On further investigation this flatness was found to be due to a complete absence of the sternal fibres of the left pectoralis major muscle. The clavicular head was present and more developed than its fellow on the right.

Miss Nicholson, Principal of the massage department at the Royal Victoria Infirmary, Newcastle-on-Tyne, very kindly tested his electrical reactions for me, but no response could be obtained either with the faradic or galvanic currents.

The condition would appear to be congenital in origin, as his mother gives me a history of a perfectly normal and natural delivery, so that any questions of a birth injury such as Erb's paralysis is improbable, while no history suggestive of an anterior poliomyelitis is obtainable.

The man has now two months' service and has been able to carry out his gymnasium work quite satisfactorily.

I am indebted to Major J. J. D. Roche, R.A.M.C., officer in charge, for permission to publish this case.

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**Echoes of the Past.**

**HONG KONG.**

A COLLECTION OF FRAGMENTS, LITERARY, STATISTICAL AND HISTORICAL WITH SPECIAL REFERENCE TO 1845 AND 1865.

BY MAJOR W. K. MORRISON, D.S.O.;
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(Continued from p. 395).

With reference to the occurrence of fever, it is of interest to record that there were forty-seven deaths from remittent fever in 1860, while in 1873 the Colonial Surgeon in his annual report "strongly animadverts on the increasing prevalence of continued fevers of a grave type, which he attributes to the defective drainage, but the subject has not yet received the attention it deserves."

Intemperance played a certain part in the causation of disease, and the "consumption of ardent spirits" was readily accepted by some as the primary cause of much of the sickness. "Sailors and strangers were those who suffered the most, because they had a jollification to celebrate their arrival and were next day dead and buried."

In the annual return for 1845, there are six cases of delirium tremens with one death, while only thirteen cases of "ebrietas" with no deaths are recorded. Yet in 1861 the number of cases admitted to hospital for "ebriositas" is 172. One witness stated how an urgent call was received from Stanley Barracks for sudden illness, but on arrival there twenty-three
men were found lying in a state of intoxication. While another records that he saw through his glass men bathing at noon-day in the middle of the hot weather, and alternately drinking sham-shui which they had purchased from the occupants of a sampan near by.

A classical education is supposed to be a particular advantage in the medical profession, but such nearly failed to come to the rescue in explaining the unusual disease of punitus—twenty-four cases in Hong Kong, 1845. Corporal punishment must have been a terrible affair in those days, and let those who doubt that the number of lashes were given in hundreds, turn to the appendices of the Parliamentary Report. It is recorded there of one man that he was awarded 125 lashes. An asterisk indicates a foot-note, where it is recorded that he only received twenty-five lashes, as the surgeon intervened. Other men have the award of lashes in hundreds, but no asterisk indicates that they received other than the full amount. From the Army Medical Reports perused, it is obvious that all the men who received corporal punishment were carried to hospital afterwards. In 1865 it is recommended at Victoria Gaol, that a better form of whipping-post should be adopted to stretch the back, so that the strokes can be applied with more regularity. It is suggested that, in the case of more than two floggings being ordered for the same individual within six months, the intermediate one should be given on the buttocks. The object of this is to meet the difficulty of getting the skin sufficiently healed within two months so as to bear a second flogging. The appendices in the report also show a small number of men to be branded "D" "B.C."

But the prisoners of the regiment, if they escaped corporal punishment, were often doubly fortunate, as it is recorded that the healthiest men in the regiments were the prisoners because they had no night duty to perform, and had every night in bed and so no night-exposure to the miasmatic poison. The question of the origin of the miasmatic poison gave rise to all sorts of speculation, and for many years the most popular belief was that it came from disintegrated granite. The Colonial Surgeon of Hong Kong in 1848 stated: "The idea of this fearful epidemic (Hong Kong fever) being the product of malaria from ‘decomposing granite’ is founded on an ignorance of both Chemistry and Geology.” In 1875, it is written that “the improved health in Hong Kong is due to the precautions taken to avoid as far as possible disturbing the earth in the vicinity of barracks.” In 1893, two officers, one whose obituary notice was just recently in the Gazette (Colonel F. E. Barrow) and Colonel H. E. Paterson, stated most definitely that disintegrated granite, per se, had no connection whatever with malarious fevers. Yet the frailty of the medical profession is such, that even in the following year a new medical officer has no hesitation in proclaiming, in no uncertain voice, his firm conviction that disintegrated granite is the cause of Hong Kong fever.

Even in 1929, I have met one of the gentler sex, who had herself suffered from fever due to the ill-effects of imported disintegrated granite!
Dr. Snell states: “In Hong Kong (1864) there is some peculiarity of the soil, which is a red yellowish clay, intermixed with disintegrated granite, and which, even when undisturbed, contains and gives off the miasmatic poison of ordinary intermittent fever: and when disturbed gives rise to remittent fever of a low typhoid type, highly and rapidly fatal in results, which type of fever proved so notoriously fatal in the early days of the settlement. The site of Victoria is now built over, and the fever is exceedingly uncommon. The virgin soil is covered by houses, roads, gardens and well planted with trees.” “The town now (1866) is a healthier town than most of the others in the eastern tropics. But outside the town, wherever there are cuttings and excavations for new bungalows going on, such provide a fruitful source of fever.”

The same idea gave rise also to the opinion that a large amount of sickness at Stanley and elsewhere was due to the fact that the parade grounds were not constructed until the barracks had been occupied. The troops were, therefore, exposed in the early days of their residence to the noxious effect of the turned-over soil.

Such was the opinion held for a long time, and when the question of permanent barracks for Kowloon was first discussed plans were issued for the construction of a “trial hut”; the hut to be built, and left unoccupied for a period, to get rid of the poison of the disintegrated granite. These plans did not bear fruit until 1866, as there was difficulty about the site and also about the final outlay of the permanent barracks.

One shrewd witness, in the subsequent inquiry, gave it as his considered opinion that just as much information would have been obtained by erecting the trial hut in Hyde Park!

In 1860 the question of the Appropriation of Kowloon, the peninsula of the mainland to the north of Hong Kong Island, is entered into fully in a War Office memorandum, written by the Secretary of War.

The following is an extract: “The necessity for increased accommodation for the garrison has long been apparent to the military authorities, and the acquisition of a healthy site like that of Kowloon points at once in which direction this accommodation must be found. The annual cost of life in the garrison, and the invaliding home of the sick are so costly, that, putting all questions of humanity aside, it is well worth the while of the Government, in an economical point of view, to go to considerable expense in constructing new barracks and hospitals open to the sea breezes.”

Kowloon was handed over to the British on March 28, 1861. On December 31, the Principal Medical Officer in his Annual Sanitary Report to the Army Medical Department states: “The sanitary condition of the promontory of Kowloon is far from being good; the vicinity of the huts (bamboo and ‘Manilla’) on the north side of the camp is especially objectionable; the whole promontory is more or less surrounded and intersected in an irregular manner, by belts of paddy cultivation requiring constant irrigation. I strongly recommend that the cultivation be entirely
interdicted." Kowloon now comes well into the picture, and one has not to study it far before one realizes that Kowloon was just as unhealthy as Stanley.

The first point to notice is the very definite statement: "In Kowloon before any cuttings and excavations were started, men of the 99th Regiment in 1864, after only a short residence there, used to get similar peculiar fever to that of the original Hong Kong fever. The detachment proceeding there became sickly in about a month to six weeks. Those who remained in Hong Kong did not get the fever, whilst those who went, even for a short musketry practice, did."

When the troops were gathering for the China War of 1860 some were encamped in Hong Kong, one camp being on the foreshore at Deep Water Bay, while others encamped at Kowloon. Many of the latter, including the 1st Battalion of the 2nd Regiment, picked up there the seeds of disease, which did not produce fever until they were on service in North China.

Such fever was, therefore, "due to the miasmatic poison of undisturbed granite."

In the 99th Regiment it was noted that there was an immunity from fever of all men who were not liable for night duty.

About August 9, 1864, excavations and cuttings were begun for the general levelling and laying out of the new settlement, civil and military, the future modern Kowloon. These cuttings were responsible for a fresh outbreak of Hong Kong fever, in an epidemic form, such as had not been known for some years.

On September 12, 1864, Private Howgill of the 99th Regiment was done to death in Victoria, in a street disturbance. He had the misfortune to receive an abdominal wound from a Malay kris in a brawl with Malay sailors.

The next evening unfortunate reprisals occurred which resulted in the confinement of the regiment to barracks on the 14th. On that evening one can picture the groups of men behind the wooden railings that separated them from the main road. Suddenly a mob of sailors appeared, armed with cutlasses. Brandishing these they harangued the soldiers behind the fence. "Come out, if ye are men, and avenge your dead comrade." A number of men, answering the challenge, leapt the fence and were soon in full cry down the Praya. Unfortunately, one of the hunted, losing his nerve, jumped into a sampan, overbalanced, fell into the harbour and was drowned.

The night's work was to cost the regiment dearly. The next day orders were issued for it to quit Hong Kong, at three and a half hours' notice, and to proceed into the old huts at Kowloon. Strong protests by the commanding officer and surgeon of the regiment were without avail.

The admission rates for fever in this regiment were in September 68, October 203, November 288, and December 263, with a total of five deaths. The fever, according to Dr. Snell, was identical with the fatal and
malarious Hong Kong fever. "The prophylactic effects of the quinine were completely neutralized by the fever-producing influences of the locality."

Only ninety-one men out of 568, stationed at Kowloon from October 1, 1864, to January 23, 1865, had not been attacked with some miasmatic disease during that period.

It is an interesting fact that the Annual Report of the Army Medical Department for 1865 records the subsequent effect of this malarious outbreak in the increased figures of admissions for miasmatic disease at the Cape of Good Hope, whither the 99th Regiment proceeded, as will appear shortly, and also the increase in the same figures in the returns for Her Majesty's troops at sea.

In the beginning of February, 1865, the 2nd/9th (The Norfolk) Regiment arrived in Hong Kong harbour on board Her Majesty's screw troopship "Tamar," and relieved the 99th, who embarked for the Cape of Good Hope.

On the journey to the Cape ninety-nine admissions are shown for miasmatic diseases. Their arrival is recorded by Colonel Jenner, commanding the 2nd/11th (The Devonshire) Regiment, in a most moving account.

"When the 99th Regiment arrived at the Cape they were so decrepit that they could not march to their camp. The roads were strewn with men trying to march up with their band. The whole road was strewn with men and discarded packs. Out of 250 (who disembarked at this port), not more than 45 got to the camp without assistance. The camp was two miles away through sandy soil."

One can imagine what thoughts Colonel Jenner must have had as he realized that he was under orders to take his own regiment to the place that had reduced the 99th to such a plight. His misgivings would have been greater had he known that Dr. Dick, the P.M.O. at Hong Kong, had already written to superior authority in the following terms:—

"I very much fear that, if a second regiment is sent to Hong Kong before proper provision is made for its reception, the measure will defeat its own object, and that should a force be required for any emergency, after a residence of one hot season in the Colony, one of the regiments will be totally inefficient as regards any active military service; and that, should Hong Kong be visited by another unhealthy season, the risk of very serious mortality amongst the troops will be greatly aggravated by the impossibility of adopting any efficient sanitary measures. I need scarcely refer to the alternative of hired buildings for the occupation of troops, because suitable ones could not, I believe, be obtained at any cost. I would beg for the delay, if possible, of the despatch of a second English regiment to Hong Kong until proper accommodation be provided for it."

This request for delay was ineffectual and by an unfortunate coincidence Her Majesty's screw troopship "Tamar" made a record run, from the Cape to Hong Kong in forty-nine days, with the second English regiment on...
Hong Kong

board, the 2nd/11th Foot, bringing the regiment at least one month before it was expected. Difficult though it had been before, the accommodation question became impossible of satisfactory solution.

What a plight for Colonel Jenner, when he received orders to disembark his headquarters wing to occupy the huts recently vacated by the 99th!

He protested and was joined in his protests by Captain Stirling, the Commander of the "Tamar," who told him that to go to Kowloon was to go to certain death. "If you go there, your regiment will be dead in a month." But he had no option. He had not long to wait before his worst fears were realized. At the same time too, he saw part of his regiment off to Stanley, of evil reputation, and saw also others of his men housed in go-downs, where they had to cook out in the glare of the summer sun without cover and without topees, and for other purposes had to adjourn to the bush adjoining. On June 30, 1865, thirty-one days after his warning from the Commander of H.M.S. "Tamar," a typhoon struck the Island. "After it was over I had to go to Kowloon in the evening. There should have been 240 to 250 men on parade at 5.30 p.m. When I got there only thirty-six paraded and before the roll could be called twenty of these had fallen out. I dismissed the remainder and ordered the roll to be called by companies. I went to look for the men myself, and found them lying in the church or chapel as they call it. I do not know how to describe it, they were lying on the floor covered over with blankets and greatcoats in a state of fever and ague." Later he says: "I have seen them go down 120 on parade at a time. They had very excessive night duties to perform, and I told the adjutant, that, if he put a man on guard with only one night in bed, I would place him under arrest. Wear accoutrements? The men of the regiment could not wear their belts, their spleens were so bad. They never wore accoutrements for four or five months. Eight or ten families were sent to live at Kowloon and the children began to die at the rate of three or four a day."

Colonel Sankey, commanding the 2nd/9th Regiment had a similar tale. "I had a guard of 110 men over at Kowloon for a fortnight, and when they returned to Hong Kong nearly all had to go to hospital with fever. Cuttings were going on to an enormous extent, and some of the officers' huts were actually taken away by the cuttings. Every person, who had experience, said, 'of course we shall have more sickness while the cuttings are going on.' The cuttings were for the site of a new town at Kowloon. Several acres of ground were levelled and the stuff was thrown down to erect wharves and piers. No punkahs were allowed at Kowloon, owing to the supposition that it was much cooler from the effect of the monsoon. The men of the battalion could not sleep on account of the mosquitoes. The wind of the punkahs would have kept them away. Instead many of the men used to go out and sleep in the long grass round the barracks to get away from the bites of the mosquitoes. I was speaking to the Captain of H.M.S. 'Cormorant' the other day, and he told me that in Hong
Kong, in 1865, he lost eighteen men by death out of seventy-two, and the health of the remainder was such, that he could not put out to sea.” These two unfortunate regiments, the 2nd/9th and the 2nd/11th, suffered very heavily. From June 1 to October 20, 1865, the former, with an average strength of 839 men had 1,354 admissions with 29 deaths, whilst in addition there died 6 women and 24 children; the latter regiment with a strength of 704 had 1,261 admissions with 43 deaths, in addition there died 3 women and 48 children.

The total deaths from paroxysmal fever in 1865 for these regiments was twelve in the 2nd/9th and thirty-three in the 2nd/11th. In this year there stands out the firm and unflinching attitude of George Saunders, Surgeon, 2nd Bn. 9th Regiment. He was acting principal medical officer, and there is many a word of praise for him in the evidence.

On August 24, 1865, he asked for transport for his many invalids to England, but on August 31 found that his application had been forwarded by the acting local commandant to the General Officer Commanding, who was absent on inspection duty in Japan.

He therefore writes: “The consequent delay (one month) ere a reply can be received is a most solemn responsibility; many of these men will have perished, whose lives might otherwise have been saved. There are women and children also, who would succumb to this climate, whose lives might be preserved by immediate removal. You will, I trust, bear with me in making these remarks, as I am solely moved by a deep sense of duty and the cause of humanity.”

The reply is couched in curious language: “Instructions have been given to supply the transport you require. I have to add that your statement is so forcible and rendered in so humane a spirit, that I congratulate myself upon its receipt, as it enables us to anticipate his Excellency the Major-General’s instructions on this subject.”

There is something particularly sad about the fate of those unfortunate invalids who never lived to see their native shores again. One can see the ship well under way, Hong Kong fading in the distance, and yet out of 254 invalids in 1865, sixty-six died on the journey home!

It is recorded of one ship with invalids from Hong Kong, how shortly after they had sailed, the officer in charge of invalids heard for the first time that he had ninety tons of gunpowder on board as cargo. He organized what fire-picquets he could from the invalids, but they were small in numbers and of miserable physique, yet he had the pleasure of extinguishing two fires with their help on the way home.

Thus have we seen now that by invalidism and death was the forecast of Dr. Dick, P.M.O., fulfilled.

But he had not long to wait before he was called upon for his explanations. The Major-General had gone off on inspection tour. Dr. Dick, waiting until he was satisfied that all that could be done in the way of accommodation, under existing local conditions, had been accomplished,
left his office in the care of the able Dr. Saunders and proceeded after his General to Japan. Three letters from the authorities at home, written at the end of 1865, reached him and asked practically the same question: "Explain why you were absent from Hong Kong during the sickly season, and at a time when there is such an amount of sickness amongst the troops, and are at a station, where the climate is so good, the force so small and healthy, and for whose care the regimental officers are quite sufficient. His lordship will reserve his judgment until he is in possession of a full report from you on the whole case."

It was not until March 26, 1866, that it occurred to those at home to follow up these first letters with one addressed to the Major-General Commanding himself.

"It is regretted that the previous letters did not more distinctly call for an explanation of the conduct of other officers besides the medical officers."

Dr. Dick's reply was thus: "I went on my annual tour of inspections of the 67th (The Hampshire) Regiment and the 20th Regiment, the former at Shanghai and the latter at Yokohama. At the latter station, the headquarters of the command had been established before my arrival. I would myself have accompanied the General and his staff had the business of my office permitted it, as I have always understood, that the proper station of the principal medical officer is the headquarters of the command, wherever it may be, and in taxing my recollections to the very utmost, I can remember no case where it has been otherwise (and I never had the least shadow of a doubt on the subject until the receipt of your letter), but as soon as I was made aware of the sickness among the garrison at Hong Kong I lost no time in returning to that station. The causes of the sickness, past and present, are another question, but I venture to say, and I say advisedly, that they could not have been effectually controlled at any period, after the arrival of the 2nd Battn. 11th Regiment, by any local medical authority, even though he had been armed with full power to act as he thought necessary in the promotion of sanitary measures."

Subsequently he wrote on February 9, 1866: "Since my arrival here, almost four months ago, I have been engaged in the active discharge of my duty, and that the garrison has continued very sickly almost up to the present time."

In his evidence, the principal medical officer refers to the alleged shortage of medical officers. The medical officers were worked hard, and after the death of Assistant Surgeon Macintyre, Dr. Piper, the assistant surgeon of the 2nd/9th, had to look after the 2nd/11th as well. Two other medical officers were on the sick list, but at no time, Dr. Dick states, was there any anxiety about the number of medical officers available, owing to the willing co-operation of the medical services of the Senior Service who were always willing to come forward and help in emergency, should such have occurred.
It is interesting to record that one of the attempts to improve the health of the garrison was the provision of a sanatorium at a height of 1,670 feet on Victoria Peak. This was very shortly afterwards closed down, owing to the continual occurrence of dysentery amongst the soldiers transferred to it for convalescence. The dysentery, which was due presumably to some carrier among the staff, was at the time attributed to the altitude. After this, as far as possible, certain detachments were sent north, but the accommodation in Yokohama was limited. Yet later, in 1878, it is recorded that Singapore was used as a convalescent station for Hong Kong! In that year the 28th (The Gloucestershire) Regiment had suffered so much from paroxysmal fever contracted at Kowloon, that they were sent to Singapore, where they threw off completely the susceptibility to the disease.

The causes of the excessive prevalence of paroxysmal fevers in 1865 were held to be: the cuttings and excavations and exposure of fresh soil; the state of the bamboo and "Manilla" huts at Kowloon; defective barrack accommodation aggravated by overcrowding; excessive night duty; and the withdrawal of Asiatic troops. This last involved an increase in the duties of the European troops, and a much greater amount of exposure to the influence of the heat. After the Parliamentary Inquiry in 1866, the reposting of Asiatic troops was decided upon with the intent of relieving the British troops of as much duty as possible. In this connection, it is well to bear in mind that even nowadays the hot weather in Hong Kong is very trying, particularly for men on exposed duties.

Musketry practices appear so frequently in the records as a cause of an increase of paroxysmal fevers, that it is worth while to review the records of such. We have noted that in 1864, Dr. Snell stated that those who went to Kowloon, even only for a short musketry course, contracted the fever, and that too before the commencement of the cuttings. In 1877 it is reported "A marked change in the sanitary condition of Kowloon for the past year has been noted. It is customary for the infantry regiments at Hong Kong to proceed by companies to the promontory every year, during the cool season, for musketry practice, being encamped in ordinary bell tents. In previous years the men benefited much by the change, but soon after the course commenced last season malarious fevers broke out amongst the men.

"After careful inspection of the vicinity of the camp, it was found that the diseases were caused by the disturbance of the soil by civilians who owned and cultivated plots of land around the military reservation. On inquiry, it was ascertained that the civilian families, residing at Kowloon, suffered to a great extent from these fevers; and that some of their native servants had died from the same causes.

"It was therefore recommended to the officer commanding the troops, that the men should be withdrawn and the musketry course suspended. This measure was adopted and the fevers declined in number after the return of the men to the garrison. Many of the diseases, however, which
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had undoubtedly been contracted at Kowloon, developed themselves after the men had been withdrawn from the mainland."

Again in the following year, 1878, it is reported: "At Kowloon, where the annual course of rifle practice takes place, and where the troops are usually encamped, malarious fevers are prevalent. The Deputy Surgeon-General recommended in consequence, that the men should be taken over and brought back daily in steam launches; this has been carried out and the result has been most satisfactory."

In 1928, a musketry practice camp was held at Chukon, Kowloon, but had to be abandoned on account of the prevalence of malaria amongst the men. The hospital accommodation was taxed to the utmost. Thus does history repeat itself.

The first military hospital in Hong Kong was presumably one of the bamboo huts at West Point. Certain it is, that all the huts at West Point, on July 21, 1841, were badly damaged by a severe typhoon. "Barrack" after "barrack" was laid flat by the violence of the storm. From the description of the event, one can imagine the plight of the unfortunate soldiers, as they collected their effects and repaired the damage of the wind and rain. But after four days, on the night of July 25-26, a second typhoon swept over the camp and demolished even the minor works they had restored! One wonders how often Hong Kong has been thus afflicted by two consecutive typhoons? Such a double event must bring despair to the chief engineer but delight to the heart of the contractor!

Prophylactic quinine has been in use in Hong Kong for many years. In 1864, the quinine cost 10s. 6d. an ounce. Those who lived in Hong Kong were given two grains daily, whilst those stationed in Kowloon received four grains daily. The quinine, originally, was given in porter, and its popularity as an issue disappeared when water was substituted. There were so many complaints, that a little rum was added to the water, when the quinine once again became popular; finally, however, water was the sole solvent. In 1887 it is recorded that quinine prophylaxis failed to keep down the paroxysmal fevers.

In 1843 the house on Marine lot No. 46 was occupied as a military hospital at a rental of 300 dollars a month. One would have liked time to identify this place and, should it have appeared convenient, to indicate the spot with a small plate. In Dr. Kinnis's report he refers to Gillespie Barracks, a hired house on the sea-front, at the east end of the town, which was formerly a European military hospital. By 1843 there was a military hospital at Stanley, which was really a converted barrack of two stories high. It was situated six feet above the parade-ground and had a northern aspect seventy-one feet above sea-level. The bedsteads were of wood with cane bottoms and "betwixt them small movable medicine stands." There was accommodation here for seventy-six patients, but at the time of the doctor's visit he found 106 patients in hospital out of a strength of 377 men of the 18th regiment. The military hospital proper
W. K. Morrison

was on the north side of the Queen's Road, a little way to the east of the North Barracks. The foundation was laid on November 3, 1844, and the building occupied on February 13, 1846. "The hospital is separated from the North Barracks by the Commissariat Wharf, the old engineer offices, several private houses and the Canton Bazaar. It has accommodation for 134 sick. There is one main building with two detached wings. The right or west wing is occupied by the R.E., who have an office and mess-house, as well as quarters for officers there; the left wing, on the east, was originally intended for a female hospital and quarters for one sick and three medical officers; but want of room in the central building has made it necessary to accommodate sick soldiers there, instead of their wives in the two principal wards. A wooden partition in the side verandah of the east wing divides the Female Hospital from the officers' quarters. On the ground floor under the officers' quarters are two rooms for officers' servants and one room marked principal medical officer. But this last, were it otherwise eligible, cannot be used as such, in consequence of its distance from that officer's house. The use of the west wing gives an additional accommodation for thirty-two sick, making a total number of 166 beds (1845). The drains terminate in Victoria harbour, the east close to Wellington Battery. A considerable part of the ground has been gained from the sea. Behind the hospital (north) is an area covered with gravel, defended from the encroachments of the tide by a thick wall of granite on the west and by Wellington Battery of nine guns on the east.

"In front of the hospital is a large area, which is separated from the Queen's Road by a dwarf wall, surmounted by a wooden railing. These areas have been tastefully laid out by the engineer department in gravel walks and grass plots and planted with trees, shrubs and flowers.

"Opposite the hospital, on the other side of Queen's Road is Artillery Hill, where the native hospital is on the brink of a hill, which has been here cut away perpendicularly for the Queen's Road to pass" (Dr. Kinnis, 1846).

By 1865 the hospital ship "Hercules" occupies a prominent position, as a worn-out condemned hulk, just sufficiently water-tight to lie in a few feet of water near enough to the shore to give some hope to those on board of reaching land should a typhoon arise!

Ultimately the hospital ship "Meaneer," a picture of which adorns the walls of the C.O.'s office in the present Military Hospital at Hong Kong, became the Military Hospital after the Parliamentary inquiry of 1866. She appears frequently in the notes of these times, and led to much correspondence. In the typhoon of 1874 she suffered a good deal of damage, one result of which was the provision of two naval petty officers to take nautical charge of her in typhoons. Another was the provision of a covered-in rowing boat, instead of the steam launch asked for, and more often than not, the boat, being too heavy, was blown down the harbour and had difficulty in making the ship's side in any breeze. One would
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like to know how the orderly medical officer fared in these days. A casualty ward was maintained on shore for accidents and urgent sickness occurring at night. The principal medical officer in 1874 records, "I think it very questionable, if the advantage of having the hospital afloat counterbalances its many disadvantages. The Naval Authorities have a convenient hospital on shore."

What a curious position, the Naval Hospital ashore and the Military Hospital afloat!

The new Military Hospital dates from 1901, and is an excellent building on Bowen Road, overlooking the harbour from about 400 feet up the hillside. The original plans included a family hospital, which, however, did not materialize.

Bowen Road is the path over the main water-conduit, and until recently, dhoolies and wheeled-stretchers were the only means of transport for the sick. In 1929, a "Baby Austin" was converted locally, by the Royal Army Ordnance Corps, into a miniature motor ambulance, which takes one lying case all the way up to the hospital—almost into the reception room itself!

In conclusion, the question of paroxysmal fevers in Hong Kong and Kowloon may be reviewed and brought up to date. Malaria was present before cuttings and excavations were begun, the prevalence of the disease was only increased through the importation of carriers and the provision of more breeding places. The benign tertian type has predominated recently, though in some previous years both benign and malignant malaria have been equally prevalent, e.g., in 1906 there were 139 malignant tertian and 134 benign tertian cases. In that year, eight quartan cases are recorded, and in 1912 two other similar cases occurred, and even now an odd case of such is diagnosed in the laboratory. Occasional cases of malaria are sent in from Mount Davies, Mount Austin Barracks and Stonecutters' Island. The disease may be said to have been prevalent at times recently, at Lyemun Musketry Practice Camp, Kowloon, and the New Territories.

A new epoch awaits Stanley, where a magnificent college, St. Stephen's College, has been erected on the site of the old barracks.

In the town of Hong Kong, in the vicinity of the barracks and hospital, no anopheline breeding-places have been discovered recently, though ample facilities would appear to exist for such along the many watercourses down the hillside. It may be noted that there was an outbreak of malaria at Bowen Road Hospital in 1910. Numerous breeding places have been found however, where literally countless numbers of culicine larvae have been observed. No full explanation is yet forthcoming as to the absence of malaria in one year, with marked prevalence in the same place and at the same season in another year.

When the Shanghai Defence Force resided at Kowloon, there was no epidemic of malaria, and by some it was reasoned that malaria did not occur
there. What a contradiction the experience of the musketry camps has shown this to be! In some years the camps improved the fitness of the men. In other years—even as recently as 1928—the camps had to be abandoned. Sai Wan abandoned in 1846; Lyemun, next door, still giving rise to malarial fevers in 1929!

No one can say yet that Hong Kong, Kowloon and the New Territories are free from paroxysmal fevers. The appointment of a new Principal Civil Medical Officer, with a special knowledge of malaria problems and anti-malaria work, has rightly given rise to a spirit of optimism. In some countries, the incidence of malaria is indicated, in no uncertain manner, by a falling off in the annual successful output of labour, and so anti-malaria measures proceed rapidly. In Hong Kong the Annual toll of malarial sickness does not readily show itself, but one feels sure that the day is not far distant when at last the administration will be in a position to declare that the danger of paroxysmal fevers no longer exists within their territories.

BIBLIOGRAPHY.

The standard work on Hong Kong is the History by Dr. Eitel, a copy of which work it has not been possible to obtain in the preparation or revision of these notes. The main reference is the Official Report of the Select Committee of the House of Commons on the Mortality of Troops in China, a copy of which was kindly loaned by Mr. J. Barrow, of the Colonial Civil Service (Hong Kong), son of Major-General H. P. W. Barrow, and grand-nephew of Colonel F. E. Barrow, whose views on "disintegrated granite" have been recorded. The extracts in the beginning of the article are taken from H. C. Sirr's "China and the Chinese," 1848.

The pamphlet, containing the lecture by Dr. Kinnis, was found by accident in the City Hall Library. There are many extracts from the bound volumes of the "Chinese Repository," 1841. One of the best volumes of this was missing; according to the index it contained plans of very early Hong Kong.

The remaining works consulted were:

Army Medical Reports.
Power's "China."
Captain Ellis's "Journey from Hong Kong to Manilla."
*Transactions of the Bombay Medical Society*, 1847-1848 (Dr. Kinnis).