Medical-topographical report on Wei-Hai-Wei (Weihai, Shandong Province, China, leased to the British Government), by Major William Henderson Starr, RAMC, annotated (by the author), including re the capture of Weihai by Japanese forces (in the 1930s)

wellcome collection

Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
https://wellcomecollection.org

MEDICAL - TOPOGRAPHICAL REPORT ON WEI-HAI-WEI.

From. Col. G. H. Starr
Corygn Cottage
Gittisham
Honiton
Devon

MEDICAL-TOPOGRAPHICAL REPORT

ON

WEI-HAI-WEI.

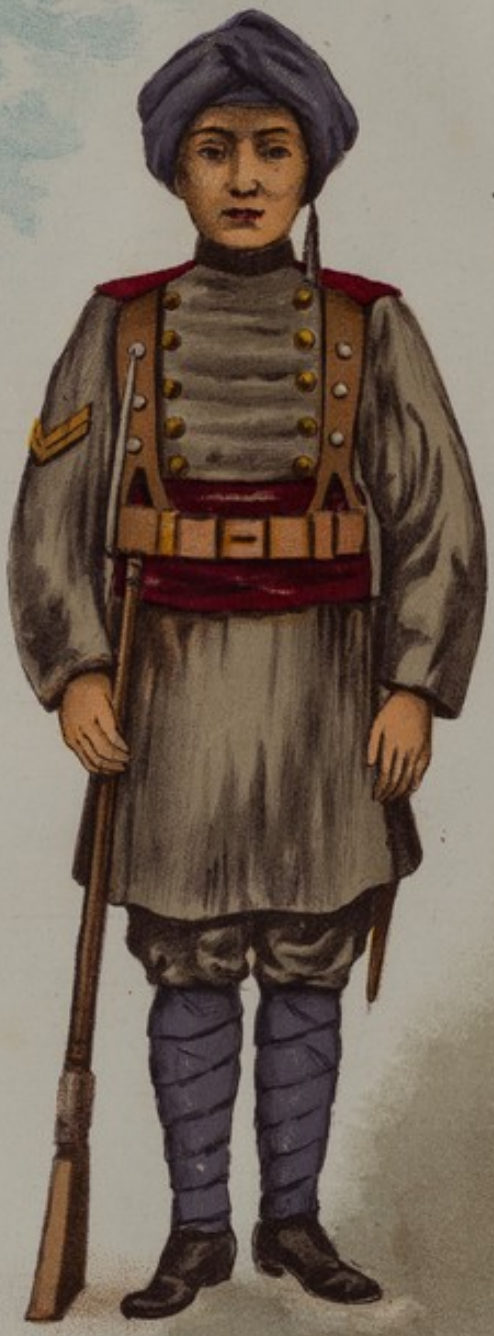
BY

MAJOR W. H. STARR, R.A.M.C.

LONDON:
PRINTED FOR HER MAJESTY'S STATIONERY OFFICE
BY HARRISON AND SONS, ST. MARTIN'S LANE,
PRINTERS IN ORDINARY TO HER MAJESTY.

1900.

Wt. 18266 200 11 | 00—H & S 5162 P. 00/754



1st Chinese Regiment

E.Weller & Grahams Ltd Litho.

MEDICAL-TOPOGRAPHICAL REPORT

ON

WEI-HAI-WEI.

By Major W. H. STARR, R.A.M.C.

Situation.

The territory leased to the British Government in China, generally known as Wei-hai-Wei, is situated on the north coast of the province of Shantung, in the prefecture of Têng-chou-fu, about midway between Chefoo, a Treaty port, and the north-east promontory.

Forty miles by sea to the east of Chefoo the coast-line forms a deep bight, which has the island of Liu Kung to the north-east, thus providing shelter for the commodious anchorage known as Wei-hai-Wei Harbour.

This harbour is 471 miles distant from Shanghai, 254 miles from Newchwang, and 284 miles from Tientsin, which latter place is connected by railway with Pekin, a distance of about 88 miles. The distance to London viâ the Suez Canal, Singapore, Hong Kong, and Shanghai is 11,140 miles.

Extent of territory leased by British Government.

The territory acquired consists of the island of Liu Kung, some 2 miles long by ¾ mile broad at its widest part, and a strip of land extending along the coast of the mainland, chiefly around the harbour of Wei-hai-Wei, 10 miles in breadth from the sea, and 30 miles (of coast line) in length, comprising an area of 285 square miles, with a population estimated to be 140,000—150,000 souls.

Extent of British sphere of influence

This includes all promontory cut off by 121° 40′ East, with a coast line of 250 miles, an area of 1,790 square miles, containing a population estimated at 959,650.

Routes to Wei-hai-Wei.

The fine steamers of the P. and O. Company, Messageries, Nippon Yusen Kaisha, and many others run to Shanghai viâ Suez Canal, Singapore, and Hong Kong. Average duration of the voyage is forty-five days by sea route. Another route is viâ America and Japan, a few days shorter than the Suez Canal route.

From Shanghai the well found and equipped coasting steamers of Messrs. Butterfield and Swire, Jardine, Matheson, and Co., and Nippon Yusen Kaisha line sail usually several times a week for Chefoo and the northern ports, and frequently call in at Wei-hai-Wei, which place they must necessarily pass very close to in rounding the promontory. The passenger accommodation is good on all these lines.

From the ports of Japan there is regular communication by the fine vessels of the Nippon Yusen Kaisha line.

Siberian Railway.

In a few years the Siberian railway will probably be finished to Port Arthur, which is distant only about 100 miles across the Gulf of Pechili, when the journey to St. Petersburgh may be a matter of some seven days.

Disembarkation.

Steamers lie off the island of Liu Kung, close in shore, passengers and freight being landed by boats and lighters.

There is an iron pier, but at present it is out of repair, so is only available for steam launches.

Accommodation on arrival.

There is a boarding house, or hotel, on the island kept by a European, where officers can find temporary accommodation until quarters are obtainable.

Administration.

Colonel Dorward, R.E., is now Civil and Military Commissioner and also Officer Commanding Troops. His court is held on the island.

There is a small police force of natives established on the island under a European superintendent.

The description of Wei-hai-Wei may best be given under the following heads :—

I. The island of Liu Kung, commonly known as Liu-kung-tau, and the harbour of Wei-hai-Wei.
II. The mainland territory, including Ma'ton, where the first Chinese regiment is being raised.

Liu-Kung-Tau.*

Brief description of Liu-kung-tau.

The island of Liu-kung is of leg-of-mutton shape with the broad end to the west, and terminating at its eastern extremity in a point with detached reefs of rocks which formerly were connected with the island. Ships arriving from Shanghai and the south enter the harbour by its eastern mouth. The general appearance of the island is that of a bare rock of a brown colour, except in the spring, when crops give some sign of fertility. It is practically bare of trees. It is 2 miles in length and $\frac{3}{4}$ mile broad at its western end, the widest part. It has an area of $1\frac{1}{4}$ square miles.

A range of hills traverse the island from west to east, the highest point, known as Centurion Hill, is 510 feet above the sea. There was a signal station on the summit of this hill which is now to be replaced by a battery mounting two heavy guns ; the signal station has been transferred to an adjacent height. The range o hills is most lofty at its western end, and slopes by easy gradients to the eastern extremity of the island, which is nearly flat.

The north side of the island is formed by lofty and precipitous cliffs, with deep water close to the shore. There are no habitations whatever on this side of the island ; on the south side the hills slope more or less gradually down to the sea, and it is on this side that the villages and dockyard are situated.

Several deep ravines have been cut by rainwater down the southern slopes, and dams have been built across two of these, forming reservoirs for rainwater.

Every foot of available ground has been cultivated by the

* "Tau" is Chinese for island.

industrious Chinese, but the crops are very poor. The slopes of the hills are terraced, and cultivation often extends nearly to the summit of a fairly steep hill.

There are two villages on the island, the most considerable being situated near the west end, and is largely taken up with shops and storekeepers. The other one, known as the east village, is smaller, and mostly occupied by fishermen. On the summits of the hills are the remains of several Chinese forts built under foreign supervision and now dismantled.

A low stone wall built by the Chinese extends along the hills the whole length of the island. There are also the ruins of a large Japanese hospital which was established here during the war.

At the south-western end of the island is a small isle known as Observatory Island occupied by a Chinese fort, and connected with Liu-kung-tau by a solid stone causeway, which helps to form a boat camber, situated between the two islands.

The late Chinese dockyard, with the remains of a good iron pier, and the recreation and parade ground, are situated at this end of the island, and comprise the largest extent of flat ground available in the island.

Garrison.

At present a detachment of marines form the garrison. They are quartered at the west end of the island in temporary barracks made of converted Chinese houses. They number about 120.

A detachment of Royal Engineers of thirteen warrant officers, non-commissioned officers and men are stationed on the island, with two Royal Engineer officers.

The detachment Royal Engineers are in temporary quarters of similar nature to that of the marines.

The Royal Engineers do not draw rations, but have a mess of their own, and enjoy a varied diet, and their health has been excellent.

Buildings on the island.

The existing buildings are all of very poor description, being merely Chinese cottages with walls of rubble masonry, but built without bond, and cemented with mud. Roofs are covered with Chinese pantiles embedded in mud or thatched with seaweed, at best only fit for temporary use.

Queen's House.

The only pretentious building is that formerly occupied by the Chinese Governor, now known as Queen's House, which occupies a good site, and is built in the usual Chinese style, the rooms, which are lofty and spacious, being arranged round courtyards and inclosing them.

In it are located the Commissioner's office, C.R.E.'s office, Commissioner's Court, officers' quarters, &c.

The Club.

A fairly good building to the west of Queen's House has been appropriated and fitted up as a club for the navy and army officers.

Canteen.

There is an excellent canteen (wet) for the Royal Navy.

Home for sailors and soldiers.

A comfortable and well managed "Sailors and Soldiers Home" is established under civilian management where the men can get tea and temperance drinks and a light meal. It is situated on the quay and is well patronised.

Naval sick quarters.

A small naval sick quarters, with accommodation for about ten patients is under charge of a Surgeon R.N., for severe

cases from the ships, and permission has been obtained for the admission of any of the Royal Engineer detachment on the island should the necessity arise.

Recreation ground. There is a good recreation ground, much used by the Royal Navy for cricket, football, hockey, and tennis.

Rifle range. A new rifle range has been constructed for the use of the navy at the eastern extremity of the island.

Roads. Formerly only paths existed, now roads are being constructed from one end of the island to the other.

Sanitary condition Was very bad, but since our occupation progress has been steady, if perhaps, somewhat slow. The want of money being the chief cause of delay. Old and useless buildings have been pulled down, thus opening out the crowded parts. Surface drains built and the place kept clean.

Public latrines and urinals have been built.

I have recommended that the dry earth system of conservancy be established, and a destructor for refuse be erected. The latter is now nearly finished and the dry earth system will be carried out.

Washing. A tank for washing purposes, with a sufficient and clean water supply is needed, and has been recommended.

Burial ground. A cemetery for Europeans has been provided, as also one set apart for the natives.

Overcrowding by natives. As the island is of very limited extent it is important to prevent overcrowding by a native population, as has occurred at Gibraltar and other places.

The native residents should be strictly limited as to numbers.

As a matter of fact, overcrowding is not probable, as the land has nearly all been bought by the War Office or the Admiralty, and of late, the population has been decreasing, owing to the houses being pulled down on transference of the land.

Population. The population of the island may be estimated at about 2,500 natives.

Soil. The rock is of igneous origin, syenite is largely present, weathered and disintegrated in some places, and clayey beds are found.

The soil is of poor quality and the crops are scanty.

Marshes. There are none.

Vegetation. Grass is scanty and trees are practically absent, except for a few about the east village.

Trees should grow well if planted. The Chinese cut down everything for the sake of the wood.

Natural productions. Building stone is obtainable.

With the exception of a few cows kept for milk, there are no cattle on the island.

The natives own a few mules and donkeys.

Dogs are very plentiful.*

Insect life is largely represented. Mosquitos are abundant,† but there has been no malarial fever this year. I have not yet had the opportunity to find out whether the *Anopheles claviger*

* Dogs were very plentiful, but have been nearly all destroyed.

† Practically there have been no mosquitos since 1st October.

is present. Frogs, rats, and mice are common, and some few snakes of a harmless variety are to be found. There are two cereal crops a year. Millet and sweet potatoes are the chief products.

Bathing.

Excellent sea bathing is obtainable. Boating and sailing are good.

Food supplies.

Practically no food of any description for Europeans is produced on the island. It is all brought over from the mainland.

Market gardens could be introduced and doubtless would prove very productive. Supplies are good and plentiful. Beef, mutton, pork, fish, vegetables, and fruit. Duck, pheasant, hares, &c., are plentiful in season.

European stores.

There is no want of Chinese storekeepers, and some European firms are represented by agents. The price of stores generally is high and above that of Hong Kong or Shanghai.

Coal* and oil are very dear.

Water supply.

The native source is from shallow wells, open to contamination.

The water supply was condemned by the authorities before my arrival, apparently on information derived partly from Japanese sources.

The military residents were formerly supplied with condensed water from H.M.'s ships.

Tanks of capacity of 24,000 Gals have been erected.

A distilling apparatus has now been erected on shore capable of turning out some 70 tons a day, and all residents (European) are supplied from it. The water is conveyed in kegs to their houses, and is distilled from the sea.

When the barracks are built it is proposed to provide tanks and pump the water up from the distiller.

Police.

There is a small detachment of Chinese police under the supervision of a European superintendent.

A lock up, yard, and charge room, &c., are in course of construction.

Climate and meteorological observations.

Situated in the north temperate region on the sea coast, the climate presents neither extremes of great heat nor cold.

It compares very favourably with that of Shanghai or Hong Kong.

One year varies much with another, and the year under consideration has been an abnormally dry one.

The weather begins to get warm in May; June, July, and August, are the hottest months.

It is during these months that thick cold fogs are prevalent, and often the atmosphere seems saturated with moisture. Boots and other articles in a room become covered with mould in a single night.

January, February, and March are the coldest months, but even in the winter bright sunshine is the rule.

The cold is very intense when a strong north wind prevails.

14° Ft. is the lowest temperature recorded. The barometric observations are equable. September, October, and November are the most pleasant months.

---

* Fair coal costs about 23*s.* per ton.

Meteorological Observations taken at Liu-Kung-Tau, China, for the Year ending October 31, 1899.

	Reading of barometer.				Temperature.						Rain and snow.	
	Highest in month.	Lowest in month.	Range.	Mean in month.	Highest in month.	Lowest in month.	Range in month.	Mean of all highest.	Mean of all lowest.	Mean daily range.	Number of days it fell.	Amount collected.
November	30·38	29·92	0·46	30·13	65	27·5	37·5	56·2	45·7	10·5	5	0·85
December	30·57	29·67	0 90	30·17	58	21·5	36·5	46·1	33·3	12·8	5	0·64
January	30·54	29·85	0·69	30·24	48	14	34	43·7	25·2	18·5	4	0·14
February	30·33	29·97	0·36	30·16	52·5	20·5	32	42·3	28·1	14·2	3	0·63
March	30·29	29·57	0·72	30·04	64	29	35	49·8	39·7	10·1	4	0·31
April	30·23	29·52	0·71	29·75	80	33	47	61·2	45·9	15·3	2	0·01
May	29·99	29·55	0·44	29·81	88	50	38	74·6	57·0	17·6	5	0·66
June	29·82	29·22	0·60	29·59	84	56·5	27·5	77·2	63·2	14·0	12	4·20
July	29·63	29·28	0·35	29·48	88	63	25	80·7	70·9	9·8	11	9·59
August	29·81	29·30	0·51	29·62	91·5	64	27·5	82·5	72·3	10·2	6	3·71
September	30·05	29·99	0·06	29·83	85·5	53	32·5	77·8	64·7	13·1	5	1·81
October	30·32	29·74	0·58	30·00	76·5	41·5	35	63·1	51·9	11·2	5	0·64
Mean	30·16	29·63	0·53	29·90	73·4	39·5	33·9	62·9	49·7	13·1	67	23·26

Rainfall.

Total rainfall for the year ending October 31st was 23·26 inches, which was very unequally distributed, as no less than 17·50 inches fell in June, July, and August.

4·12 inches fell in 18 hours in July, which was the rainiest month, with a total of 9·59 inches.

Thunderstorms are common in May and June. Snow fell in November. 5⅝ inches was registered on November 27th, 1898.

Punkahs.

Are not a necessity except in hospital in special wards, but are a great comfort, and were in use by all the Europeans in the hot muggy weather. Major Penrose, R.E., kindly allowed me access to the meteorological observations taken on the island, from which I have been able to compile the attached table. Unfortunately they are not in possession of a wet and dry bulb thermometer or minimum thermometers.*

General conclusions.

The island is very healthy and the climate a good one.

With good sanitation properly carried out and the native population restricted in numbers and kept under sanitary supervision, the place is capable of being kept in the very best of conditions and should be as healthy as any foreign station we possess. It should form an excellent convalescent station for the troops at Hong Kong, who doubtless would derive much benefit from the change.

The Mainland.

The province of Shantung.

The territory acquired by the British Government on the mainland is all situated on the coast of the province of Shantung. A few remarks on the province generally may not, therefore, be out of place.

Meaning of the name.

The Chinese characters for 山 Shan 東 tung are ideographic symbols. The first is supposed to represent jagged mountain tops, *i.e.*, hills; while the second is formed of 木 "trees," and 日 "the sun" shining through among the branches, *i.e.*, "east," hence the meaning of the name Shantung is "East of the Hills."

The Shantung province is washed on three sides by the sea, and is reputed to be one of the healthiest provinces in China, and is one of the most interesting and celebrated in Chinese history.

It contains the birthplace of Confucius, and one of the five sacred mountains, 5,050 feet in height, called T'ai-shau, and known as the Tung-yo or east peak, which is looked upon as by far the most sacred.

It is mentioned in the "Shu King" as that where Shun sacrificed to Heaven (B.C. 2254).

Area.

It has an area of 55,984 square miles, and is nearly as large as England and Wales.

Population.

The Report of the Imperial Chinese Customs for 1881 gives the population of this province as 29,000,000, which is larger than the population of England and Wales in 1891.

Divisions.

It is divided into ten departments or prefectures, each called a "fu."

---

* There is a maximum and minimum thermometer.

Each "fu" is subdivided into the three following subdivisions of decreasing importance :—

1. Termed a "chih-li-chou."
2. „ „ "chou."
3. „ „ "hsien."

A "chih-li-chou" does its business direct with the heads of the provincial Government, "chih-li" meaning "straight" or "direct rule."

Each fu, chih-li-chou, chou, and hsien, has one walled town, the seat of its government, having the same name as the division to which it belongs. There are, however, many large centres of population, which do not fall under any of those heads.

Shantung has ten fu, two chih-li-chou, nine chou, and ninety-six hsiens.

Physical features.

The physical features of the province are most diversified.

The greater part of the province is very hilly. More than a half of the whole circuit of the province is exposed to the sea.

The Huang-ho, or Yellow River, so well-known from its disastrous floods, finishes its course on the north coast of Shantung. In this province, owing to the silt and dykes built to keep the water in, even at low water, the surface of the river is from 1 to 6 feet higher than the surrounding country.

A portion of the Grand Canal runs through the province. Plains in the north-west and south-west; while from the spot where the Grand Canal crosses the Yellow River, hills and mountains stretch north-east and south-east, and the backbone of the province, as it were, shows itself more or less prominently from the Yellow River to the most easterly point of the north-east promontory.

There are two good harbours on the south-east coast, another near the lighthouse on the south-east promontory, Wei-hai-Wei, and Chefoo,* the Treaty port, while there are others of minor importance on the Gulf of Pechili-li. Besides the Yellow River, there are no rivers of much importance in Shantung. There are some lakes, but not of any extent. Many islands are to be found round the coast.

Hot sulphur springs.

There are many hot sulphur springs throughout the province, the most noted ones being within the prefecture of Têng-chou. All the sulphur springs in Têng-chou-fu are places of great resort. Large tanks have been built in, and, in some cases, substantial houses have been erected over the baths.

The Chinese think that the waters possess great medicinal qualities.

Kiao-chow Bay is in the province, some 200 miles south of Wei-hai-Wei, occupied by the Germans in 1897 with territory leased to them.

The people.

The natives are said to be generally of larger and stronger physique than those further south. Their power of endurance is greater.

They are largely engaged in agriculture.

---

* A very indifferent harbour.

The women are generally rather under the medium size, and many of them, like the men, work in the fields. The people are very uneducated, but are usually civil and well disposed, especially away from large centres.

Superstition is rife among them, and they are suspicious and inquisitive.

Roads.

There are no good roads, and wheeled traffic is very limited. Perhaps the most important road is one from Chefoo to the capital, Chi-nau-fu. Carts can go the whole way, but part of it is very rough.

Everywhere there are numerous bridle-paths.

Methods of travel.

The traveller may ride an ass, a mule, or a pony; he may also use a barrow, sedan chair, boat, occasionally a cart, or he can travel by a shentzu.

The shentzu.

The shentzu belongs more particularly to the north, and may best be described as a large sedan chair having an arched roof, with a floor roomy enough to allow of a person lying down, but whereas the chair is carried on men's shoulders, the shafts of the shentzu rest on the backs of mules, one mule in front and the other behind.

Natural productions Animal.

Mules, donkeys, ponies are the beasts of burden. Mules are in greatest demand.

Oxen are used for tillage.

Dogs are innumerable.

Pigs everywhere abound.

Poultry, pigeons, pheasants, waterfowl, snipe, quail, partridges are found everywhere.

Fish is very plentiful, cheap, and in great variety.

Sheep can be had, and silkworms are bred.

Mineral.

Good building stone abounds.

Iron ore, ironstone, sulphur, gold, salt, coal, granite, limestone, copper ore, galena, jade stone, and saltpetre are all to be found.

Vegetable.

There are two crops of cereals per annum. Millet furnishes the principal article of food.

Millet of several kinds, rice, wheat, sorghum, maize, beans, Indian corn, and sweet potatoes are extensively cultivated.

Cabbages, onions, carrots, turnips, peas, French beans, brinjals, chilies, spinach, artichokes, and radishes thrive very well.

Fruit is plentiful, and includes peaches, apricots, apples, plums, pears, cherries, grapes, persimmons, walnuts, chestnuts, ground-nuts, and dates.

The harbour of Wei-hai-Wei.

Wei-hai-Wei harbour formed the second great naval stronghold of China, and was well defended by a fine series of modern-built forts situated all round the harbour, and mounting more than fifty big guns before it was taken by the Japanese in 1895.

It is formed by a deep and irregular indentation of the coast, and protected by the island of Liu Kung on the north. It has two entrances, the eastern being the widest, with a small island, by name "Jih," or "Sun Island," situated in the middle of the entrance, and wholly occupied by a dismantled fort, on which English-made disappearing guns were formerly mounted.

This island would form an excellent quarantine station if required.

There is a good lighthouse at the east entrance.

The western entrance is narrower and its channel deeper.

The harbour is somewhat too open to winds from the south-east, and to render it secure from bad weather (or an enemy) would require the construction of an expensive breakwater at its east entrance.

There is good anchorage for the whole of the British fleet in Chinese waters. First-class battleships can anchor within ¼ mile of the shore off Liu Kung Island, and ordinary freight and passenger steamers could berth alongside the pier if it was repaired, which is going to be done.

Dredging operations are in progress.

The shore all round the harbour is hilly and presents a picturesque, though very bare, appearance.

The west shore of the harbour is, roughly speaking, unequally divided into two principal bays by a rocky promontory at the extremity of which is a lighthouse, and, at the base, a large Japanese camp was situated, part of which is now occupied by a detachment of marines, and is known as Flagstaff Camp, there being a signal station on the adjacent hill.

Flagstaff Camp.

The lesser bay, known as Narcissus Bay, stretches from Flagstaff promontory round to Ma'ton, and has a fine expanse of sand throughout its whole extent, some 3 miles in length. Just beyond Flagstaff Camp to the north, six houses, known as the bungalows, have been built on the shore by a local company, and will probably be occupied by visitors in the summer. The Company have also built some bungalows in a very salubrious position, on a pretty bay, known as Half Moon Bay, outside the harbour, to the north of its western entrance. These remain at present unoccupied, and in the absence of a good road are somewhat isolated. This place in the future is likely to become a favourite resort of Europeans in the hot months, who require a change from Shanghai or Hong Kong.

New houses built.

On the west side of the harbour, in a low valley, about midway between Flagstaff Camp and the village of Ma'ton, and a quarter of a mile from the shore, is situated the Chinese city of Wei-hai-Wei.

City of Wei-hai-Wei.

It is square in shape, and surrounded by a stone wall, 1½ miles long with four gates. The walls are some 30 feet in height, with a guard-house over each gate, and one can walk right round the city on a rampart inside the wall.

A large area within the walls is used for agricultural purposes.

The houses are of one storey, and of the usual poor description. There is no building of note.

The population is estimated at about 4,600, and are all of a poor class. Ropemaking and general shopkeeping is carried on. Some five Europeans live in the city, including missionaries and the postmaster.

The town is filthy, and in a very insanitary condition, and it is much to be regretted that it has not been included in the British jurisdiction, as it will always be liable to prove a source of disease.

On the north and east sides of the town market gardens are under cultivation, and produce a varied crop of excellent vegetables.

about 330 villages in the Dependancy.

There is a fine range of hills on the south side of the city, the highest point Mount Goschen, being 1,350 feet high.

Small streams come down either side of the city, draining the higher ground, but they have been dry for the greater part of the year.

Between the city and seashore is a level plain, some quarter of a mile in width, part of which is used as a parade and recreation ground by the 1st Chinese Regiment.

Recreation ground.

A portion of this plain could be made into an excellent recreation ground for the mainland garrison, there being plenty of space for a race course, polo ground, cricket, football, tennis, and other games, besides being used for drilling purposes. A scanty crop of grass is already present, and would speedily increase if looked after.

Hot sulphur springs.

On this plain, opposite the west gate of the city, are situated some hot sulphur springs. Bath-houses of wood were constructed over them by the Japanese, and they are now in charge of a marine. These will no doubt be developed and utilised in the future, and their proximity to the recreation ground site should prove useful. Up to the present I have not had the means to analyse the water, but it does not appear to be strong in sulphur.

Boring for coal.

Boring for coal is being carried on close outside the north gate of the city, but it is not yet far enough advanced to say with what success.

The country all round is hilly, and every available piece of ground is under cultivation. Except around some of the villages and ancient graveyards, trees may be said to be entirely absent.

Oak scrub is cultivated on some of the hills for feeding the silkworms, and dwarf fir trees are present to a small extent on the higher slopes of some of the hills.

The hills are reputed to be rich in minerals, and small quantities of gold are obtained by the Chinese from washing by hand in the streams, but it is doubtful whether it would pay Europeans to work with modern appliances.

The remarks as to the natural productions, &c., of Shantung apply generally to the portion of territory leased by the British Government, remembering that it is on the coast and hilly, wherefore the soil is poor, and its producing power limited.

The country here is no doubt over-populated, and the people very poor.

Graveyards seem scattered about everywhere, ever forming a prominent feature in the landscape.

A road runs round the bay from Ma'ton village, past the sea front of Wei-hai-Wei city to Flagstaff Camp, from whence it continues south into the country, and it carries a great deal of traffic from the neighbouring villages. It is rough and broken in places, and streams cut through it, there being few bridges. It could easily be made into a good road at a small expense, and this will be done in time.

Village of Ma'ton, general description.

The north shore of the harbour of Wei-hai-Wei is formed by a promontory, and is surrounded on three side by the sea. This promontory is hilly throughout, most of the hills attaining a height of 900 feet.

The strata of the hills are metamorphic, consisting of beds of quartzite gneiss & crystalline limestone, cut across by dykes of volcanic rock & granite.

Situation. About 1½ miles north of the Chinese town of Wei-hai-Wei, along the north shore of the harbour, is situated the village of Ma'ton. The village has a sea frontage of half a mile, and is well protected from the bitter north winds by the closely adjacent hills.

The upper portion of the village is partly built on the lower slopes of the hills, and also along a ravine that comes down in the middle of the village.

The lower portion is built on level ground abutting on the sea, and for the most part is only a few feet above high water level.

In the Port of Wei-hai-Wei. It is the port of Wei-hai-Wei, and has a good anchorage for junks.

The people are poor, and mostly engaged in the local coasting trade and fishing.

Population. It has a population estimated to be about 1,200.

It is about 2½ miles distant from the island of Liu Kung, with which it is connected by a steam ferry. Communication is liable to be cut off at times, owing to the heavy sea in the harbour when certain winds prevail.

Climate. The climate is very much the same as that of the island, but Ma'ton is reputed to be somewhat warmer in summer and colder in winter. At present meteorological observations have only been possible on the island. The present year has been an abnormally dry one, and the surrounding country is suffering much from a drought.

1899 a very dry year.

Houses. The houses are of poor description, built in the usual Chinese style, of rubble with mud for cement and thatched or tiled roofs.

Jetty. There is a stone jetty, somewhat out of repair, that affords a good landing-place for boats or steam launches.

The shore is low and sandy and the water shallow, with a tendency to become more so as time goes on.

Water supply. Is from shallow wells, open to every kind of contamination. The water is of reputedly good quality for this part of the country.

Sanitary condition. This was filthy in the extreme, as is the usual condition in Chinese villages, there was no attempt at sanitation whatever.

Since our occupation matters have been somewhat improved, and externally the place is now kept fairly clean, and many nuisances have been abated, but there still remains much to be done.

Roads, surface drains, and public latrines are in course of construction.

The Chinese are very conservative, and it will take some time before they can appreciate the benefits of modern sanitation.

Every house has an open cesspool, these should be abolished and the dry earth system made compulsory, or, what might prove more feasible, the pail system.

A civil hospital would prove a blessing to the people.

The magnetic variation is 3° 36' West, nearly stationary.

Good camping ground for 100,000 men available & water supply adequate.

MEDICAL REPORT ON THE 1ST CHINESE REGIMENT.

1st Chinese Regiment.

The chief interest in the village of Ma'ton lies in the fact that it is here that the 1st Chinese Regiment, under Lieutenant-Colonel H. Bower, is being raised and is at present located.

Position of temporary barracks.

The temporary barracks occupied by the regiment are situated at the eastern extremity of the village, on low-lying ground just above the beach; immediately behind the barracks the ground rises abruptly some 20 feet in height, forming a perpendicular earthen cliff only a few feet from the barrack buildings. Irregular ranges of hills form the background, sloping gradually down to the sea.

Just past the east end of the barracks is a small valley, bounded on the further side by an elevated spur sloping down to the sea, with its extremity broken off, and forming rocky cliffs, with the ruins of a large Chinese fort near its extremity.

The site is not one that would be chosen from a sanitary point of view, but it was considered the most suitable place that was available, and existing buildings had to be made use of.

Nature of buildings temporarily occupied.

The various houses taken over by the regiment are all built round open courtyards in the common Chinese fashion.

The walls are of rubble masonry cemented with mud, and the roofs either thatched with straw and seaweed or with Chinese pantiles imbedded in mud. They all open out on to the main street of the village, and are of various dimensions.

As the number of the men increases, fresh adjacent buildings are acquired and fitted up.

As this can only be done at the west side, the barracks are necessarily extending gradually into the heart of the village.

These buildings, though unsuitable for the purpose, were as good as any that could be made available.

The general direction of the barracks is from east to west with a southerly aspect.

Nature of improvements.

Cesspools were removed, the rooms cleaned and limewashed, windows put in to obtain through ventilation and light, and doors, &c., fitted.

Nature of improvements in temporary barracks.

Partition walls removed where necessary, and the place generally made clean and habitable. Surface drains, ablution places, kitchens, and latrines provided. The floors of the barrack rooms are of beaten earth only.

Barrack rooms.

Are of various sizes, some being spacious and lofty, whilst others are the reverse. The cubic space is in many somewhat limited, but they answer their purpose, and all present superior accommodation to what the men have hitherto been accustomed. Shelves and pegs are provided for the kits, &c., and each man is to have a box.

The rooms are warmed in winter by American stoves, in which coal is burnt, which promises to be satisfactory.

The Chinese "kang."

The universal form of bed in use amongst the Chinese consists of an elevated platform made of unburnt bricks and mud with fire-holes underneath it, and is known as a "kang." This is

Situation.

readily heated in cold weather by burning straw, leaves, wood, or other material underneath it for a short time. On the top they put their blankets, &c., and sleep.

Beds.

These "kangs" have not been allowed in the barracks, and, in lieu thereof, each man is supplied with a plank bedstead, consisting of three planks, supported on a pair of trestles. On these the men usually place a thick grass sleeping mat, and then their blankets. These plank beds are $6\frac{1}{2}$ feet long by $2\frac{1}{2}$ feet broad, and stand at a height of 2 feet from the ground. The men are amply supplied with good blankets.

In the Port of Wei-hai-Wei.

Latrines.

Pails are in use and are emptied daily. It does not answer well at present, owing to the carelessness of the men and their habit of standing up on the seats when using the latrine and making the place filthy. It is not considered practicable to make them use dry earth properly. A new form of latrine is under consideration to meet their particular habits, and should it prove successful will be generally adopted.

Population.

Urinals.

Present a similar difficulty, buckets being in use at present, but owing to careless habits of the men, who will urinate all round outside, are not satisfactory. An improved method is to be put on trial.

Climate.

Washhouses.

Are supplied with basins, but being open are not likely to be much used in winter.

1899 a very dry year.

Baths.

Have not been provided in the temporary barracks. Provision will be made in the barracks about to be built, and is especially necessary for Chinese.

Houses.

A warm bath is obtainable at an establishment in the village, and is frequented by the men.

Jetty.

Kitchens.

Appear to be sufficient, and are supplied with native cooking places; some of the kitchens are open.

Water supply.

Water supply.

Is from a shallow well. Within a few yards of the eastern end of the barracks is the termination of a small valley and watercourse. The general direction of the valley is north and south, and it is about a mile in length. After heavy rain a perfect deluge rushes down this watercourse bringing with it a large quantity of *débris*, which is gradually forming a delta at its mouth; for the greater part of the year the watercourse is dry except for a trickling rivulet which originates in a spring at the head of the valley, and winds down the bed of the watercourse until about $\frac{1}{4}$ mile from high-water mark, when it is lost in the sand.

Sanitary condition.

Villages are situated along both banks of this small stream, the inhabitants of which use the rivulet for washing their clothes in, &c., so the water is open to every kind of contamination. The shallow well from which the drinking water for the regiment is obtained is situated on the right side of the dry bed of the stream some 250 yards lower down than the spot where the last traces of water disappear in the sand, which is some 250 yards above high-water mark, and 40 yards from the barracks. The water thus passes through a natural filter bed before reaching the well, to which I attribute its comparative purity. Immediately adjacent to the well and all around the valley the ground is assiduously cultivated by the industrious chinese, and the soil, being naturally

poor, is well manured, according to the prevalent custom, with manure made from human fæces.

Although in close proximity to the sea-shore, and only a few feet above high-water mark level, the water is not brackish, nor are chlorides present in excessive quantity. A deep well would almost certainly give brackish water.

The depth of this well from the surface is only 9 feet, of which 3 are water.

The walls are not properly steined, and it has no cover.

The water is considered to be the best in the neighbourhood.

As it was important that the quality of this water should be determined as quickly as possible, in the absence of any local means of analysis, I collected samples which were sent by direction of the officer commanding troops to the Medical Officer of Health's Laboratory at Shanghai, and a table showing the report of his analysis is attached. It was recommended to be boiled or filtered before use by all British officers and non-commissioned officers.

Iron or wood buckets, the former galvanised, are in use for conveying the water to barracks.

The native non-commissioned officers and men of the regiment use the water direct from the well.

No disease has been traceable to its use.

It may be noted in connection therewith, that the Chinese rarely drink cold water; they almost invariably drink tea or hot water. No doubt the water is as good as it is owing to the natural filtration it undergoes before reaching the well, though, of course, the filtering media must become foul in course of time.

Water is found near the surface all along the low-lying ground at Ma'ton from just above high-water mark.

On measuring the distance from the surface to the top of the water of five wells, from east to west, along the village, I found it to vary from 5 to 11 feet, the average being about 6 feet.

The 11-feet well is situated higher up than the others.

All of these shallow wells are open to contamination—often from closely-adjacent sewage.

It would appear that there is a natural reservoir of water at the base of the hills at Ma'ton.

Present water supply to British officers, N.C.O.'s and men on mainland.

Now that a condenser has been established on the island, and is in working order, condensed water is regularly supplied in kegs for the use of all British officers, non-commissioned officers, and men residing on the mainland.

Food of the Chinese.

The usual diet of the people of this part of the country is almost entirely vegetable. Rice, not being grown here, is consequently dear, and millet largely takes its place as the staple article of diet.

Sweet potatoes are extensively cultivated, and provide an important food supply for winter.

Vegetable

Vegetables of all sorts are raised and extensively used by the

people, such as peas, beans, carrots, turnips, radishes, spinach, onions, sweet potatoes, cucumbers, tomatoes, brinjals or egg-plant pumpkins melons, and cabbages, including a very fine and large variety known as the "Shantung cabbage," which often weighs 8 to 10 lbs. or even more.

A small amount of wheat is grown, but millet of various kinds and Indian corn form the principal cereal products in this district.

Of millet the following three varieties are common :—

Panicum miliaceum.
Sarghum.
Pencillaria spicata.

Very good bread is made from millet. Arrowroot and vermicelli are obtainable. There are two crops of cereals per annum. The flour used in making bread for Europeans is imported from America.

Fish. Fish is plentiful and cheap, and of endless variety, being largely consumed by the people generally. A large quantity is dried (in the sun) and exported.

All along the coast here fishing gives employment to a large number. The finer fish are of excellent quality. The coarser and cheaper kinds, such as skate, dogfish, conger eels, hake, &c., are readily bought by the poor people.

Country-fed pork of excellent quality is always obtainable and extensively used by those who can afford to buy it. Beef and mutton are not usually eaten.

Tea is the universal drink, though Chinese wine is extensively used by those able to afford it, and also native spirits. As infused and immediately drunk, Chinese tea is very free from tannin and rich in theine.

The Chinese will not drink tea made with water not boiling.

Chinese wine and spirit is very cheap, and although its use is very common, the people are sober, and intoxication is rare.

Wine in this part is usually made from millet. In colour and flavour it resembles a very mild sherry.

Spirits are chiefly consumed by the middle and lower classes, and are usually taken at meal time.

Spirits are made of the red "kao-liang" or millet, with the addition of the chii (leaven, made from wheat).

Both wine and spirits, as a rule, are drunk hot.

Spirits are very strong and coarse, and quite lacking in any pleasant flavour

Fruit, though little grown in the vicinity, can always be obtained in season. Ground nuts are plentiful, and persimmons, pears, apples, plums, peaches, apricots, and other fruit are fairly cheap.

Rations. The men receive a *free* ration of—

Rice	...	...	1 catty
Flour	...	...	$\frac{1}{3}$rd catty
Wood	...	...	1 catty

} daily.

and beef 1 lb., once a week one catty = $1\frac{1}{3}$ lb. English.

The above are all of good quality. This is largely supplemented by the men with such food as—fish, pork, cakes and bread of millet flour, vermicelli, bean curd, peas, cabbages, spinach, turnips, radishes, and other vegetables, fruits and nuts.

Their ration does not appear to be on a liberal enough scale.

The flour is very small in quantity, and might be increased with benefit, and another ½ catty of rice given.

I refrain from going into the subject of rations thoroughly, as the men are very well paid, and it is intended that they should buy their own food largely. Whether this method is satisfactory I am inclined to doubt. There must always be men who will gamble or otherwise squander their money and thus have to go on short commons or get into debt.

Some men do not care about beef; pork is preferable for the ordinary Chinaman, is cheaper, abundant, and good in quality.

The objection to a pork ration is that the Officer Commanding is anxious to get as many Mahomedans into the regiment as possible, and a pork ration for non-Mahomedans would entail separate cooking utensils, &c., for them.

The men are temperate; a few take opium.

The cooking is done by a cook coolie to each company, and appears to be satisfactory.

British N.C.O.'s.

Do not draw rations. They have a mess of their own, and enjoy a varied and liberal diet.

Dress. Head-dress.

During the past summer the men have worn straw sailor hats with good brims; these were very suitable, as one great essential of head-dress for the Chinese is protection of the eyes from the glare of the sun.

In the winter they wear turbans of a blue cotton material, similar in style to that worn by native Indian troops, which would seem to meet cold weather requirements, but are not so suitable for summer.

Clothing, summer.

In summer the men wear a blue cotton frock, buttoning in front and reaching to the knees, and blue cotton trousers tied round the ankles in the usual Chinese fashion. A red cotton kummerbund is worn outside round the waist.

Clothing, winter.

A thick frieze cloth frock and trousers of a dark gray colour are to be worn. Up to the present the winter clothing and overcoats have not arrived, but are daily expected.

Under-clothing.

No flannel is worn, and shirts are unknown.

They wear short cotton vests or coats; usually several are worn at once, according to the state of the weather. The usual custom of the Chinese to add an extra coat as the weather gets colder is followed. The same plan is pursued as regards trousers.

The people all wear wadded coats and trousers in winter, which form an excellent protection against the cold, but are unsightly as they wear them.

The introduction of flannel shirts might be considered with advantage.

Boots and shoes

The common native shoe is worn at present.

The shoes worn even by the labouring classes are commonly too tight and cramp the foot, so that it is not rare to find overlapping of the toes present.

Ammunition boots have been tried and proved satisfactory; they will be taken into wear by the men as soon as obtainable.

Dress of British N.C.O.'s

Khaki is worn in summer, and the usual English kit in winter.

Terms of service.

Every soldier who enlists has to serve for three years from the date of enlistment, but he may be obliged to serve for four years if specially required.

He must go to any part of the world that the regiment may be sent to.

Rates of pay.

			Dollars.
Private,	per month	...	8·00
Bugler,	„ „	...	9·00
Lance-corporal,	„ „	...	9·00
Corporal,	„ „	...	9·75
Lance-Sergeant,	„ „	...	10·50
Sergeant,	„ „	...	11·25
Sergeant-bugler	„ „	...	12.00

The dollar varies in value, at present = 1*s.* 11*d.* to 2*s.*

1 dollar = 100 cents.

Good conduct pay.

If at the end of two years a man has served without committing an offence for which he is punished by the Colonel, he will receive extra pay at the rate of 1 cent a day.

Stoppages from pay.

A soldier is liable to forfeiture of pay for every day of absence without leave, for every day of imprisonment, and for every day he is in hospital. He is further liable to pay for articles of Government property which he has broken or damaged.

Security.

If a recruit is unable to find a householder to stand security for him, he is stopped 3 dollars a month from his pay for the first three months of his service. The 9 dollars thus deducted are paid back to him when he has finished his three years' service, or at any time he is discharged by the Colonel.

Analysis of Sample of Drinking Water from well in use by 1st Chinese Regiment.

By Arthur Stanley, M.D., B.S. Lon. D.P.H., Health Officer, Shanghai.

Physical characters.

Well aerated.
Pale blue colour.
Reaction faintly alkaline.
Appearance on ignition—no charring.

Total solid matter in solution	31·6	Parts per 100,000.
(*a*) volatile	9·6	
(*b*) fixed	22·0	
Total hardness	11	
(*a*) Temporary	1	
(*b*) fixed	10	
Chlorine	8·7	
N. as nitrates	...Traces	
Saline or free NH_3	·00152	
Albuminoid Ammonia	·00154	
Poisonous metals	nil.	
Nitrites	nil.	
Phosphates	nil.	
Sulphates	Traces.	
Sediment	Diatomaceæ	

Bacteriological.

7,300 bacteria to cubic centimetre.
No pathogenic organisms were detected.
Bacillus coli communis not found.

MEDICAL TRANSACTIONS.

Health of British Troops.

On Liu Kung Island.

On arrival I found that the British troops resident here only consisted of—

3 officers, R.E.
12 Warrant officers, Non-commissioned officers and men, R.E.

all of whom formed the survey party, and had previously been camping out the greater part of their time, surveying. They all enjoyed excellent health with the exception of one officer who had a mild attack of dysentery, and one corporal who also had dysentery, both of whom made a speedy recovery. This party returned to England, except two officers and three men who have lately been augmented by another detachment R.E.

Present strength is now :—

3 officers, 2 women (officers' wives).
13 Warrant officers, Non-commissioned officers and men, all R.E.

One recent arrival has contracted venereal disease—gonorrhœa—which up to the present has been the only case of sickness amongst them.

On the Mainland.

The officers and British non-commissioned officers of the 1st Chinese Regiment are the only white troops here at present.

Strength.—Officers ...	...	... 14
Non-commissioned officers		11
Women ...	...	... 4
Children ...	...	... 1

Officers 1st Chinese Regiment.

One officer, a lieutenant, had scarlet fever about 10 days after arrival, possibly contracted in Shanghai. Beyond a severely ulcerated throat, no complications ensued; but the officer being very weak, he proceeded to Japan on sick leave, and shortly after leaving had an attack of malarial fever, from which he had previously suffered in India. He made a good recovery, and has returned to duty.

One case of mild dysentery occurred; the officer had previously had the same disease in Burma. He was sent on two months' sick leave, and has returned to duty "fit."

The only other cases were mild attacks of diarrhœa, dyspepsia, and chill, necessitating a few days' rest and treatment.

British Non-commissioned Officers.

Have enjoyed good health, and beyond mild attacks of diarrhœa, &c., there has been only one case requiring mention. This was a sergeant who, immediately after arrival, suffered from chronic dyspepsia and debility, and was quite unfit for duty. He seemed broken down and aged, and soon developed symptoms of mental debility; his memory became very bad, and as there were no means of having him looked after here, I got him admitted to the naval sick quarters at Flagstaff Camp, from whence he was subsequently sent down to the Station Hospital at Hong Kong to be invalided home.

One case of tertiary syphilis, not incapacitated from duty, is under treatment.

1st Chinese Regiment.

Present Temporary Hospital Arrangements.

On my arrival here I found that a Staff-Surgeon, R.N., stationed at Flagstaff Camp, in medical charge of a marine detachment, went twice a week to Ma'ton to examine recruits for the regiment, and attended the sick.

A barrack-room was set apart for the treatment of cases.

As my services were most required at Ma'ton, as soon as quarters were provided by the R.E., I moved over there from the island, and, under orders from the Officer Commanding troops, I assumed medical charge of the regiment on August 29th, 1899, in addition to my other duties.

As the barrack-room was overcrowded and unsuitable for the purpose, after a short time I obtained the use of a separate building which was the best obtainable for the establishment of a temporary non-dieted hospital, which is now in use.

Extent of building.

It is situated on the sea-shore, fronting the harbour, opposite the barracks, and contains six rooms, five of which are appropriated as wards, and one as a surgery and office.

A kitchen, two latrines, two small rooms for hospital staff, and two store-rooms complete the accommodation.

The buildings are of the usual Chinese construction of rubble stone walls, cemented with mud, and roofed with pantiles embedded in mud.

Hospital.

Two of the rooms used as wards have each a small closet opening out of them which have been utilised as lavatories. The building was originally intended as officers' quarters, and all the rooms have been fitted wtih wooden floors, windows for through ventilation, and doors were added, and the walls limewashed. A closed-in verandah is being put up outside two of the rooms to keep them warmer for winter, and obviate the doors opening directly to the outer air.

The rooms are in the form of a parallelogram, with a courtyard enclosed in the middle.

Method of heating.

American stoves are used for heating—coal being burnt.

The rooms are small, and, as the place is only made up of converted Chinese houses, it is only a make shift until a hospital

is built; and it would, therefore, be useless to go into details of area, &c., sufficient to say that, under the circumstances, it answers its purpose fairly well.

If found necessary more buildings will be obtained and fitted up as wards.

It is just possible to accommodate 30 patients.

Staff. The hospital staff at present consists of:—

1 Medical officer.
1 Native corporal.
2 Coolies.

The men use barrack pattern board beds at present, and bring their own bedding.

Ward for British troops. One ward is set apart for Europeans, and I am getting it equipped according to regulation; but until some R.A.M.C. men arrive, any non-commissioned officer could only have a Chinese boy to look after him.

Diseases Common amongst the Chinese in this Neighbourhood.

Eye and skin affections, especially "granular (ophthalmia) lids," and parasitic skin diseases.

Dyspepsia is most common amongst the lower orders, due largely to the nature of their diet, and often resulting in dilatation of the stomach and thinning of its walls.

Diarrhœa and dysentery prevail at times.

Malarial fevers do not appear to prevail here, although cases occur.

Small-pox is always present, especially in the spring.

Typhus is often present; in 1889 an epidemic occurred in this province.

Cholera occurs from time to time; there was a wide-spread epidemic in 1888.

Typhoid is known to occur in natives.

Nephritis is well known.

Pleurisy and bronchitis are common in winter.

Muscular rheumatism is not uncommon.

Nervous diseases are rare.

Worms are very common—most natives suffer from them.

Jaundice is very common; there would appear to be an epidemic form at times.

Information from native sources describes a disease they call "*yellow eye pestilence*" from which many have died lately round about here. This is a form of jaundice probably complicated with fever.

Leprosy occurs.

Unclassified Fevers.

In the tropics generally cases of fever occur which are not due to malaria. These fevers have not yet been studied sufficiently or classified, and have usually been shown under the head of simple continued, remittent, typhoid, typhoid-malarial, &c.

In the north of China (and in this neighbourhood) a severe and very fatal form of remittent fever occurs, often more of a continued than remittent type, or with the remissions very slightly marked, without any symptoms of typhoid, and not due to malaria.

At the present day there should be no difficulty, with the aid of the microscope, in arriving at a definite diagnosis as to whether a case is due to malaria poisoning or not.

Symptoms observed in three cases.

The spleen in these cases is not enlarged, and the patient only presents the usual symptoms due to fever, such as malaise, furred tongue, aches and pains, loss of appetite, &c.

The skin is hot and dry, and the patient does not sweat. Constipation is usually present. The patient rapidly loses strength, great prostration ensues, he refuses nourishment, delirium of a low muttering kind sets in, and coma supervenes, followed rapidly by death. The pulse becomes notably weaker and more rapid. There is no rash present.

Treatment.

Quinine is not only useless, but adds to the patient's discomfort.

The ordinary antipyretics and diaphoretics, &c., are of little or no use. The wet pack may keep the temperature down somewhat, but apparently nothing will induce free sweating.

The temperature keeps mostly between 103° and 105° F.

The only drug that would appear to have some specific action in these cases is methylene blue, which is used by practitioners in these parts with, they report, benefit.

Hæmatozoon found.

Observers in China have found hæmatozoon in the blood of these cases which is considered to be the cause of the disease.

An account of this hæmatozoa has been published by E. W. von Tunzelmann, late of Cheefoo, where the disease has been prevalent.

It appears to be more common amongst the natives, though Europeans are by no means exempt. A similar, if not the same, form of fever is met with in India.

In Dr. Daly's report on the health of Newchwang, North China, for the year ending the 31st March, 1895, the following remarks occur :—

Dr. Daly's remarks.

"A fever occurs in this province which continues to puzzle all the medical men who have come across it. Simple continued fever, without any other symptoms, is the only description one can give of it.

"The temperature rises to 103°, 104°, or 105°, with a drop of from 1° to 2° during the 24 hours. There are no other indications to guide one as to the nature of the poison. There is complete absence of abdominal symptoms, and even with a continued high temperature extending over weeks, delirium, or anything approaching the typhoid condition, is absent, and the patients generally feel comfortable and are able to take plenty of nourishment and sleep well. Quinine, antipyrin, and many other remedies have been tried without producing any permanent beneficial effect, and I have come to the conclusion that absolute rest in bed, strict dieting, and a dose of calomel at the onset, and occasionally afterwards, if required, is the best course of treatment to adopt. . . . The duration of the fever is very variable;

some cases only last 7 or 14 days, others from 3 to 11 weeks." (Imperial Maritime Customs, Medical Report for 1895. China.)

Dr. von Tunzelmann calls it, in his article, "Non-malarial remittent fever," but this does not appear suitable, as from the above accounts it is practically a continued fever.

I have seen three cases of this fever in natives, all of which rapidly proved fatal in spite of all treatment.

Nomenclature.

Under what heading is this fever to be placed in the official Army returns? I suppose it must come under the term "Simple continued fever." I would prefer that it should be termed "unclassified" until more has been discovered as to its true nature.

Native Non-commissioned Officers and Men. 1*st Chinese Regiment.*

Strength, 463.

I regret to say that I am unable at present to supply the usual monthly and annual statistical returns. The forms have not yet been received, but I hope to do so from January 1st, 1900.

The following information is based on the short experience of the past three months:—

Prevailing disease.

The prevailing disease is venereal. It does not seem that the Chinese soldier will be any more exempt from venereal diseases than the British soldier.

Civil Hospital required.

I would recommend that a small general civil hospital should be established in the village, in which women could be treated who become diseased. This is badly wanted, as the people have no means whatever of getting proper treatment, and the so-called Chinese doctors, who depend chiefly on charms for curing the sick, are worse than useless. The people will readily take European advice and treatment if they can get it gratis. The men of the regiment are rapidly gaining confidence in the "foreign devil's" medicine and treatment, and even ask for medicine to send to a sick relative at a distance.

Wei-hai-Wei city.

The adjacent native town of Wei-hai-Wei is much frequented by the men, and it would be a very difficult matter to keep them out of it. Some have their wives or other relatives living there.

The town is very filthy, and its condition most unsanitary. I believe it would be practically impossible to make the Chinese put it in order.

Unless control over the city is taken by the British authorities it must always be a menace to the health of the outside community.

No doubt much of the venereal disease has been acquired in the city.

For the four months ending December 31st, 1899, the following cases have been admitted to hospital:—

Venereal...	26
Malarial fever	20
Jaundice...	15
Granular ophthalmia	13
Dyspepsia	10
Bronchitis	6
Dysentery	8
Opium poisoning	1
Unclassified fevers	2

And 26 minor cases, such as gumboil, itch, inflam. connective tissue, ulcers, and sprains. Total admissions were 127.

Deaths.

There were two deaths only, both being cases of fever, which I have referred to under the term of "Unclassified fevers."

All the other cases recovered.

Opium poisoning.

The case of opium poisoning was an attempt at suicide, owing to a quarrel with his father. He recovered after prolonged treatment.

Ophthalmia.

Some of the men suffer from granular lids, an exceedingly common affection amongst the Chinese, and from time to time get an acute attack of ophthalmia. The cases are usually readily amenable to treatment.

Smallpox.

No case has yet occurred. It is most prevalent in the spring.

Vaccination.

I have procured a supply of good vaccine lymph from the Municipal Vaccine Laboratory at Shanghai, after consulting, and with the approval of, the P.M.O., Hong Kong; and hope to be able to vaccinate all men who have not had smallpox.

As vaccination is not made compulsory in the regiment it will probably be impossible to persuade some of the men to undergo it, as they think vaccination in infancy is sufficient. They bring their children readily enough.

I am endeavouring to vaccinate all fresh recruits as they come up.

Recruiting.

During the four months, September to December, I have examined 225 recruits, of whom 180 were fit.

Their physique generally is good, and is superior to the average recruit at home. Though there is no fixed standard, the approval resting with the Officer Commanding 1st Chinese Regiment, it is the usual rule for the minimum chest measurement to be 34 inches.

The men are almost entirely of the agricultural class, and many are coolies. They are decidedly intelligent and learn quickly, and though quite wanting in any education they are quick at drill and learning to shoot.

Whether they possess good fighting qualities remains to be seen.

The present strength of the regiment is 463; there is no lack of recruits, but they can only be taken on as the accommodation is increased.

The rejections are mainly on account of defective vision, deformity of the chest, and varicose veins.

Although the present strength of the regiment is only 463, over 600 men have been enlisted up to date, the reduction in

strength being due to desertions and discharge of men found unsuitable for various reasons (non-medical).

Proposed Diet Scale for Chinese Soldiers.

For the dieted Station Hospital for the 1st Chinese Regiment, I would submit the following scale of diets for approval :—

Milk Diet.

Milk, 3 pints.	Tea, ½ oz.
Rice, 1 lb.	

Low Diet.

Rice, 1 lb.	Vegetable (fresh), 4 oz.
Fresh fish, 4 oz.	Tea, ¼ oz.

Half Diet.

Fresh fish, 8 oz.	Rice, 1⅓ lb.
or	Tea, ½ oz.
Chicken, 1 lb.	Salt, ½ oz.
Vegetable, 8 oz.	Pea nut oil, ½ oz.

Full Diet.

Fresh fish, 12 oz.	Tea, ½ oz.
or	Salt, ½ oz.
Pork or Mutton (without bone) 8 oz.	Pea nut oil, 1 oz.
Rice, 1⅓ lb.	
Vegetables, 1 lb.	

Future Requirements.

1st Chinese Regiment.

A station hospital of 40 beds will probably be built during 1900, adjacent to the new barracks on the slope of the hills. Plans for the same are being submitted to the Home authorities. This should include an isolation ward for infectious cases, and a ward for the British non-commissioned officers of the regiment, with all the usual offices and accommodation for the staff, which should consist of two officers, one serjeant, and four men, R.A.M.C., as Chinese are useless as nurses unless under the constant supervision of a European.

Liu kung tau.

The proposed garrison will consist of two companies British infantry, a battery of garrison artillery, and a battery of native artillery, and details R.E.; A.S. Corps, &c., and some Chinese. A hospital of 30 beds is under consideration for the British troops, and would require two medical officers, one staff serjeant, and three or four privates, R.A.M.C. If troops are sent up from Hong Kong this summer, a temporary hospital will have to be provided for them, and medical staff will be required for it.

Plague.

An important matter for consideration is the probability of the plague breaking out here. I consider it not to be unlikely for the following reasons :—

1. Plague has extended in the past few years from Canton northwards to different ports along the coast.
2. Cases have occurred in Japan, and it was reported to have been prevalent in Newchwang this year, where an epidemic disease has killed very many; but I have heard that Japanese authorities sent to study it have expressed the opinion it is not true plague.
3. There is constant communication by sea with Japan, Newchwang, and other Chinese ports and this place.
4. Some 20,000 coolies are employed on the Russian railway in Manchuria, a large majority of whom are drawn from this province. If the disease breaks out amongst these coolies, a very likely contingency, plague will certainly be brought into Shantung by men returning home.
5. The Chinese custom of being buried near their native village leads to the sending of corpses of those who have died long distances to their place of birth, thus providing a possible source of infection.

I have therefore thought it advisable to make recommendations of such measures as may help to prevent its introduction, for the consideration of Her Majesty's Commissioner.

The recommendations made embrace the following points :—

1. Taking measures to put the island of Liu Kung and the village of Má ton into as sanitary a condition as possible.
2. Medical inspection of ships or junks coming from infected ports, and the immediate isolation of any cases that may be detected, disinfection, &c.
3. Compulsory notification of disease amongst the Chinese residents.
4. The destruction of rats and mice.

With the exception of No. 2, not at present considered necessary or feasible, the recommendations are being carried out.

SINCE DEMOLISH

PANORAMIC VIEW OF WEIHAIWEI HARBOUR AND SURROUNDINGS, AS SEEN FROM ABOVE FLAGSTAFF POINT.

1 sq. Chang (1 ching) = 121 sq. ft.
15 Ching (1 Chiio = 1,815 sq ft.
4 Chiio (1 Mon) = 7,260. sq ft.

Japanese land force that took Wei hai wei

34,000 officers & men. 30 transports reqd.
48 field & mountain guns.
12 Howitzers. 13,000 coolies.
Disembarked at Yung Cheng Bay. 5 days to disembark.
Stores for 6 weeks landed.