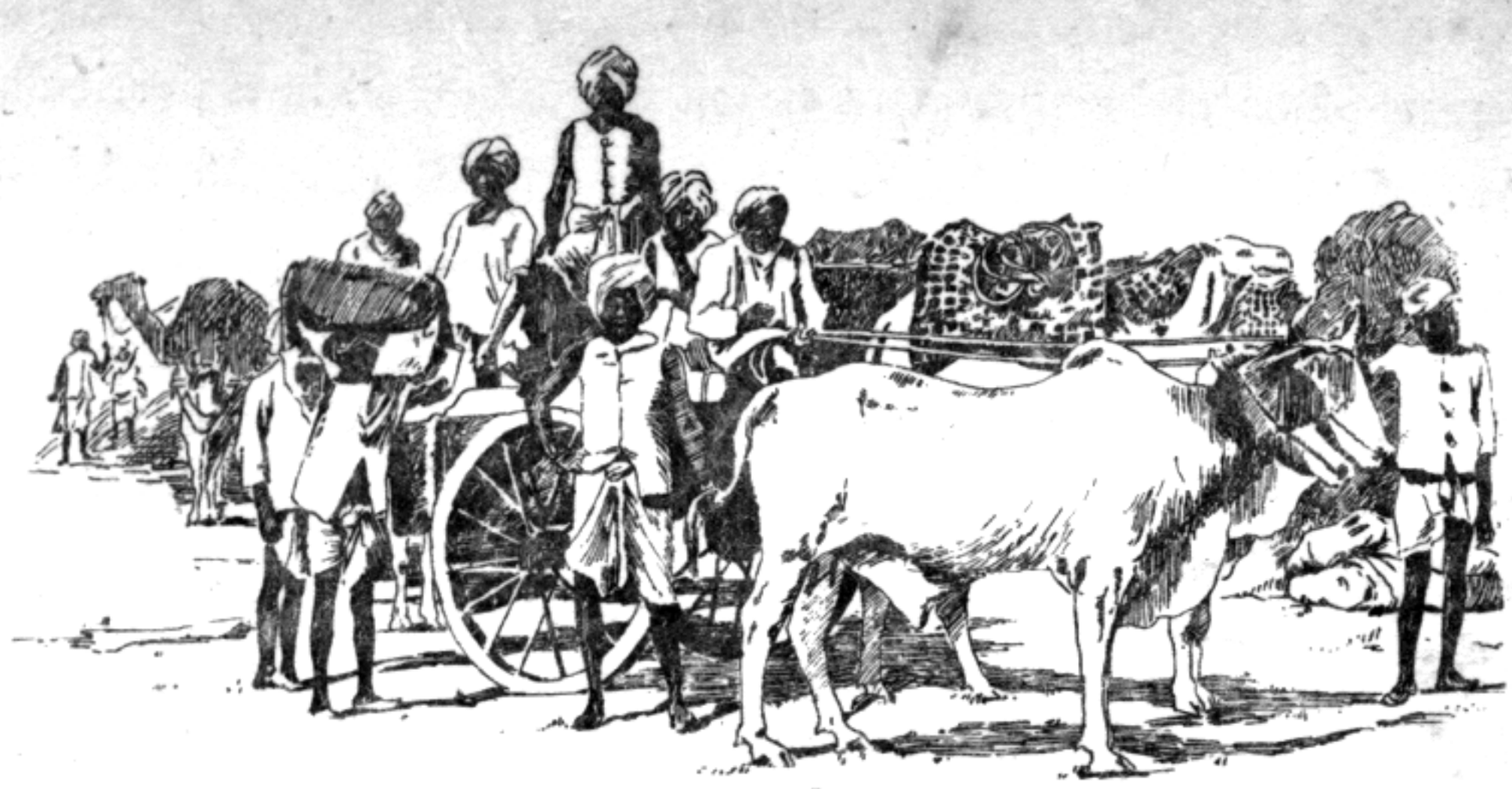
In the beginning of May General Lord Wolseley arrived at Suakin and inspected the troops and hospitals. He was much pleased with our base hospital on board the *Czarevitch*, and complimented us on the order and cleanliness of the hospital, which he said was 'perfection.' This was high praise, and in my opinion it was well deserved, as this hospital was admirably organised and worked by Brigade-Surgeon J. C. Morice and the medical officers serving under him. In order to show how successfully the hospitals of the Indian contingent were worked I may mention that up to this time there had been only six deaths, two from wounds received in action and four from disease, out of more than 1000 sick and wounded men who had been admitted and treated since our landing at Suakin.

A SIKH SUBADAR

I witnessed the inspection parade of the whole force under Lord Wolseley on the 8th of May. It was a grand and striking spectacle ; the march past was very fine and the troops presented a splendid appearance, especially the Guards and the 15th Sikhs, whose companies looked like solid walls as they moved past. On the 4th of May we were warned to be in readiness to march to Tamanib, a distance of twenty-five miles from Suakin, to surprise the rebel leader, Osman Digna, who was reported to be there with a few followers. The force was to consist of the 15th Sikhs, 28th Bombay Native Infantry, and a detachment of British troops mounted on camels, the whole under the command of General Hudson. Every one concerned was delighted, but our enthusiasm was speedily damped as the expedition was countermanded. We

heard that Lord Wolseley disapproved of it, and he was probably right, as Osman Digna would almost certainly have received warning of our approach from his scouts, and would have had plenty of time to make his escape before we arrived. He had, indeed, many friends and sympathisers in Suakin itself, and it would have been very difficult, if not impossible, to take him by surprise.

Moreover the water difficulty was an almost insurmountable obstacle to military operations in the Sudan during the hot



THE INDIAN COMMISSARIAT AT SUAKIN

season. There was then hardly any water to be found in the country except at a few widely-separated springs, which in most instances yielded a scanty and precarious supply only sufficient for a small number of men and animals. If a force took with it an adequate water supply the movements of the troops were liable to be hampered and their presence betrayed by the large number of transport animals required to carry the water. If, on the other hand, a force had marched into the desert during the hot season with only a little water, the consequences might have been very serious or perhaps even fatal. This dilemma always confronted us

during the military operations in the Sudan, and doubtless this consideration induced the British Government to select the Nile route for the expedition sent for the relief of Khartoum.

On our first arrival at Suakin, when it was fully believed that we should march across the desert to Berber to co-operate with Lord Wolseley's force in the expected advance against the Mahdi at Khartoum, an elaborate plan was drawn up by the officers of the quartermaster-general's department for the supply of water to a force of 5000 fighting men and a suitable proportion of camp followers, while marching from Suakin to Berber, by means of caravans of water-bearing camels sent from Suakin in a particular order. I went over this scheme very carefully, but could not help noticing that the success of the arrangement would depend entirely upon its never being interfered with by the enemy, and also that if it failed from any cause the force would be in great danger of perishing from thirst, as the amount of water found at a few points along the Suakin-Berber road is very scanty, and would only suffice for a few hundred men at most. Under these circumstances I was not sorry when all idea of this march was given up.

CHAPTER XVIII

Termination of active operations—The field force broken up—Garrison left at Suakin—I am appointed principal medical officer of the garrison—Positions occupied by the troops—The garrison hospitals—General Hudson and the staff move into the 'New House'—Insanitary state of Suakin and its environs—I endeavour to improve matters—Climate of Suakin—Its effect on the troops—Prevalence of enteric fever among the British troops—Remarkable immunity of the Indians—A risky anchorage—We visit the *Cushie Doo*—Our supplies of ice and drinking water are curtailed—I obtain privilege leave to England, and start for Suez in the *Iona*—I meet General Dormer in the *Tanjore*—His tragic death—I travel to London *viâ* Brindisi—My name appears in the Gazette as a C.B.—I leave England in the *Rome*—We engage a steam launch at Port Said and so reach Ismailia—I go on to Suakin in the *Romeo*—Changes during my absence—The rainy season—Report of Osman Digna's death—I volunteer for service in Burma—Farewell order by Sir John Hudson on my departure from Suakin—Remarks on sickness and mortality among the troops and followers of the Indian contingent during the occupation of Suakin.

ACTIVE operations in the field were considered at an end by May 14th, when the force assembled at Suakin began to break up, most of the British troops returning to England, and the Australians to their own country. About 1000 British and 2500 Indian troops remained to form the garrison of Suakin and to occupy several fortified positions outside the walls. In consequence of the departure of Deputy Surgeon-General Hinde, C.B., on the 5th of June I was appointed principal medical officer of the Suakin garrison, with the local rank of deputy surgeon-general, and this order was subsequently confirmed by the Government of India. On the 9th of June the camp was broken up, and the troops composing the garrison of Suakin took up the following positions.

The British troops were distributed in three positions as

follows. A detachment of the Shropshire Light Infantry, the Royal Artillery, and B company Mounted Infantry were quartered in H Redoubt, a fortified position on a rising ground, defending the approaches to Quarantine Island from the west and to El Kaf and Suakin from the north. These troops were accommodated in European privates' tents with mat shelters erected over them. A smaller detachment of the Shropshire Light Infantry with detachments of Royal Engineers and other corps were stationed in wooden huts in Quarantine Island. The Headquarters Shropshire Light Infantry, with details of other corps, were posted at Graham's Point, a narrow strip of land at the south side of the entrance of Suakin harbour.

The distribution of the Indian troops was as follows. The 15th Sikhs occupied three intrenched posts, namely, West Redoubt (a fortified position on the railway about a mile and a half from El Kaf in the direction of Handub), the Sandbag Redoubt, and a fortified camp about 1200 yards north-west of H Redoubt. The 28th Bombay Native Infantry were encamped on the south side of Suakin harbour, between the Quarry Fort and the commissariat yard. The men of both regiments were accommodated in European privates' tents with mat shelters. The 17th Bengal Native Infantry were stationed in the forts around the suburb El Kaf, and the Madras Sappers and Miners were quartered in European privates' tents in Quarantine Island. The 9th Bengal Cavalry were sent back to India, with the exception of one squadron which was posted in the commissariat yard, close to the transport lines.

The hospital arrangements for the garrison were as follows. For the British troops remaining at Suakin two station hospitals were established, one on Quarantine Island and the other at Graham's Point. The former was located in a large building roofed with wood and matting (previously used by Messrs. Lucas and Aird)

and in two wooden huts covered with matting. The situation and surroundings of this hospital were unsatisfactory, but its occupation was a matter of necessity at the time. The other station hospital was established in well-constructed wooden huts at the extremity of Graham's Point, the most salubrious situation that could have been selected anywhere about Suakin. These hospitals were originally designed for sixty patients each, but by taking into use additional huts they were subsequently enabled to accommodate many more. They were regularly dieted as station hospitals and provided with all necessaries for the use and comfort of the sick, including a sufficient supply of ice. The general and field hospitals of the Indian contingent were still maintained as before; the general hospital on board the transport *Czarevitch*, No. 1 field hospital on some level ground between the harbour and the camp of the 28th Bombay Native Infantry, and No. 2 field hospital in Fort Euryalus, one of the forts around the suburb El Kaf. At the same time General Hudson and his staff took up their residence in a large building in the town of Suakin called the 'New House,' where our whole party found roomy and convenient quarters. I had a large room at the top of the house commanding a fine view of the harbour and the sea beyond.

My first care, on being appointed principal medical officer of the garrison, was to try and bring about some improvement in the sanitary condition of Suakin and its environs, the state of which was indescribably filthy. The whole plain which had been occupied by the army and the transport animals was in a most insanitary state, owing to the neglect of proper arrangements for disposing of filth and refuse and the bodies of dead animals. An order had been issued that the latter should be buried at a distance of two miles from the camp, but this order was frequently disregarded, and dead animals were buried far too

near the camp. It actually happened on one occasion, when the camp was shifted a few hundred yards, that an officer found a dead camel buried just below the spot where his tent was pitched. The truth is that the conservancy establishments were insufficient for the wants of the large number of troops, followers, and transport animals assembled round Suakin, and I conclude that it was found impossible to keep the place clean with the means available. The British troops should have been supplied with a corps of sweepers from India to keep their camps clean, and the sweepers should have been placed under some steady and intelligent non-commissioned officers, who would have directed their work and have generally looked after the conservancy of the camps under the supervision of the sanitary officer.

If the sanitary condition of the camps was bad, the town of Suakin was little better in this respect, and El Kaf and Quarantine Island were much worse. These places were crowded with people who had no idea of cleanliness and were under very little control, if any. Quarantine Island was full of graves, many of which had fallen in or were on the point of doing so. An officer stationed there was leaning back in his chair one evening after dinner, when suddenly the ground gave way under him and he fell down. On rising and examining the spot he found that he had broken through into a grave. All along the margin of the harbour was a belt of black fetid mud which exhaled the most offensive odour when uncovered by the sea, while pools of filthy water and abominations of all kinds poisoned the air in every direction. In short the whole place was an Augean stable and demanded the labours of a Hercules to clean and purify it.

However, considerable improvement was effected after a time. A number of labourers were employed to clean the worst parts, and numerous truck loads of sand and stones were brought from

the desert and laid down along the shores of Quarantine Island and in other places in order to cover the accumulations of filth which were in such quantities as to preclude the possibility of removal. Pools of foul stagnant water were filled up, and the low-lying shores of the harbour were in several places reclaimed from the sea and converted into firm, dry ground. The bodies of dead animals were burned, and all stable litter and refuse destroyed in the same way. In short, everything possible under the circumstances was done to improve the sanitary condition of the town and the various positions around it occupied by the British and Indian troops forming the Suakin garrison.

When the troops arrived at Suakin in March the climate was not unpleasant. The sun had considerable power in the middle of the day, but the strong winds made it quite bearable, and the nights were cold enough to render blankets necessary. In April and May the weather was much the same, but the power of the sun was sensibly increased. Towards the end of May several storms occurred, in one of which there was a rather heavy fall of rain with much thunder and lightning. The heat increased greatly during the month of June, but it was occasionally tempered by a comparatively cool sea breeze. Dust storms, of short duration compared with those of India, were of frequent occurrence. In July the heat became greater and the nights were extremely still and oppressive, so that it was difficult to obtain sleep. When there was any wind, it generally came from the desert and was like the blast from a furnace, but occasionally there was a sea breeze loaded with moisture. The temperature in the tents, huts, and houses frequently exceeded 100°, and in the mess hut of the Royal Engineers in Quarantine Island (a very hot corner) it reached 120°. On going to my room one night at ten

o'clock I found that the temperature was 108°; the air was suffocating and everything felt hot to the touch.

This intense heat told severely upon the health of the garrison, particularly the British portion, and several British officers and soldiers were found dead in their beds from heat apoplexy, while many others were attacked by enteric fever which often proved fatal. The Indian troops naturally bore the climate better, but nevertheless they looked sickly and exhausted, and many of them, with several of their British officers, had to be sent away on sick leave at different times. The immunity of the Indian soldiers and their British officers from enteric fever during this campaign was a very remarkable circumstance and has never (so far as I know) been satisfactorily explained. They had not a single case of this disease from first to last, while the British force, including the officers, suffered severely from it, although the surroundings and general conditions in both cases were precisely the same. The only difference was that the Indian officers and soldiers were mostly older men than the British, and more accustomed to campaigning in hot climates, but although this gave the former a certain advantage it hardly accounts for the absolute immunity which they enjoyed in the midst of the most insanitary and trying conditions.

A singular incident, which might have been very tragic, occurred early in July, and deserves mention here. A wealthy Australian, who had been going about in his steam yacht for some months, visiting different parts of the world, resolved to see Suakin, but on his way down from Suez he ran short of fuel when about twenty miles north of Suakin. Being totally unsuspicious of danger he anchored his yacht close to the shore, and came on to Suakin in a small boat with a few men to procure a supply of coal. It was felt that he had done a very imprudent and risky thing in leaving the

yacht anchored so near the shore, and accordingly arrangements were at once made for the despatch of a steam launch on the following morning with an armed party in case of need. Several officers, myself included, accompanied the party, and a barge with a supply of coal was towed by the steam launch so that our progress was slow and several hours passed before we reached our destination. We found the yacht anchored literally within a stone's throw of the shore; they had been in this dangerous situation for two days, and a lady who was on board had actually landed with others of the party and rambled about as though they had been in a peaceful and friendly country. We told them that had any Arabs been in the neighbourhood and seen them land, they would in all probability have fallen into the hands of the enemy and would have been massacred or carried off into slavery. They were very much astonished, and said they thought there was no danger so near Suakin, so we told them it was not safe to go even one mile outside the forts and camps around the town.

The yacht was a fine vessel of 350 tons named the *Cushie Doo*, with a saloon right across in the fore part of the ship and the cabins in front of it. The engine and boilers, as well as the quarters of the crew, were in the after part of the vessel. We had lunch on board, and stayed with them till they had taken in their coal and got up steam. One of the seamen of the yacht, who was dissatisfied for some reason or other, asked to be landed at once, and was vainly assured that it would be certain death, either from hunger and thirst, or from the spears of the Arabs. He seemed unable to take it in, and still insisted on going ashore, so that he had to be forcibly prevented from doing what would have been equivalent to an act of suicide. In the afternoon we said good-bye and set off on our return, and soon after starting we saw the yacht under steam heading to the eastward for Jeddah on the

Arabian coast, as the owner had given up his intention of visiting Suakin. On our way back the weather became very squally, and our little steamer (a craft of only forty or fifty tons) jumped about in a very lively way, taking clouds of spray over her bows and wetting us through. The coal barge towing astern pitched tremendously and took in a good deal of water, so that we feared she would be swamped, but at length we reached the entrance of Suakin harbour and presently got into smooth water.

Just about this time we found ourselves deprived of ice owing to the departure of the *Bulimba*, our principal ice ship, which was believed to have been removed by orders from the Admiralty in order to effect some paltry saving. The *Amethyst*, our remaining ice ship, made only twelve or fifteen hundredweight of ice daily, and as this amount was all required for the hospitals, there was none available for the different messes, and no more cool drinks could be had. Subsequently two ice machines were sent to Suakin, and were set up on No. 4 Pier at Quarantine Island, but they were very liable to get out of order, and in a short time only one of them continued working. Another misfortune happened to us about this time. Since our arrival at Suakin the whole force had been supplied with condensed water for drinking and cooking, and this water was made by several ships kept in the harbour for the purpose. The condensing machinery of one of these vessels, the *Edinburgh*, got out of order and could not be used for a time, so that the supply of water to the force was seriously diminished. The consumption of the garrison, including followers, amounted to 60,000 gallons of condensed water daily, and of that amount the *Edinburgh* made about 24,000 gallons. The condensed water was generally of good quality, but occasionally it was rendered very nauseous in consequence of salt water and oil from the machinery having by some accident got into the condensers. To add to our

troubles, the mails to and from England, which had been weekly, were now despatched only once a fortnight, so that every one was dissatisfied and thought the authorities at home were treating us very shabbily.

In August I was granted privilege leave to England, and after making over charge of my office to Brigade-Surgeon Morice, the next senior officer, I left Suakin on the 13th in the *Iona* for Suez. The heat was almost unbearable during the voyage, which fortunately lasted only four days. On landing at Suez I at once took the train and went on to Alexandria, arriving there late in the evening. Next morning I took my passage for London, *viâ* Brindisi, and embarked on board the P. and O. steamer *Tanjore* in the afternoon. One of my fellow passengers was General Dormer, then commanding the British army in Egypt, and late commander-in-chief of the Madras army. This distinguished officer met his death recently in a very tragic manner, having been so seriously injured by a wounded tiger which he had imprudently followed up on foot that he expired shortly after.

After a prosperous voyage of three days' duration we arrived at Brindisi, and I left by train at 8 P.M. I reached Calais at 7 P.M. next day, crossed the Channel during the night, and arrived in London early on the following morning, very happy to find myself at home once more. Two days after my arrival the *London Gazette* of August 25th, 1885, containing Lord Wolseley's despatches relative to the Nile and Suakin expeditions, was published, and I had the great satisfaction of finding my name in the list of officers whose services were considered deserving of special mention, and of seeing my appointment as a Companion of the Military Division of the Most Honourable Order of the Bath, a high distinction which very few Indian medical officers are fortunate enough to obtain.

After a short stay at home with my wife and family I left

England on September 30th to return to my post at Suakin. I was unable to travel *viâ* Brindisi, as the Egyptian International Sanitary Board had imposed seven days quarantine on arrivals from Italy, so I went round by way of the Straits of Gibraltar in the P. and O. steamer *Rome*. A good many of the passengers besides myself had to land in Egypt, and we were anxious to be disembarked at Alexandria, but the captain of the *Rome* refused our request, and on arrival at Port Said, at the entrance of the Suez Canal, we had to make our own arrangements to reach the railway at Ismailia. Fortunately we were able to engage a steam launch for 500 francs (or about one pound each person) which took our whole party as well as our baggage from Port Said to Ismailia, where we arrived early in the morning. My companions all left at once for Cairo by a special train they had wired for, but as I was going in the opposite direction I had to wait for my train till the afternoon, when I continued my journey and reached the Suez Hotel in time for dinner. I found the steamer *Romeo* in Suez docks about to start for Suakin, and took my passage by her, arriving at my destination on the evening of October 19th, and resuming charge of my duties on the following morning.

During my absence the British troops in garrison had been reduced to about 500 men, and the greater part of the Indian contingent had left Suakin, having been relieved by other native regiments from Madras and Bombay. I found that the 17th Bengal Native Infantry were to leave Suakin in November, and that I was to return to India with them, my place as principal medical officer of the Suakin garrison being taken by Brigade-Surgeon Roberts, Madras Medical Service.

By this time the weather had become much cooler, and towards the end of October there were several storms and heavy falls of rain, by which the low-lying grounds in El Kaf and the vicinity of

H Redoubt were flooded and a good deal of damage was done to the walls. The climate in November was not unlike that of the rainy season in India; the maximum temperature on the maindeck of the hospital ship *Czarevitch* was 88° and at Quarantine Island 94°. In the middle of the day the sun still had great power but the nights were cool and pleasant.

Soon after my return we heard that our old enemy Osman Digna had been slain, with a large number of his followers, in a battle with the Abyssinians, but this subsequently proved to be a false report. A sanguinary battle indeed took place near Kassala between the Mahdist and Abyssinian forces, but Osman Digna, according to his usual practice, kept well out of harm's way. News also reached us of the commencement of the Burmese war, and of an expedition under General Prendergast having been despatched to Mandalay. As I knew that my period of service at Suakin was nearly over I volunteered for service with the Burma expedition, but my application was unsuccessful.

On the 13th of November the steamer *Nowshera* arrived with some native troops to relieve the 17th Bengal Native Infantry, who were ordered to return in her to India. I made preparations to return with them and made over charge of my office on the 15th to Brigade-Surgeon Roberts of the Madras Medical Service. The following very flattering farewell order was published by General Sir John Hudson, K.C.B., on this occasion, showing how highly he appreciated my services and those of the medical officers serving under me:—

'Deputy Surgeon-General J. H. Thornton, C.B., having been relieved of his duties as principal medical officer of the Indian contingent and Suakin garrison, the brigadier-general commanding cannot allow this officer to leave his command without placing on record the high estimation in which he holds Dr. Thornton's

services with the Indian contingent. His constant and anxious care in watching over the sanitary condition of the garrison, and all details affecting the health and comfort of the troops, has been most successful, and has materially contributed to the efficiency of the force. During Dr. Thornton's absence in England his administrative duties were most ably carried on by Brigade-Surgeon J. C. Morice, whose previous services in medical charge of the general hospital on board the *Czarevitch*, whereon in the earlier stages of the campaign a large number of wounded were treated, deserve special acknowledgment. To both these officers as well as to those who worked so unremittingly and zealously under them, Sir John Hudson tenders his warmest thanks for the cordial support they have invariably afforded him on the many occasions on which he has sought their advice and assistance.'

A few remarks upon the sickness and mortality among the native troops and followers during the occupation of Suakin may not be out of place here. The prevailing disease was dysentery, which caused more than a third of the total number of admissions into hospital. It was of a very mild type and was chiefly due to hard work, chills from exposure, insufficiently cooked food, and climatic influences. The 17th Bengal Native Infantry suffered from this complaint in larger proportion than any other regiment, probably in consequence of the men not taking time enough to cook their food properly. There were a considerable number of admissions from fevers, chiefly ague: most of these were slight cases caused by chills from exposure, but some were severe and several proved fatal. There were eighty-one cases of scurvy among the troops and 132 among the followers; these mostly occurred in the months of August, September, and October, and were doubtless due to the want of fresh vegetables, a sufficient supply of which could not be procured. The 15th Sikhs suffered most from

this disease, having thirty-six cases, four of which proved fatal. The tendency to scurvy was prevented, as far as possible, by the issue of fresh meat, lime juice, rum, sugar, and fresh vegetables when procurable, but unfortunately the latter could not be obtained regularly or in sufficient quantities. There was more sickness among the men of the Madras Sappers and Miners, in proportion to their strength, than in any of the other corps; this was probably owing to the hard work they had to perform throughout the whole period since their arrival at Suakin. The total number of native soldiers treated in the field hospitals of the Indian contingent during the whole period they were stationed at Suakin was 2584, including 105 cases of wounds received in action, and ten cases proved fatal, including two wounded cases. The total number of camp followers treated during the same period was 1421 (including thirty wounded cases) of whom thirteen died, one of them from wounds received in action.

Taking into consideration the very trying climate of the Sudan, the severe duties, and the hardships and privations which both troops and followers had to undergo, it is surprising that the sickness and mortality were not far greater. It was a matter for congratulation that, with the exception of those killed in action, not a single commissioned officer of the Indian contingent died during the campaign and the occupation that followed. This very favourable result was mainly due to the promptitude with which the sick officers were granted leave and sent away as soon as it became evident that a change of climate was necessary for their recovery. Several officers would certainly have died had they been detained at Suakin during the hot season. The sick of the native troops and followers also were invalided to India whenever there were opportunities of sending them, and doubtless many lives were thus saved.

CHAPTER XIX

I return to India in the *Nowshera* and await orders at Allahabad—My temporary appointment to Bankura—Visit to Bishenpur—I am appointed civil surgeon of Tirhoot and proceed to Mozufferpur in February 1886—The Mozufferpur 'meet' —I chum with an old friend—My work at Mozufferpur—Castor oil manufacture in the jail—Singular case of cholera—I am promoted, and appointed to the Punjab Frontier Force—My journey to Abbottabad—Description of the station —Distribution of the Punjab Frontier Force — My house at Abbottabad— Description of the Hazara district—I visit Thandiani—Magnificent scenery— I go to Mansehra on inspection duty—Pali inscriptions there—Græco-Bactrian coins found in Hazara—Ruined bridges on Mansehra road, anecdote regarding them—My visit to Haripur.

On the morning of November 16th, 1885, we embarked on board the *Nowshera*, said farewell to the general and our other friends who were to remain at Suakin, and commenced our voyage to Bombay, where we arrived on the 27th. After spending a few days there in the transaction of official business connected with my late appointment, I left by train for Allahabad, where I had been directed to await orders as to my future destination and employment. I reached Allahabad on December 3rd, and put up in Laurie's Hotel. After some delay, in consequence of there being no vacancy among the civil medical charges in Bengal, I was appointed, as a temporary arrangement, to the civil station of Bankura in Lower Bengal, and left Allahabad by train on December 24th, arriving at Raneegunge next day. There I had to leave the train and continue my journey to Bankura by mail cart, which was to start at midnight, so I spent a dull and cheerless Christmas at the hotel. Early on the following morning I arrived at Bankura and put up for a day

or two with the district magistrate, Mr. Tayler, and his family, who received me with the greatest kindness and hospitality. The station was a small one, and there was not a house to be had, so, knowing that in all probability I should be there only a few weeks, I took a room in the circuit house.

In the last century, and in the early part of the present century, Bankura was a military cantonment, and troops were required there to protect Lower Bengal from incursions of the Mahratta cavalry, the bands of freebooters called Pindaris, and the wild tribes (Santals, Kols, etc.) inhabiting the neighbouring hills. The troops were removed many years ago, and the only traces of their presence remaining at the time of my visit were a few small masonry buildings in which the soldiers had kept their arms, a cemetery containing the tombs of various officers, and the house occupied by Mr. Tayler and his family which had been the officers' mess. My duties at Bankura were similar to those I had previously discharged at Arrah and Monghyr, but considerably lighter, as there was very little private practice. The country was undulating, and the station was situated on rising ground at an elevation of more than 1000 feet above the sea. The soil was of a reddish colour, being largely composed of laterite. The native town was of small size and not remarkable in any respect. I visited two branch dispensaries in the district; one of these was at Bishenpur, some miles away to the south on the Midnapur Road. At this place I saw some very ancient and curious temples built of blocks of laterite, and I noticed several rusty old cannon lying on the ground, which, I was informed, had formerly been used against the roving bands of Mahratta and Pindari horsemen, who used to go all over India in past times on plundering expeditions.

In February I was appointed civil surgeon of Tirhoot, and I quitted Bankura on the 9th, arriving at Rancegunge in the after-

noon. There I got the train in the evening and arrived at Mozufferpur, the chief station of Tirhoot, on the afternoon of the following day. Mozufferpur is a large and important station, and may be styled the capital of the indigo districts of Behar. The native city is extensive and populous, and there are a great many European residents, consisting of government officials, railway employés, indigo planters, barristers, and others, whose houses are widely scattered round about the city. At the time of my arrival the Mozufferpur 'meet,' or annual gathering of Europeans from the surrounding districts, was just coming to an end, but the visitors had not yet departed, and their white tents were standing round almost every European residence in the station. Two or three hundred people, mostly indigo planters, visit Mozufferpur for a week or so at this annual gathering, and have a very good time of it. Races, cricket, lawn tennis, balls, and festivities of all sorts go on continually, varied sometimes by a parade of the Behar Light Horse, who are usually inspected at this time every year by the general commanding the Allahabad division of the Bengal army.

At the time of my arrival it was difficult to get a house, and rents were very high. For a short time I lived in a tent, and then I was very kindly invited by an old friend, Mr. Irvine, district superintendent of police, to chum with him. I gladly accepted his proposal, and lived with him during the remainder of my residence at Mozufferpur. Had it not been for his kindness, which I here gratefully acknowledge, I should very likely have been compelled to spend the hot season of 1886 in a tent, which would not have conduced either to my health or my comfort.

I was well occupied during my stay at Mozufferpur, and although there were two other medical men besides myself, one attending the planters and the other the railway establishments,

yet there was work for all three of us. I had charge (executive as well as medical) of a large jail which required much supervision. The prisoners were chiefly employed in the manufacture of castor oil, which was sold in large quantities to the railways and to the different indigo factories for use in the machinery. The oil was extracted from the castor seeds by iron roller presses worked by the prisoners with long handspikes, and the labour required for this work was very severe. I also had to superintend a large dispensary in the station, and to visit several branch dispensaries in different parts of the district, in addition to my work as police surgeon, and a fair amount of private practice among Europeans and natives in the station and district.

During my stay at Mozufferpur a curious case occurred which appeared to me to throw considerable doubt upon Koch's 'comma bacillus' theory of cholera. A female prisoner, who had been several months in jail, was suddenly attacked at night with illness which appeared to be cholera, all the characteristic symptoms of that disease being unmistakably present. No other case occurred in the jail, and there was no cholera at the time, so far as I could ascertain, among the population of the district. I made a very close inquiry into all the circumstances of this case, but could find out nothing of any consequence except the fact that the woman had eaten a quantity of food which the other female prisoners had left unconsumed. When I saw her first the patient was in a state of profound collapse, all the usual symptoms of cholera were present, and any one familiar with that disease, on seeing the case, would at once have pronounced it to be a case of cholera. Those who believe in Koch's view would, I suppose, deny this, but in that case they would be bound to state what this woman's illness was, and to call it 'cholera nostras' would, in my opinion, be a mere evasion of the difficulty. I have seen some other cases of a similar

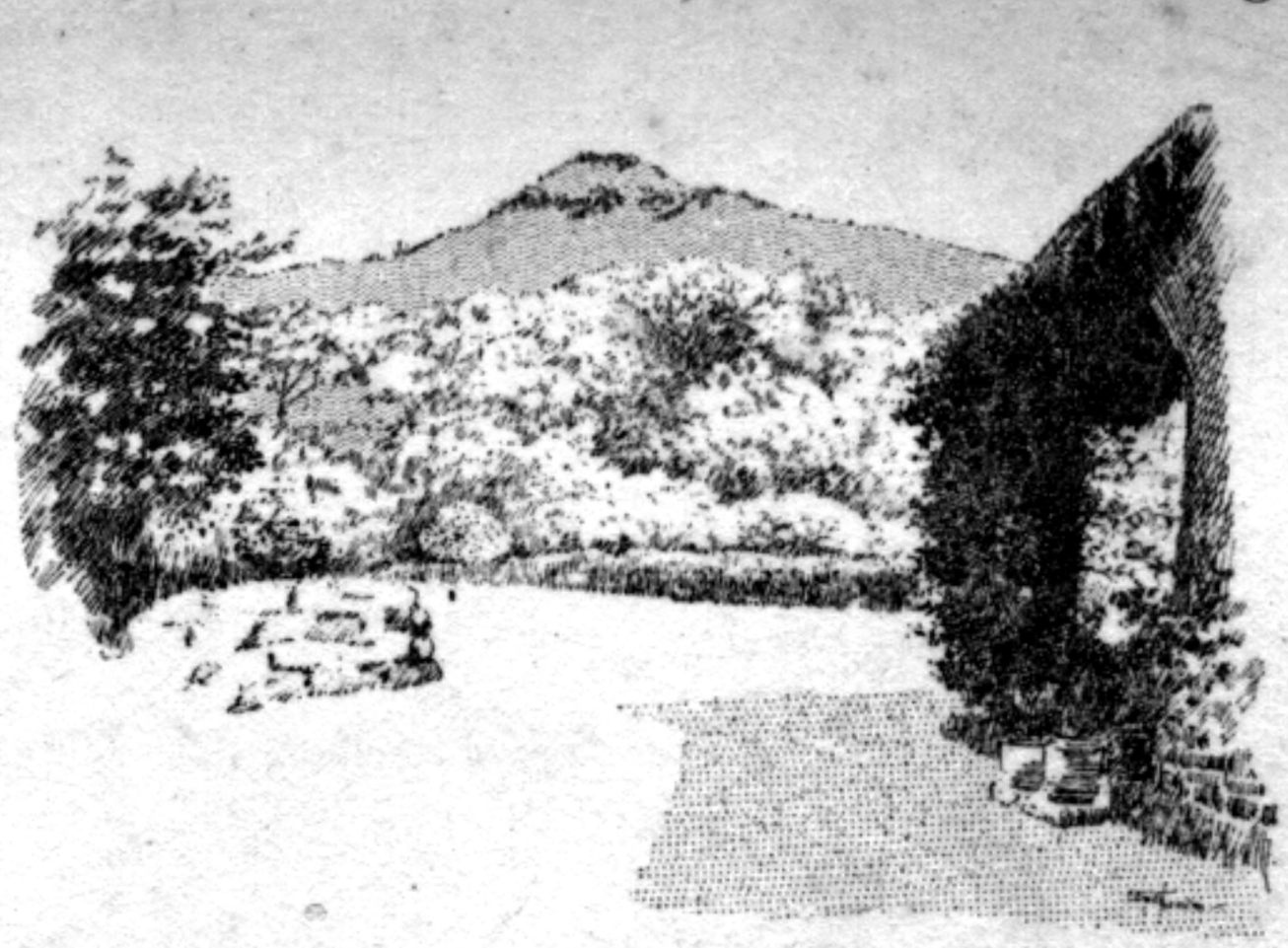
kind at different times during my residence in India, but this was the most striking, and the impression it left on my mind was that we have not yet got to the bottom of the question of the nature and causation of cholera.

At the end of July I received a telegram from the head of my department informing me that I was to be promoted immediately to the administrative grade, and a day or two after my promotion to the rank of deputy surgeon-general was announced in the *Gazette* of India. Very shortly I received orders to make over charge of my duties at Mozufferpur and to proceed at once to Abbottabad, in the Punjab, as principal medical officer of the Punjab Frontier Force. Accordingly, after winding up my affairs at Mozufferpur (which did not take me long), I started by train on August 7th. On the following day I reached Arrah, and broke the journey there in order to spend a day with an old friend. Then I resumed my travelling, and after a railway journey of three days and two nights I arrived at Hassan Abdal about midnight, and found a special tonga in readiness to take me up to Abbottabad, which was forty-two miles distant.

This conveyance was a heavy two-wheeled cart drawn by two ponies; it was fitted with an awning, and was capable of carrying three passengers in addition to the driver. These tongas are used on most of the hill roads in the north of India; they are very strongly and solidly built, as they have to stand much rough usage and many violent shocks from the boulders in the beds of unbridged streams through which the tongas are driven at a sharp trot or sometimes even at a gallop. My tonga brought me to Abbottabad early in the morning, after a journey of about six hours. The road ran through a broad valley for some thirty-five miles, and was very good in most parts, but two unbridged rivers and a number of smaller streams had to be crossed, and the jolting there

was dreadful while the heavy tonga was being dragged over the stones and boulders, some of which seemed large enough to upset it. After the last river (the Dor) had been crossed, the road entered a narrow pass between two mountains with very steep sides, and ascended the pass by a series of zigzags and bends which presently brought me in sight of the station lying embosomed in trees in a beautiful valley, bounded towards the north by mountain ranges exceeding 8000 feet in height.

This valley is about 4000 feet above the sea at its lowest part; it is bounded on the east by Siriban, an isolated mountain rising very abruptly to a height of about 6000 feet, and on the west by ranges of hills culminating in Habiba, a rounded summit about 5700 feet in elevation. The ground rises gradually from the base of Siriban towards the west, and

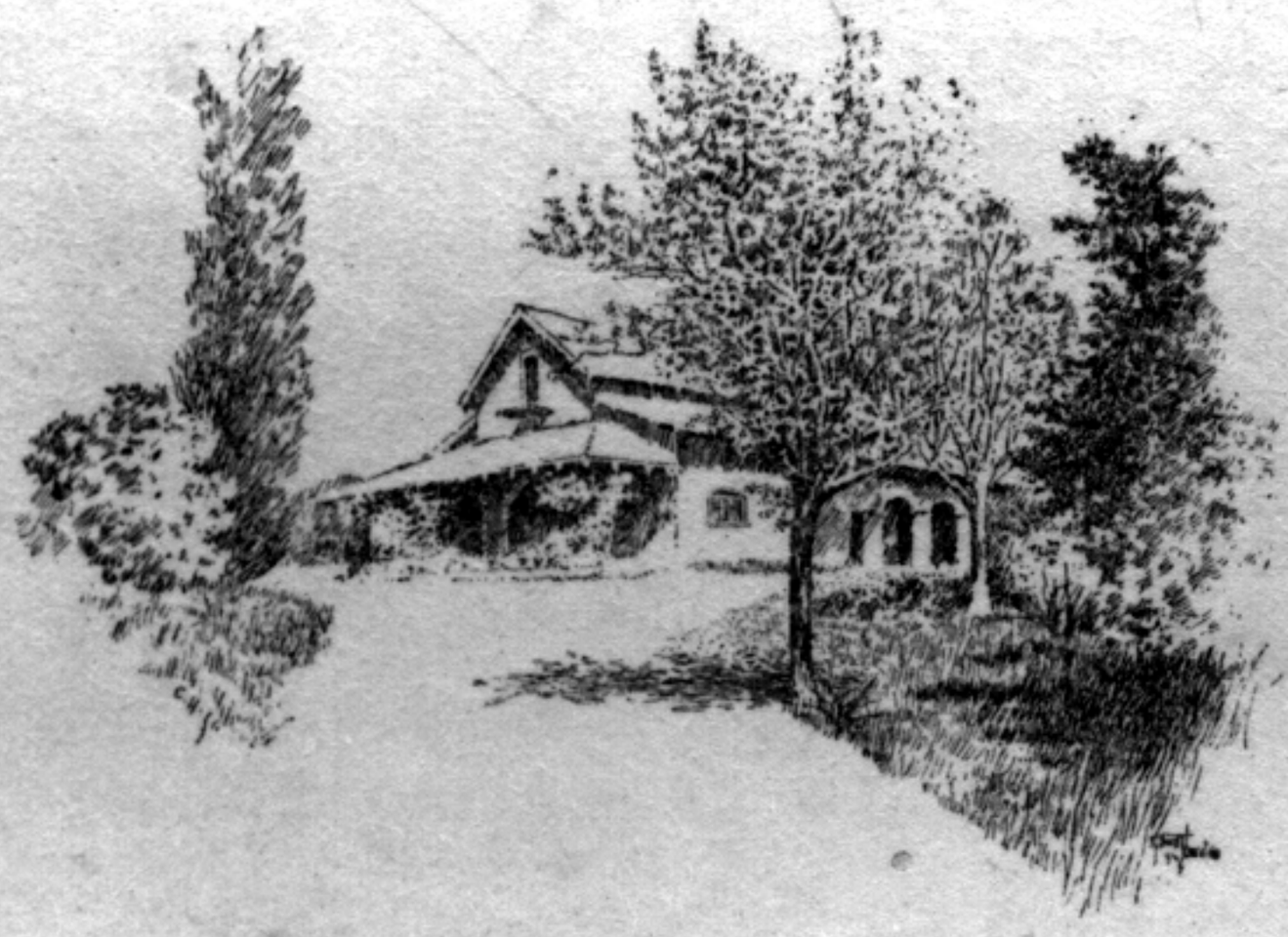


VIEW FROM MY GARDEN, ABBOTTABAD

on this slope are situated the native town (which is of small size), the courts of justice, the jail, dispensary, and district school, the houses of the European residents, the barracks and hospitals of the troops, and the church, which stands nearly in the centre of the station. Excellent driving roads have been carried through and around the station in various directions, and are always kept in good order.

Abbottabad, so named after Major Abbott, the first British administrator of the district of Hazara, was occupied about forty years ago, the site having been selected by the late Sir Herbert

Edwardes, who succeeded Abbott as chief civil officer of Hazara. As time went on many houses were built and great numbers of trees were planted round them, as well as along the roads and in all the open spaces. These have long since grown up and make the station very shady and pleasant. The houses are mostly built of stone, and are very pretty and picturesque; indeed they are much more like English villas than Indian bungalows. Most of them are surrounded by a variety of beautiful trees, such as pine, oak, walnut, chestnut, and cypress trees, Himalayan cedars (*deodar*), Australian gum trees, and others, while their verandahs are covered by a profusion of climbing roses, geraniums, passion flower, honeysuckle, etc., and their gardens contain lovely roses and other flowers too numerous to mention. From a little distance the station of Abbottabad, with its abundant foliage crowned by the spire of the church, much resembles in appearance some small country town in England. The barracks of the troops are situated to the north of the station, on each side of the main road passing through it, and just below them is a large open space used for parades and drills, as well as for polo, cricket, football, and golf.



MY FIRST RESIDENCE AT ABBOTTABAD

As soon as possible after my arrival I took over charge of my duties from the officer who had preceded me in the post. My appointment was purely administrative, that is to say I had to

superintend the medical officers and hospitals of the Punjab Frontier Force, a division of about 14,000 native troops disposed along the north-west frontier of India, from Kashmir in the north to Sindh in the south, and in addition I had to supervise the civil medical arrangements at the different stations occupied by the troops. These stations were Abbottabad, the headquarters of the force, where the general commanding and his staff officers resided; Murdan in Yusufzai, occupied by the Queen's Own Corps of Guides; Kohat, close to the Afridi Hills, held by the largest garrison of the force; Bunnoo or Edwardesabad, situated in a fertile valley, where peace and order were first established by Edwardes in 1846; Dera Ismail Khan on the Indus, opposite to the Waziri Hills and the remarkable mountain called Takht-i-Suleiman or Solomon's Throne; Dera Ghazi Khan, further down the river; and lastly Rajanpur, not far from the frontier of Sindh. The troops of the Punjab Frontier Force, consisting of twelve battalions of infantry, five regiments of cavalry, four mountain batteries, and one garrison battery, are disposed along the frontier at these stations and at numerous outposts and forts established at various points near the hills to protect our territory and to prevent the raids of the hill tribes. Annual inspections of the troops and establishments at the different stations and outposts are made by the general officer commanding the force, and the medical and sanitary arrangements are inspected annually by the deputy surgeon-general of the division.

Soon after my arrival at Abbottabad I was fortunate enough to secure a very pretty and comfortable house, conveniently situated close to the church, and only a little way from the garrison mess house. It stood in a good-sized piece of ground well stocked with trees, and had a large vegetable garden, behind which were the stables and coach house, and a range of servants' houses. The

porch and verandahs of the house were covered with honeysuckle, passion flower, and climbing roses, and the approaches were bordered by hedges of white and yellow roses, 5 or 6 feet high, which in April were covered with hundreds of blossoms making a splendid show. In front of the house were two magnificent cypress trees, and all around were piñes, gum trees, walnut and chestnut trees, and the 'chenar' or Kashmir sycamore. I was so well pleased with this residence that I rented it until I finally left Abbottabad in 1891.

The district of Hazara is a mountainous tract of country between Kashmir and the River Indus, inhabited by a Mohammedan population. The central and southern parts contain some extensive valleys, but the country becomes more and more mountainous and rugged towards the north and east. The northern extremity of Hazara is the Khagan Valley, a narrow gorge between lofty mountains extending along the west and north of Kashmir for about 100 miles. In winter this valley is quite impassable from snow. The River Indus forms the western boundary of Hazara for some distance, but a little north of Derbund the boundary leaves the river and follows the crest of the Black Mountain for several miles, then bending towards the east and meeting the Khagan Valley near Balakot. This district is full of splendid mountain scenery, several summits, near Abbottabad, exceeding 8000 feet in height, and one mountain, Miajani, almost reaching 10,000 feet. In Khagan there are many mountains of 14,000 and 15,000 feet, and one falling little short of 18,000, so that persons fond of mountaineering had ample opportunities of gratifying their taste in that direction. I devoted as much time as I could spare from my official duties to exploring the country around Abbottabad, and there were few hills in the neighbourhood that I had not ascended when I finally left the country.

Soon after my arrival I paid a visit to a friend who was

spending a short period of leave at Thandiani, a charming little station situated at an elevation of nearly 9000 feet on the lofty range to the north of Abbottabad. At this spot are about a dozen houses, which are generally full in the summer months, but unoccupied in winter, when the place is buried under many feet of snow. Starting after breakfast, I rode for three miles along the Murree Road, a shady avenue of willow, mulberry, and other trees. Beyond the third milestone I left the road, and passing a large village, I crossed a hill stream, and began to ascend a steep ridge by a path which curled round the spurs and zigzagged up the steep places. On reaching the top of this ridge I saw Thandiani a good way above me on the other side of a wooded gorge into which the path I was following now descended. Through this gorge ran a brawling hill stream called the Kala Panee (Black-water), strongly reminding me of the scenery in the Khasia Hills. The road went down the hill obliquely for several miles to the river, which it crossed by a substantial bridge. On the other side was the dâk bungalow, or travellers' rest house, where travellers could obtain accommodation and refreshment if required. From this point the road ascended the steep forest-clad side of the mountain by a series of zigzags for six or seven miles, and brought me about dusk to the top of the ridge, when, a little further on, I reached my friend's house and received a hearty welcome.

Early next morning I got up and enjoyed a truly magnificent view of the snow-clad mountains which surrounded us on three sides. From the south-east to the north-west extended an almost uninterrupted succession of snowy peaks, many of which exceeded 20,000 feet in elevation. To the east, south-east, and north-east were the mountains of Kashmir, one of which called Nanga Purbut, or the naked mountain, is nearly 27,000 feet high. The south side of this mountain is a sheer precipice for 10,000 feet, so that

snow cannot lie on it, whence the name. To the north were the mountains of Khagan, Chilas, and the Swat country, and to the north-west and west could be seen the mountains of Bajaur, Kafiristan, and Afghanistan. I doubt if a more extensive and magnificent panorama of mountain scenery is to be found in any other part of the world.

The ridge on which the little station is situated consists of limestone and is several miles in length but very narrow at the summit, where it becomes, in some places, a veritable knife edge only a few inches wide. The houses, which are mostly built of wood, are scattered along the summit of the ridge wherever space could be found for them. The tiny church, the bazaar, the post-office, and the travellers' rest house are at the very edge of an abrupt and precipitous declivity which forms the eastern face of the mountain. The whole extent of the ridge, a few bare spots excepted, is clothed with a magnificent forest of pine, deodar, chestnut, oak, holly, and other trees, among which the climbing white and pink rose, clematis, honeysuckle, ivy, etc., are frequently seen, and the white peony, violets, primroses, and other wild flowers abound everywhere throughout the forest. There is an excellent walking and riding road through the forest from the Kala Panee dâk bungalow to the summit of the ridge, and similar roads have been carried through and around the station in different directions, so that a great many beautiful walks and rides may be taken and an infinite variety of lovely and magnificent scenery may be enjoyed.

Towards the east the ridge of Thandiani sinks very abruptly into an immense ravine, beyond which is a similar but loftier mountain called Miajani. To the south are seen the wooded hills known as the 'Gullies,' and beyond them the forest-clad ridge of Murree, thickly dotted with houses. A few miles off to the south-

west are the valley and station of Abbottabad, and the lower hills immediately surrounding them, while to the west rises a precipitous ridge nearly as high as Thandiani and connected with it by a spur a few hundred feet lower. The mountains and vales of Kashmir are seen towards the east, and due north stretches the deep valley of the Kunhar River, descending from the mountains of Khagan. In a north-westerly direction is the extensive Pakli Plain, full of rice fields, and beyond it are the Susal Pass, the Oghi Valley, and the Black Mountain, the theatre of several frontier campaigns since our occupation of Hazara.

After spending a few days very pleasantly at this charming spot, I returned to Abbottabad. My duties included the inspection of the civil dispensaries in the various districts occupied by the Punjab Frontier Force, and I took an early opportunity of visiting the dispensary at Mansehra, a town about sixteen miles north of Abbottabad. The medical officer in charge of the civil medical duties of the district accompanied me, and we travelled in a light cart drawn by a pair of mules. For several miles the road was excellent and almost level, as it traversed a plain extending northward from Abbottabad. Then it skirted the foot hills of the Thandiani ranges, crossed three ravines, wound in and out among some low hills, and then ran down a long descent to the town of Mansehra, which stands on an eminence overlooking the Pakli plain.

When I had finished my inspection of the dispensary we breakfasted at the travellers' rest house, and then walked about the town, which is of some size and was, in ancient times, a place of considerable importance, being on the way to Kashmir. Close to it is a small hill covered with large granite boulders, several of which bear Pali inscriptions, which have been ascertained to be portions of the edicts of Asoka, a great Buddhist sovereign who

reigned about 250 B.C., and whose dominion extended over the greater part of India. Coins of the Græco-Bactrian kings (successors of Alexander the Great), and of the Indo-Scythian kings who followed them, are often found in Hazara and in other parts of the Punjab by the natives, while digging wells or cultivating their fields, and may occasionally be got from the moneylenders or grain dealers, into whose possession they are pretty sure to pass soon after their discovery. During my stay at Abbottabad I picked up a considerable number of these old coins by inquiring for them in remote villages and purchasing them from the villagers. Among the coins thus obtained were some fine specimens of the coinage of the Græco-Bactrian kings, Apollodotus, Antimachus, Menander, Hermæus, etc., and of the Indo-Scythian kings, Azes, Gondophares, Kadphises, and others; also coins of the Hindu sovereigns of Kabul and Kashmir, of the early Mohammedan invaders of India (in particular Mahmud of Ghazni) and of the later Mohammedan sovereigns down to our own time. Coin collecting, however, is a risky amusement, as the scarcer and more valuable coins are now extensively forged at Rawal Pindi, and an inexperienced and unwary purchaser is sure to be taken in.

On the road to Mansehra I noticed the ruins of several bridges in the ravines we crossed, and my companion related the following anecdote about them. These bridges, he said, had been built many years before by the district engineer, but as he had not made sufficient allowance for the force of the hill torrents, his bridges were soon carried away, leaving some ruins which have remained up to the present time. Years passed, and the officer responsible for this blunder had long left the district and had become the superintending engineer of the circle, when he received a report from the officer then occupying his old post to the effect that he had discovered some interesting Buddhist remains on the Kashmir

Road. He was asked to describe them, and when he had done so it became evident that he had mistaken the ruins of his predecessor's bridges for Buddhist remains! The feelings of the superintending engineer, when this became clear to him, may be readily imagined.

Early in October I visited another dispensary in the Hazara district at Haripur, a considerable town about half way between Abbottabad and Hassan Abdal. During the period of Sikh domination the governor of Hazara resided at Haripur and used to go round the country with a strong body of Sikh cavalry to collect the revenue. The town of Haripur is buried among trees and gardens and has many streams of water flowing through it. The broad valley around is highly cultivated, and the people seem prosperous and contented, which they certainly were not under the rule of the Sikhs, who, like most Orientals, were hard and rather tyrannical masters. A considerable body of Sikh troops was stationed at this place, and when the Sikh army revolted in 1848 the troops at Haripur naturally followed suit. An Italian officer who commanded the Sikh artillery was killed in the attempt to defend his guns, and there is a monument to his memory by the roadside at the spot where he fell, not far from the Haripur dâk bungalow. The British administrator, Major Abbott, was unable to resist the revolted troops, but he succeeded, by the assistance of the Mohammedan population of the district, in maintaining himself in the neighbouring hills until the revolt was finally crushed by the crowning victory of Goojerat in 1849.

CHAPTER XX

Severity of the winter at Abbottabad—I start on my tour of inspection—Murdan—Abazai—The Swat Canal—We shoot the rapids of the Swat River—Our trip to Takht-i-Bahi—Discovery of sculptures in Swat and Yusufzai—I visit Peshawur and Attock—My journey to Kohat—The station and its surroundings—The water supply of Kohat—The Fort of Mahomedzai—Disaster near it in 1868—I go on to Edwardesabad, halting for the night at Banda and at the fort of Bahadur Kheyl—Description of Edwardesabad and the valley of Bunnoo—Pacification of the district by Sir Herbert Edwardes—I proceed to Dera Ismail Khan—The station described—Jubilee celebration there.

In November the weather at Abbottabad became rather wintry, and snow fell on Thandiani and the higher ranges. We found it necessary to have fires in our houses, and every one put on winter clothing. In December it became much colder, and in the beginning of January 1887 a good deal of snow fell at Abbottabad, while the surrounding mountains were thickly covered. I now made preparations for my tour of inspection along the frontier and started by tonga on the 15th of January. Travelling was not pleasant, as the snow was melting and the road in a very bad state. In crossing one of the unbridged streams the ponies could hardly drag the heavy tonga up the steep ascent, and for a few moments I thought we should roll back into the water. On arriving at the railway station at Hassan Abdal I had to wait several hours for the train, so that it was 5 A.M. by the time I reached Nowshera, a small military station between Attock and Peshawur. There I left the train, and after an hour's delay I got a seat in the mail tonga going to Murdan, the first station I had arranged to visit. The road crossed the Kabul River by a bridge of boats very soon

after leaving Nowshera; it was then carried through a chain of low hills, from which a fine description of marble has since been excavated, and for the rest of the distance it ran northward to Murdan through a level plain where few trees and little cultivation were to be seen.

Murdan is permanently occupied by the Queen's Own Corps of Guides, a distinguished native regiment nearly 1500 strong, of which H.R.H. the Prince of Wales is honorary colonel. This station is situated in the extensive plain of Yusufzai (literally the place of Yusuf or Joseph) which is bounded by the river Indus to the east, the mountains of Buner and Swat to the north, and those of Afghanistan to the west. When this position was first taken up, a mud fort was built for the protection of the garrison, but as years passed away, new barracks, houses, and other buildings were erected around the fort, and now by far the larger part of the station is outside the fortifications. I remained several days at Murdan engaged in the medical inspection of the regiment, its barracks, hospital, etc., and the civil dispensary, which was well managed and largely attended. I also had to preside at the annual invaliding committee appointed for the examination of all soldiers reported by the regimental authorities to be unfit for further service owing to disease or injuries.

Having finished my work at the station, I proceeded, in company with the medical officer of the Guides, to visit a detachment of the corps stationed at Abazai, about thirty miles from Murdan and close to the hills of Swat. We drove out in a light cart drawn by a pair of mules, taking our revolvers, as the road was not always safe and there was a standing order forbidding any one to go there unarmed. The road ran in a north-westerly direction passing a rugged chain of hills on which are the ruins of an ancient Buddhist monastery known as Takht-i-Bahi. Then

the road followed the Swat Canal for some miles, and at length it brought us into the fort of Abazai, which is on the Swat River and only a mile or two from the hills. At the time of my visit the fort contained the barracks and hospital of the detachment of troops, quarters for their officers, and a bungalow for the canal engineer, who resided there.

Here I must explain that the government, at considerable cost, had constructed a canal for irrigation, the water being taken from the Swat River just where it issues from the hills. The canal was carried through the plain to Murdan and for some distance beyond. Channels from this canal were constructed in different directions through the plain, and the irrigation has already gone far towards transforming it from a barren waste into a fertile and well-cultivated tract of country. It was hoped not only to fertilise an extensive and previously barren district, but to induce the people of the Swat and Buner Hills to come down and settle in the plain and to give up their turbulent and predatory habits. So great a change, however, could only be expected to come about very gradually.

I inspected the barracks and hospital in the fort, and after breakfast we walked up to the head of the canal where the water of the Swat River enters it. This point was strongly fortified by massive masonry walls and towers, and not far off stood a strong fortress built to keep the hill tribes in check. These defences were garrisoned by the border militia, and the fort of Abazai, less than two miles off, served as a support. Just beyond this point the Swat River issues from the hills; it is a fine, clear, rushing stream about 150 yards wide, with rapids in many places. Our territory ends here, and beyond rise the rugged hills of Swat, range after range, with snow-clad peaks appearing in the distance.

After seeing all that was to be seen we went down to the river bank and embarked on a raft supported by inflated mussucks

(water skins) for our return to Fort Abazai. We soon got into the first rapid, and our raft was whirled round and tossed about in the most exciting way. This was followed by some smooth water and then came another rapid, and so on till we had shot several of them, and presently found ourselves floating in calm water abreast of the fort. We returned to Murdan on the following day, and then visited the interesting ruins of Takht-i-Bahi previously mentioned. These are supposed to be the remains of a large Buddhist monastery founded more than 2000 years ago; they are extensive and cover a considerable portion of the hill on which they stand. When first discovered these ruins were in better preservation than at present, and they contained many curiously carved statues and sculptures of various kinds, but these have mostly been removed to different museums, and the whole place has been dug up in quest of antiquities, so that now there is nothing to be seen but ruined walls, excavations, and heaps of débris, among which some broken fragments of sculptures or statues may sometimes be found.

In the mess house of the Guides at Murdan there are several very fine statues, which I believe were dug up in some other part of the district; they are nearly perfect and show unmistakable traces of Greek art. A great number of statues and sculptures of various kinds, mostly executed in a dark slaty stone, have been discovered in different parts of Yusufzai, and have been sent to the museums in India and elsewhere, but unfortunately most of them were damaged owing to the iconoclastic zeal of the Mohammedans, who defaced them under the impression that they must be idols. An officer of the Guides showed me some beautiful and well-preserved sculptures which had been brought to him from the Swat country, but unluckily the man he employed was ultimately detected by the people of the country, who smashed the sculptures

he carried, and threatened to kill him if he took away any more.

On leaving Murdan I drove to the railway station at Nowshera, hoping to catch the afternoon train to Peshawur, where I had to inspect the civil dispensary, but I only arrived in time to see the train steaming out of the station. Having to wait till the following morning for the next train, I visited my old Suakin friends, the 15th Sikhs, who were in garrison at Nowshera, and spent a pleasant evening with them. Early in the morning I got the train, and arrived at Peshawur in time for breakfast. After inspecting the dispensary, which was well attended and admirably managed, I walked through the principal streets of the town, a large and populous place containing more than 80,000 inhabitants. Peshawur is a kind of trade emporium for Central Asia, and it is visited by people from all parts. Persians, Afghans, hillmen of various clans, traders from the central Asian states, from Yarkand, Kashgar, and Kashmir, and people from most parts of India throng the streets, and the shops exhibit all manner of wares, the productions of these different countries.

During the rule of the Sikhs, and in the early period of British government, Peshawur was a very unsafe place of residence for any European, and several assassinations occurred, notably that of Colonel Mackeson, the commissioner of the division, who was fatally stabbed in his own court in 1853 by a Mohammedan fanatic, who approached him under the pretence of delivering a petition. Until a comparatively recent period it was unsafe for any European to go about the streets of the city, and the cantonment of the garrison and the officers' houses were guarded as though they had been in an enemy's country. Thefts of arms, horses, and other property were frequent, and even now they sometimes occur in spite of all precautions. Nevertheless the state of

things at Peshawur has considerably improved, and the European traveller may now go about the city in security, without fearing that at any moment some Mohammedan fanatic may stab him 'for the love of God,' as would have been very likely to happen thirty or forty years ago.

In the afternoon I again took the train for Attock, where I had to inspect another dispensary. After traversing the plain of Yusufzai and passing Nowshera the train entered the hills near Attock, and went through a tunnel and some deep cuttings before reaching the Indus, which was crossed by a fine iron bridge protected against the rush of the river by massive stone piers built in front of the iron work and intended to serve as breakwaters. The scenery at this point is very striking. The Indus, reinforced by the Kabul River, which falls into it a little higher up, is confined, on entering the hills at Attock, in a rather narrow channel with high rocky banks, and rushes down with great velocity. On either side is a succession of bare rugged hills, and the town and fortress of Attock are seen on the eastern bank nearly opposite to the point of junction of the Kabul River and the Indus.

The fortress of Attock was built in the sixteenth century by the great Mogul Emperor Akbar, and at that time it would no doubt have proved an effectual barrier against any enemy attempting to cross the Indus at that point. But it is commanded by higher hills on both sides of the river, and it could offer little resistance in these days to a well-appointed army. The gates still retain the iron spikes with which they were studded as a protection against the butting of war elephants, and the whole place bears an appearance of considerable antiquity. Some twenty or thirty years ago a tunnel was carried under the Indus at Attock with the object of keeping open communications at all seasons, as the bridge of boats, which was then used for this purpose, was

frequently carried away. The tunnel was completed, but it proved useless, as owing to the nature of the rock, the water of the river could not be excluded, and the tunnel was at last completely flooded by it.

On leaving Attock I travelled by train to Rawal Pindi, passing through a chain of hills on which stands an obelisk erected in memory of General John Nicholson, who was killed at the storming of Delhi in 1857. Rawal Pindi is an important military station between Lahore and Peshawur; it is the headquarters of a division of the army and contains one of the largest garrisons in India. I had no official business there, and merely stayed a day on my way to Kohat. Leaving Rawal Pindi in the morning I proceeded by train along a branch line of railway to Khushalgarh, a place on the Indus some way below Attock. There the railway ended, and I continued my journey by tonga, descending into the rocky gorge of the Indus and crossing that river by a bridge of boats. Then we rattled on along an excellent road through a wild and jungly country till we approached a range of hills where the road was unfinished, and the work of cutting the rock, levelling inequalities of ground and bridging the streams was still going on. There we had to drive slowly and carefully, but in a short time we got through the hills, and entered the plain of Kohat, arriving at the station between four and five in the afternoon after a tonga journey of thirty-two miles.

Kohat is a considerable station, having a garrison of more than 3000 men, consisting of three infantry regiments, a wing of cavalry, and two batteries of artillery, all belonging to the Punjab Frontier Force. The barracks and hospitals of the troops, the houses of the civil and military officers, the courts of justice, the church, post-office and cemetery, the native town and the fort, all stand close together on the plain, and are but a few miles

from the Afridi hills, through which the Kohat Pass, about twenty miles in length, leads northward towards Peshawur, which is about forty miles distant from Kohat. The entrance of the Pass is about four miles from Kohat, and is marked by a low ridge on which stands a blockhouse occupied by a few of the border militia. To the west of this point the hills rise abruptly and attain considerable elevation, culminating in a peak commonly known as the 'Old Woman's Nose,' and really bearing some resemblance to a human face. These hills are inhabited by the Bezoti Afridis and other hill tribes, while those to the east of the pass are the home of the Jowaki Afridis. These tribes have often been turbulent and hostile, and several expeditions have been sent against them from time to time, not always with satisfactory results.

I stayed several days at Kohat, as there was a great deal of inspection and invaliding work to be done there. I may here mention that an annual inspection report in duplicate, comprising answers to some fifty or sixty printed questions regarding the health of the troops and the sanitary condition of their barracks, hospitals, etc., had to be sent in for every regiment and battery of the Punjab Frontier Force, and a separate report upon the conduct and qualifications of every medical officer with the force had also to be forwarded. Office copies of all these reports had, of course, to be kept for future reference. In addition to the military medical establishments, I had to inspect and report upon the civil dispensary and the police hospital, and to inquire generally into the sanitary condition of the town, the quality of its water-supply, and, in short, all matters affecting the health of the native population.

The Kohat water-supply is in some respects very remarkable, and deserves to be noticed here. Both the town and the cantonment are supplied with water by springs which rise in the Afridi

hills several miles to the north. The water is conveyed to the station in natural subterranean channels in the limestone rock, and it gushes out in full clear streams from various little caverns near the fort of Kohat, and it is thence distributed to the town and throughout the station according to requirements. These springs are of the utmost importance to Kohat, the water is of excellent quality, and has never been known to fail, even in very dry seasons. The supply is abundant, and much of it is employed in irrigating the fields and gardens in the immediate vicinity of Kohat.

Being so near the Afridi hills, Kohat has always been much exposed to the raids of the hillmen. The native town is surrounded by a wall and the gates are closed at night, but the cantonment is unprotected except by pickets and sentries posted at various points during the night. Robberies in the cantonment frequently took place in former times, and even now they occur sometimes, though the state of affairs is much improved. Just before leaving Kohat I walked out to the fort of Mahomedzai, about three and a half miles off, at the mouth of a pass leading into the hills inhabited by the Bezoti Afridis. This fort is garrisoned by about twenty men from one of the Kohat regiments, under a non-commissioned officer; they always have to be on their guard, as if they had the enemy in front of them. They have a beacon ready to be lighted in case of an attack by night, and a large white flag to be hoisted if they are attacked in the daytime; these signals would be seen at Kohat, and assistance would be sent immediately. The Sepoys pointed out to me the scene of the disaster in 1868 when Captain Ruxton and many of his men were slain while trying to storm an almost inaccessible position held by the Bezotis. This disaster is said to have been due to a misconception of orders.

On the 5th of February I left Kohat in one of the regimental

mule carts and proceeded towards Bunnoo or Edwardesabad, which was the next station I had to visit. For some miles the road was excellent; it ran in a southerly direction along the plain, avoiding the hills as much as possible by curving round the spurs, and taking advantage of the valleys between them. At length the road crossed some considerable spurs which could not be avoided; at these points there had been much cutting and blasting of rocks, and work of this kind was still going on in many places. In the afternoon I arrived at Banda, thirty-four miles from Kohat, and put up in a comfortable rest house, inside a fortified enclosure, where a party of Punjab cavalry were quartered. Not far off was the road engineer's house, fortified in the same way.

The mule cart could go no further, so next morning I continued my journey on horseback, accompanied by one of the troopers as escort. We crossed a river soon after starting, and I saw that preparations for bridging it were in progress. We then ascended some bare and rugged hills beyond, and presently came down into a veritable valley of desolation, where a salt stream flowed sluggishly along. After following this valley for some miles the road ran up the side of the hills on our left, and after crossing these hills descended into a broader valley, which at first seemed as barren and desolate as the one we had already traversed. As we proceeded, however, the country became less barren, a few trees and patches of cultivation appeared, and at length a large square stone building came in sight, which I found to be the police station of Bahadur Kheyl. The fort where I was to put up was a mile or so further on, and after my long and fatiguing ride I was very glad to reach it and to obtain rest and refreshment.

The fort of Bahadur Kheyl is very solidly built, and is quite impregnable so far as the hill tribes are concerned. It is garrisoned by a detachment of fifty men from Kohat under a native

officer. Formerly cannon were mounted on the ramparts, but they have been removed. I put up in the dâk bungalow, which is inside the fort, and found to my astonishment that even in this remote place the khansama (butler) in charge had tinned soups and other stores, soda water, spirits, beer, and claret for sale. I went all over the fort and inspected the detachment hospital, which was empty, as there were no sick. The ramparts commanded an extensive view over the broad valley, which was shut in at its western end by a very curious hill called by the natives 'Kafir Kot,' or the Infidel's Fort. The sides of this hill are precipitous and apparently inaccessible, and at a distance it presents the appearance of a stupendous and impregnable fortress.

Early next morning I mounted and left Bahadur Kheyl with my escort. After crossing a deep and rugged ravine we came to a tunnel which had been cut in the solid rock through a range of steep hills which here blocks the way. We rode through this tunnel, which is about two hundred yards long, and entered a most curious and interesting valley beyond, where the hills were almost entirely composed of rock salt. I saw a great many men employed in cutting out large blocks of the salt and loading camels and asses with them. They have to pay a small tax to our Government for the privilege of cutting the salt. On emerging from this valley we found a stretch of fairly level country, and then we came to a tremendous gorge into which the road descended by many zig-zags. A great deal of blasting and cutting was going on still, and we found the frequent explosions rather trying to the nerves of our horses.

After following this gorge for several miles the road left it and passed over a fairly level country to a place called Letemma, where I found a mule cart which had been sent from Bunnoo to bring me in. Between Bahadur Kheyl and Letemma the road passes close to the border and used to be very unsafe. About thirty years ago

a sick officer going away on leave was attacked by the hillmen and murdered not far from Letemma. He had an escort of police, but they fled and left him to his fate. Thanks to the excellence of the mules, I took little more than two hours in driving from Letemma to Bunnoo, a distance of about twenty miles. Just before reaching the station we crossed the Koorum River, which comes down the valley of that name from the Afghan mountains. There was very little water in the river, so that we drove through it quite easily, but in the rainy season it becomes an impassable flood a mile or so broad. A splendid bridge has since then been constructed across this river, so that communication is now uninterrupted.

On reaching Bunnoo I went to the fort and put up with the senior medical officer of the garrison. The fort was built by Sir Herbert Edwardes, the first British administrator of the Bunnoo district. It is like the fort at Kohat, but considerably larger, so that both the infantry regiments of the garrison are quartered in it, and it also contains their hospitals and the residences of some of the officers. The cavalry and artillery lines and hospitals, the court house, post-office, etc., and the residences of most of the officers, civil and military, are outside the fort and to the west of it, while the native town of Bunnoo is to the east. There are some very pretty public gardens containing within their enclosure the church, the public library, and the lawn tennis courts of the station. As at the other stations on the Punjab frontier there is a garrison mess, where all the unmarried officers take their meals. The married ones generally dine at the mess on guest nights, once a week.

The country around Edwardesabad (as the station was called after its founder) is highly cultivated and well irrigated by channels from the Koorum River. The mountains inhabited by

the Waziris are only a few miles distant, and raids by these wild hillmen sometimes occur. To the east lie the hills of the Khuttucks, and to the south the low range of hills culminating in Shaikh Budin, about 4000 feet high, on the summit of which is a little station which serves as a most useful sanitarium for the inhabitants of these frontier stations. It has been the means of saving many lives which would certainly have been lost had there been no escape from the terrible hot weather in these burning plains.

Previous to the establishment of British rule the extensive plain of Bunnoo was full of forts, and was in a state of perpetual civil war. This miserable state of things had continued from time immemorial in spite of the efforts of successive governors (Mogul and Sikh) to reduce the turbulent population, but it was at length terminated by the extraordinary ability, tact, and patience of Sir Herbert Edwardes, the first British administrator of this district. Without the employment of force, and simply by his own personal influence and noble character, he at last succeeded in getting the people of Bunnoo to demolish their forts and to give up fighting among themselves. How he accomplished this apparent miracle is fully described in his most interesting work, entitled, *A Year on the Punjab Frontier*, a book that deserves to be attentively studied by every Indian administrator.

The garrison of Edwardesabad was considerably smaller than that of Kohat, so I got my inspection and invaliding work over in a shorter time, and after inspecting the civil dispensary, the police hospital, and the native town, I was ready to resume my journey. I started by a special tonga on February 12th, taking my servant and baggage with me. For the first fifteen miles the road was good, but further on the country became poor and sandy, and the road in many places was very heavy. Towards evening we drew

near the hill of Shaikh Budin and entered the low chain of hills connecting it with the Waziri mountains. A great deal of blasting and rock cutting had been done in carrying the road through these hills. Immediately after getting through the hills we reached the dâk bungalow at Peyzu, fifty-two miles from Edwardesabad, and halted there for the night. Early next morning we loaded the tonga and resumed our journey to Dera Ismail Khan. The road was very bad and our progress was slow, so that we did not get over the remaining thirty-seven miles before 2.30 P.M.

Dera Ismail Khan has a larger garrison and is altogether a more important place than Edwardesabad, being the headquarters of the commissioner (chief civil officer) of the Derajat division. The station is well wooded, and the houses of the residents are pleasantly situated in large enclosures, many of them having very pretty gardens, thanks to the irrigation channels which convey water from the Luni River. A considerable native town adjoins the cantonment, and both are surrounded by a beautiful circular road, planted on each side with fine trees forming a shady avenue. The roads through the station and its vicinity are excellent and well kept, and there are some pretty public gardens. At a short distance from the station stands a fort of considerable size containing European barracks, in which a detachment of British troops used to be quartered. They were withdrawn some years ago owing to the unhealthiness of the fort, and since then it has had no regular garrison.

The town and station of Dera Ismail Khan are situated on the extensive plain of the Derajat, a little to the west of the Indus and some forty miles or so from the Suleiman mountains, which are seen stretching north and south in an unbroken chain, culminating in the remarkable mountain called 'Takht-i-Suleiman,'

or Solomon's Throne, over 11,000 feet high. The Gomal Pass, one of the principal trade routes between Afghanistan and India, is nearly opposite Dera Ismaïl Khan. This important pass has recently been brought under British influence, so that the trading caravans can now come down safely, instead of being subjected to the alternative of being plundered or paying blackmail, as frequently happened in past times. About sixty miles north-west from Dera Ismail Khan is Tank, a town of some size and importance, which was attacked and burned by the Mahsud Waziris some years ago in one of their raids. This led to an expedition being sent against them which occupied their chief town and soon compelled them to submit and agree to our terms.

During my stay of a week at Dera Ismail Khan the Jubilee celebration took place, and we had illuminations, fireworks, a grand parade of the troops under the general, a durbar or reception by the commissioner of the Derajat, and a dinner and ball at the garrison mess house.

CHAPTER XXI

I resume my journey and arrive at Dera Ghazi Khan—Description of the station—I visit the posts at Khur and Rukhni on the Pishin Road—Account of my journey —Sanitarium of Fort Munro—Scenery in the Suleiman mountains—I return to Dera Ghazi Khan—My fatiguing journey to Rajanpur—I cross the Indus and reach the railway at Khanpur—Halt at Mooltan—I visit Lahore and stay with Dr. and Mrs. Dallas—Return to Abbottabad—I receive a good-service pension from the Government of India—My visit to Murree—Scenery along the Abbotta-bad Murree Road—The 'Gullies'—Murree—An outbreak of cholera on the frontier—A narrow escape.

I FINISHED all my work at Dera Ismail Khan by February 20th, and on that evening I started by the mail cart for Bukkur, a railway station twenty-five miles distant on the other side of the Indus. It was very dark, as there was no moon, and I could not understand how the driver managed to keep on the road, but he drove on as easily as if it had been broad daylight. The Indus was here broken up into several branches, and we drove over no less than six bridges of boats in getting across to the other side. The sandy tracts between these channels delayed us greatly, and it was 2 A.M. before we reached the railway station at Bukkur. My train was there, but was not to start till 7 A.M., so I entered a first-class carriage and got a refreshing sleep before the journey began. After starting the train ran so slowly that it did not reach Mahmud Kot, the station where I had to get out, till 2 P.M., though the distance was scarcely a hundred miles. On leaving the train I had to make my way across a wide stretch of sand to the bank of the Indus, which I was obliged to recross in order to reach my destination, Dera Ghazi Khan.

This town stands in a forest of date palms on the west bank of the Indus about a hundred miles due south of Dera Ismail Khan. It is so near the river as to be sometimes in danger from floods or changes in the direction of the river currents, and a few years ago a considerable sum of money was expended in works designed to protect the town against the encroachments of the river. At the time of my visit a garrison of two regiments of infantry and one of cavalry occupied the station, but a strong detachment of infantry and a squadron of cavalry had been sent up into the Suleiman mountains, sixty or seventy miles to the westward, to protect the labourers employed on the new road which was being constructed to Pishin and Quetta. The barracks and hospitals of the troops, the houses of the officers, the jail, courts of justice, and other civil establishments of the station lie to the west of the town, and are traversed by the main road going north to Dera Ismail Khan and south to Rajanpur. Dera Ghazi Khan is smaller than most of the frontier stations, but it possesses a garrison mess, a public library, with lawn tennis courts near it, a tiny church, a pretty public garden, and an extensive parade ground, where races and tent-pegging often take place. The station is well wooded and the trees are full of crows and green parrots which make a deafening noise.

I soon finished my work at Dera Ghazi Khan, and started on the 26th of February to inspect the Pishin Road detachments in the Suleiman hills. My conveyance was a rickety cart drawn by a pony which had the appearance of being in poor condition, but nevertheless it took me fourteen miles along the Rajanpur road to Kot Chutta at a very good rate. There I got a fresh horse and drove on for nine miles along a wretched cross country road to a town of some size called Choti Zerin, where I put up for the night in the dâk bungalow, which was fairly comfortable. I received a

visit from the local Nawab, a Belooch chief, who was a pleasant, well-informed man, and talked much about his travels and what he had seen at Lahore, Bombay, and other places. I told him he should go to England and see London, and he was much astonished on hearing from me of its great extent and population. All the people in these parts are Beloochees, and are very quiet and courteous in their demeanour. Those I met in my journeys always saluted me courteously with a 'Salaam, Sahib,' and appeared pleased to see me. They were nearly all armed with sword and shield, and sometimes with matchlock and pistol also. I believe our forward movement a few years ago to Quetta and the intermediate posts has been very useful to the Beloochees by protecting them from the destructive raids of their deadly enemies the Pathan hill tribes to the north.

Next morning I rose early and mounted a troop horse, which had been sent out for me, as the cart could go no further. My baggage and servant came along on mules, and an escort of three troopers of the 3rd Punjab Cavalry accompanied me. On leaving Choti Zerin all signs of cultivation ceased, and we rode for many miles over a desolate wilderness where I hardly saw a living thing except a crowd of vultures feasting on a dead camel. The plain was bare and sandy; a few stunted bushes were scattered over it, and around their roots were many rat holes, in some of which I caught a glimpse of the rats. At length we came to some cultivated ground and one or two villages on the banks of a broad river bed which was then perfectly dry. The furthest of these villages was Choti Bala, and there we halted after a fatiguing march of nearly twenty miles. I put up as before in the dâk bungalow and rested for the remainder of the day.

Early next morning we started again, and crossing the broad sandy river bed we entered the plain beyond and soon reached the

first range of hills, which were low and seemed to consist almost entirely of boulders and stones embedded in a sort of hard tenacious clay. On passing through a gap in this chain of hills we found ourselves in a plain several miles broad extending to the foot of the main range of the Suleiman mountains. The plain was very thickly covered with boulders, and a road had been made by clearing them away and piling them on each side. This road could be seen running across the plain for miles like a narrow ribbon, and it seemed as if we should never come to the end of it. At length we reached the dâk bungalow at Zaradun, twelve miles from Choti Bala, where I had some refreshment and changed horses, escort, and baggage animals. Then I began the ascent to Khur, ten miles further on, where the infantry detachment was posted. The road was carried by zig-zags up the steep ascent; the hills were very bare and ugly, and there was no vegetation to be seen except a stunted wild olive tree here and there. The rocks in many places looked as if they had been fused by intense heat, and even at that time of year they were actually too hot to be touched by the hand. The heat and glare were very distressing, and I was glad to ride up the steepest part of the ascent. This was followed by a more gradual slope up the side of a long ravine; then the road passed over a narrow saddle with a precipice on each side, and after meandering through a succession of rocky hills and vales, it at length entered the valley of Khur and the encampment of the troops appeared in sight.

The camp was in the middle of the valley at an elevation of about 5300 feet; the troops were accommodated in tents and huts and seemed to be very healthy. A short time before, I was told, the cold had been intense, but when I arrived it was very hot and the thermometer indicated 85° in the shade. Such extraordinary variations in temperature rendered the climate rather trying.

Next morning I rode to Rukhni, about ten miles distant, in company with the medical officer of the posts, to inspect the squadron of cavalry stationed there. We proceeded in a westerly direction, continually descending till within three miles of the camp, when we entered the valley of Rukhni, which extends north and south some twenty or thirty miles. It appeared quite barren and desolate, but the ruins of several villages, which had been destroyed by the Pathan marauders, showed that at one time there had been inhabitants and cultivation. The cavalry camp was in the southern part of the valley at an elevation of about 3700 feet. The men had hutted themselves, but as wood of proper length was very scarce and difficult to procure, they had made their huts very low and had dug out the floors to some depth so as to increase the space within. The sanitary condition of this camp, as well as its situation and surroundings, were decidedly inferior, and the troops were not so healthy as those at Khur.

We left the camp at 2.30 P.M. on our return to Khur; our horses bounded up the steep ascent like deer and brought us back in about an hour. After a short rest and afternoon tea we walked up to Fort Munro, situated on the top of the range to the south of Khur and about 1000 feet above the camp. This place is a sanitarium for the residents of Dera Ghazi Khan and Rajanpur; there are a few bungalows scantily furnished, but very few trees, though many have been planted, as there is hardly any water on the hill-top. The spot is bare, bleak, and forbidding in appearance, but it affords welcome relief from the intense heat of the plains during the summer months. The views from Fort Munro are grand and far reaching, but the absence of vegetation all over these mountains detracts much from their beauty.

Next day, having finished my work, I left Khur on my return, accompanied part of the way by the medical officer of the posts.

We walked down the line taken by the new road which was in course of construction, and after descending a deep ravine for a few miles we came to an extraordinary 'gap' where the precipitous sides of the gorge approached each other very closely. For some distance beyond this point the valley opened out considerably, and then became very narrow, winding, and precipitous. The work on the road was in full swing and much blasting was going on. Large numbers of labourers were employed, the clank of their iron crow-bars and pickaxes was heard all down the pass, and every now and then a loud report and the crash of falling masses of rock indicated that an explosion had taken place. We had to proceed very cautiously, and make our escort shout to the workmen to stop their operations till we had passed. At length we reached a point where it was no longer possible to follow any track along the bottom of the gorge, so we had to ascend a narrow path, get above the precipice, and descend again further on.

The heat in this rocky gorge was intense, and we were quite exhausted by the time we gained the mouth of the pass and reached the tent of the engineer in charge of the works. After a wash, refreshment, and rest, which were very welcome, I borrowed a pony, parted from my friends, and rode five miles along a rough track near the foot of the hills to Zaradun, which it took me about an hour to reach, the road being very bad. At Zaradun I found my horse and baggage with my servant and escort, who had come down by the old road, and only waiting to drink a cup of tea I went off again, reaching Choti Bala at 7 P.M. quite tired out. Early next morning I rode to Choti Zerin, where I found the cart, and drove back to Dera Ghazi Khan the same afternoon.

After a day's rest, which I needed after having done about 160 miles of very rough driving, riding, and walking in five days, I started in the same rickety conveyance for Rajanpur,

seventy-two miles distant, the most southerly station occupied by the Punjab Frontier Force. I made slow progress at first, as the road was very bad; in many places it passed through long stretches of sand where I had to walk in order to lighten the cart. It took me five hours to reach Jampur, thirty-two miles from Dera Ghazi Khan, and I was quite done up with the heat and dust. I stopped at the dâk bungalow, had lunch, and rested till 2 P.M. when I resumed my journey. The road was better and the heat less as the sky was cloudy, but I was much delayed by a vicious horse, which played all sorts of tricks, and several times nearly brought us to grief by backing the cart to the very edge of the road embankment. The road ran through a very wild country full of jungle and thinly inhabited, but I saw no game save a few partridges. It was quite dark when I arrived at Rajanpur, and I was glad to get dinner and retire to rest.

Rajanpur is a small station in the southern part of the Derajat and not far from the border of Sindh. It lies between the Indus and the Suleiman hills, which at that point are much lower than the more northerly portions of the range. In former times this station and its outposts were very necessary for the purpose of preventing raids by the Marris and other hill tribes, but these are now almost completely pacified and brought under British influence, while our frontier has been extended far beyond them, so that the stations and outposts in the southern part of the Derajat are now little required. As only a regiment of cavalry was at Rajanpur I soon finished my inspection work and set out on my return to Abbottabad. I rode to Mithankot, eleven miles distant, and then embarked in the ferry boat to cross the Indus. The current was so strong that the boat had to go a long way up close to the bank before attempting to cross. At length we reached the other side, the horses and mules jumped out of the boat, and

we loaded, mounted, and started again. A little further on we reached a dâk bungalow where I had lunch, and found a cart ready to take me on to Khanpur, where I was to catch the train. I arrived there in the evening, dined in the railway refreshment room, and started by train at half-past ten.

I resolved to break the journey at Mooltan, in order to see something of the famous city and fortress. I arrived there at six o'clock in the morning and went to the travellers' rest house, which was pretty comfortable. After breakfast I visited the fort, where I saw a massive stone obelisk which was erected above the graves of Mr. Vans Agnew and Lieutenant Anderson, two political officers who were murdered there in the rising headed by the Dewan Moolraj in 1848. Soon after this Mooltan was besieged by a British army under General Whish, and eventually taken by storm. I went up into a lofty bastion where several cannon commanded the city below; there should have been a fine view from this point, but the atmosphere at the time of my visit was so full of dust that hardly anything else could be seen. Mooltan has always been celebrated for heat, dust, and beggars, and the place fully sustained its reputation in these respects during my stay there. I walked through the city and saw many specimens of the blue glazed pottery and enamel work for which it is deservedly noted.

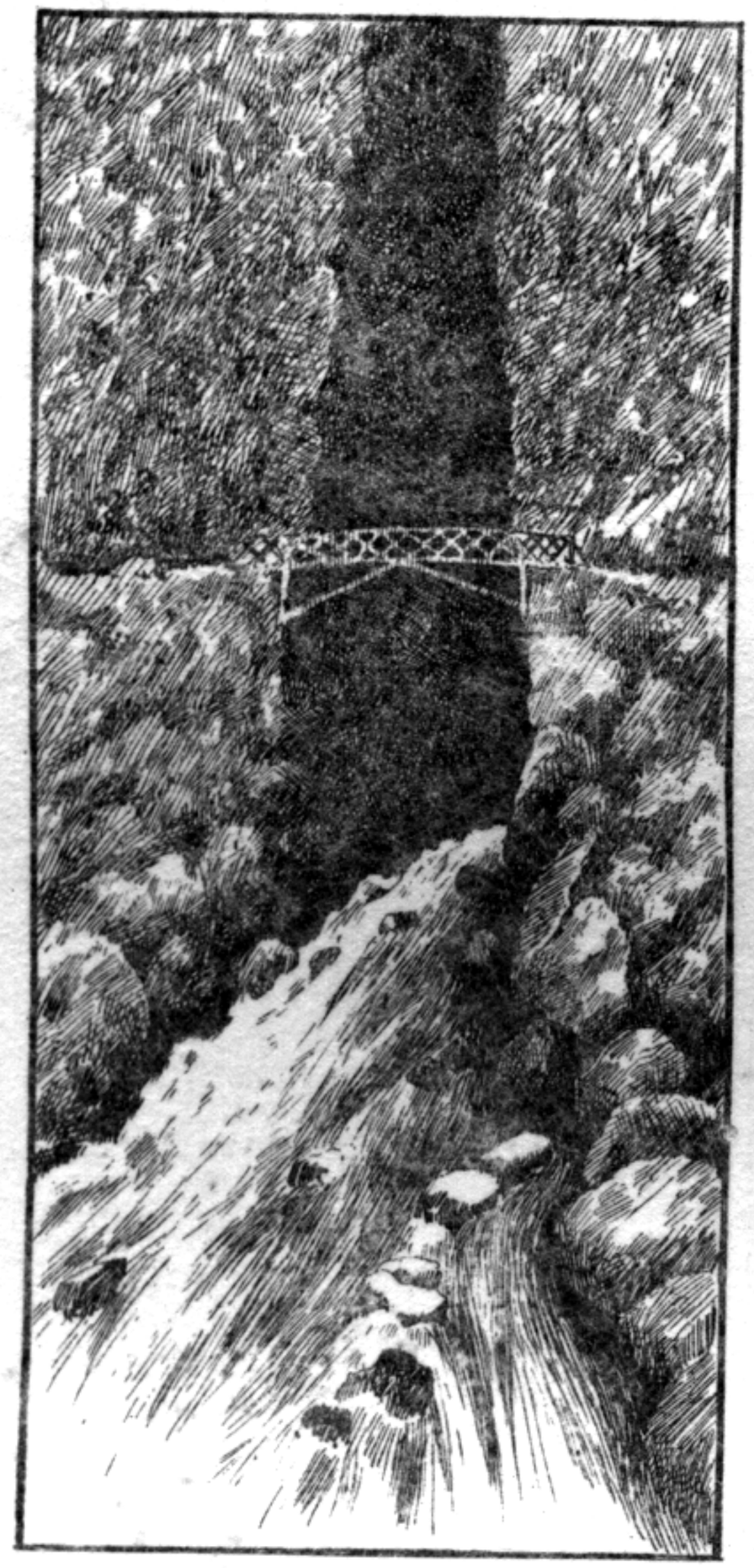
Early next morning I resumed my journey to Lahore, where I arrived at 5.30 P.M. and put up with Deputy Surgeon-General Dallas, C.I.E. (inspector-general of civil hospitals in the Punjab), and Mrs. Dallas, whose kindness and hospitality I have much pleasure in acknowledging here. As I only stayed a couple of days I had not time to see much of the Punjab capital. However I visited the Lahore Museum, which contains a great number of very curious and interesting sculptures (chiefly Græco-Bactrian), a fine collection of coins, the Græco-Bactrian, Indo-Scythian, and

Mohammedan sovereigns being well represented, and a great variety of other artistic and interesting objects from different parts of India and the adjacent countries. I also visited the fort, the cathedral, the school of art, the palace of Runjeet Singh (remarkable for its beautiful marble carvings, which at a little distance resemble lace), and a great mosque standing in a large enclosure with lofty minarets, from the top of which an extensive view of the city and environs may be obtained. I was also shown over the Lahore central jail, where the chief industry was carpet-weaving, which was carried to great perfection. The prices of carpets at the time of my visit ranged from Rs. 14 to Rs. 40 per square yard, according to the quality of the work and materials. I saw a carpet which was being made for some rich New Yorker and which was to cost Rs. 420.

I parted from my kind friends on the 16th of March and arrived at Abbottabad next day. It was still very cold there, the Khagan mountains were thickly covered with snow, and a good deal remained on Thandiani and the adjacent hills. Early in May I had the satisfaction of learning that the Government of India had conferred upon me a good-service pension of £100 a year, with effect from the 31st of October 1886. This was doubly welcome, not only as a valuable addition to my income, but as a rare distinction which very few Indian medical officers are fortunate enough to obtain. Towards the end of May I proceeded to Murree, a hill station about forty miles distant, where I had to inspect the civil dispensary. This station is connected with Abbottabad by an excellent road, constructed soon after the mutiny time, which passes over the intervening mountains through some of the most beautiful scenery to be found in India.

On leaving Abbottabad the road runs in a north-easterly direction along the valley for three miles, passing through fine avenues

of fir, willow, mulberry, and gum trees. It then descends and crosses a stream, passing, at a little distance, the beautiful grove of Dhumtaur, a favourite spot for picnics and encampments.



BRIDGE OVER THE DOR

Some distance further on the road sweeps round to the left and enters the valley of the River Dor, which it follows for several miles, crossing the Kala Panee, which comes down from Thandiani and falls into the Dor. The scenery all through this gorge is very fine; the hills on both sides rise to a great height in steep grassy slopes, on which few trees are to be seen. The road runs along the hills on the left at a considerable height above the river, which foams over its stony bed far below. Several streams are crossed, some by bridges, but others, like the Kala Panee, are unbridged, and after a heavy fall of rain they are sometimes impassable for several hours. At length the gorge narrows considerably and the road rises high above the river to avoid a precipice. Then it descends again and crosses the Dor by a wooden bridge at a point where the river rushes down from the mountains on the left and enters the valley through a narrow cleft between two perpendicular walls of rock.

The bridge is 50 or 60 feet above the torrent, but far below the summit of the towering cliffs which overhang the river on both sides.

Beyond this point the valley opens out and the rest-house at Bugnotur, ten and a half miles from Abbottabad, is seen perched on an eminence to the left of the road. For two miles or so further this road ascends steadily, then it turns to the left and enters a lovely valley overhung by precipitous hills. The scenery here is remarkably fine; the road for long distances is flanked by perpendicular precipices, in the crevices of which a few pines and other trees find foothold, while the gentler slopes on both sides are covered with a beautiful forest of oak, pine, walnut, chestnut, holly, yew, and many other trees, and a murmuring stream, almost hidden by the foliage, runs at the bottom. After following the sinuosities of the mountains for several miles the road crosses a saddle just below the little station of Bara Gali, where a British mountain battery is usually quartered during the hot weather. There is not much level space available, and it is nearly all taken up by the barracks, hospital, and other buildings of the battery, the mule lines, the officers' quarters, and the mess house. The elevation is over 7000 feet, and the climate during the spring, summer, and autumn is delightful. In the winter no one remains there, and the whole place is buried in heavy snowdrifts.

From this point the road ascends gradually for three miles more, and reaches Kalabagh, another summer station of a British mountain battery, having an elevation of nearly 8000 feet. Two miles more along a nearly level stretch of road bring the traveller to Nuttia Gali, perhaps the most charming of all these so-called 'Gullies,' and a favourite summer resort of the civil and military officers in this part of the Punjab. It is a long narrow ridge with very steep and in some places precipitous sides clothed with a

thick forest of pines. The houses are on little knolls commanding fine views of Miajani, Moojpoora, and the beautiful wooded valley between them. In clear weather the great Kashmir mountain Nanga Purbut can be seen from Nuttia, and though more than a hundred miles distant it is a magnificent spectacle. The houses are mostly built of wood, but they are warm and comfortable, and often very picturesque in appearance, resembling English villas. In winter they are shut up and buried in the snow, but they are nearly always occupied during the other months.

Two miles beyond Nuttia the road passes Doonga Gali, another little station inhabited by Punjab officials and others during the summer months. Most of the houses are picturesquely situated on the wooded slope of Moojpoora, but a few, including the dâk bungalow, are on a saddle between Moojpoora and the opposite mountain, which rises very steeply close behind the rest house. No troops are quartered either at Nuttia or Doonga, but the former possesses a post-office, while the latter has a church and a dâk bungalow. A mile and a half beyond Doonga the road, still passing along the side of the forest-clad hills, arrives at a bridge crossing a stream which issues from a deep and narrow cleft in the rock called Durwaza Kus, where snow sometimes lies till the middle of summer. Beyond this point the road continues its course along the ridge for six or seven miles with a slight ascent until it reaches Chungla Gali. The scenery is grand and beautiful; sometimes the road passes through dense forest, sometimes there are steep grassy slopes sprinkled with trees, or sheer precipices of rock above or below. In some places landslips have carried away the trees and cut long vistas through the forest, extending to the bottom of the valley, hundreds of feet below. Chungla Gali is the highest point on the road, being considerably over 8000 feet in elevation. A school of musketry is held there

every year during the hot weather. The dâk bungalow stands on the top of a lofty hill commanding a splendid view of the ridge of Murree and the intervening country. The road descends from this point rather abruptly in the direction of Murree, and after two miles it passes the little station of Khyra Gali, where a British mountain battery is stationed in the hot season. Two miles beyond this is the camp of Thobba, and three miles further on is Kuldanna camp. Large numbers of British troops are located at these and other situations around Murree every year during the hot weather. After passing the hill on which Kuldanna camp stands, the road arrives at the forest-clad ridge of Murree, and reaches the post-office in the centre of the station by an easy ascent.

I reached Murree on May 30th and put up in Powell's Hotel. This station was for some time the summer residence of the Punjab Government, and it is still a favourite resort of the civil and military officers of the Punjab. A depot of British troops is maintained there permanently. The barracks, hospitals, and numerous private houses, shops, hotels, etc., are scattered along a wooded ridge several miles in extent and about 7500 feet in elevation. The scenery in and around Murree is very fine, particularly at the eastern end of the ridge, called Kashmîr Point. I soon finished my inspection of the dispensary, and after two days' stay commenced my return, halting for the night at Chungla Gali, and visiting the forest officer, who had a charming summer residence a little way off. Next day I came to Doonga Gali and put up in the dâk bungalow, where I stayed four days, making excursions in different directions and ascending Miajani, the highest mountain in this part of Hazara. In clear weather the view from the summit of this mountain is magnificent, but on this occasion nothing could be seen owing to clouds of dust from the plains, which filled

the air and obscured everything. On the 6th of June I left Doonga by the upper road, passing through the forest along the summit of the ridge to Kalabagh and thence to Bara Gali, where I had lunch, and then went on, reaching Abbottabad in the evening.

After this trip I remained for some time at headquarters occupied with the ordinary duties of my office, which were increased in the autumn in consequence of an outbreak of cholera on the frontier. The disease was for the most part confined to Kohat and Edwardesabad, and although cases occurred at Abbottabad among the civil population, the troops remained unaffected. All possible sanitary precautions were taken at the different stations and the disease soon disappeared. In August I went to Haripur in company with the medical officer in charge of the civil medical duties of the district, to inspect the dispensary and to inquire into the circumstances of an outbreak of cholera which had occurred in the town. On our return we found the River Dor much swollen by rain, which had fallen in the hills, and apparently almost impassable. Being pressed for time we nevertheless made an attempt to cross, but the force and velocity of the torrent were so great that our tonga would have been overturned and swept away had not a number of natives hastened to our assistance, and with great labour and difficulty pushed and dragged our heavy conveyance through the river. It was a narrow escape, for had the tonga been upset we should have been swept away at once by the rushing torrent, and in all probability lost our lives. Accidents of this kind not unfrequently happen in India, and are sometimes attended with fatal results.

CHAPTER XXII

My trip to Oghi and Balakot—A leper village—Garhi Habiboolla—My second journey down the frontier — The commander-in-chief inspects the Kohat garrison—I visit Shaikh Budin—My ride to Kingri and back—The commander-in-chief visits Abbottabad — I proceed again to Oghi and ascend the Black Mountain—Major Battye, Captain Urmston, and some Sepoys are set upon and killed by the hillmen—Account of this disaster given by one of the survivors of the party—Order issued by General M'Queen on this occasion—Cholera on the frontier—Orders received for an expedition to the Black Mountain under the command of General M'Queen—I am appointed principal medical officer—Strength of the force—Medical arrangements for the expedition—Ambulance transport— Lady nurses — Description of the Black Mountain and adjacent country.

On the 3rd November 1887 I proceeded to Mansehra to inspect the dispensary at that town, and went on to Oghi, a post of some importance situated in the Agror Valley, close to the Black Mountain. On leaving Mansehra I traversed the Pakli Plain, crossed the Sirin River, and ascended the Susal Pass, through a thick forest of pines. Then I came down into the Agror Valley and reached the fort of Oghi about dusk. This fort is a square enclosure with lofty stone walls loopholed for musketry, and a massive gate. It contains officers' quarters, barracks, and hospital for the detachment of troops always stationed there. The Agror valley is bounded on the west by the Black Mountain, a lofty ridge between the Indus and British territory. The tribes inhabiting this mountain have long been a thorn in our side, and have committed various acts of hostility at different times, thus forcing our long-suffering Government to send several punitive expeditions against them. Several of the peaks of the Black Mountain exceed

9000 feet in height, and one or two approach 10,000 feet. The upper part of the mountain is clothed with a thick forest, consisting chiefly of lofty pines, but the lower slopes are bare. Our frontier was supposed to run along the crest of the mountain for some distance, but the hillmen considered the whole of it as their own territory, and it was not safe for any white man to approach the boundary. This was plainly and fatally demonstrated a little later.

Next morning I left Oghi after inspecting the post, and marched eastward towards the Katai Pass, taking with me a small escort as the road passed close to the border. After walking about eight miles up a picturesque valley with pine-clad hills on both sides I reached the pass, where I dismissed my escort, and then descended into a narrow valley beautifully wooded, along which I marched for many miles, arriving about dusk at the village of Shinkiari, where I put up for the night in the police station. On the following morning I resumed my journey, traversing part of the Pakli Plain and passing round the wooded spurs projecting into it, till after some miles I descended into the valley of the Kunhar River, a deep gorge shut in by lofty mountains, with the impetuous river rushing down with such force and velocity as to be quite impassable. After following the course of the river for some miles I arrived at Balakot, a considerable town at the entrance of the Khagan Valley, and passed the night in the police station. The scenery at this point is very grand; the mountains on both sides are over 10,000 feet high and very steep. Those on the west of the valley culminate in a fine flat-topped summit called 'Musa-ka-Masulla,' or the seat of Moses, which is between 13,000 and 14,000 feet high.

A rude timber bridge crosses the Kunhar River at Balakot, and on the other side is a small hamlet inhabited solely by lepers, who

apparently were attracted by a sacred shrine at this spot by means of which they believed they might be cured. Next day I left Balakot and descended the Kunhar Valley to Garhi Habiboolla, a small town on the east bank of the river, ten miles lower down. In the afternoon I crossed the river, which is here spanned by a neat iron suspension bridge, walked through the town, and ascended the hill behind it till I reached the Kashmir border on the summit and looked down upon the town of Mozufferabad in the valley below. One of the roads into Kashmir passes that way, and the country around has, I believe, been examined with a view to ascertain if a railway could be carried through it easily. On the following day I returned to Abbottabad by way of Mansehra, as I had to prepare for my second tour of inspection down the frontier.

On the 23rd of November I started for Kohat, where I arrived rather late next day. A few days after General M'Queen and his staff (including myself) proceeded to the summit of the ridge (or 'kotal') overlooking the Kohat Pass to meet His Excellency the Commander-in-chief, who was coming from Peshawur to Kohat that way. We had not been there long when the Chief and his party appeared from below and joined us, when we all went to lunch, preparations for which had already been made on the kotal. While we were having lunch some shots were heard, but it proved to be merely some of the Pass Afridis fighting among themselves as they do very often. Next day the Commander-in-chief inspected the Kohat garrison and hospitals and expressed his satisfaction with all the arrangements. He and Lady Roberts and the headquarters staff were entertained at dinner at the garrison mess that evening, and left next morning on their way to Rawal Pindi. After their departure I was at liberty to get on with my own inspections and invaliding work, all of which I finished by

December 9th. I left Kohat on the following day, and proceeded to Edwardesabad, where I remained ten days engaged in my inspection and invaliding work. I resumed my journey on December 22nd, and reached the dâk bungalow at Peyzu late that evening.

On the following morning I visited the little hill station of Shaikh Budin, where I arrived in about three hours, after a rough scramble up the steep and rugged flanks of the mountain. The appearance of this mountain from below is very remarkable: it stands in a part of the country where little rain falls, yet it looks as though it had been for ages exposed to a prodigious rainfall. The rocks in all directions have been worn away into sharp pinnacles and serrated ridges with precipitous sides scored with innumerable furrows and channels. The road ascends the mountain in its easiest part by a long succession of zig-zags, but my guide led me up by short cuts where sometimes we had to climb up hand over hand, holding on to the projections of the rock. At length we reached a spur so narrow that we had to move in single file with great caution, as a precipice was on either side. A little further on we found the regular road, which after many windings conducted us to the station. The summit of the mountain resembles a volcanic crater having raised edges, within which is a saucer-shaped hollow containing the station. There are about twenty-five houses, a neat little church, a club house, a racquet court, some lawn tennis courts, several good sized water tanks, a police station, and a small hospital.

On my way up I saw several 'markhor' (mountain goat) standing on a precipitous ridge; these animals formerly abounded on Shaikh Budin and the adjacent hills, but they have grown scarce and shy of late years. There is very little vegetation to be seen on this mountain, and the station is decidedly hot during the

summer months as the elevation is only about 4000 feet. Nevertheless it has been the means of saving the lives of many persons who would not otherwise have been enabled to live through the terrible hot weather in the plains of the Derajat. I took my lunch at the club, and after walking round the station and admiring the extensive views over the surrounding country on every side, I returned to Peyzu, had dinner, and retired to rest early. Next day I travelled to Dera Ismail Khan, and when I had finished my work there I went on to Dera Ghazi Khan, whence I set out, on January 17th, 1888, to visit the posts on the Pishin Road.

I had the same conveyance as before and took the same route by Kot Chutta, Choti Zerin, Choti Bala, and Zaradun, whence I rode up the steep ascent to Khur. After inspecting the troops and hospital at that post I went on to Rukhni, accompanied by the medical officer of the posts, made my inspection, and put up there for the night. Early next morning we started for Kingri, a new post which had been established between thirty and forty miles further on. We were both armed and had one trooper as escort, the country being still unsettled and travelling rather risky. News had been received that the Hasséranis and Bozdars were fighting among themselves, and it was possible we might meet a party of them, who might or might not meddle with us. We rode northward over the Rukhni Plain for several miles, then we turned west and went through a gap in the mountains for some distance till we reached the hut of one of the road engineers, where we proposed to have breakfast. The engineer, however, was out, so we had to go on our way, and in a short time we reached the half-way post, where a change of horses awaited us. This post was held by a small party of the 1st Punjab Cavalry, and a house for the road engineer was in course of construction close by. Beyond this stretched another

great plain, parallel to that of Rukhni, with bare mountain ranges on either side.

Our ride now became very unpleasant in consequence of an icy wind which came from the north-west, where snow-clad mountains could be seen in the distance. At last we left the plain and ascended the hills to the westward, where we met two officers coming from Kingri. Crossing these hills we descended into a winding ravine which we followed for some distance. The appearance of the whole country was most desolate and forbidding; not a living thing was to be seen; no villages, no cultivation, no trees, nothing but rocks, stones, and a few scrubby bushes here and there. Late in the afternoon we entered the Kingri Valley, and soon reached the post, where we were kindly received by Major Harvey of the 1st Punjab Cavalry, who commanded the wing stationed there. He had a roomy and comfortable hut, and soon made us warm with some hot tea and a blazing fire. In the morning I inspected the hospital and went all over the station and its vicinity. The situation was not particularly good, as the Kingri River sometimes overflowed its banks and rendered the lower parts of the valley swampy and unhealthy, but nevertheless the occupation of this post was necessary for the protection of the engineers and labourers working on the new road to Quetta.

Next morning we started on our return to Rukhni in a drizzling rain which was presently followed by a fall of snow. The cold was intense, and though warmly clad I felt it very much and could realise in some degree what the French retreat from Moscow must have been. The road was so slippery with ice and melting snow that it was impossible to ride fast, and it was 1 P.M. before we reached the hut of the road engineer, very cold, wet, and hungry. This time he was at home and gave us breakfast, after which we resumed our journey and reached Rukhni about 5 P.M. We met

no armed party either way, but the officer commanding at Rukhni told us that the bodies of two slain men had been found not far off, and that the posts on the road had been approached during the night by parties of men, some on horseback and some on foot, who prowled round the posts, but fled when the cavalry turned out, and were lost sight of in the darkness and rain.

On the following day I returned to Khur and started next morning to inspect the labourers' hospitals on the new road, which had made great progress since my previous visit. I was accompanied by the medical officer of the posts and the native assistant-surgeon in charge of the road hospitals. The road was not yet finished, and in two places we had to scramble up the cliff by very narrow paths where a single slip would have been fatal. One of these paths ended about 30 feet above the road, and we had to descend by an iron ladder fixed there for the purpose. This road is really a magnificent work; it is a triumph of engineering skill, and has rendered it possible for artillery and wagons to be brought easily through this formidable pass. I put up for the night with the road engineer, who lived in a house at the mouth of the pass, and next morning I walked across the stony desert (five miles) to Zaradun, where my baggage, mules, and horse were waiting for me. Then I rode to Choti Bala and drove back to Dera Ghazi Khan, whence I proceeded to Rajanpur, Lahore, Murdan, and Peshawur, and then returned to Abbottabad.

In March 1888 it was feared that the tribes of the Black Mountain would give trouble, and accordingly 250 men of the 3rd Sikh Infantry with three British officers were sent to reinforce the post at Oghi, and to prevent raids into the valley. In April the Commander-in-chief visited Abbottabad, and inspected the troops and hospitals, expressing satisfaction with everything. Soon after this I went to Oghi to inspect the hospital in the fort, and during

my stay there I made two ascents of the Black Mountain to a height of more than 6000 feet, but saw nothing of the hillmen, who apparently were keeping quiet. After a time the greater part of the troops were withdrawn from Oghi, and the reports about a Black Mountain expedition gradually ceased.

In June I went to Murree for my annual inspection of the dispensary there, and just after my arrival I received intelligence that Major Battye, of the 5th Goorkhas, Captain Urmston, and some native soldiers had been attacked and killed on the Black Mountain. I immediately returned to Abbottabad, where I heard the following account of this lamentable affair from one of the survivors of Major Battye's party. That officer had gone to Oghi in the ordinary course of duty to inspect the detachment stationed there, and Captain Urmston had accompanied him, though not on duty. On the 18th of June the two officers, with about sixty Goorkha Sepoys and a few police, marched up the Barchar spur of the Black Mountain to exercise the troops. On reaching the crest of the mountain the party made a halt and took refreshments. So far they had been quite unmolested, and had they then descended by the way they came, in all probability no mischief would have

A BLACK MOUNTAINEER

occurred. Unfortunately Major Battye decided to go along the crest of the mountain and descend by another spur, and he accordingly marched on, keeping within our boundary, which follows the crest of the mountain for some distance.

After a time they were fired on by the hillmen, but Major Battye would not allow them to fire in return; and at length a havildar (native sergeant) was severely wounded. The two officers went back to his assistance with the native officer of the detachment and a few men, but the main body were ordered, or permitted, to march on, so that they were soon out of sight and hearing of the little party behind. Then the hillmen, seeing that the officers had very few men with them and were unsupported by the rest of their detachment, closed in upon them and killed the whole party except the native officer and two men who managed to escape and rejoin the main body. They then returned to the scene of conflict, and recovered the bodies of Major Battye and Captain Urmston, which were brought back to Abbottabad, and buried in the cemetery there with military honours. This sad affair cast a gloom over the station, and rendered a punitive expedition inevitable, though the Indian Government were much averse to it on financial grounds.

The following order, issued on the occasion by the brigadier-general commanding the Punjab Frontier Force, shows how highly these unfortunate officers were respected and esteemed by all who were acquainted with them. 'It is with deep regret that the brigadier-general commanding announces to the force the death in action on the Black Mountain on the 18th instant of Major L. R. Battye, 5th Goorkhas, and Captain H. B. Urmston, 6th Punjab Infantry. These officers met their death while chivalrously endeavouring with a few men of the 5th Goorkhas to bring off a havildar of the regiment who had been wounded. Owing

to the densely wooded nature of the country they became separated from the rest of the detachment, and all except three were killed. In Major Battye's death the Punjab Frontier Force has to deplore the loss of the third brother of that family who has fallen in action while serving in the force, and none who knew him could fail to admire and esteem his noble character. Like his brother the late Major Wigram Battye, of the Guides, he was beloved and respected not only by the native ranks of his own regiment, but by all the natives of the country with whom he was brought in contact, especially those of Hazara, who have publicly expressed their sorrow at his death. Captain Urmston, though unarmed, stood bravely by Major Battye when he was wounded, and, though himself severely wounded, refused to desert his fallen comrade, displaying great coolness, courage, and self-devotion.'

In the beginning of August I received intelligence of an outbreak of cholera on the frontier. As before, the disease prevailed chiefly at Kohat and Edwardesabad, and a medical officer at Kohat died from it. Suitable sanitary measures were adopted at the different stations, part of the troops were moved into camp, and the outbreak gradually ceased. Towards the end of August it became known that the Government of India had decided to send a military expedition to the Black Mountain, and that the force was to be commanded by General M'Queen. Very soon after I received official information of my appointment as principal medical officer of the expedition, which was styled the Hazara Field Force, and for the next three weeks I was much occupied with the necessary preparations and arrangements. I had, at the same time, to carry on the current duties of my office, no one having been appointed to act for me as principal medical officer of the Punjab Frontier Force during the Black Mountain campaign.

The strength of the expeditionary force, including the reserve, which was subsequently employed in the military operations, amounted to about 10,000 fighting men and about 5000 camp followers. It was divided into four columns, three of which were to concentrate near Oghi, in the Agror Valley, and ascend the Black Mountain on that side, while the fourth column was to assemble at Derband, on the Indus, and to ascend the Indus Valley from that point. The troops composing the first, second, and third columns of the Hazara Field Force reached Oghi by the end of September, and those of the fourth column arrived at Derband about the same time. The men had been carefully selected, and for the most part they were in excellent health. Cholera had prevailed in many parts of the Hazara district for some weeks, and in spite of all precautions it attacked some of the marching troops, particularly the 45th Sikhs and a detachment of the Suffolk Regiment, also some of the transport followers. Suitable precautionary measures were adopted, and, very fortunately, the outbreak did not increase. Scattered cases, however, occurred at different points along the line of march of the troops, and even at Oghi and Derband, but no serious prevalence took place, and the disease eventually disappeared.

The following medical arrangements were made for this expedition. The corps units were equipped according to the scale laid down in the Indian army regulations, and first field dressings were supplied in the authorised proportions to the troops of the Oghi columns at Abbottabad and to the fourth column at Derband. One British and two native field hospitals were allotted to the whole force, and were opened at Oghi and Derband soon after the arrival of the troops at those places. These field hospitals were distributed in the following manner. At Oghi, sections A, B, and C of the British field hospital, one native field hospital and two

additional sections. At Derband, section D of the British field hospital, and two sections of a native field hospital. As the difficult nature of the country to be traversed and the limited amount of carriage available rendered it impossible for the field hospitals to move bodily with the troops in their advance up the spurs of the Black Mountain, these hospitals were made stationary at Oghi and Derband, and a detachment was sent with each column consisting of one medical officer, one medical warrant officer, one hospital assistant, two ward servants, two cooks, two water carriers, one sweeper, and one purveyor, with three hospital tents and a suitable supply of medical stores and comforts. The medical stores, tents, and baggage of each detachment were carried by sixteen mules.

The ambulance transport for the force was fixed at sixty dandies and sixty-six saddle mules, and these were divided between the field hospital detachments in nearly equal proportions. In addition, field stretchers were taken by the different corps according to the fixed scale for field service. To facilitate the transfer of sick and wounded to the rear, and thus prevent the field hospitals from becoming overcrowded, rest-camps were established on the lines of communication at various points between the railway station at Hassan Abdal and the bases at Oghi and Derband. A medical warrant officer was placed in medical charge of each of these rest-camps, with one hospital assistant and an establishment of hospital servants, a suitable supply of medical stores and comforts, and an adequate number of tents and cots for the accommodation of the sick on their way through. For the transport of the sick and wounded to the rear an establishment was provided consisting of dandies and bearers for the first stages from Oghi and Derband, and Hawkes' ambulance tongas for the other stages. Finally, a section of a British field hospital was stationed at Hassan Abdal to receive the sick and wounded on their arrival at that station, and

some railway carriages, specially fitted up for the purpose, were provided for their conveyance to their respective destinations.

I mention these details in order to show that all practicable arrangements were made for the requisite care and comfort of the sick and wounded in this expedition. The arrangements all worked well, and I heard of no instances of failure. The field hospital detachments and the regimental medical establishments afforded ready aid to the sick and wounded of the force. The principle of sending all sick and wounded to the rear as speedily as possible was constantly kept in view and acted upon, sick convoys being sent down whenever escorts were available for them. Miss Loch (the superintendent) and four nursing sisters were sent up for duty with the British field hospital, and their services were invaluable in the care and nursing of severe cases of sickness and wounds.

The Black Mountain is situated at the north-western extremity of the Hazara district, having the Agror Valley (British territory) to the east, the River Indus to the west, the territory of the Nawab of Umb to the south, and independent territory to the north and north-east. The mountain may be described as a long, narrow granite ridge of the average height of 8500 feet, extending north and south for twenty or thirty miles, with several peaks of 9000 feet and upwards at intervals. Numerous large spurs project on all sides from the central mass, those on the west running down to the Indus. The sides of these spurs and of the mountain generally are steep, rocky, and in many places precipitous. The lower slopes are mostly cultivated, or covered with grass and thorny bushes, but further up the mountain is clothed with a thick forest of pines, oaks, horse chestnuts, etc. Open grassy glades are found at intervals along the crest, and the slopes of some of the higher peaks are bare of trees and covered with short grass.

To the north of Agror and east of the Black Mountain are the Tikaree and Nundihar Valleys; they are well watered and extensively cultivated, and they seem to be populous. The Nundihar Valley is separated from Allai by a lofty range of mountains, which runs down to the Indus at Thakot. The Nundihar River flows between this range and the north-eastern spurs of the Black Mountain, and after winding through a succession of deep and abrupt gorges, it falls into the Indus close to Thakot. Allai is an extensive valley bounded by Kohistan (independent) on the north and east, by Bogarmung (British territory) and Nundihar (independent) on the south, and by the Indus on the west. It is fertile, well watered, and cultivated, and it contains many villages. Its northern and southern boundaries are ranges of lofty mountains, some of which exceed 15,000 feet in height. The Chaila Mountain, by which our troops entered Allai, is over 10,000 feet at its highest point, and is clothed with thick forest on its northern slopes. Its southern declivity is very precipitous for the first 500 or 600 feet, and almost bare of trees, then the mountain slopes more gradually and is pretty well wooded. The lower slopes are quite bare of trees, and this is the case almost universally in this region, the reason probably being that the trees in these situations were long since cut down for firewood or to clear the ground for cultivation.

CHAPTER XXIII

Advance of the Hazara Field Force from Oghi and Derband—Action of Kotkai—Charge of the Ghazis—Death of Captain Beley—Colonel Crookshank severely wounded—Subsequent operations—Submission of the Hassanzais and Akazais—Hardships endured by the troops—I visit the spot where Battye and Urmston were killed—The general and staff join the first column and descend into the Tikaree Valley—Operations against the Parari Sayads—Death of one of our men from snake bite—Visit of His Excellency the Commander-in-chief—Our march to Thakot—We are fired at from the opposite bank of the Indus—The enemy's tower shelled—We march up Chaila and enter Allai by the Ghorephir Pass—Difficulty of the ascent—We attack and destroy Pokul and are followed up by the enemy on our retirement—We withdraw from Allai—Gallant conduct of Surgeons Heuston and Melville—End of the campaign—I visit the river column at Derband—Bad weather sets in—Losses of the force during the campaign—Gratifying acknowledgment of my services by the military and medical authorities.

On the 4th of October the three columns of the Hazara Field Force encamped in the Oghi Valley began the ascent of the Black Mountain, the first column ascending the Kiarkot ridge towards Chittabut Peak, the second proceeding up the Barchar spur, and the third (accompanied by General M'Queen and the staff, including myself) going up the Sumbabut spur. Next day the advance was continued; there was little resistance on the part of the enemy, and by October 6th these three columns were firmly established at different points along the crest of the mountain. The fourth or river column had in the meantime advanced up the Indus Valley from Derband and engaged the enemy near Kotkai on October 4th. The Black Mountain men on this occasion were assisted by a body of Ghazis (Mohammedan fanatics) from the Hindustani colony at Palosi, on the other side of the Indus, who charged

our troops sword in hand and caused some loss, but were nearly all shot down. Captain Beley, deputy assistant quartermaster-general of the Punjab Frontier Force, a very gallant and accomplished officer, met his death in this engagement: he was caught in the charge of the Ghazis and cut to pieces. Next day Colonel Crookshank, C.B., the commander of the river column, was severely wounded, while reconnoitring, by a shot from the opposite bank of the Indus, but nevertheless the advance was continued and Kotkai and Kunhar, with other villages in the valley of the Indus, were occupied by the troops of the river column. They subsequently crossed the Indus and occupied Palosi, compelling the Hindustani fanatics to retreat further up the river.

The other three columns holding the crest of the mountain operated in various directions for about a fortnight; there was hardly any fighting, but some of our men were killed and wounded by the fire of the enemy's skirmishers, who were hidden in the forest. Seri, the residence of Hashim Ali Khan, chief of the Hassanzais, was taken and destroyed, and the military operations resulted in the complete submission of the Hassanzais and Akazais, the most important of the tribes in arms against us.

During this time the weather fortunately remained fine, except on the nights of October 4th and 8th, when it rained and snowed a little, making us very uncomfortable. The health of the troops and followers continued good, notwithstanding the hard work and exposure they had to endure. No tents were allowed, except a few for hospital purposes, and officers and men had to sleep on the ground under temporary shelters constructed with blankets, waterproof sheets, tarpaulins, boughs of trees, etc., which would have been of little avail had heavy rain set in. I had two waterproof sheets, one of which was spread on the ground under me to exclude the damp while the other was rigged up like a little tent above

me as a shelter from the dew. My bedding consisted of a wadded resai, or quilt (which when trebly folded served as a mattress), two blankets, and my heavy military overcoat. Like every one else I slept in my clothes, and as the weather was fine I suffered no harm, though my bones felt rather sore before the campaign was over.

I several times visited the camps and hospitals of the first and second columns on Chittabut and Nimal, and on one occasion I went to the spot where Major Battye, Captain Urmston, and their

CHITTABUT PEAK, BLACK MOUNTAIN, WHERE MAJOR BATTYE AND CAPTAIN URMSTON WERE KILLED

men had been attacked and killed. I was accompanied by a Sepoy who had been with Major Battye at the time of the attack and had managed to escape. The scene of the catastrophe was on the east side of Chittabut peak and a little below the summit; the side of the mountain was very steep there and was covered with thick forest and dense undergrowth, amongst which were some enormous granite rocks. From the nature of the ground it was plain that the party must have been suddenly attacked from above and must have had little chance. Before the departure of our

force a large cross was deeply cut in one of the great granite rocks just above the spot as a memorial of the tragic event.

On the 20th of October the general and his staff (including myself) left the third column and proceeded by way of Chittabut

BILANDKOT, BLACK MOUNTAIN

to Mana ki Dana to join the first column in the operations which still remained to be undertaken against the Parari Sayads, Thakot, and Allai. Very early on the following morning a strong detachment of the force, under the command of Brigadier-General Channer, V.C., was despatched to surprise and capture Bilandkot,

one of the principal villages of the Parari Sayads. The village was found to be deserted, the inhabitants having evidently been warned of our approach. From this place we continued our descent of the Black Mountain until we reached the Tikaree Valley, where we remained for several days encamped on a fairly level slope called Chirmang. In order to reduce the Parari Sayads, who still held out, we had to enter their glen and destroy several of their villages. Little opposition was encountered and no loss sustained from the enemy, but a soldier of the Northumberland Fusiliers met his death in a singular manner during these operations. He was bitten by a snake which he had handled, believing it to be harmless, and he died in less than an hour. From the description of the snake given me by an officer who saw it I concluded that it was a *Daboia Russellii* (Russell's Viper) one of the most deadly of the venomous snakes of India.

A PARARI SAYAD

A short distance from our camp at Chirmang was the old fort of Trund, belonging to a friendly chief. From our camp it appeared a picturesque object, but on visiting it I was much disappointed to find that it was a wretched, dilapidated place, full of dirty hovels and offensive smells. The day after our expedition against the Parari Sayads, His Excellency the Commander-in-chief and his staff arrived in our camp to inspect the troops and see the country which had been the theatre of our late operations. After passing a day with us they ascended the Black Mountain by way

of Mana-ki-Dana and Chittabut peak, proceeded along the crest as far as Nimal, and then returned to the standing camp at Oghi by the Sumbabut spur. On the morning of their departure we left our camp at Chirmang, and marched across the range of hills separating Tikaree from Nundihar to a place called Maidan where we encamped.

The Nundihar Valley is an extensive and well cultivated tract of country with a hill stream flowing through it; there are plenty of villages and a considerable population. A chain of lofty mountains separates Nundihar from Allai, a still larger valley, which we were soon to visit, as its inhabitants had raided into our territory some time before, and had refused to make any reparation. Between this dividing range and the northern part of the Black Mountain is a succession of deep and gloomy gorges, through which the Nundihar River finds its way to join the Indus near Thakot.

Next morning we marched along the flanks of the Allai mountains for several miles till we reached Dabrai, the furthest point attained in 1868 by the expedition under General Wilde, who turned back at this point on perceiving the very difficult appearance of the country further on.* I was not surprised at this, for the country between Dabrai and the Indus looked most difficult, indeed almost impracticable. Nevertheless, we pressed on, and after much labour in roadmaking and removing obstacles, we arrived at a place called Shumsheer Gŭtt, where many great granite rocks were scattered about. The biggest of these, a huge mass of many tons, had steps cut in it by which the top could be reached, where two round holes, some feet apart, were seen in the rock. There was a legend current in the locality to the effect that the Sultan Shumsheer, a great warrior, who ruled over the country long ago, used to tether his horse on the top of this rock, and that the steps were worn in the granite by the horse going up and

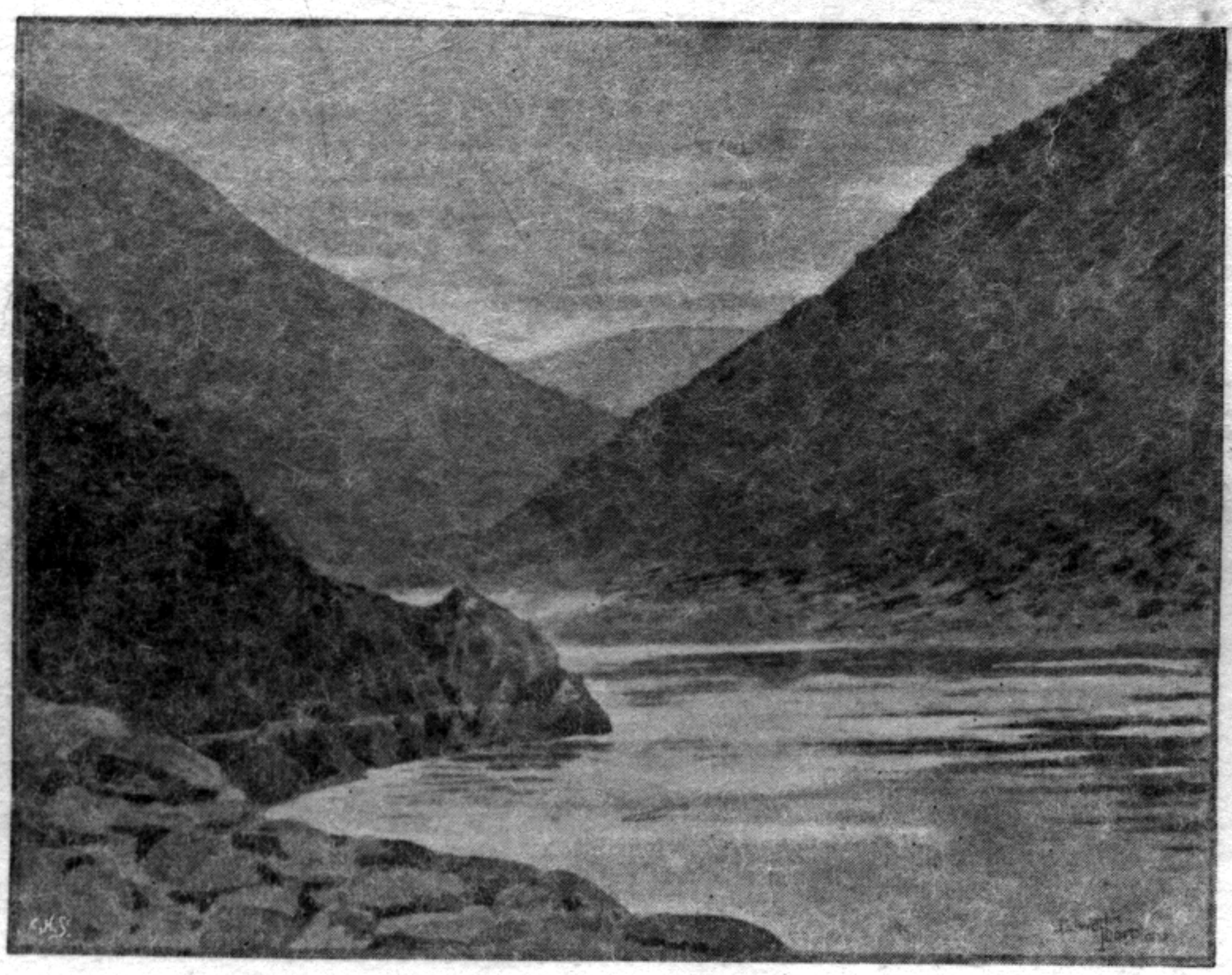
down, while the holes on the top of the rock were for the pegs to which the horse was tied!

Next morning I accompanied a force under Brigadier-General Channer, V.C., to Thakot. We started early and soon reached the deep gorge of the Nundihar River, which we crossed with some difficulty. A long slanting ascent of a great spur of the Black Mountain followed, and on reaching the summit we got a view of the Indus and of the spot where the Nundihar River falls into it. Just above this point was the village of Lora with its square stone tower perched on a commanding eminence overlooking both rivers. For this village we directed our course, and we reached it after a long and very steep descent. We then found ourselves about 50 feet above the Indus, and in full view of Thakot, which was about a mile off further up the river. On the other side of the Indus the mountains of the Chakesur range rose steeply to a considerable height, and a large village with a massive stone tower could be seen a little way from the bank of the river.

The village of Lora was deserted, the inhabitants having fled across the Indus, but the people of Thakot sent a holy man to the general to ask that no injury should be done to their village, and to give assurances that they would offer no opposition. We were told, however, that they could not answer for the people of Lora, who were their enemies, or for those on the other side of the Indus, who would probably try to annoy us. A reassuring reply was sent, and then we crossed the Nundihar River and marched to Thakot, passing through the place in regular order with the band of the Seaforth Highlanders playing in the van. No opposition was offered, and we returned to Lora, where we took up our quarters for the night. As everything seemed quite peaceful, and we could see people going about, tending cattle, and cultivating their fields as usual, Mr. Apcar, the *Times* correspondent, and I

went for a stroll along the bank of the Indus. The river was about 200 yards broad at this point, and came rushing down with great force and velocity.

We were sitting on a rock at the water's edge gazing at the scene, when several shots were suddenly fired at us from the opposite bank, where some large rocks afforded shelter to our assailants.

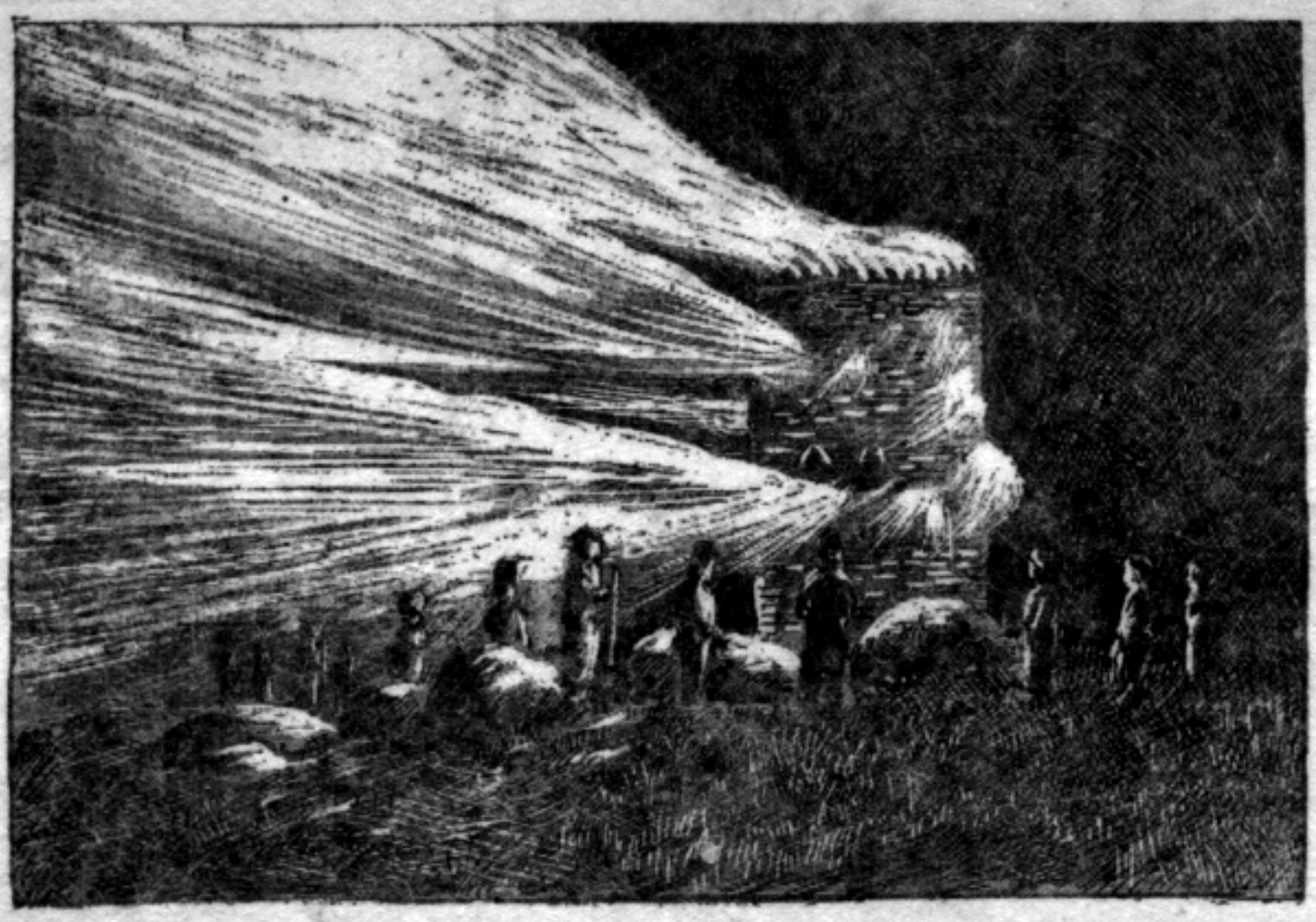


THE INDUS NEAR THAKOT

We then retired to the village, where our people had begun to return the enemy's fire. The firing on both sides continued for an hour or more, but we had only two men slightly wounded, and though machine guns were used on our side I do not think the enemy sustained much loss, as they were well covered and we saw none of them. During the night they tried to work down the Black Mountain spur to our left and so reach our camp, but a picket of

the Khyber Rifles had been posted there, and after some firing the hillmen retreated and did not disturb us again that night.

In the morning it was decided to destroy the village and tower of Lora, and to shell the large village on the other side of the Indus from which we had been attacked the day before. Accordingly some guns were got into position and began to shell the village and a large square tower near it, while the houses and the tower of Lora were filled with wood and straw and set on fire, when they soon became a mass of flame and smoke. The tower



BURNING OF THE TOWER OF LORA

beyond the river was repeatedly struck, and at length the simultaneous discharge of two guns brought it down with a crash. We then prepared to withdraw; the baggage, guns, and most of the troops returned by the way we came, but Colonel Gatacre, the chief of the staff, myself, and several other officers, with an escort of the 3rd Sikh Infantry and the Khyber Rifles, went along the narrow valley of the Nundihar River, by a path following the windings of the stream. The enemy attacked us by rolling rocks down the steep slopes as we were passing below, but

no harm was done, and our escort soon drove them off and burned one of their villages. After a fatiguing march we regained our camp, and on the following day the whole force returned to Maidan.

On the 31st of October we marched up Chaila Mountain towards Allai, encamping for the night at an elevation of about 7000 feet. The watch-fires of the Allai men were visible on the crest of the mountain, and as their chief, Arsala Khan, had not accepted our terms, it was evident that they intended to resist. Next morning we left our bivouac and advanced along the wooded ridge which led upwards to the crest of the mountain. The last 500 or 600 feet was a succession of bare precipitous slopes, and there no doubt we should have found great difficulty and sustained heavy loss but for our artillery, which was used with such effect that the enemy were driven from their commanding position on the summit before our infantry began the ascent. Even though unopposed, we did not reach the summit without much difficulty, owing to the precipitous character of the declivity. We had to make our way up by narrow ledges, sometimes only a few inches wide, so that the men, while ascending, looked liked flies on the side of a wall.

The ascent was so difficult that no loaded animals could go up till a road had been made for them by the engineers; thus the baggage did not arrive till late on the following day. Several baggage mules were killed by falling down the precipices; one fell 250 feet and was literally dashed to pieces. This precipitous ascent bore the name of the Ghorephir Pass (from *ghora*, a horse, and *phirna*, to turn), there being a legend that Sultan Shumsheer, when marching to invade Allai, turned his horse round and retired on beholding the precipices of Chaila. He may well have done so, for we found considerable difficulty in ascending on foot, and no one attempted to ride up.

Owing to the baggage not arriving, the men had to bivouac as they were at a height of more than 9000 feet. Many of the men had not even their greatcoats, yet this exposure apparently did them no harm.

On the 3rd of November I accompanied a force of 750 men under General Channer, V.C., which was sent down into the valley to attack and destroy the village of Pokul, the residence of Arsala Khan, the principal chief of Allai. For some distance we marched along the side of the mountain on which the Northumberland Fusiliers were encamped. The views were magnificent; to our right far below lay the Allai Valley, and beyond it a great range of snow-clad mountains, the dividing range between Allai and Kohistan, exceeding 15,000 feet in height. In our front the Allai Valley sloped down to the Indus, which appeared beyond, flowing down a long valley between lofty mountains and then turning to the left in the direction of Thakot. From what I saw of the country it appeared to me that we might have entered Allai more easily by advancing up the Indus from Thakot and turning to the right into the lower part of the Allai Valley, than by crossing the Chaila Mountain as we did.

After marching some distance we turned to the right down a spur of the mountain, and after a skirmish with the enemy, costing us one man killed and one wounded, we reached the bottom of the valley about noon and occupied Pokul without resistance. The village, which was of considerable size and contained the residence of Arsala Khan, was burned, and its large stone tower was blown up. After a short halt for rest and refreshment we set out on our return to camp, and for some distance we were unopposed, but when we reached the point where we had turned down the spur the enemy attacked and followed us up rather persistently almost as far as our camp. The retirement was conducted by General

Channer with much coolness and skill; the men were directed to retire by alternate parties, each party while retiring being covered by the fire of the next, and taking up a new position behind them to cover their retirement in the same manner. In this way the enemy were prevented from coming very close, and we had not many casualties, but we should have suffered much loss had the retirement been badly conducted, as the enemy were in some force and fired heavily.

On the 4th of November we prepared to withdraw from Allai, and after sending off the baggage we marched along the ridge of Chaila towards the Ghorephir Pass. We were annoyed by occasional shots from the enemy who were concealed in the forest, and a Sepoy of the 24th Punjab Infantry was mortally wounded. Our rear guard, while descending the precipitous part of the mountain, were assailed by rocks which the enemy rolled down upon them, and a soldier of the Northumberland Fusiliers in trying to avoid these missiles, got his foot wedged in a crevice of the rock, and broke his leg. Being thus disabled he was in considerable danger as the enemy were close behind, but two young officers of the medical staff, Surgeons Heuston and Melville, took him on their backs in turn and so carried him out of reach of harm. These officers showed great courage and presence of mind on this occasion, and their conduct was duly brought to the notice of the military and medical authorities.

After clearing the Ghorephir Pass we marched back to Maidan, halting there for a day to rest the men, and then went on to our old camp at Chirmang, where we remained for several days. The campaign being now over, the force returned to Oghi on November 9th, and the troops composing it proceeded to their respective stations. I returned to Abbottabad on November 14th, and went to Derband the same day to visit the river column, which I

had not been able to do before. The distance was fifty-two miles, and I had to travel by ekka, no other means of travelling being available. For about thirty miles the road was very good, but after crossing the Sirin River it became a rough cross country path, and I endured a terrible jolting and shaking, particularly on reaching the Indus, where the road was a mere track over rough stones and rocks. At last I could bear it no longer, and getting down I walked the last few miles of the journey.

I found the camp on an open sandy space near the river some distance beyond the town of Derband, and I put up with the senior medical officer. After one day's stay I returned to Abbottabad by the same road. Up to this time the weather had been very fine, but a change took place on the 20th of November and some very wet days ensued. When the weather cleared a little the Black Mountain and the Allai hills were seen covered with snow. It was, therefore, very fortunate that military operations were not prolonged, as the troops and followers would have suffered severely from the effects of bad weather at such high altitudes. The duties of the troops during this brief campaign were arduous, and they underwent much fatigue, exposure, and privation, all of which would have been greatly augmented had not fine weather prevailed throughout the period when military operations were going on.

AN EKKA

Considering the circumstances of the case, the sickness and

mortality were very small, and the general health of the troops was excellent. This satisfactory result was mainly due to the very favourable weather which prevailed almost without cessation throughout the operations, and also to the men being very well fed. The losses in killed and wounded sustained by the Hazara Field Force during the military operations in the Black Mountain, Thakot, and Allai, were about a hundred men, and must be considered small when the nature of the country and the amount of opposition are taken into account. They were, however, considerably larger than the losses sustained by the expeditions of 1852 and 1868.

For some time after my return to Abbottabad I was much occupied in preparing my report on the Black Mountain expedition, and in winding up the medical affairs connected with it. I was much gratified by receiving a letter from Surgeon-General Madden, principal medical officer H.M. Forces in India, congratulating me on the success of the medical arrangements of the expedition, and also on finding that my services were acknowledged and brought to the notice of Government in the despatch of Major-General M'Queen, C.B., in the following terms:—'Deputy Surgeon-General J. H. Thornton, C.B., the principal medical officer of the force, saw carefully to the establishment of the several field hospitals, and the smooth working of everything connected with them was most creditable to him and the medical officers serving under him.'

CHAPTER XXIV

My third annual tour of inspection—I visit some ruins near Kohat—A motley escort—Dogs and mules—I go through the Kohat Pass with the Lieutenant-Governor of the Punjab and his party—The Pass Afridis—My first visit to Simla—I inspect the cavalry in October 1839—Narrow escape at Dera Ghazi Khan—Similar incident at Abbottabad—Asoka's tower—My fourth annual inspection tour—I visit the posts in the Suleiman hills—The new road—Sakhi Sarwar and its shrine—We are warned of Gola but do not meet him—My adventure near Peyzu—I visit Sultan Jan at Kohat—Account of my journey to Ranigat—Inscriptions on rocks at Shahbazgarhi—We are hospitably received by the Khan of Shiwa—The fortress of Ranigat—The Umbeyla Pass and the Crag Picket.

In December 1888 I left Abbottabad on my third annual tour of inspection, and proceeded by way of Khanpur and Mithankot to Rajanpur, from whence I travelled northward, visiting the different stations in turn, until I reached Kohat. During my stay at that station I went with a friend to visit some curious ruins in the Afridi hills six or seven miles to the westward. We drove in a mule-cart a few miles along the Hangu Road to a village called Mahomedzai, where we found our escort, consisting of a posse of about fifty villagers armed with all sorts of miscellaneous weapons, ready to accompany us to the ruins. With this motley crowd we set out, walking across country towards the hills. Our escort had with them many dogs, some of which resembled English bull dogs, and on the way these dogs amused themselves by chasing and pulling down an unfortunate cow which they would speedily have killed had not their masters rushed up and pulled them off. On reaching the hills we scrambled up by a steep and difficult path for about 1000 feet, when we reached the ruins of what must once

have been a very strong fortress. A large and massive tower still remained in good preservation, and from this the remains of walls and towers could be traced around a large enclosure. Close by was a spring which no doubt supplied the garrison with water.

The position commanded an extensive view over the Hangu Valley and the fertile plain of Kohat, and it seemed just the sort of stronghold that a band of robbers in past ages would have selected for their retreat. It is, however, completely commanded by higher hills, and would now be quite untenable. It is said to have been built by a chief named Adh in prehistoric times, but this is a mere tradition. After viewing the ruins we retraced our steps to the road and got into our mule cart, but no sooner did we start than the dogs of our escort gave chase and rushed at the mules, barking loudly and springing at the heads of the animals. The mules struck at the dogs with their forefeet and knocked them over several times, but they still came on pertinaciously, and we did not shake them off till we had gone a mile or two along the road.

The Lieutenant-Governor of the Punjab arrived at Kohat while I was there, and, finding that he intended to go through the Kohat Pass to Peshawur, I arranged to accompany his party. We rode northward towards the Afridi hills, ascended the 'Kotal,' and went down a series of slippery zig-zags into the narrow winding valley, fifteen or sixteen miles in length, which forms the Kohat Pass. For some miles we followed the valley in an easterly direction. Many times we were stopped by people with petitions to the 'Lord Sahib' about their friends or relatives who had committed crimes in British territory, and had been sent to prison there. These Pass Afridis were all armed to the teeth; some had muskets or Enfield muzzle loading rifles, a good many carried Snider breechloaders, and some actually had Martini-Henry rifles,

which doubtless had been stolen from our garrisons. They seemed very friendly, nevertheless, and offered us refreshments in the shape of tea, milk, eggs, chupatties, and curried fowl.

The pass, after some miles, turns round a spur of the mountains and runs to the westward for a considerable distance, then it turns to the north-east, and presently ends in the plain of Peshawur. It is everywhere narrow, and the hills on both sides are within easy rifle range of the road. In 1850 a British force under Sir Charles Napier (who was then commander-in-chief in India) marched through this pass, but met with determined opposition from the Afridis, and sustained considerable loss in forcing its way to Kohat. Since then arrangements have been made with the tribes inhabiting the hills round the pass: they receive an annual subsidy, in return for which they keep the pass open and allow all travellers to go through unmolested. At Matanni, five miles beyond the pass, we halted for breakfast, after which I continued my journey and arrived at Peshawur in the evening. Thence, after a short stay, I proceeded to Murdan, and then returned to my headquarters at Abbottabad.

In June 1889 I obtained fifteen days' leave and visited Simla for the first time. I travelled by railway to Umballa, and then by carriage to Kalka at the foot of the hills, about forty miles distant. There I breakfasted, and then started in a tonga for Simla, which was fifty-eight miles further on. The road is a splendid piece of engineering, and its construction must have cost much labour and a great deal of money. Two military stations, Kussowli and Dugshai, are passed on the way, and further on a little place called Solan, where a convenient hotel invites travellers to break the journey. The hills are in some parts forest-clad, but generally they are very bare, and abrupt or even precipitous in some places. After a hot and dusty journey I reached Simla at

three in the afternoon, and went to Harding's hotel, where I had secured accommodation.

Simla is something like Murree in general appearance, but very much larger. It is situated on a narrow undulating ridge several miles in length and between 7000 and 8000 feet high, with spurs projecting from it on both sides. The ridge and its offshoots are everywhere clothed with a beautiful forest of pines, deodars, rhododendrons, oaks, and other trees, amid which the roofs of the houses are seen in many places. About the centre of the ridge stand the church and the town hall, the latter being a very large and imposing stone edifice in a prominent situation. Below these are the shops, places of business, and the native town, also most of the public offices. Close to the church the ridge rises rather steeply for about 1000 feet, forming the hill called Jakko, covered with a beautiful forest, in which many European residences are seen. A small Hindu temple stands on the top of this hill, and numbers of monkeys gambol among the trees. Further west, on the summit of the ridge, is the summer residence of the Viceroy of India, a handsome stone building containing some very fine reception rooms, and surrounded by beautiful grounds. The summit of the Simla ridge is so narrow that in most places there is room only for a single house, but though the slopes are very abrupt, sites have been found almost everywhere for houses, which in many instances are elegant structures resembling the villas of Bournemouth or Torquay. The roofing material is generally sheet iron, plain or corrugated, but shingles or slates are used in some instances. A broad road, protected on the side of the declivity by a suitable railing, is carried all along the ridge and around Jakko, while many smaller roads and paths diverge from it on both sides and extend in all directions through the lovely forest covering the mountain. No carriages drawn by horses or ponies are allowed at

Simla except those belonging to the Viceroy, the Commander-in-Chief, and the Lieutenant-Governor of the Punjab. This rule is doubtless intended to prevent accidents, which would be very likely to happen were the roads crowded with all manner of vehicles drawn by all sorts of horses, when the side of the mountain is always steep and often precipitous, and the outer edge of the road is merely protected by a wooden railing. In consequence of this regulation people at Simla usually walk or go about on horseback, or employ a jinrickshaw, a two-wheeled vehicle propelled by men. These 'rickshaws have come into very general use at Simla of late, and they are particularly useful in bad weather, as well as for going to balls, dinner parties, etc. The tongas which bring people up to Simla and take them back to the plains are obliged to stop at and to start from a special station like a railway terminus situated some distance below the summit of the ridge. Passengers have to make their way to or from this station as best they can.

After a short residence at this charming hill station, I started on my return journey in a violent thunderstorm. The horses tore along with the tonga at a tremendous rate, caring nothing for the torrents of rain beating in their faces, the flashes of lightning and peals of thunder, or for the stones that came rolling down the hillside above us. Several times a small landslip came rattling down upon the road as we passed, but the well-trained horses were not in the least affected by it. This was fortunate, for the outside of the road was protected only by a low stone wall, beyond which were steep and profound declivities threatening destruction in case of accident. Had our horses gone over through fright or mismanagement escape would have been impossible, and tonga, horses, and passengers would have been dashed to pieces hundreds of feet below. The storm presently ceased and the clouds dispersed. I reached Umballa in the afternoon and continued my journey

by train, arriving at Abbottabad in time for breakfast next morning.

In October 1889 I had to make an extra journey along the frontier in order to inspect the cavalry regiments of the Punjab Frontier Force before they left their stations to join the cavalry camp of exercise at Muridki near Lahore. My trip was necessarily hurried, and in three weeks I finished my inspection work and returned to Abbottabad. While I was at Dera Ghazi Khan an incident occurred which might have suddenly terminated my career. I was returning from the garrison mess to the house where I was putting up, and happening to look down I saw what seemed to be a dry stick lying across the path. I was on the point of putting my foot upon it when I saw, just in time, the transverse black and white marks which told me that it was a krait. At that moment my foot was a few inches above the reptile in the act of stepping, but I just managed to step clear of it, and turning round I killed it with my walking stick as it was beginning to move. It was a large specimen, and had I set my foot upon it I must have been bitten and in all probability I should have lost my life, as the krait is one of the most deadly of the venomous snakes of India. Considering how these reptiles abound all over the country it is surprising how seldom any European falls a victim to their venom. Narrow escapes, however, are common enough, and I believe most Anglo-Indians could relate similar instances as having occurred in their own experience.

A curious incident of this kind took place at Abbottabad about the same time: a snake was found among some toys with which two young children had been playing just before in the verandah of their home. They had been taken out by their nurse, and a casual visitor, who was calling at the house, noticed, among the children's toys lying about in the verandah, what he supposed to

be a toy snake. On his going near it moved, and he saw that it was no toy, but a real snake, which had most likely come from the garden. The snake was then killed, the children had a narrow escape, and their parents must have experienced an unpleasant shock.

In returning to Abbottabad I left the train at Serai Kala, a station about ten miles to the east of Hassan Abdal, for the purpose of visiting an ancient tower on the banks of the Hurroo River, said to have been built by the great Buddhist sovereign Asoka, who ruled over a great part if not the whole of India, about two centuries before the commencement of the Christian era. The tower was in a very ruinous state, as might well be expected after the lapse of so many centuries, but from its situation and appearance I came to the conclusion that it was originally a military post established to command the passage of the river and the Kashmir Road, which at that time probably took this direction. Between Serai Kala and the Hurroo River are a number of low hills covered with ruins, which are said to be the remains of the once famous city of Taxila, which was a large and important place when Alexander the Great invaded India, and was occupied by him after he crossed the Indus.

In December I made preparations for my fourth annual inspection tour and travelled by train to Dera Ghazi Khan, proceeding by way of Lala Musa and Bukkur. After getting through my inspection and invaliding work at Dera Ghazi Khan, I started off to inspect the posts in the Suleiman hills. The new road had been completed since my last visit, and I chose it in preference to the old route by Kot Chutta, Choti Zerin, and Choti Bala. I had the same rickety cart as on previous occasions, and drove out to a place called Ramghur, about fifteen miles distant in a westerly direction. For the first ten miles the land was well cultivated and

fairly wooded, most of the trees being date palms. Beyond that distance the country grew more or less barren and treeless until near Ramghur it became a bare sandy desert. I put up for the night in the road bungalow, which was commodious and comfortable.

Early next morning I resumed my journey through the sandy desert, which was so heavy that I had to walk most of the distance, since it was as much as the horse could do to drag the cart through the sand. After a slow and fatiguing march of fifteen miles I reached the rest-house at Sakhi Sarwar and halted there for the night.

After a short rest I walked over to see the town; it is a place of some size, having a population of about 2000 persons, who are mostly beggars. A celebrated Mohammedan 'Peer,' or holy man, lived, died, and was buried there some eight centuries ago; hence a sacred shrine was established in the place, and it has, ever since, been continually visited by devout Mohammedans from all parts of India, who pay liberal contributions to the guardians of the shrine. A great deal of money is also collected by the people of Sakhi Sarwar who travel all over India for this purpose. The shrine consists of several whitewashed buildings with two minarets, and long ranges of steps going down to a rocky nullah, or watercourse, which was quite dry when I saw it, but evidently contains water during the rains. The houses of the town are the usual flat roofed mud huts common in this part of India. The surrounding country is a howling wilderness: a range of bare rugged hills lying to the west and a stony desert plain all around.

Next morning I started on foot, as the cart could go no further, and walked eleven miles to a place called Rukhi Munh. The road ran along the base of the above mentioned range of hills, and then turning to the right ascended a ravine which led to the

main range of mountains. The sides of this ravine were in some places quite perpendicular and more than 100 feet high; they consisted of an enormous mass of pebbles of various sizes embedded in tenacious clay. This sort of formation is very frequently met with all along the North-West Frontier of India from Abbottabad downwards. At Rukhi Munh I put up in a very comfortable road bungalow, and on the following day I rode up to Khur, a distance of eighteen miles. The new road was quite finished and had been so skilfully constructed that I could have driven a carriage the whole way.

At Khur I found hardly any change except a few new buildings and some preparations for the construction of a reservoir for water. After finishing my inspection work I went on to Rukhni with the medical officer in charge of the posts. We spent the night there, and next morning rode on to Rankan Sham, a distance of eighteen miles. Since my last visit a comfortable road bungalow had been built at this place, so we put up there, and next day continued our journey to Kingri, seventeen miles further on. The country looked just the same bleak inhospitable wilderness of bare rugged hills and long treeless valleys as at my previous visit two years before. At Kingri we were informed that a Musa Kheyl Pathan, named Gola, was going about the country with a Martini-Henry rifle which he had stolen, and was shooting at our men under cover of the darkness whenever he could get a chance. He had already killed several men, and it was reported that he had vowed to shoot an officer. We saw nothing of him, however, either going or coming, and I got back to Khur, and from thence to Dera Ghazi Khan without any adventure worth mentioning.

I then continued my inspection tour, proceeding next to Dera Ismail Khan and then to Edwardesabad. On leaving the former station I found the road so heavy from recent rain that my tonga

got on very slowly, and just as it was growing dark the tongá horses came to a stand-still and would not move in spite of all the efforts and invocations of the driver. I was reminded of the graphic description of the horse, said to have been written by a Bengalee student at an examination, which ran thus: 'The horse is a very noble animal, but when irritated he will not do so.' The situation, however, was beyond a joke: we were still several miles from the rest-house at Peyzu, it was nearly dark, raining fast, and a very cold wind was blowing. I sent the tonga driver on to Peyzu to bring me fresh horses, while I walked up and down the road beside the tonga for several hours to keep myself warm, wondering what I should do if the horses failed to arrive. At length the driver returned with a pair of fresh horses; we soon had them harnessed and the tonga was put in motion, but the road was so bad that for some distance we were obliged to walk to lighten the conveyance. Then we got in, the driver (who seemed able to see in the dark) urged on the horses, and we reached Peyzu dâk bungalow a little before midnight. I was wet through and very tired, but a good dinner and a sound sleep restored me, and I rose next morning quite refreshed and none the worse for this disagreeable adventure.

At Kohat I paid a visit to a fine old native gentleman named Sultan Jan; he was an honorary magistrate and was much liked and respected by all. He was descended from the Durani sovereigns of Afghanistan, and he showed me many curiosities which he said had come down to him from them, particularly the sword and dagger of the celebrated Ahmed Shah, Abdali, who won the great battle of Paniput from the Mahrattas in 1762. He also showed me a very ancient copy of the Koran in the Kufic character, said to have been executed soon after the death of Mohammed.

From Kohat I proceeded to Murdan, and during my stay there

I made a most interesting excursion to a place called Ranigat, about thirty miles distant in a north-easterly direction. It is supposed by some archæologists to be the famous 'Rock of Aornos,' which was taken by stratagem by Alexander the Great just before he crossed the Indus in his invasion of India, B.C. 326. Leaving Murdan in company with several officers of the Guides, I proceeded in a north-easterly direction across the plain of Yusufzai, and after travelling about seven miles arrived at a large village called Shahbazgarhi. There the road crossed a range of low hills, under which were two large rocks bearing Pali inscriptions similar to those at Mansehra. One of these inscriptions had only recently been discovered, and on being deciphered it proved to be a missing edict of Asoka, which was known to exist but could not be found previously. Asoka is said to have been the grandson of Chandra Gupta (called by the Greek historians Sandrokottos) who was contemporary with Alexander the Great. His edicts were cut on rocks in various parts of the country, and he also erected stone pillars in different places, where they still remain, showing how extensive the dominions of Asoka must have been.

We continued our course eastward, and after travelling some fifteen miles more we arrived at the village of Shiwa, where we were kindly and hospitably received by the Khan of Shiwa, who placed his house at our disposal and made us very comfortable. Next morning we started for Ranigat, escorted by the khan with a number of his armed retainers, as the place we were going to visit was situated across the border in the country of the Kodo Kheyls. We rode over the plain for eight or nine miles till we reached a village at the foot of a range of steep granite hills projecting into the plain from the mountains north of it. There we dismounted and, leaving our horses at the village, we began to clamber up the steep ascent, which was obstructed by granite rocks of all shapes

and sizes. I thought to myself while going up how difficult the ascent must have been for Alexander and his heavily armed Greeks and Macedonians. One of our party whose bulk was considerable had to sit down several times, to admire the view as he said.

At last we reached the summit of the range and found there the ruins of an extensive fortress, which from the style of its architecture seemed to belong to the period of Buddhist supremacy. The ruins were in some parts very well preserved; there were walls, towers, a pointed archway, and a vaulted passage leading from it, all built of great blocks of granite which had been regularly cut and squared. Within were heaps of débris, among which we found fragments of statues of Buddha and broken pieces of carved stone of a dark slaty appearance which must have been brought from elsewhere. The ruins covered a good deal of ground and we had little time for exploring them, as our friend the khan grew nervous and was in a great hurry to get us away. Perhaps he feared an attack from the Kodo Kheyls; anyhow he appeared uneasy till we returned to the village at the foot of the hill. There we had some rest and refreshment, and then mounted our horses and rode back to Shiwa.

This place is only a few miles distant from the Umbeyla Pass which leads into the Buner country, and in the Pass we saw a little eminence which we were informed was named 'Katl Ghar,' or the place of slaughter, in remembrance of the severe fighting that went on there in the Umbeyla campaign in 1863. That little hill was then the Crag Picket, and was taken and retaken more than once with great loss on both sides. We passed the night at Shiwa, and on the following morning we took leave of our kind host and came back to Murdan, whence, after finishing my work, I returned to my headquarters at Abbottabad.

CHAPTER XXV

I obtain leave of absence and set out for Khagan—Earthquake at Balakot—The Kunhar River—Kowai—The Forest Officer's house at Malkandi—Scenery in the valley—Rude bridges—My camp at Jared—We cross the Shikara nullah with difficulty and meet herds of cattle—Our arrival at Khagan—Visit of Sayad Ahmad Ali Shah—Some of his relatives accompany me onwards—Scenery on the way—We arrive at Narang—Our visit to Saifool Maluk Lake—Grand scenery around it—A local legend—The Sayads hasten my return—Bad weather sets in—Dangerous bridges—A snake adventure—I return to Abbottabad.

In September 1890 I obtained fifteen days' leave of absence for the purpose of making a trip up the Khagan Valley, a long narrow strip of British territory lying between Kashmir on the east and Allai, Kohistan, and Chilas on the west and north. The valley is formed by two great mountain ranges, offshoots of Nanga Purbut, and it is more than 100 miles in length. My journey was partly undertaken for the purpose of ascertaining whether it would be possible to establish a dispensary in the valley, so that medical aid might be within easy distance of most of the inhabitants. I had intended to go the year before, but had been prevented in consequence of disturbances being expected to take place among the hill tribes in that direction. This time, however, nothing occurred to stop me, and having beforehand despatched my servants and baggage to wait for me at Balakot, I started by ekka from Abbottabad very early on the 14th of September and reached Mansehra (sixteen miles) at 9.30 A.M. I breakfasted in the travellers' rest-house, and went on by the same conveyance for eight miles along the Kashmir road, which ran along the flanks of the foot hills of the Thandiani range skirting the extensive Pakli Plain. At

Ooturseesee I dismissed the ekka, and leaving the Kashmir Road I proceeded on foot through the eastern part of the Pakli Plain till I reached Jabah, where the path ascended for some distance over pine-clad hills, and then went down rather abruptly into the deep valley of the Kunhar River. There I found my pony and rode on to Balakot, where I put up in the police station, and found my servants and baggage awaiting me.

The station consisted of a range of buildings in the form of a quadrangle with a high outer wall loopholed for musketry, and only one entrance provided with two ponderous wooden gates which were closed every evening. The village of Balakot contained about 3000 inhabitants, and was situated on a rising ground in the middle of the valley, about half a mile from the police station. The mountains rise steeply on both sides of the valley to a height of 10,000 feet or more; they are bare below, but covered with pine forest above. The valley from Garhi Habiboolla to Balakot is of some breadth and highly cultivated, being full of Indian corn and rice. The former is grown far up the hill sides while the latter is confined to the lands which can be irrigated. Much skill and ingenuity are shown by the natives in terracing the ground for rice cultivation and in bringing water to it by channels from every available source. As no supplies were procurable beyond Balakot, I laid in a small stock of flour, rice, and other necessaries for the journey, inspected the mules, looked over the baggage, and provided so far as I could for every contingency. During the night, while I was sleeping in an upper room of the police station, there was a rather severe shock of earthquake which made the whole building shake badly. It roused me from sleep, and set my dogs barking loudly.

Next morning (Sept. 15th) the baggage mules were loaded and we started at 8 A.M., crossing the Kunhar River near the police

station by a rude bridge consisting of two enormous tree trunks which extended from one side to the other, and were covered by loose planks kept in place by large stones placed upon them. There was no hand rail on either side, and some distance below was the rushing torrent threatening destruction to any living creature falling into it. We got safely over, the muleteer bringing over the mules singly, and holding their tails as they went along, apparently to keep them in a straight course. Above Balakot the valley became narrower and appeared as an enormous cleft in the mountains. The road, or rather path, ran along the side of the hills for some miles at a height of 200 or 300 feet above the river, then it descended into a gorge and crossed a small tributary of the Kunhar River. Another stream was crossed a little further on, and then the road turned up a large valley coming down from the east. The village of Kowai lies about two miles up this valley, and there we halted and pitched our tents on a little bit of grassy ground with a few trees scattered about. The Kowai Valley extended a good way further east, and was bounded by a range of high hills clothed with forest.

I rose early on the following morning, had tea, got the tents struck and everything packed, loaded the mules, and set out for Jared, the next halting place. The road ascended steadily till at last on looking back I saw the bare summit of Mukra, 12,400 feet high, appearing above the wooded hills east of Kowai. Soon after the path began to descend and by various steep inclines and zig-zags took us down almost to the bottom of the Kunhar Valley, where we passed the village of Parus, and saw much rice cultivation. The road now continued along the bank of the river, and not many feet above it, till we reached a forest of deodars among which I saw the roof of the forest department house at Malkandi. I stopped there for breakfast and met a very courteous and intelligent native officer

of the forest department who was stationed there. He insisted on accompanying me part of the way to Jared, as he said the road was difficult and I might require assistance. For some distance beyond Malkandi the road was a narrow track formed partly by blasting the rock and partly by fixing logs in crevices of the cliff and so building up a way. In some places on looking down I could see the rushing torrent of the river directly under my feet. However we got along all right, and after crossing the Kunhar River twice by bridges like the one at Balakot, but a good deal worse, we arrived at Jared and pitched our tents in a beautiful grove of deodars close to the river bank. This day's march, like the previous one, was about fourteen miles.

Next morning I was up betimes, had tea, packed, loaded the mules, and started at 6.30 A.M. The road almost immediately began to ascend by zig-zags, but after going up some distance it descended again and presently reached the Shikara nullah, a mountain torrent coming from the Kashmir direction, and falling into the Kunhar River at this point. The bridge over this nullah had recently been carried away by a flood, so we had to ford the stream and we found the crossing no easy matter. After a heavy fall of rain this torrent would be impassable, and as it was we had hard work to get the mules through it. When I rode across, my pony was almost taken off his legs by the rush of the water. From this point the road continued up the hill side for a space and then again descended to another nullah, which was also unbridged, but was smaller and easier to cross than the other. Thence we followed the track for some miles along a bare hill side, which in many places seemed to consist of white marble rock. On looking back the lofty peak Bichalee, on the Kashmir border, upwards of 16,000 feet in height, was seen towering above the nearer hills.

The river below us soon made a sharp bend to the eastward,

and the road descending to it, ran along a few feet above the water. The valley became very narrow and was shut in by immense precipices of almost perpendicular rock. Finding a pleasant shady spot, I halted for breakfast, sending the baggage on ahead. Numerous herds of cattle and flocks of sheep and goats passed us on their way down the valley to the neighbouring districts. The people of these districts bring their flocks and herds into the Khagan Valley at the beginning of the hot season on account of the excellent and abundant pasturage which is to be found there, and they come down again in September. They have to pay the headmen of the valley for the privilege of grazing, and these grazing fees form a large part of the incomes of Sayad Ahmad Ali Shah and the other Khagan Sayads. After breakfast I proceeded on my way, and soon found the brawling river turning towards the north. The valley widened considerably on the east side of the river and the hills culminated in Sirool, a fine peak between 13,000 and 14,000 feet high. In a short time I arrived at the encamping ground, and saw many little groups of houses dotting the valley and hill sides. These constituted the village of Khagan, the most important place in the valley. Every available piece of ground was cultivated, and the crops of rice and Indian corn looked very flourishing.

In the afternoon I was visited by Sayad Ahmad Ali Shah, the chief man in the valley, and several of his relatives, and I presented to him the 'parwana' (vernacular order) which had been kindly given me by Mr. Cunningham, C.I.E., the Deputy Commissioner of Hazara, to facilitate my progress. I then had a long conversation with the Sayads regarding my journey and about the establishment of a charitable dispensary in Khagan, which was much wanted, as the people of the valley were entirely without medical aid, and could not seek it elsewhere during the winter months owing to the

heavy snow drifts which rendered travelling impossible in that season. The Sayads were very courteous and friendly in their behaviour; they agreed to consider what they could afford to subscribe towards the maintenance of a dispensary, and they promised me that several of their number, including the younger son of Sayad Ahmad Ali Shah, would accompany me onwards to the end of my journey and back, in order that my safety might be assured.

On the following morning we resumed our journey, accompanied by several of the Sayads. The path continued for several miles along the east bank of the Kunhar River, but at Rajwal, the residence of Sayad Ahmad Ali Shah, it crossed the river by a bridge like those previously mentioned. The river there took a north-easterly direction, and the road followed it on the north bank until we drew near Narang, when the river was again crossed by a bridge as before. The scenery met with on this march was very grand. Some distance to the west I saw Nakra, about 14,000 feet high, and our road traversed the flanks of a chain in which sundry peaks, such as Kundi, exceed 15,000 feet, and others fall little short of it. I breakfasted in a lovely valley, through which a wild hill stream came rushing down to join the river. Looking up this beautiful glen I could see the snow on Muttapur, several thousand feet above. Resuming my journey I shortly reached the bridge, which was very much out of repair, and cut up by the continual passage of cattle. After crossing this and traversing a stretch of open ground where the hills receded, I arrived at the village of Narang, the end of my journey up the Khagan Valley.

By direction of my friends the Sayads, my tent was pitched on the flat roof of a house in the village, and they pitched theirs close by. This was done in order to insure my safety, about which they were rather anxious, as the frontier of Kohistan was close at hand,

and the Kohistanis sometimes made raids into the valley. The march we had made was about sixteen miles, but after some refreshment and a short rest I set off again, in company with one of the Sayads, to try and reach a lake called Saifool Maluk which lay among the mountains east of Narang. The path ran up a valley with a beautiful clear stream flowing down the centre of it. The hill side on our right was covered with forest, but that on the left was bare, and soon became broken and precipitous. As we advanced up the valley the height of the mountains greatly increased and snowy peaks became visible further on. After we had proceeded a few miles a storm came on and we had to make our way back to camp as quickly as possible.

The weather was fine and clear next morning, so I rose early, had tea, and started for the lake, in company with my friends the Sayads, who seemed much distressed at my persistence in walking instead of riding. We soon reached the spot where I had turned back the previous afternoon, and continuing the ascent we presently gained the top of the low ridge forming the head of the valley and saw the lake at a little distance below. A few minutes' walk brought us to its shore. The lake is perhaps two miles round; it is 10,700 feet above the sea, and is surrounded by lofty mountains, particularly on the north where they are from 15,000 to 17,000 feet high. The highest peak, named Malika Purbut, was covered with snow for a considerable distance. A stream of water issuing from the lake rushed down a steep ravine into the valley from which I had just ascended. We crossed this stream and I had breakfast beside the lake, after which we began to ascend the mountain south of it, called Narang-ka-Dunna. It was a very stiff pull, and I had to stop and rest several times, but at length we gained the top of the ridge and found a smooth grassy slope stretching upwards. We ascended this slope to a height of

about 13,000 feet, when we came to snowdrifts; so I halted, had lunch, and enjoyed at leisure the splendid prospect.

Far below was the crystal lake, and directly opposite rose Malika Purbut (the Queen Mountain) to a height of nearly 18,000 feet. To the west the mountains of Kohistan were spread out like a map before me, and to the north I could see those of Chilas. Eastward were many fine peaks on the border of Kashmir. After resting a while, and enjoying this glorious scene to my heart's content, I descended the ridge, which was nowhere difficult, and at length regained my camp at Narang. Next day I again went to the lake, breakfasted at its eastern end, and then followed the valley towards the east for a few miles, after which I returned to camp. In the evening I explored the lower part of the valley, and was struck by the number of large rocks I found scattered about everywhere. Apparently they must have been swept down by some overwhelming flood, and on inquiry I found that there was a local legend accounting for their presence in the following manner.

Many ages ago a demon lived near Saifool Maluk Lake, and loved a beautiful fairy who also had her abode there. One day a handsome young prince came there hunting, and seeing the fairy he fell in love with her and carried her off. On discovering his loss, the demon, in a fit of rage, demolished the dam which confined the waters of the lake; they rushed down the valley, destroying the villages and people, and leaving rocks strewn all over the ground as they are now seen. Some such catastrophe no doubt must have occurred, but in all probability it was caused by an avalanche or landslip which dammed up the lake for a time but at length gave way and allowed the accumulated water to escape.

On the 21st of September I quitted Narang on my return, as the Sayads seemed unwilling that I should remain there any longer. They made some unpleasant references to the fate of

Major Battye, and showed great anxiety to get me away as soon as possible. Accordingly I marched back to Khagan, halting at Rajwal on the way to see the chief Sayad Ahmad Ali Shah and bid him farewell. The weather was still fine, and I proposed on the following day to ascend Shingri and if possible Sirool also, and thus get a view of the country around, particularly the lofty peaks of Manoor, Shikara, and Bichalee. But when I rose next morning the sky was covered with clouds, and fearing rain, which might render the Shikara nullah impassable, I packed, loaded the mules, and started at once for Jared. As we proceeded on our way the sky cleared and I began to think I had hurried off needlessly. On reaching the Shikara nullah we found it lower than before, and we got through without difficulty. My larger dog, a big powerful fox terrier named Rip, tried to cross by himself and was carried down a good way, but managed to struggle through and reach the shore. The smaller dog, Tim, I carried before me on the saddle on both occasions in crossing this dangerous torrent, the force of which was so great that I saw a cow swept down by it and nearly carried into the Kunhar River.

On reaching Jared my tent was pitched as before in the grove of deodars, and I congratulated myself on having left Khagan, as the rumbling of thunder indicated that a storm was coming on. Heavy clouds soon overspread the sky and a good deal of rain fell, but as our tents were in a sheltered place, and we had taken all necessary precautions, we remained quite dry and comfortable. The storm ceased towards evening, and as the weather seemed to be clearing I proposed next day to ascend Bichalee which was not far distant. But when I rose on the following morning I saw that this was out of the question as the sky was covered with heavy clouds and fine rain was falling. Moreover alarming reports reached me about the state of the bridges over the Kunhar River, one of them, it was

said, having become unsafe for loaded animals. Accordingly we struck the tents, loaded the mules, and set off in spite of the rain, intending to make a short march, get over the bridges, and halt for the rest of the day at the forest department house at Malkandi.

On reaching the first bridge, which was close to Jared, I found that it had sunk a little on one side from the cracking and bending of one of the two enormous tree trunks which spanned the river and supported the bridge planking. However by leading the animals slowly across it one by one they all got safely over. In about an hour we reached the other bridge, the worst of the two according to report, and I saw at once that the report was correct. One side of the bridge had sunk to such a degree that I did not like the idea of walking over it myself, and I feared that the pony and mules would lose their footing on the wet sloping planks and be precipitated into the raging torrent below. After some consideration I had quantities of earth and small stones scattered over the planks of the bridge in order to give the animals some foothold, and then they were slowly and carefully brought over, one by one, the muleteer holding the tail of each animal as it walked across, so as to keep it in a straight course. I went over first, and watched the passage of the animals with some anxiety, for I was not at all sure that the bridge would bear them. At length they all got safely over, and in a short time we reached Malkandi, where I put up in the forest house, and we proceeded to spread out the wet tents, bedding, etc. to dry in the sun, the clouds having by that time dispersed.

The Kunhar River, in its course from Narang to Balakot, falls about 6000 feet, or on an average about 100 feet a mile, so that for nearly the entire distance it is a raging and impassable torrent. After breakfast I strolled down to the river, which was much swollen by the recent rain and quite red. The forest officer

stationed at Malkandi informed me that the red colour of the water was caused by a hill stream from the east which fell into the river a mile or two above. I proposed a walk to the spot, and he accompanied me. As we were walking along the path in single file, the forest officer, who was behind me, suddenly seized me by the arm and pulled me back just in time to prevent me from treading on a snake, which I had not seen, as I was looking at the river and the scenery around. The snake glided off into the jungle before I could catch sight of it, so that I could not be certain whether it was harmless or deadly. But, however that might be, the behaviour of the forest officer was very creditable to him, and I thanked him warmly for his prompt and friendly action. Soon after this we reached the spot where the red stream entered the river. It must have flowed through a highly ferruginous tract, for it resembled a stream of red ink, and in the course of a few yards it tinged with red the whole body of water in the river. After following up this stream for a mile or two we returned to Malkandi, and next morning marched back to Kowai.

As the march was a short one and the weather fine, I went out after breakfast and ascended the wooded ridge at the head of the Kowai Valley, getting a fine view of Mukra and other mountains in the Kashmir direction. Next morning, as the weather looked threatening, I made the best of my way to Balakot, hoping to get there before it began to rain. In this I was disappointed; a heavy storm came on while we were still a good way from shelter, and we were wet through long before we could get in. I remained at Balakot for the next day as I wished to dry the tents and baggage and to rest the men and animals. During this halt I strolled through the town of Balakot, and inquired after old coins, getting several, in particular a well-preserved copper coin of the Græco-Bactrian king Hermæus.

On September 27th I marched from Balakot down the Kunhar Valley to Garhi Habiboolla, a distance of about ten miles, and put up in the dâk bungalow. After breakfast I walked across the graceful suspension bridge over the Kunhar River, strolled through the little town, paid a visit to Samundar Khan, the chief man of the place, and explored the course of the river for a few miles further down. Next morning I walked to Ooturseesee, ten miles distant, where I had breakfast; then getting into an ekka which had been sent there to meet me, I proceeded to Mansehra, rested there for an hour, and then came on to Abbottabad, reaching home at about 5.30 P.M..

CHAPTER XXVI.

Expedition to the Black Mountain in October 1890—We encamp at Oghi—Heavy storms—We ascend the Black Mountain—Our bivouac attacked by the hillmen during the night—The expedition withdrawn—General Sir John M'Queen resigns the command of the Punjab Frontier Force—His farewell order—He is succeeded in the command by General Sir William Lockhart—My last tour of inspection—Visit to Akra—My term of office as principal medical officer of the Punjab Frontier Force comes to an end—Owing to my having missed promotion I am obliged to retire from the service—Conclusion of my Indian career—Remarks on the Indian Medical Service and on the preservation of health in India.

On my return to Abbottabad I found that the general commanding the Punjab Frontier Force had received orders to proceed to the Black Mountain with a force of about 1200 men taken from the Abbottabad garrison, and to march for some distance along the crest of the mountain and then return. The object of this little expedition was merely to assert our right to traverse the country, a stipulation to this effect having been included in the treaty made with the tribes of the Black Mountain in 1888. No hostile action on our part was intended, a suitable notification of the proposed march was sent to the headmen of the tribes, and they were invited to send in their 'jirgahs,' or deputations, to accompany our force in its passage through the country. The troops marched from Abbottabad on the 17th of October, and I joined them at Oghi on the 19th.

The weather had been threatening for some time, and that evening a storm came on which tried our tents severely, but they stood it well. In the morning our camp seemed to be standing in a swamp, but the tents were fairly dry inside. The sky was still

covered with clouds, and it was evident that we could not make any forward movement until the weather became more settled. On the 21st it cleared a little, so two detachments were sent up the mountain a short distance to reconnoitre. One of these parties observed a 'sangar' (or stone breastwork) further up the mountain side, and the men behind it yelled at them. This looked like hostility on the part of the mountaineers, particularly as only one jirgah—that of the Parari Sayads—had as yet come in, and reports were current that our advance would be resisted.

On the night of the 21st a very severe storm came on, the flashes of lightning and peals of thunder were incessant, and the wind and rain beat upon our tents with such violence that it was really wonderful they were not overthrown. I had gone to bed, but remained awake expecting every moment that my little tent would be blown away, leaving me exposed to the fury of the elements. Fortunately, though it shook violently, the poles, tent pegs, and ropes did not give way, and the canvas of the tent kept the rain out very well. In the morning the sky cleared and we could see the crest of the Black Mountain thickly covered with snow. The weather improved during the day, and on the morning of the 23rd it was so fine that the general determined to advance up the mountain that afternoon.

We accordingly left our camp standing at Oghi, and marched up the Barchar spur of the Black Mountain on the afternoon of the 23rd. After accomplishing about two-thirds of the ascent we halted and formed our bivouac for the night. We had brought no tents with us, so every one selected some more or less sheltered spot whereon to spread his bundle of bedding. My servant found a nice place for me under a bank, and made it smooth; then he cut a quantity of a soft shrub which grew on the hill side and spread it out to serve as a mattress, then he spread my bedding

upon it, and rigged up a waterproof sheet on some sticks as a sort of tent over the bed. We had dinner in picnic fashion, and soon afterwards we retired to our respective sleeping places. I crept in beneath my waterproof sheet, and should soon have been sound asleep had nothing happened to disturb me.

As it was, I was very soon aroused by firing from several directions and the whizzing of bullets overhead, as parties of the mountaineers crept down the mountain and commenced firing into our camp. I got out from under my little tent as quickly as possible, for I felt that should an attempt be made to rush the camp, I should be quite defenceless if caught under it. The firing, however, was soon over. A party of the hillmen came by accident, I conclude, upon one of our pickets, both fired simultaneously, and one of the enemy was badly hit. He fell down the steep hill side, and called loudly to his friends for help. They came and carried him off, and the firing ceased very shortly after. About twenty shots were fired into our camp, but there were no casualties on our side, except one of the artillery mules, which was wounded by a bullet in the leg.

A BLACK MOUNTAINEER

The rest of the night passed quietly. In the morning we found that the spot where one of the enemy had been wounded was only a few yards below our sleeping places, so that had not the picket been stationed there the mountaineers might have got in among us as we slept and cut up the general and his staff! After consulta-

tion with the deputy-commissioner of Hazara, who accompanied the force as political officer, the general decided to withdraw the troops instead of pushing on to the crest of the mountain, as originally intended, for the conduct of the hillmen in attacking us during the night proved that they were hostile and would oppose our further progress. A communication was sent to the tribes warning them that they would be punished for their unprovoked attack, and then the force descended the mountain and returned to the camp at Oghi. This retirement in the face of the enemy must have been very unpalatable to the general, as it was to all of us, but he had received strict orders from Government not to advance if the tribes were hostile and likely to fight, so he really had no choice.

Finding that the expedition was given up for the present, I left the camp and came back to Abbottabad, the troops returning there a few days later. An expedition was sent to the Black Mountain in the spring of 1891, and well-merited chastisement was inflicted upon these turbulent hillmen. As I had no official connection with this expedition, no further reference will be made to it. In November 1890 General Sir John M'Queen, K.C.B., resigned the command of the Punjab Frontier Force, his term of five years' service in command having expired. He issued a farewell order, placing on record his high appreciation of the discipline and efficiency of the force, and warmly thanking the senior officers and the staff, including myself, for our advice and assistance during his tenure of command. He was succeeded by General Sir William Lockhart, K.C.B., an officer of great experience and high distinction, whose appointment gave general satisfaction.

In December 1890 I left Abbottabad on my last annual tour of inspection, which I had to get through as quickly as possible on account of an expedition which was expected to take place in

January 1891 against the Miranzais, one of the Afridi clans in the neighbourhood of Kohat. Having no time to spare, I got through my inspection and invaliding work at the different stations in a few weeks and then returned to Abbottabad. Nothing of any interest occurred during my tour, with the exception of a visit which I paid one afternoon to Akra, a place about eight miles from Edwardesabad, believed to be the remains of an ancient Greek city founded by Alexander the Great, or by one of his successors. I rode there with a guide and saw an extensive mound of bricks and pottery which had evidently once been the site of some town, though no buildings or even ruins yet remained. Many coins of the Græco-Bactrian sovereigns, as well as seals and other small articles, were found from time to time by the natives, who were continually digging among the débris. I bought a few coins in a neighbouring village; among them was a copper coin of the Græco-Bactrian king Apollodotus in fine preservation.

On the 12th of August 1891 I completed five years' service as deputy surgeon-general with the Punjab Frontier Force, and as I had not been so fortunate as to obtain promotion to the rank of surgeon-general I had no alternative but to retire. As I was only fifty-seven years of age and in full mental and bodily vigour I should have been glad to remain in the service for several years more, and I could have done so with advantage to the Government as well as to myself, but unfortunately the regulations of the Indian Medical Department did not admit of this, and I was obliged to retire. Accordingly I wound up my affairs, took leave of my friends, and finally quitted Abbottabad on the 15th of August 1891. After a disagreeable tonga journey, in which I encountered a heavy storm and got through the swollen rivers with much difficulty, I reached the railway station at Hassan Abdal. Thence I proceeded to Simla for a short visit to my

relatives, General and Mrs. Walker, after which I travelled to Bombay, and embarked in the Anchor Line steamer *Britannia* for Marseilles. My homeward voyage was entirely without incident, and I arrived at Marseilles on the 22nd of September. I started by train the same evening, travelled through France, and reached the home of my wife and family at Horsham the following night. So ended my Indian career after thirty-five years of chequered and eventful service.

The foregoing pages have, I hope, demonstrated how diversified and interesting an Indian medical officer's work and experience may be. Though its palmy days have gone by, and its emoluments have declined in consequence of financial difficulties and the need for retrenchment, the Indian Medical Service still presents a fine field for the rising generation of medical practitioners. A great variety of appointments are open to members of the service, for instance the medical charge of regiments and civil stations, usually separate but sometimes combined, professorships at the different medical schools, medical storekeeperships, appointments under the jail department, the medical charge of the different political agencies, the superintendence of vaccination in various parts of the country, the medical charge of hill sanitaria, certain appointments in the service of native princes, and lastly the valuable administrative appointments of the military, civil, and jail departments, including the sanitary commissionerships. Civil employ is eagerly sought for, not only as being more lucrative than military duty, but as giving larger opportunities for professional work and as leading more certainly to advancement in the service. Indeed, since the changes in the constitution of the Indian Medical Service introduced in 1880, the head of the department in the Bengal Presidency has invariably been an officer who had passed nearly all his service in civil employ.

The charge of a native regiment in peace time does not usually give the medical officer much trouble, and unless supplemented with other professional work is rather apt to lead to stagnation. But additional work in the shape of an extra charge or private practice may be had in most cases. Some medical officers devote their whole attention to prison management, and one in particular did so with such marked ability and success that he not only became the head of the jail administration in Bengal, but has since been appointed a member of the Viceroy's Legislative Council, a post of great dignity and importance, which had never previously, I believe, been filled by an Indian medical officer. Others, again, pay special attention to vaccination and sanitary matters generally, and eventually become sanitary commissioners of the different provinces. Some of the ablest men obtain professorships at the medical schools at Calcutta and elsewhere, and acquire large and lucrative practices among the European and native residents.

This brief sketch may suffice to convey some idea of the advantages offered by the Indian Medical Service to its members. These advantages are still, in my opinion, superior to the inducements held out by any other medical service in any part of the world, and they will doubtless continue to attract many clever young men, eager to gain wealth and distinction, and impatient of uphill work and slow progress at home. It is true, indeed, that here as elsewhere wealth and distinction are only gained by a few fortunate individuals, but every member of the Indian Medical Service who does his duty and keeps his health is assured of a comfortable competence while in the service and an adequate pension on retirement.

I add, in conclusion, a few remarks upon the preservation of health in India, a subject of the greatest importance to all who have to spend part of their lives in that country. The secret of

good health is to be found in a temperate and active life, and in the strict observance of the rule of moderation in all things, especially in food and drink. Most European residents in India eat and drink more than is good for them, and they often lose their health from this cause. Alcoholic drinks are taken far too frequently in many cases, and do great mischief. As a rule they should never be resorted to except at meal times, and then only very sparingly. Light wines are less likely to do harm than beer and spirits, and when mixed with soda water they form very refreshing beverages. These, however, should not be indulged in too frequently, for experience has shown that in hot climates the more people drink, the more they want to drink, the fluid imbibed being speedily got rid of through the skin. Usually I never drank anything except at meals, even in the hottest weather, and I found that I was less troubled by thirst than others who were continually taking drinks. Careful attention should always be paid to the quality of the water supply, which in India is often very indifferent. The water can generally be purified in a great degree by filtering and boiling.

Exercise in the open air is necessary for the preservation of health, and should be taken daily in the form of walking, riding, lawn tennis, golf, etc., as circumstances may admit. I used to play lawn tennis regularly when I could spare time for it, and I found it very beneficial. In the hot season exposure to the sun should be avoided as much as possible, and when it has to be endured the head should be protected by an ample pith helmet, and the spine by a thick pad suitably attached to the coat. Exposure to the night air is also injurious, and the habit of sleeping in the open air, which so many Europeans indulge in during the hot weather, may result in very serious illness, as the temperature sometimes falls suddenly in the night and the sleeper

may receive a chill causing a dangerous attack of dysentery or liver disease. I never slept out of doors except on active service in the field, when it was unavoidable, and I usually kept my doors closed at night, as I thought it better to be uncomfortably hot than to run the risk of contracting illness from some casual chill. The clothing should be as far as possible adapted to the climate and the season of the year. I wore flannel underclothing throughout my Indian career, and found it of great service in preventing chills. By leading a temperate and active life, and by adopting the precautions already mentioned, I succeeded in passing through a period of thirty-five years of Indian service without suffering from any serious illness except a bad attack of malarious fever in 1865, from which I soon recovered, and I finally returned to England, on my retirement from the service, with unbroken health and an unimpaired constitution.

THE END

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