The responsibility for maintenance of law and order which followed our assumption of the position of paramount power in the Indian Peninsula imposed constant hard work on the British soldier for the first forty years of the nineteenth century. When the menace of Napoleon was removed the military establishment which Parliament could be persuaded to maintain was so small that, when Indian and colonial garrisons had been provided for, less than a quarter of the Army remained at home. Owing to there being so few reliefs available, regiments at this time might remain overseas for twenty or thirty years.

The Gurkha war of 1814-16 had been followed by the Pindari war and the third Mahratta war of 1817-18, which completed the pacification of Central India. In 1818 Ceylon was subjugated mainly by the exertions of three British regiments involving a very great mortality from sickness. In the Burmese war of 1824-26, ending in our protectorate of Assam and the annexation of most of the sea frontage of Burma, six soldiers out of every seven died. An outline of the events following the ill-considered invasion of Afghanistan in the year 1839 has already been given; at the same time an expeditionary force from India was operating in China. In 1843 Sir Charles Napier completed the conquest of Sind, and Sir Hugh Gough engaged a Mahratta army in the native State of Gwalior. Two years later we were involved in hostilities with the Sikhs, which terminated in 1849 with the annexation of the Punjab. In 1852 there was a second Burmese war.

Allowing for the fact that the pre-Mutiny regiments of the Hon. East India Company’s native troops have few historians, and that for details of the fighting in all these wars the student must rely largely on works written from the point of view of the Queen’s or the Company’s European regiments, it is impossible to resist the conclusion that almost all the serious fighting in these latter campaigns was done by the Europeans. About this period there is evidence of a dawning appreciation on the part of the nation that the British soldier, so far regarded as “an outcast from society and an object for vituperation of pamphleteers, of agitators, and windbags in Parliament,” 1 might perhaps be deserving of a little more consideration.

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1 Fortescue.
G. A. Kempthorne

than he was accustomed to receive. No doubt various factors contributed to this change of attitude. The publication of the health statistics of various foreign garrisons, commenced under Sir James McGrigor's auspices in 1835, did much to reveal to the public eye the conditions the Army had to face in its task of policing and consolidating the Empire. The authors of the first report, Deputy Inspector Henry Marshall of the British Medical Service, and Lieutenant Alexander Tulloch of the 46th, were, moreover, no mere statisticians, but men who devoted the best part of their lives to the promotion of the soldier's welfare and securing an amelioration of his condition.

In 1837 the punishment of flogging was greatly mitigated, good conduct pay was instituted, and diet and quarters in the tropics began to receive attention. After 1847 a limited term of engagement was introduced in place of the life sentence formerly accepted by recruits.

Medical Officers of the British Service made their first appearance in India in the year 1754, when the 39th (1st Dorsets), who still bear the motto "Primus in Indis," were lent to the East India Company. From that date they had served continuously side by side with their brothers of the Company's service, but except for the three Inspectors of Hospitals of the King's troops appointed to each of the three Presidencies in 1825, always in a regimental capacity. The duties of the said Inspectors were confined to what was called officially the superintendence of the professional practice of the hospitals, "leaving economical concerns to the Superintending Surgeons of the Company." Each of the Presidencies had its own medical department, controlled by a Medical Board, the members of which were not apparently selected for their administrative abilities, and as a rule showed little competence or originality in handling military affairs. Each army was administered by its own Commander-in-Chief, though the Commander-in-Chief in Bengal exercised a certain authority over the whole.

The China War, 1840-42.

The China expeditionary force was despatched from India early in the year 1840, at the request of the Imperial Government, owing to the arrogant behaviour of the Chinese towards traders carrying on commerce under the British flag. In the beginning of May a naval squadron assembled at Singapore with twenty-six transports carrying the 18th Royal Irish from Ceylon, the 26th (1st Cameronians) from Calcutta, the 49th (1st Royal Berks), two companies of Artillery, two companies of Sappers and Miners, and a composite Indian infantry battalion. On arrival in Chinese waters operations commenced with a blockade of the coast, a matter which concerned the Navy. Meanwhile the soldiers were landed at Ting-hai on the island of Chusan, which had been occupied with little difficulty in July. Here they were allowed to remain for the next six months. "The men were placed in tents pitched on low paddy fields surrounded by stagnant water, putrid and stinking from quantities of dead animal and vegetable matter.
Under a sun hotter than ever experienced in India, the men on duty were buckled up to the neck in full dress coattees, and, in consequence of there being no camp followers, fatigue parties of Europeans were daily detailed to carry provisions and stores from the ships to the tents and to perform all menial employments. The rations were salt beef and biscuits; a proportion of the beef had been salted in India and was uneatable; the biscuits were mouldy. The water was drawn from irrigation channels. The men's clothing was entirely unsuited to the climate. With the full dress coatee with tails, tight nankeen trousers were worn, and a very heavy shako. For undress, they had a tight shell jacket and a forage cap. During this period, in a strength of 2,500, there were 5,329 admissions to hospital and 448 deaths. To malaria were ascribed 2,654 admissions and 91 deaths, diarrhoea accounted for 829 admissions and 70 deaths, and dysentery for 759 admissions and 218 deaths. There were 255 cases diagnosed as continuous fever. According to Surgeon General Maclean, who served in the island as an assistant surgeon with the Artillery, much of the sufferings of the troops was due to the ignorance and obstinacy of the colonel who succeeded to the command on the death of Brigadier Oglander. Various representations were made by Dr. King, the Company's superintending surgeon, but they were received in such a contemptuous and insulting manner that the doctor lost heart and went back sick to India. For political reasons, the buildings in the town were not occupied. The Royal Irish, who were quartered in a joss-house on high ground, escaped with a death-roll of 52, as compared with 142 in the 49th and 268 in the 26th.

It is doubtful, however, whether the town with its narrow streets and stagnant canals was much preferable to the paddy fields. The Cameronians did move in during September, when their 400 sick were accommodated in a large, though ill-adapted, building, but the plague was not stayed. Considering the season and the local conditions, the only real remedy consisted in the embarkation of the troops. There was no serious military objection to this course, but owing to some muddle, the transports, which were outside Army control, had been filled up with naval stores and could not be made available.

In the spring Chusan was temporarily evacuated and the remains of the garrison were transferred to Hong Kong, which was secured as a new base. On March 2, 1841, Sir Hugh Gough arrived from India and took over command of the troops. Combined naval and military operations followed, which put us in possession of the city of Canton. Terms were exacted and the place was not occupied, the force returning to Hong Kong heavily infected with dysentery and intermittent fever. In the course of the next twelve months a number of seaport towns were occupied and garrisoned.

1 D. Macpherson. "Two Years in China."
Battle casualties were negligible, and the sick wastage enormous. In June, 1842, reinforcements were received, including the 98th regiment and five battalions of Madras infantry. In August, as a result of a combined demonstration in the Yangtze River and a threat on Nanking, the Pekin Government came to terms. Throughout these latter operations the sun proved a more formidable adversary than the enemy. In the assault on Chinkiang Fu, the most severe engagement of the war, there was a total casualty list of 144, an appreciable proportion being due to heat stroke. Of the 98th, thirteen men died outright. The Royal Irish were fortunate in not having a case, owing to the courageous but unprecedented action of their C.O., who, on the urgent representation of his adjutant, allowed the men to discard their greatcoats, to remove their stocks and sling them over the left shoulder, and to undo three jacket and three collar buttons!

A treaty followed by which five ports were opened to trade, and the island of Hong Kong became a British possession. A garrison remained in Chusan for the next four years, whose history is written on the gravestones in the walled cemetery on Joss House Hill. In the years to come Hong Kong was to acquire a no less unenviable reputation as the grave of the British soldier.

This expedition left India without any definite idea on the part of those who despatched it as to what it would have to do, or the seasonable and climatic conditions it might have to face. At the outset, when vigorous action might have finished the war in a matter of months, if not weeks, both the Navy and Army suffered from the weakness, vacillation, and credulity of the political agent who directed their movements. The tragedy of Ting-hai was the same fatal muddle which was repeated on a larger scale in the Crimea fourteen years later, the result of defective organization of the administrative services, and lack of co-ordination of the work of the naval, military and civil departments. The arrangements made for the medical requirements of the Army are said to have been deficient. Wherever the fault may have been, the Company’s superintending surgeon and the officer commanding the troops in Chusan failed to collaborate. Sir Hugh Gough on his arrival appointed a Queen’s officer, Surgeon James French of the 49th, to be P.M.O., and the latter rapidly acquired his confidence and that of the whole force. He was allowed a very free hand, which he exercised with much success.

The mortality of this war was due almost entirely to sickness. The Cameronians left India 900 strong. They received 900 recruits from Scotland during the campaign, and marched into Edinburgh Castle in 1843 the same strength as they left India. The casualties of the Royal Irish were 9 officers and 348 other ranks. The 98th under Colin Campbell,

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whose only permanent resting place for twelve months had been an overcrowded transport, arrived at Hong Kong in December, 1842, having lost 283 men, with a half company mortally sick, and with 80 fit only for permanent invaliding. It may be noted that the year 1840 marked the commencement of one of the great cholera pandemics. The reinforcements coming from India have been credited with the introduction of the disease to China, whence it spread to Burma, reaching Europe in 1848.

The following medical officers of the British Service were engaged in the China War:—

18th Royal Irish, Surgeon D. M. McKinley, Assistant Surgeons C. Cowan, J. Baker (died), J. Stewart; 26th (1st Cameronians), Surgeon W. Bell, Assistant Surgeons Chilley Pine, W. Godfrey Bace (died), J. R. Brush; 49th (1st Royal Berks), Surgeon James French, Assistant Surgeons Campbell Flyer (died), R. H. Garrett; 55th (2nd Border), Surgeon Archibald Shanks; 98th (2nd N. Staffs), Surgeon E. H. Blake, Assistant Surgeon E. Damaresque Batt; Ordnance Medical Department, Assistant Surgeon J. E. Parratt.

SIR CHARLES JAMES NAPIER IN SIND, 1842-47.

Sind, in the year 1842, was in the hands of a despotic body of Baluchi nobles, the Amirs, who had risen to power about seventy years before. They had consented very unwillingly to a treaty permitting the passage of British troops through their country to Afghanistan in 1839, and subsequently to the occupation of Karachi and Tatta and the free navigation of the Indus. When Sir Charles Napier, on his arrival to take over command in July, 1842, found sufficient evidence of hostile designs on their part to advise the annexation of a large part of the country, they began to make open preparation for war.

In December British headquarters were fixed at Rohri and the Army commenced the passage of the Indus. The European contingent of the force consisted of the 22nd (Cheshire) regiment, which had been brought up from Karachi, the remainder, with the exception of a few British artillery-men, were Indian troops.

Operations commenced with a remarkable expedition undertaken for the reduction of Imamgarh, an impregnable refuge of the Amirs of Khairpur in the heart of the desert eighty miles away. There was no certainty about the route or the watering places and transport was scarce. Napier decided therefore to carry out a raid with a small force. For this purpose he selected 350 men of the 22nd, whom he mounted on camels in pairs, 200 of the Sind (Jacob's) Horse, and two guns of the Camel Battery. The distance was covered in seven marches, "the first three through thick jungle, not a very bad road, the remaining four through an ocean of loose sand hills, sometimes very high and steep, over which there was much difficulty in taking the guns. Fatigue parties of infantry were constantly required to drag these up the ascent, although sometimes twenty-five camels were
yoked to each besides." The fort, which was found deserted, was blown up and the column returned without a man on the sick list.

On January 27, negotiations having proved a failure, the Commander-in-Chief commenced to move south with 2,800 men. Transport, including that of the guns, was by camels, and the sick were carried in kajawahs. The Baluchi army was found on February 17 drawn up near the village of Miani, ten miles north of Hyderabad, its strength being estimated at 22,000. Baggage and hospital were parked inside a ring of camels, made to lie down with their heads inwards, and with piles of bales in the intervals, while the troops advanced on the enemy. The 22nd, when ordered to charge, found themselves suddenly confronted by the main body of the Baluchi army concealed in the dry bed of the Fulai River, which they proceeded to engage with volleys at a range of ten yards. "Napier himself rode slowly up and down between the opposing arrays, pouring out torrents of blasphemous exhortation. His appearance was so strange that the Baluchis might well have mistaken him for a demon. Beneath a huge helmet of his own contrivance there issued a fringe of long hair at the back, and in front a large pair of round spectacles, an immense hooked nose and a mane of moustache and whisker reaching to the waist." After a critical fight of four hours, the position was turned, and the Baluchis, having received the most severe punishment, sullenly drew off. Our casualties were sixty-four killed and 194 wounded, of which the 22nd contributed nearly a third. The senior medical officer in this engagement was Dr. John Dalrymple, of the Company’s service, to whose “activity and zeal” Napier referred in his despatch. The surgeons of the 22nd were Alexander Campbell and John Anderson.

After the battle, Hyderabad was surrendered and seven of the Amirs gave in their submission. One, Sher Mahomed, of Mirpur, still remained in the field, and Napier, having formed an entrenched camp on the river in which the sick and wounded were placed, sent for reinforcements. When these arrived on March 23 the weather was already hot. The following day a battle took place at Dabo, within two miles of the city, when another victory was won at a cost of 270 casualties. "The exertions of the officers of the medical service under Inspecting Surgeon [D. C.] Bell" were described as “very laudable.”

The next three months were occupied in hunting down the enemy with small columns in the terrific heat of the Sind desert. The marches were mainly made at night, the men remaining in their tents by day with wet towels round their heads. Even so, there were many casualties from the sun. On the day the operations ended the General himself succumbed, also thirty-three other Europeans, who were all dead within three hours.
For four years Sir Charles Napier governed the Province, garrisons were established, and a permanent settlement effected. Karachi, the seat of government, became an important seaport town. Sir Charles was not only a great soldier and a born leader, but also a great organizer. Though essentially a man of action, all his undertakings were carefully thought out, so far as time allowed, with an attention to detail worthy of the Duke of Wellington. Economy of transport and, until battle was joined, conservation of man power, were always in his mind. In the field, baggage was rigorously cut down and transport animals properly cared for. His care of his men, by whom he was idolized, was proverbial. Thanks to efficient organization and reasonable forethought, sick wastage during active operations was kept within bounds. In cantonments, much of the improvement in the soldier's welfare now manifested was due to his initiative. That he was not more successful in controlling some terrible outbreaks of disease which occurred during his administration of Sind was due to no want of effort on his own part.

The year 1843 was a malarious one, sickness was universal, crops were abandoned and the Army was prostrate. Sir Charles wrote to the Commander-in-Chief in Bengal,1 "I can tell you as much about the sickness as the doctors. Malaria has long been watched by me in various countries. The cause is known to be decayed vegetable matter. Nothing in the power of government can prevent it; while the Indus overflows its banks and rain falls, malaria will be present in Scinde. But it may be diminished by cultivation which will substitute crops for decayed vegetable matter. When this cannot be done without inconvenience to the inhabitants, by turning ponds into tanks with sides of masonry; by building good barracks, especially for the Europeans. The stench of a low barrack in the morning is horrible. No European barrack should be less than thirty feet high, the number of men should be painted on the doors, and officers held responsible that it is observed. The heat of the country is tremendous, and if the men have not thick walls and lofty rooms sickness is inevitable. Such barracks are expensive no doubt; so are sick soldiers; so are dead soldiers. But the difference of these expenses is that the first is over and done with, the second goes on increasing like compound interest and quickly outstrips the capital." Barracks on these lines were built at Karachi and Hyderabad. At the former Napier caused a public vegetable garden to be planted to combat scurvy; at Shikarpur and Sukkur he ordered engineering work to be undertaken to control the inundations of the Indus which were

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1 Sir William Napier's "Life of Sir C. J. Napier."

2 An Army Order issued by Sir Charles Napier when Commander-in-Chief in India [1850], after prohibiting the accommodation of married soldiers in barrack verandahs and providing for them in separate common barrack rooms, stated, "It is not the amount of square but cubic feet that should form the basis of all calculations. This allowance should be at the least 1,000 feet of air for every man, woman and child."
recognized as a cause of fever. He held strong views on the injurious results of excessive drinking, and not unreasonably considered that the allowance of five ounces of raw spirit per head per day in the canteen was excessive. In this most of the regimental doctors heartily concurred, but it is easy to spoil a good case by overstatement.

The 78th (Seaforth) Highlanders were ordered to march from Karachi to Sukkur late in August, 1844, where they arrived in October in apparently good health. Almost immediately they began to succumb to a devastating epidemic of what it seems reasonable to suppose was pernicious malaria. In seven months they lost 3 officers, 532 other ranks, 68 women and 134 children. "Some lingered for weeks, some for days. It was not infrequent to hear of the death of a man to whom one had spoken but half an hour previously. The hospital was filled with upwards of 800 men under treatment. Some hundreds of the less dangerously affected were marched about a few paces in the hope that by being called 'convalescent' the mind might act beneficially on the body, but as death called them away the group became less and less. Quinine alone appeared to give them any relief and their eagerness for it was pitiable to behold." 2

There is no evidence that the rumour prevalent in Karachi of the excessive drunkenness of this distinguished regiment had its origin in any remark dropped by the Commander-in-Chief, but in a private letter, published in his life, he wrote, "About the 78th sickness, all you may see in the Bombay Times is miserable stuff. The real cause is drink." Whatever share rum may have had in the matter—and the commanding officer indignantly offered to produce his canteen accounts—such a statement was, to put it mildly, an exaggeration. The barracks at Sukkur were vacated the following year.

Sir Charles Napier's last year at Karachi was marked by a bad outbreak of cholera, in which his favourite nephew, John Napier, and his great-niece perished. In the course of a week the 86th regiment (2nd Royal Ulster Rifles) lost 208 men, apart from women and children. Between January 11 and July 20, 1846, in a community of 8,566, there were 1,838 admissions to hospital and 918 deaths. At the commencement some of the troops were moved out to the Ghizri ridge, but little improvement resulted. Sir Charles was indefatigable in visiting the hospitals. He had a firm belief in the free administration of water, which he urged the surgeons to adopt. On June 18 he issued an order that 3 officers, 9 sergeants and 100 men were to be camped near each regimental hospital and be divided into three reliefs, each of which was to do six hours' duty in nursing the sick. The officer was directed to assume all the surgeon's duties except that of treatment, and he, or one of the sergeants, was to personally supervise the administration of all alcohol ordered by the medical officers.

A detailed report of the epidemic from the pen of Surgeon Alexander

2 Davidson. "History of the 78th Regiment."
Thom was published as a Blue Book. "The disease," he stated, "was resultant on a diathesis engendered by the united action of high temperature, a large proportion of vapour suspended in the atmosphere, and impeded ventilation on the surface of the earth." He thus described the scene in his hospital on June 16: "As the night closed in a scene presented itself such as few minds can conceive or pens depict. The floors were literally strewed with the livid bodies of men labouring under the pangs of premature dissolution, surrounded by crowds of attendants trying to alleviate their hopeless sufferings. Many were brought in with the cold and clammy damp of death, as if sudden obstruction of every vital function had taken place and the fountain of life had been arrested by an invisible but instantaneous shock. For these all human aid was in vain. Others were struggling with all the violence of strong men against the agony produced by the spasmodic action of the muscles of the body, and their yells and cries, commingling in fearful discordance with the subdued groans and gaspings of those nearer the closing scene, were truly heart-rending. After June 16 the number of daily admissions began to decrease, but the places of those who continued to fall victims to the disease were too often occupied by men who had lately been their attendants. Indeed, it not infrequently happened that the soldier attendant was found lying in the agonies of the disease beside the pallet of his dying charge." It may be easy enough, in the light of modern knowledge, to criticize many of Sir Charles Napier's sanitary orders in detail, especially in the handling of a cholera epidemic, but his persistent and successful exertions for the welfare of the army in India deserve to be held in perpetual memory.

(To be continued.)

Current Literature


The authors carried out a series of experiments on the effect of chlorine and chloramine on the cercarie of both varieties of the human Schistosome parasites. Infected planorbis and bullinus snails were thoroughly washed so as to remove any cercarie which might be adhering to the shells and then placed in fresh water, incubated at 37°C for twenty minutes and left at room temperature for another twenty minutes. It was hoped that by