

# SUPPLEMENT

TO THE

# Hongkong Government Gazette

No. 31 of 1st July, 1899.

GOVERNMENT NOTIFICATION.—No. 379.

The following Report on the Health and Sanitary Condition of the Colony of Hongkong for 1898, which was laid before the Legislative Council on the 27th ultimo, is published. By Command,

J. G. T. Buckle, for the Colonial Secretary.

Colonial Secretary's Office, Hongkong, 1st July, 1899.

No.  $\frac{8}{54}$ 

GOVERNMENT CIVIL HOSPITAL, Hongkong, 7th March, 1899.

SIR,—I have the honour to submit, for the information of His Excellency the Governor and for transmission to the Right Honourable the Secretary of State, the Medical Report on the health and sanitary condition of the Colony of Hongkong for the year 1898, together with the returns, &c., appended thereto.

I have the honour to be, Sir, Your obedient Servant,

J. M. ATKINSON,
Principal Civil Medical Officer.

The Honourable

THE COLONIAL SECRETARY.

### POPULATION.

The estimated population of the Colony for 1898 was 254,400; there were 1,206 births and 5,674 deaths, of the latter 1,175 were from plague.

The population shows an increase of 5,690 as compared with 1897.

The birth-rate was 4.7 per 1,000 against 5.5 in the previous year; the low birth-rate is accounted for to a great extent by the greater number of males in the Colony, the percentage of males in 1897 being 70.9 amongst the Chinese and 58.6 in the non-Chinese population.

In connection with the low birth-rate amongst the Chinese, it must also be borne in mind that many births are not registered by the parents, I refer to those taken to the Convents and to those found dead in the harbour and streets.

The death-rate was 22.30 per 1,000 as against 18.85 in the previous year, excluding the deaths from plague the death-rate would have been 17.68 per 1,000.

Taking the different nationalities the death-rate is as follows: -

Whites ......16.2 per 1,000. Coloured ......33.6 Chinese ......22.54

It must be remembered that the population of Hongkong is mainly an adult one, 52.6 per cent. amongst the non-Chinese are between the ages of 20 and 45 years whilst amongst the Chinese 55.9 per cent. are between these age periods; so that one would naturally expect a low death-rate. This is the case amongst the Whites who include Europeans, Americans. Portuguese, and the Army and Navy. The high death-rate amongst the Coloured and Chinese races is a sure proof of the insanitary way in which they live.

PREVALENCE OF SICKNESS IN THE DIFFERENT SEASONS OF THE YEAR, AND GENERAL

CHARACTER AS TO THE MILDNESS OR SEVERITY OF THE DISEASES

Small-pox.—This disease was practically epidemic during the first four months of the year; it was so prevalent in February that on the 15th of that month No. 4 Health District was declared an area infected with the disease.

A house to house visitation was made, free vaccination stations were appointed, and the attention of the inhabitants was drawn by printed notices to the different places where this was being carried out, the Chinese especially being urged to avail themselves of this opportunity of being vaccinated.

In all 199 cases were notified during the year, the numbers in the several months being-

 January
 54

 February
 86

 March
 38

 April
 13

 May
 5

 June
 2

 August
 1

Plague.—Unfortunately, the Colony was again attacked in an epidemic form by this disease which

prevailed practically until the end of August.

There were 1,320 cases reported with 1,175 deaths; of these 75 occurred amongst the Non-Chinese with 49 deaths—a mortality of 65.3 per cent.; whereas the mortality amongst the Chinese was 89.6 per cent.

The following table gives the number of cases reported in each month of the years 1896 and and 1898:—

1896. 1898.

	. 1896.	1898
January	49	9
February	125	67
March	168	137
April	316	468
May	344	534
June	113	92
July	52	7
August	25	2
September	9	1
October	2	2
November		
December	()	1
December		
	1,204	1,320

It will be seen that the disease in each year attained its maximum in the month of May, in this Colony in each outbreak the months of maximum mean temperature are followed by a material reduction in the number of cases.

The city of Victoria is divided into ten Health Districts.

On the 24th March, the Health Districts Nos. 2, 4, 5 and 6 were declared infected; in the following month the disease spread to British Kowloon, this being declared infected on the 18th April,

whilst Aberdeen and Aplichau were not infected until June.

Unfortunately, more Europeans were attacked than was the case in 1896, the numbers being 26 as against 16. I regret to have to report amongst these two of the Nursing Sisters at the Government Civil Hospital who both succumbed to the pneumonic type of the disease; the first, Sister Frances, undoubtedly having contracted it from a Chinese patient in the observation ward at the Government Civil Hospital suffering from what proved to be the pneumonic variety, and the other, Sister Gertrude, contracted the disease whilst nursing Sister Frances.

Each epidemic year has been followed by a year of freedom from the disease, eg., 1894, 1896, and 1898 were epidemic years whilst in 1895 and 1897 and thus far in 1899 the Colony has been practi-

cally free from the disease.

It is worthy of note that an outbreak of rinderpest (cattle plague) occurred amongst the cattle at the Pokfulam Dairy Farm in the months of February and March and that during the earlier part of the year the neighbouring provinces of Kwang Tung and Kwang Si were overrun with rinderpest which killed off large numbers of cattle. A similar outbreak of rinderpest occurred amongst the cattle at Pokfulam prior to the 1894 epidemic.

The following table gives the number of cases of infectious diseases notified during the year:-

The following t		, , , , , ,											
Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Bubonic Fever	9	67	137	468	534	92	7	2	1	2	•••	1	1,320
Small-pox	54	86	38	13	5	2	0	1		•••	•••	•••	199
Enteric Fever	2	5	8	12	1	6	3	1	<u></u>	6	6	2	52
Diphtheria	1		2					1	•••	•••	•••	1	]   .5
Puerperal Fever	1	1		1	1	•••	1	•••		1	•••		6
Scarlet Fever	•••						•••			2	2	•••	4
Cholera			•••	5					•••	•••	•••	•••	5

Enteric Fever.—There were 52 cases reported as against 65 in the previous year; twelve of these occurred in April, most of them were imported.

Scarlet Fever.—These cases both occurred on board II.M.S. Powerful and were imported from the Mediterranean.

Cholera.—These were evidently cases of Acute Choleraic Diarrhœa due to indiscretion in diet; they occurred in April.

Malarial Fever.—As usual malarial fevers prevailed during the summer months; there were no cases of the pernicious type in the Government Civil Hospital.

Discases of Respiratory Organs.—These were as usual chiefly prevalent in the winter months and account for many deaths amongst the Chinese.

### RELATIVE MORTALITY IN THE DIFFERENT SEASONS.

From the following return it will be seen that the two months April and May were the most fatal both for Chinese and Non-Chinese; this is accounted for by the prevalence of plague during these months

Excluding the deaths from small-pox and plague, it is seen that the months in which the least number of deaths occurred were April, May, and June.

The winter months, though the healthiest, give the greatest mortality; this is due to the greater number of deaths from diseases of the respiratory organs amongst the Chinese at this season of the year.

1898.

POPULATION:—Non-Chinese 15,190. Chinese 239,210.

DEATHS.

Month.	Non- Chinese.	Rate per 1,000.	Chinese.	Rate per 1,000.	Total Deaths.	Total Deaths excluding Plague and Small-pox.
January	23	]	<del>4</del> 01	]	424	386
February	27	<b>}</b> 17.90	440	23.55	467	378
March	18	]	499	]	517	394
April	39	   ]	708	ן	747	323
May	45	30.02	710	30.77	, 755	323
June	30	} .	422	] .,	452	288
July	14	1	333	j	347	337
August	22	15.54	372	17.87	394	392
September	<b>2</b> 3	]	364	]	387	386
October	12	<u>)</u>	391	)	403	402
November	17	} 13.10	361	18.96	378	378
December	21		382		403	403
Total	291		<b>5,</b> 383	-	5,674	4,390

### GENERAL SANITARY CONDITION OF THE COLONY.

Though much has been done of late years to improve the sanitary condition of the Colony by:--

- (a.) The removal of illegal cocklofts, mezzanine floors and backyard obstructions;
- (b.) The concreting of the Chinese houses not only in Victoria but at Hung Hom, Yaumati, and Taikoktsui in British Kowloon;

- (c.) The steady improvement of defective house-drains;
- (d.) The closure of polluted wells;

no one acquainted with the elements of sanitation and the conditions of overcrowding, filth and ignorance that exist can fail to see that it will be years before those conditions necessary for the maintenance of the public health are satisfactorily established in this City.

The Insanitary Properties Commission, who had been sitting since August, 1896, issued their report in March of last year, and in it they state:—

- "That there are many insanitary properties in the Colony, and dwellings which, in their present condition, are unfit for human habitation."
- "The back portions of a number of houses visited by us are dark, ill-ventilated, extremely dirty and, in some cases, mere dens of filth. The interior of the cubicles or sub-divisions of the living rooms was such that in the great majority of cases their contents could only be seen by the aid of an artificial light."

They call particular attention to the tabulated statement of the Medical Officer of Health, in which he states that in Health Districts V and VI out of a total of 3,095 Chinese houses 2,530 are insanitary. In the other Health Districts it appears from his evidence that a similar unsatisfactory state of affairs exists.

To show to what extent overcrowding exists I append the following table from the Medical Officer of Health's report for 1897:—

Districts.	Chinese Houses.	Floors.	Chinese Population.	Non-Chinese Houses.	Non-Chinese Population.	Acreage.	Total No. of Persons per acre
1	503	811	7,720	31	428	531	15.3
2	955	2,353	21,120		1,108	267	83.2
3	18	33	4,210	355	1,869	158	38.5
4	776	2,341	23,230	128	1,834	45	556.9
5	980	2,686	21,720	21	351	23	959.6
6	805	2,308	16,680	3	398	23	742.5
7	722	2,227	16,010	7	179	27	599.6
8	732	2,231	18,540	5	129	42	441.4
9	1,023	2,457	23,860	19	160	40	600.5
10	564	. 1,213	7,370	47	296	258	29.7
	7,078	18,660	160,460	616	6,752	1,414	

From this it is seen that in No. V Health District there are no less than 959 persons to the acre.

A Bill has been framed to make further provision for the sanitation of the Colony and is now under consideration by the Legislature.

It contains regulations as to cubicles, doing away with them entirely in houses fronting streets of a width of 15 feet or less, limiting their height, &c.

It makes the erection of mezzanine floors or cocklofts illegal without the permission of the Sanitary Board.

It limits the heights of buildings.

The most important regulations are those that insist on the provision of an open space in the rear of every domestic building already erected, erected hereafter or now in process of erection; these, if passed, will do away with back to back houses.

It also requires that no obstructions shall be in any private streets or lanes upon which domestic buildings abut.

To remedy these insanitary defects it is necessary to aim towards the attainment of abundance of pure air and light in houses, shops and streets, to provide an abundant supply of pure wholesome water, to do away with back to back houses, to abolish blind courts and alleys, to prevent overcrowding and to increase as far as practicable open spaces in the crowded part of the city.

#### VACCINATION.

The following vaccinations were performed during the year:—

Government Civil Hospital	71	8
Alice Memorial Hospital	23	8
Tung Wah Hospital :-		
***	9 5	0

Victoria	1,358
Aberdeen	45
Stanley	68
Hung Hom	16
Shaukiwan	31
Yaumati	70
Victoria Gaol	4,507
	7,051

Vaccination of infants has been compulsory since 1890.

It appears from the last census (1897) that only 44 per 1,000 of the Chinese population are born in this Colony so that this does not afford much protection to the community from Small-pox.

METEOROLOGICAL CONDITIONS OF THE SEASONS AND THEIR PROBABLE EFFECT WITH REGARD TO SICKNESS.

The general conclusions to be drawn are that the months of maximum mean temperature are those in which malarial fevers chiefly occur, these are also the months in which the mean humidity is the highest.

Whilst diseases of the respiratory organs are prevalent in the months of minimum mean temperature.

With regard to special diseases:-

Small-pox was much more rife during the first three months of the year.

The conclusions to be drawn from our experience of plague in 1896 and 1898 are that the occurrence of plague is favoured by:—

- (1.) Long prevalence of drought or of abnormally low rainfall;
- (2.) Atmospheric temperature below 82° F., as the months of maximum mean temperature were in each year followed by a material reduction in the number of cases;
- (3.) The absence of sunshine;
- (4.) The dampness of the atmosphere, during the months in which there were most cases the mean humidity of the atmosphere was high.

RETURNS ACCOMPANYING THIS REPORT.

### Attached are the :-

Statistics of Population.

Meteorological Return.

Monthly Return of Diseases and Deaths at the Government Civil, Tung Wah, and Gaol Hospitals.

Appendix A.—Report on the Prevalence of Plague in this Colony during the years 1897 and 1898.

J. M. ATKINSON, M.B. (London), Principal Civil Medical Officer.

March 7th, 1899.

### RETURN OF THE STATISTICS OF POPULATION FOR THE YEAR 1898.

	Europeans and Whites, (including Portuguese) and also Army and Navy.	Africans, Malays and East Indians.	Chinese.	Totals.
Number of inhabitants in 1898,	12,486	2,704	239,210	254,400
" Births during the year 1898,	178	65	963	1,206
" Deaths " " 1898,	200	91	5,383	5,674
" Immigrants " " 1898,		•••	105,441	105,441
" Emigrants " " 1898,	•••	•••	60,432	60 <b>,</b> 43 <b>2</b>
Number of inhabitants in 1897,	11,081	2,619	235,010	248,710
Increase or	1,405	85	4,200	5,690
Decrease,		•••	•••	•••

# METEOROLOGICAL RETURN FOR THE YEAR 1898, ACCORDING TO THE HONGKONG OBSERVATORY.

			Темрі	ERATURE.	51		RAIN	FALL.	Wı	NDS.	
Months.	Solar Maxi- mum.	Mini- mum on Grass.	Shade Maxi- mum.	Shade Mini- mum.	Range.	Mean.	Amount in Inches.	Degree of Humidity	General Direc- tion.	Average Velocity.	Remarks
	Mean.		Mean.	Mean.	Mean.		Ins.	Mean.	Mean.	Miles per Hour.	
January,	114°.4		66°.6	55°.1	11°.5	60°.1	1.16	65	ENE	11.0	•••
February,	ios .1	•••	66.8	59 .2	7.6	62 .7	2.52	78	E by N	12.9	•••
March,	116 .6		68.8	60 .8	8.0	64.3	0.17	82	E by N	15.5	•••
April,	121.6		73.4	65.8	7.6	69 .2	3.44	81	E by N	15.4	
May,	136 .1		83 .4	75 .0	8.4	78 .4	5.70	83	E	11.5	
June,	134.0		86 .1	78 .1	8.0	81.6	14.25	83	SE	13.5	
July,	142 .6		86 .1	78 <b>.3</b>	7.8	81.7	7.06	80	ESE	13.0	•••
August,	143 .7		86 .5	78.0	8.5	81 .5	9.90	82	E by S	13.1	•••
September,	143 .7		86 .0	77 .2	8.8	80.9	5.29	80	E by S	7.7	• •••
October,	129 .8	,	80 .4	70.6	9.8	74.9	6.72	68	N by E	11.5	
November,	127.2		75 .2	64 .4	10.8	69.4	0.79	61	NE by N	11.9	•••
December,	121 .1		67.7	56 .6	11 .1	62 .1	0.03	52	NE by N	11.6	•••
	128°.2	•••	77 .2	68 .3	0. 0	72 .2	57.03	75	E by N	12.4	

# MONTHLY RETURNS

 $\mathbf{OF}$ 

### BIRTHS AND DEATHS

IN 1898

ΑT

GOVERNMENT CIVIL HOSPITAL,

TUNG WAH HOSPITAL,

AND

VICTORIA GAOL HOSPITAL,

HONGKONG.

MONTHS.	Janu	ARY.	FEBRU	JARY.	MAR	сн.	Apr	IIL.	MA	Υ.	Ju	NE.
Mean Temperature Mean Humidity	60 65		62 78		64 82	.3	69 81		78 88	3.4	81 83	
DISEASES.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
General Diseases.									-			
Small-pox	3	•••	3		1	•••	1			•••	2	•••
Measles	•••	•••	•••	•••			•••		5 		1	•••
TyphusPlague	1	•••	 1		, 2	 1	29	6	19	2	4	•••
Dengue						•••				•••		•••
Influenza	1	•••	13		8	•••			1	•••		. • • •
Diphtheria		•••	$\frac{1}{2}$	1	2	•••		•••		•••	1	•••
Febricula	$egin{array}{c} 2 \ 4 \end{array}$		$\frac{2}{3}$	 1	4	1	8	 4	$\frac{1}{3}$	1	2	•••
Cholera		•••										
Dysentery	2	•••	4		5 -		2		3	1	6	•••
Beri-beri	2	•••	1		2	•••	1	•••	•••	•••	1	••
Malarial Fever—	1.9		24		22		9		17		23	
(a) Intermittent(b) Remittent	13 6		4	•••		•••	3	1	13	•••	3	•••
(c) Pernicious R						•••		•••		•••		•••
Erysipelas	1		٠	•••		•••		•••		***		•••
Pyæmia	•••	•••		•••		•••		•••	•••	•••		•••
Septicæmia	•••	•••		•••		•••	•••	•••	1	 1	•••	•••
Tetanus Tuberele Leprosy—	•••	•••				•••		•••	,		١	
(a) Tubercle	1						1					
(b) Anæsthetic	•••				`			•••		•••		
Yaws	•••			• • • • • • • • • • • • • • • • • • • •		•••		•••	•••	•••	•••	
Syphilis—	10		2		7 -		5		8	<b></b>	3	
(a) Primary (b) Secondary	13 10	•••	11		7		8		6		4	•••
(c) Inherited	ì				4		1					
Gonorrhœa	9		4		1		3		5		3	
Hydrophobia	•••				l ··;			•••				•••
Effects of Heat	5	1	2	1	1	1	2	1	• • • • • • • • • • • • • • • • • • • •			•••
Alcoholism	10		9		6		11		7		8	2
Rheumatism	8		3		13		11		10		9	
Rheumatic Fever					1						1	
Gout	1	ļ <sub>.</sub>			1	•••		•••		•••	•••	
New Growth, non-malignant	2			***	•••	•••		. * • • •				1 1
New Growth, malignant	3	1		•••	i	•••					2	
Diabetes mellitus												•••
Diabetes insipidus												
Debility	8	1	5	1	1	•••	2	2	1	•••	3	•••
							İ					
Local Diseases.												
Diseases of the Nervous System.												
Diseases of the Nerves.												
Sub-section 1,—						ļ ,					1	
Neuritis							1				1	
Meningitis	1	1			1	1		•••	1	1		•••
Myelitis	•••	•••		•••		•••		•••				
Hydrocephalus Encephalitis			2		:::		1 :::		1	1	:::	
Abscess of Brain			j				1				1	
Congestion of Brain		•••	1					•••				•••
Carried forward,	107	4	95	4	87	4	98	14	102	7	77	3

IN	1898.	$\mathbf{AT}$	GOV	ERNMENT	CIVIL	HOSPITAL.
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Ju	LY.	Aug	ust.	SEPTE	MBER.	Осто	BER.	Nove	MBER.	Dece	MBER.	Үел Тот	RLY	
81 80	1.7 O.	81 82	1.5 2.	80	0.9	74 68	1.9 3.	69 63	).4  .	65 55	2.1 2.			REMARKS.
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
		     2  5		     7	     	    1 3  6		    1  2		   1  1  6		10 6  56  24 3 8 33  48 29	 9  1  8  2	
22 14   	1 	25 12  1 2 		28 10  1  		21 9  	 1  	26 9   		17 3   		247 87  3 2  1	4	
• •••	•••	1 			•••	1 				 		4 	•••	
7 8  6  3 4 11 1   1  2	1   1 	12 4  5 8 12   1 1 	1	8 7  6  3 12 10   1 	 1 3  	5 8  2  1 9 9   2 1 1 	1	4 7  4  6 5     2		13 7  2  2 11 4 3    3		87 87 2 48  24 101 105 6 2 10 4 1  27	3  3  4	
										1   		3 3  4  1	 3  1 	· .
84	4	95	1	101	5	84	2	73	2	75		1,078	50	

MONTHS.	Janu	ARY.	Febr	UARY.	MAI	RCH.	<b>A</b> Pi	RÍL.	М	AY.	Ju	NE.
Mean Temperature Mean Humidity	66	0.1		2.7 8.	6-	4.3		69.2 81.		3.4 3.	8: 8:	1.6 3.
DISEASES.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Brought forward,	107	4	95	4	87	4	98	14	102	7	77	3
Local Diseases,—Contd.												,
Diseases of the Nervous System.									<u> </u>			
Functional Nervous Disorders.					,							
Sub-section 2,—		]			:							
Apoplexy		•••				•••				•••	;	<sup>.</sup>
Paralysis	1		1				3		1	•••	1	:::
Epilepsy	•••				2		2					
Neuralgia	4				3	•••	4		1		4	
Hysteria	•••	•••		•••		•••				•••		
Mental Discases.												
Sub-section 3,—											Ì	
Idioey		•••			·					• • • • • • • • • • • • • • • • • • • •		
Mania	 1	•••			3	•••	1	•••	$\frac{1}{1}$	•••	$\frac{1}{1}$	•••
Melancholia  Dementia	4		$\frac{1}{5}$		 5		1 4		9		1 1	
Delusional Insanity										:		
			ļ									
Diseases of the Eye	5		7		6				5	•	3	<b></b>
", ", Ear		•••	li		$\frac{0}{2}$		1		3	•••	1	
", ", Nose	1				·							
" Circulatory							-			1		
System	3	1	2	•••	-,1				3		3	2
", ", Respiratory System…	21	5	8	2	12	2	13	1	8	1	9	1
" " Digestive			Ĭ	_	1.2		İ	1	Ŭ	1		
System	27	2	17		9	1	7	2	19		22	2
", ", Lymphatic System	4	į	8		7	1	8	1 	4		8	İ
" " " Urinary	•	•••	ľ		<b>l</b> '	•••	ľ	•••	*	•••	ľ	
System	4	1	2	1	7	3	2 .	.1 -	3	1		
" " Generative					ł		1					
System— Male Organs	8	<b> </b>	6	1	5		5		5		1	
Female ,	12	1	$\frac{6}{6}$		$\frac{3}{4}$		7		$\frac{3}{2}$		4	
" " Organs of		ĺ				!			-			
Locomotion	16		7	•••	12	•••	10	•••	7		12	1
" Cellular Tissue " Skin	$\frac{3}{2}$		4		$\frac{1}{3}$	•••		. •••	$\frac{3}{2}$	•••	$\begin{vmatrix} 6 \\ 1 \end{vmatrix}$	
,, ,, SKIII			'		"				<b>†</b>	•••	1	
Injuries, General	4		3		1	İ	4		,		5	
,, Local	45	1	20	2	$\frac{4}{23}$	1	$\frac{4}{23}$	2	5 15		26	1
Malformations	•••											
Poisons	3	1	5	2						•••		
Parasites	3 5		1 6	•••	6	•••	$\frac{2}{2}$		1 -		$\frac{2}{6}$	
Under Observation	О	•••	6	•••	3		3	•••	5		6	
Total,	282	16	206	12	205	11	205	20	205	9	194	10

Cases. Deaths.

\* These are included in the figures already given, a detailed account will appear in the Annual Report of the Medical Department.

IN	1898,	$\mathbf{AT}$	GOVERNMENT	CIVIL	HOSPITAL,—Continued.
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Jui	LY.	Aug	UST.	SEPTE	MBER.	Осто	BER.	Nove	MBER.	DECEN	iber.	Уеа Тот	RLY	
81 80	.7 ).	81 82	1.5 2.	. 80 . 80	).9 ).	74 68	1.9 3.	69 6	9.4	62 52	2.1 2.			Remarks.
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	a
84	4	95	1	101	5	84	2	73	2	75		1,078	50	
							-						-	
1   2 		   1		1  1 1		1   2 		1 1 	•••	2 1  1 	•••	6 8 1 6 21 1		
 3 2 6 		 2  7		1 1 4 2 		  4	•••	2 2 1 2 		  4 		3 14 12 53 		
8 1 	•••	6 1 		4 	•••	4 1 	•••	2 		3 	•••	55 11 	•••	
2	1	3	1	6	3	1	1	4	2	4	1	32	12	
14	1	7		5		10	1	12	3	20	4	139	21	
20	1	21	2	25		17	1	22	3	16	•••	222	14	
13		11	1	$\begin{bmatrix} & 4 \\ & 3 \end{bmatrix}$		10 5	1 3	5 1	···	3		82	14	
2	1	2	1	ľ	•••		0			ľ				
$\frac{11}{7}$		7 5		8 5		$\frac{4}{3}$		9 6		5 8		74 69	1	ļ
6 6 2	1 	13 5 1		6 5 3	•••	6 3 5	•••	5 3 		8 1 1		108 45 21	3	
7 33  1 2 1	2	3 27   1 5	1	3 30  2 3 9	5	2 17  2 2 2	1	4 25  2  1		25  1 5	2 	44 309  15 24 51	18  3 	
234	11	223	7	233	14	184	10	183	11	183	7	2,538	138	-

J. M. Atkinson, M.B. (Lond.), Principal Civil Medical Officer.

MONTHS.	JAN	NUARY.	FEB	RUARY.	M.	ARCH.	A	PRIL.	) N	MAY.	J	UNE.
Mean Temperature Mean Humidity		60.1 65.		62.7 78.		64.3 82.		69.2 81.		78.4 83.		81.6 83.
DISEASES.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases	Deaths.	Cases.	Deaths.
General Diseases.									-			
Small-pox Measles Typhus Plague Dengue Influenza Diphtheria	6  4  3	 2 	9  27 	1  6 	2  45 	8	93 	  5 	 198 	12 	27	4
Febricula Enteric Fever Cholera Dysentery Beri-beri Malarial Fever—	  6 14	3 7	3 4	  1 4	  2 4	  2 3	  2 7	  1 2	  2 12	  2 7	   4 12	  1 5
(a) Intermittent (b) Remittent (c) Pernicious R. Erysipelas Pyæmia Septicæmia Tetanus Tubercle	8 11   	1 7  	8 8   3	1 5 3	2 13  2  1 		4 6   1 	4   2 	3 34   1 	1	5 26   1 1	2 6   1
Leprosy— (a) Tubercular (b) Anæsthetic Yaws Syphilis— (a) Primary												
(b) Secondary	4 		2  		6	1	1  	•••	1 		1	
Alcoholism Delirium Tremens Rheumatism Rheumatic Fever Gout	 10 		 4 		 6 	•••	2	, ,,,,	1  5 		4	
New Growth, non-malignant New Growth, malignant Anæmia Diabetes mellitus Diabetes insipidus Debility	 1  5	 1  2	1		 2   2	1	 1 1   2		2   2	2  	 2   3	1   1
Local Diseases.							:					
Diseases of the Nervous System.								j				
Diseases of the Nerves.  Sub-section 1,— Neuritis Meningitis Myelitis Hydrocephalus Encephalitis Abscess of Brain Congestion of Brain	 2   	 1  			  		  					
Carried forward,	74	24	70	22	87	16	120	16	261	25	86	21

IN 1898, AT TUNG WAH HOSPITAL, HONGKONG.

8				j	MBER.	Осто	BER.	Nove	MBER.	DECE	MBER.		RLY AL.	
	1.7 0.	81 82	1.5 ?.	80	).9 ).	74 68	4.9 3.	69	9.4 1.	62 52	2.1 2.			Remarks.
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
 1    1  6 19	::::::::::::::::::::::::::::::::::::::	 1     3	     1 	      10				      12 29	     1  7	 1     6 21	 1      3	17  397  3  4  69 168	1 38 4 38 84	Cases of Small-pox and Plague are transferred at once, unless actually dy- ing, to Kennedy Town Hospital.
5 42   1 3 1 	15  1 2 1 	10 67  2  	18 11 1	28 64  2  1 	1 18   1 1 	8 68  2  1	16  2  1	12 46  1  	15	5 38  1  2 	 11    	98 423  8 1 10 8 1	5 117  1 10 6 1	"Remittent" and "Pernicious R." are not distin- guished in Regis- ter, but will be so in future. Chiefly Puerperal Septicæmia, ad- mitted with the condition already developed. Leprosy exists in this neighbourhood, but is not admitted to this
1 3 1 2 2 3		4 10		7 8 		3 1 8 3 2 1				4		 41   2  65  2 14 13 	4	Hospital. Cases found in the Colony are deported by Police.  Acute Venereal Disease is not admitted.
    		1		 1   		 2 1  	3 1 48			1 86	 2    37	 7 1  	 6 1  	

MONTHS.	JANU	JARY.	FEBR	UARY.	Ма	RCH.	АР	RIL.	М.	AY.	June.	
Mean Temperature		0.1 5.		2.7 8.		4.3		9.2 1.	78	8.4	8	1.6 3.
DISEASES.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Death s.
Brought forward,	74	24	70	22	87	16	120	16	261	25	- 86	21
Local Diseases,—Cont <sup>d</sup>					}	ł						
Diseases of the Nervous System.												
Functional Nervous Disorders.												
Sub-section 2,—	. •											
Apoplexy		•••	2	2	$\frac{2}{2}$	1			$\frac{2}{3}$	$\frac{2}{1}$		
Paralysis	2	1	2	••	1	1	1	1			2	1
Chorea Epilepsy	 1		1	1	:::							
Neuralgia	î				i		l :::			•••	1	
Hysteria	•••	•••								•••		
Mental Discases.					•							
Sub-section 3,—					1		1				l	]
Idiocy Mania	 1	•••		i		•••	""	•••		•••		• • • • • • • • • • • • • • • • • • • •
Mania	î	•••	1	•••			:::		l		:::	
Dementia							1					
Delusional Insanity	•••				1							
			l				1		1		]	
Diseases of the Eye			1								1	
For	•••				:::		:::					
" Yosa	•••											
" " Circulatory System		10	7	6	11	3	7	1	6	5	4	3
,, ,, Respiratory								1.0			00	
System Digestive	64	35	81	37	58	34	21	16	25	16	20	8
" " " Digestive System	15	4	17	5	10	2	5	5	9	1	. 16	6
. Lymphatic	•				1			ļ				
System	$^2$		2	•••	3		2		3		5	
" " Urinary			1	1	1	Ì	1		1		3	2
System ,, Generative	•••	•••	'	1	1	•••		•••	'			4
System— Male Organs	1		1		1	İ	2	.,.			1	
Female ,			2		$\frac{1}{2}$					ï		
Organs of	•••		<b>I</b>		I ~		1			*	1	
Locomotion	7		4		5		4		5	1	5	
" Cellular Tissue	12		10	•••	21		9	•••	6		13	
" " Skin	10	1	6	•••	4	•••	8		3	1	3	•••
							1		1			
Injuries, General	 16	1	 14	•••	 12		111	2	10	•••	 12	1
,, Local Malformations				•••	- 1.2		11			•••		
Poisons	•••		2	1	:::		:::	:::			• • • • • • • • • • • • • • • • • • • •	
Parasites	•••		$\tilde{2}$						1		•••	
Total,	221	76	226	75	221	57	194	41	335	53	171	43

IN 1898, AT TUNG WAH HOSPITAL, HONGKONG,—Continued.

Jui		Aug		SEPTE		Осто	<u>1</u>	Nove	MBER.	Decen	MBER.	YEA Tor	RLY	•
81 80		8: 8:	1.5 2.	80 80	).9 ),	74 68	L.9 3.	69 61	).4 l.	62 52	2.1			Remarks.
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
91	34	117	27	136	31	142	48	117	42	86	37	1,387	343	
1 1  2 	1   	1 1   1	1 1  	2 1  	2 1  	3 2   1	3 2  	4 1  3 		4 3  1 	2	21 24 1 6 7	14 9 1 1 	
 1 1 		 1 										2 4 		
  5 46	5 24	1  9 31	2 29	9	7	1  6 33	2 24	4  20 34	···· ··· ··· ·14 22	1  9 69	5 34	8  107 517	63 293	To a large extent Pulmonary Tuber- culosis in advan-
39 3 3	13	36 2		29	14	32 1 5.	7  3	23 5 3	3	24 1 4	8 2	255 29 26	89 14	ced stages at time of admission.
 7 8 16		3  4 14 9		1  13 13 11		1  12 7 15	1	1 1 3 10 9		6 7 12		12 5 75 130 106	1 2 1 3	
 15  1		19   1	1 	 16  		9 		17 	  1	16	1	 167  3 5	6 2	
241	81	251	72	270	69	270	90	255	95	243	90	2,898	842*	

<sup>\*</sup> It is to be noted that the Tung Wah Hospital is largely used as a dying house, to which people in extremis are brought from the coolie quarters, &c. of the city; and that treatment is chiefly by Chinese native methods. The mortality column must be read with these facts in view.

MONTHS.	Jan	UARY.	FEBR	UARY.	Ма	RCH.	AP	RIL.	М	AY.	J	UNE.
Mean Temperature Mean Humidity		0.1 5.		2.7 8.		4.3	E .	9.2		8.4		31.6 33.
DISEASES.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases	Deaths.	Cases.	Deaths.
General Diseases.												
Small-pox			]		<b> </b>						<b>.</b>	
Measles	•••								•••			
Typhus	•••			•••		•••	1		;	•••		
Plague Dengue	•••		:::			•••	•••	• • •		•••		•••
Influenza			l :::		, ::: 		•••					•••
Diphtheria						•••						
Febricula	•••			• • • • • • • • • • • • • • • • • • • •		•••				• • • • • • • • • • • • • • • • • • • •		
Enteric Fever	•••	•••		• • • •		•••	•••			•••		•••
Dysentery	•••					• • • • • • • • • • • • • • • • • • • •	2		 1	•••		•••
Beri-beri			1				$\overline{1}$				:::	:::
Malarial Fever—	•										"	
(a) Intermittent	1	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	4	•••	1		;			
(b) Remittent	•••	•••		•••	1	•••	2	•••	1	•••	1	
(c) Pernicious R Erysipelas	${2}$		:::	•••	•••	•••		• • • • • • • • • • • • • • • • • • • •		•••		•••
Pyæmia		•••								:::		
Septicæmia	•••											
Tetanus	•••	•••		···		• • • •	•••					•••
Tuberele Leprosy—	•••	•••	• • • •	•••		•••	•••	•••	,	•••		•••
(a) Tubercular	: •••											
(b) Anæsthetic	•••											
Yaws				•••	·	• • • •						
Syphilis—			١,						1		١.	
(a) Primary(b) Secondary	1			••	2	• • • •	•••	•••		•••	1	,
(c) Inherited			l						:::	***		
Gonorrhœa					••••		<b></b>					
Hydrophobia	•••	•••		•••	<b></b>					•••		
Seurvy Alcoholism	. •••	•••		•••			***		•••	•••		
Delirium Tremens	•••		:::						'''			:::
Rheumatism	2		4		1		1				:::	:::
Rheumatic Fever	•••				,							
Gout	•••	J				•••					•••	
New Growth, non-malignant  New Growth, malignant	•••		l	•••		•••			• •••		•••	
Anæmia	1						''i					
Diabetes mellitus												
Diabetes insipidus	•••	•••		•••	,	•••		•••				• • • •
Debility	•••			•••	$\frac{2}{2}$		3	•••	1	•••		•••
Local Diseases.												
Diseases of the Nervous System.												
Diseases of the Nerves.												
Sub-section 1,—		ì	I				l		1			
Neuritis							<b>.</b>				<b>.</b>	
Meningitis	•••				•••	•••					:::	
Myelitis	•••		•	•••		•••		•••		•••		
Hydrocephalus	•••	•••	•••		***	•••		•••	•••	•••		•••
Encephalitis	•••	•••			•••	•••		•••		•••		•••
Congestion of Brain	•••					•••				•••		
					_							
,	<b>-</b>		,.		10		1 7					
Carried forward,	7	•••	6	•••	10	•••	11	•••	4		2	•••

IN 1898, AT VICTORIA GAOL HOSPITAL, HONGKONG.

Jτ	ULY.	Au	GUST.	SEPT	емвек.	Ост	OBER.	Novi	EMBER.	DEC	MBER.	YE To	ARLY	<u> </u>
8	31.7 30.	8	31.5 32.	8	30.9 30.	7	74.9 88.	6	59.4 51.	6	32.1 2.		2	REMARKS.
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
     						 1  1   	 1  					 1  2    5 4	1 	
4		1 4  1 		 6  1  		1 3   		1  1 		1 1   		9 24  5  		
	•••									•••	•••		•••	
1		 1    				        		       		 3    2   1  1		1		
8	•••	10	•••	12		8	1	4	•••	9	•••	91	1	

# xviii SUPPLEMENT TO THE HONGKONG GOVERNMENT GAZETTE, 1899.

MONTHS.	Jan	UARY.	FEBI	RUARY.	Ма	RCH.	Aı	RIL.	М	AY.	Ju	INE.
Mean Temperature		50.1 55.		32.7 '8.		54.3 32.		39.2 31.		8.4		1.6
DISEASES.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Brought forward,	7	•••	6	•••	10	•••	11		4		2	
Local Diseases,—Cont <sup>d.</sup>							1					
Diseases of the Nervous System.												
Functional Nervous Disorders.				!	<b>!</b>							
Sub-section 2,— Apoplexy Paralysis Chorea Epilepsy Neuralgia Hysteria	 1  						i i 					
Mental Discases.		:					,			-		
Sub-section 3,— Idiocy	  2											
Diseases of the Eye, ,, Ear, ,, Nose, ,, Circulatory					1 	•••			 	•••	1 	
System, , Respiratory	1 3		 4	1	‡.· 1	   1		•••	3			•••
System , Digestive System	6		8		9		1 5	1	3		 1	
,, ,, Lymphatic System ,, , Urinary		•••			1	•••	1				ı	•••
System, Generative System— Male Organs											1	•••
Female ,, ,, Organs of Locomotion		•••	•••	•••	•••			•••		•••		
,, ,, Cellular Tissue ,, ,, Skin	$\frac{1}{2}$	···		•••	4	•••	2 	•••	4 1	•••	•••	•••
Injuries, General	•••		•••					•••				
,, Local	4  1 2		1  		  2 1		   3		2   1 2		3  	
Тотаг,	30		21	l	29	1	24	1	20		9	

Deaths by Hanging:—			Death <b>s</b> .
Suicide	••••••••	•••••	. 2
Evecution			c

IN 1898, AT VICTORIA GAOL HOSPITAL, HONGKONG,—Continued.

Jui	LY.	Aug	UST.	SEPTE	MBER.	Осто	BER.	Nove	MBER.	DEGEN	IBER.	Үеа Тот	RLY	
\$1 80	.7	81 82	1.5 2.	80		74 68	1.9 3.	69 61	).4 I.	62 52	2.1			Remarks.
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Peaths.	Cases.	Deaths.	Cases.	Deaths.	
8		10	•••	12	•••	8	1	4	•••	9		91	1	
														İ
		••	•••	•••			•••		•••	 1	•••			
		•••	•••	 1			•••				•••	 1		
•••	•••		•••											
•••	••	•••	•••	•••		•••	•••				•••			
												ļ.		
					•••									
		 1		 2	•••			,		 5		 11		
					•••			,						•
•••				1		1		1			•••	5		
		 		1 			•••		•••			l 		
				1		2	•••		4, • • •	2		9		
$_2$				3		. 2		1		3	1	20	3	
1		1		3		1	•••	1		4	1	43	2	
	•••	2		l		4				1		11		
•••	•••	1				2			•••	1		. 4		
				_					1					
				I		3						5 		
1		1		$\frac{2}{2}$				2		9		$\frac{4}{33}$		
$\frac{3}{2}$		1		$\frac{2}{12}$		$\begin{bmatrix} 3 \\ 2 \end{bmatrix}$		1		3		24		
1				2				I		3 ,	•••	17		ĺ
•••			•••							1		 5		
•••					•••	1		2				11	•••	
19		18	•••	44		29	1	13		42	2	298	6	

John C. Thomson, M.D., M.A.

Medical Officer.

### Appendix A.

# REPORT ON THE PREVALENCE OF PLAGUE IN THE COLONY OF HONGKONG DURING THE YEARS 1897 AND 1898.

### INTRODUCTORY.

This is a continuation of my report of the history of this disease in Hongkong in 1895 and 1896 and is a brief record of the subsequent progress of the disease.

### PREVALENCE OF PLAGUE IN HONGKONG, 1897.

The first three cases were reported on the 21st, 23rd, and 25th May from Heung Lane, no cases having been reported since the previous November.

This is one of the ill-ventilated narrow lanes off Queen's Road West; it was declared an infected area on May 26th and promptly dealt with. From this very lane eight cases were taken in June, 1895. The recrudescence of the disease in houses previously infected shows how tenaciously the bacillus clings to dwellings; it may be that the process of disinfection used, viz., fumigation with Sulphurous Acid Gas, the washing of the floors, woodwork &c, with Jeye's Fluid and the lime-washing of the ceilings and walls, is partly accountable for this.

A similar coincidence, viz, the recurrence of plague in houses previously infected has occurred in 1898.

At the instigation of the Medical Officer of Health a new system of disinfection has been established, viz., spraying the walls floors, &c., with a solution of perchloride of Mercury of the strength 1 in 1,000.

On the 5th of June one case occurred.

In the month of July there were eleven cases and during the remainder of the year six more cases occurred, the streets, &c. where they came from being given in Appendix A. No less than 8 out of the 21 cases occurred in lanes and houses in which cases had occurred in 1896.

From this it will be seen that:—

- (1.) The total number of cases reported was 21, all being Chinese.
- (2.) The disease commenced at the end of May and cases occurred in each remaining month of the year excepting October.
- (3.) In no month did it assume the proportion of an epidemic.
- (4.) During the month of July the greatest number of cases occurred.

### METEOROLOGICAL DATA.

On reference to Enclosure A, it will be seen that the rainfall in 1897 was much greater than in 1896 or 1898.

PROCEEDINGS ADOPTED WITH A VIEW to PREVENTING THE SPREAD OF THE DISEASE IN 1897.

The proceedings adopted were similar to those adopted in 1896, viz.:-

- (a.) Removal of sick persons.—The patients after having been declared to be suffering from plague were removed to Kennedy Town Hospital in ambulances which are kept for that purpose at the different hospitals and police stations.
- (b.) Infected premises.—Steps were taken to thoroughly disinfect the premises in which cases were found and to cleanse and remove as far as possible all obstructions to light and air existing in these districts.

Heung Lane was declared infected on May 26th.

With regard to sanitary legislation the following regulations came into force:-

(1.) Regulations in accordance with section 58 of Ordinance 15 of 1889 providing for the preparation of sites and the maintenance in a sanitary condition of matsheds used by contractors for housing coolies employed in building.

- (2.) During 1897 the concreting of the ground surfaces of houses under section 4 of Ordinance 15 of 1894 was extended to the villages of Hunghom, Yaumati, and Tsim-tsatsui in the Kowloon Peninsula.
- (3.) On the 1st June the bye-laws which had been passed for the sanitary maintenance of opium divans and for the prevention of overcrowding therein came into force.
- (4.) Bye-laws made under section 13 of Ordinance 15 of 1894 dealing with the following matters were finally approved by the Legislative Council on 18th May:—

### BYE-LAWS

### Made under section 13 of Ordinance 15 of 1894.

1. The expressions "building," "domestic building," and "street" as used in these bye-laws, or in any bye-law amending, or substituted for, or added to the same, shall, unless inconsistent with the context, have and include the meanings respectively set against them in section 2 of Ordinance 15 of 1894.

The expressions "householder," "occupier," "owner," and "vessel," as used in these bye-laws, or in any bye-law amending, or substituted for, or added to the same, shall, unless inconsistent with the context, have and include the meanings respectively set against them in section 3 of Ordinance 24 of 1887.

- 2. The material to be used for covering the ground surface of all domestic buildings shall be good lime or cement concerte at least 6 inches thick, finished off smooth to the satisfaction of the Sanitary Board. Provided always that the said Board may in its discretion exempt the owners of existing domestic buildings, the floors of which have a space between the ground floor and the ground surface, from carrying out the requirements of this bye-law.
- 3. The material to be used for covering the ground surface of every cook-house, latrine, back-yard, court-yard or other space on which slops may be thrown, shall be good lime or cement concrete or other impervious material to the satisfaction of the Sanitary Board at least 6 inches thick and in addition such material shall be finished off smooth with not less than 2 inches of cement concrete of the proportion of one part of cement to four parts of fine broken stone, or with granite slabs bedded and jointed in cement mortar, or with such other material as shall be approved of by the said Board.
- 4. The ground surface of every cook-house, latrine, back-yard, court-yard, or other space on which slops may be thrown shall have a fall of not less than ½ inch to 1 foot from the walls of the building towards the surface channel or other outlet for the drainage of such surface.
- 5. No court-yard or back-yard, which appertains to, or is used in connection with any domestic building, and which is at the time of the approval of these bye-laws by the Legislative Council, either wholly or partially open to the sky, shall be obstructed, in a vertical direction, either wholly or partially, or, if already partially so obstructed, be further so obstructed to any extent whatsoever, by the erection or fixture of any structure or object of any kind whatsoever, whether temporary or permanent, without the permission in writing of the Sanitary Board. Provided, nevertheless, that in cases where such back-yards exceed an area of 100 square feet in the case of buildings of two stories in height, and 150 square feet in the case of buildings of three or more stories in height, such back-yards need only be kept clear of obstructions (including bridges and covered ways) and fixtures, and open vertically to the sky throughout, to the extent of 100 and 150 square feet respectively.

One bridge or covered way may, however, when such is necessary for giving access to buildings, be erected on each story, but such bridges or covered ways must be erected one over the other, and any such bridge or covered way shall not exceed 3 feet 6 inches in width unless the Sanitary Board gives permission in writing in any particular case for the erection of bridges or covered ways of greater midth.

This bye-law shall apply to all cases in which it is proposed to substitute another court-yard or back-yard for any existing one.

- 6. The Medical Officer of Health, or such other officer as the Sanitary Board may appoint for this purpose, shall, within such limits as the said Board may from time to time define, cause to be measured the floor area and cubic capacity of all domestic buildings or parts thereof, and shall cause to be calculated the number of occupants that may lawfully pass the night in such buildings or any parts thereof in accordance with the provisions of section 9 of Ordinance 15 of 1894, and shall cause such number in English and Chinese to be fixed to such buildings or parts thereof in such manner as the said Board may from time to time direct.
  - 7. The space required by section 8, sub-section (b), of Ordinance 15 of 1894, to be left above partitions shall not be enclosed except with wire netting, iron bars, lattice work or carved wood work, arranged in such a way as to leave at least two-thirds of such space open and as far as practicable evenly distributed.

- 8. The Secretary to the Sanitary Board shall, upon the requisition of the Medical Officer of Health, or by direction of the President of the said Board, authorise in writing, in English and Chinese, one or more of the Board's officers to enter any domestic building at any hour between 6 r.m. and midnight, for the purpose of ascertaining whether such building or any part thereof is in an overcrowded condition.
- 9. No officer of the said Board shall, between the hours of midnight and 8 o'clock the following morning, enter any domestic building for the purpose of ascertaining whether such building or any part thereof is in an overcrowded condition, without the written permission, in English and Chinese, of the Secretary countersigned by the President of the said Board.
- 10. The Secretary to the Sanitary Board shall furnish the Inspectors of Nuisances with general authority in writing, in English and Chinese, to enter, between the hours of 8 a.m. and 6 p.m., and inspect, upon reasonable notice to the occupiers or owners, any building and curtilage in their respective districts for the purpose of ascertaining the sanitary condition, cleanliness and good order thereof or of any part thereof, and of any partitions, mezzanine floors, stories and cocklofts therein, or of the condition of any drains therein or in connection therewith. If it shall be requisite, for the purpose of ascertaining the sanitary condition of any domestic building or curtilage, to open the ground surface of any part thereof any Inspector of Nuisances in possession of authority in writing signed by the Secretary to the said Board or by the Medical Officer of Health, after giving not less than forty-eight hours' notice in writing signed by either of the aforesaid officers to the occupier or owner of such domestic building or curtilage of his intention to enter the same for the purpose of opening up the ground surface thereof, may so enter, with such assistants as may be necessary, and open the ground surface of any such premises in any place or places he may deem fit, doing as little damage as may be. Should the material which has been used for covering such ground surface and the nature and thickness thereof, be found satisfactory and in accordance with law, such ground surface shall be reinstated and made good by the said Board at the public expense.
- 11. The occupier of any domestic building shall at all times cause such building to be kept in a cleanly and wholesome condition and see that the drains, traps, gratings, fall-pipes and other sanitary fittings and appliances are kept free from obstruction and in an efficient state of repair; and he shall keep the windows and ventilating openings at all times free from obstruction unless prevented by inclement weather or by the illness of any person occupying such building.
- 12. Every occupier or householder of a domestic building shall cause all excremental matter to be removed daily from such building, to one of the public conservancy boats, by a duly registered night-soil carrier.
- 13. Every occupier or householder of a domestic building shall cause all domestic waste, refuse or other objectionable matter other than excremental matter to be removed daily from such building and taken to a public dust-cart or dust-bin.
- 14. The conditions under which alone it shall be lawful to live in, occupy, or use, or to let or sublet, or to suffer or permit to be used for habitation any cellar, vault, underground room, basement or room, any side of which abuts on or against the earth or soil, shall be that (1) such cellar, vault, underground room, basement or room fronts on a street which is of a clear width of not less than 8 feet free from any vertical obstruction whatever, and (2) that such cellar, vault, underground room, basement or room is provided with one window at least opening into the external air and that the total area of such window or windows clear of window frames shall be at least one-tenth of the floor area of such cellar, vault, underground room, basement or room, and (3) that no side of such cellar, vault, underground room, basement or room abuts against the earth or soil to an average height exceeding four feet above the floor level, and (4) that throughout the remainder of the height of such cellar, vault, underground room, basement or room the ground outside is at least 4 feet distant horizontally from the external wall of such cellar, vault, underground room, basement or room, and (5) that the area formed between such ground outside and such external wall is not obstructed or covered over either wholly or partially by the erection of structures, coverings or fixtures of any kind whatsoever. Provided always that the Sanitary Board may, if it thinks fit, grant permission in writing to obstruct or cover such area in any manner which may be previously approved by the Board.
- 15. The conditions under which alone it shall be lawful to occupy or use, or to let or sublet, or to suffer or permit to be used for occupation as a shop any cellar, vault, underground room, basement or room any side of which abuts on or against the earth or soil shall be that such cellar, vault, underground room, basement or room complies with the provisions of the preceding bye-law, or that such cellar, vault, underground room, basement or room fronts on a street of a clear width of not less than eight feet free from any vertical obstruction whatever, and that such cellar, vault, underground room, basement or room does not exceed thirty feet in length, as measured from the front wall to the back wall.

Such shop may not be used for habitation except by such a person or by such number of persons as the Sanitary Board may authorize in writing, and in every case in which the Sanitary Board authorizes any person or persons to use for habitation any such shop, sleeping accommodation shall be provided by the erection of a cockloft or bunks, which shall have a clear space of at least four feet between it or them and such side or sides of the cellar, vault, underground room, basement or room as abuts or abut against the earth or soil.

16. The Sanitary Board shall, if satisfied that any domestic building in the Colony is in a dirty condition, give notice to the householder to have such building, in respect of which the notice is given, thoroughly cleansed and lime-washed within a period of one week from the date of receipt of such notice, and such householder shall cleanse and lime-wash such premises in accordance with such notice.

notice, and such householder shall cleanse and lime-wash such premises in accordance with such notice.

In any case where no householder exists or can be found, the owner of such building shall be served with a notice to the above effect, and upon such service being duly effected, such owner shall cleanse and lime-wash such premises in accordance with such notice.

- 17. All persons knowing or having reason to believe that any person has been attacked by, or is suffering from, bubonic plague, cholera, small-pox or from such other epidemic, endemic or contagious discase as may be from time to time duly notified in the Government Gazette, shall notify the same without delay to any officer on duty at the nearest Police Station, or to some officer of the Sanitary Board, and any such officer receiving any such notification whether verbal or written or discovering any such case, shall notify the same with the least possible delay to the Medical Officer of Health or to the Secretary of the Sanitary Board, and may detain such person or remove him to a public hospital until he can be examined by the Medical Officer of Health or by some legally qualified and registered medical practitioner.
- 18. The Sanitary Board by its officers may provide for the removal of, and may remove to the Hygeia, or other appointed place, any person suffering from any such disease; and no removal shall take place except under the orders of the said Board or of one of its officers or of a legally qualified and registered medical practitioner, and then only in such manner and with such precautions as the said Board shall from time to time direct. No such removal, however, shall take place if the Medical Officer of Health or any legally qualified and registered medical practitioner certifies that such person is being lodged and cared for without danger to the public health.
- 19. The Sanitary Board may remove or cause to be removed for burial or cremation all bodies found in the Colony of persons who have died from any of such diseases and may bury or cremate or cause the same to be buried or cremated in accordance with the custom of the race to which the deceased belonged in such place and in such manner and with such precautions as the said Board may from time to time direct, and no persons, unless acting under the written sanction or direction of the Secretary of the said Board or of the Medical Officer of Health to bury or cremate, shall remove or bury or cremate any such bodies.
- 20. If any article of clothing or bedding or any other article which has been in contact with any person or any dead body in any way affected by any such disease can, in the opinion of the Medical Officer of Health or of an Inspector of Nuisances, be preserved without danger to the public health and can be effectively disinfected, then any such article shall be removed from any premises in which it shall be found by coolies hired by any person acting under the instructions of the Sanitary Board, or of one of its duly authorized officers, with such precautions and in such manner as the said Board shall from time to time direct, and shall be effectively disinfected and then returned to the owner or owners thereof. No person, save as aforesaid, shall handle any such article until it has been disinfected.
- 21. If, however, in the opinion duly certified in writing, of an Inspector of Nuisances or of any other duly authorized officer of the Board, or of a legally qualified and registered medical practitioner, any bedding, clothing, or other article which has been in contact with any person or any dead body in any way affected by any such disease, or which shall have been found upon any premises recently occupied by such person or body cannot be effectively disinfected or ought, in the interests of the public health, to be destroyed then it shall, if the Medical Officer of Health or other officer of the Sanitary Board duly authorized to act on his behalf, concurs, be destroyed in such manner and in such place and with such precautions as the said Board may from time to time direct.
- 22. Any building or part of a building in which any person attacked by any such disease or in which the body of any person who has died of any such disease shall have been, or shall be found, shall forthwith, after the removal therefrom of the diseased person or of the dead body, be thoroughly cleansed and disinfected, to the satisfaction of the Medical Officer of Health; and if—in the opinion of the Medical Officer of Health or of any legally qualified and registered medical practitioner—it is necessary, in the interests of the public health, the persons residing in such building or part of a building shall be detained therein or shall be removed to such buildings or vessels as the Board may direct and there isolated and kept under observation until such time as they may, in the opinion of the said Medical Officer of Health or other Medical Officer in charge of such buildings or vessels, be safely released; and it shall not be lawful for any person to re-occupy any such building or part of a building until it has been thoroughly cleansed and disinfected as aforesaid.

### BYE-LAWS

To be enforced only during the prevalence of an epidemic, endemic, or contagious disease in the Colony or in any district thereof.

- 23. During the prevalence in the Colony, or in any district thereof, of bubonic plague, cholera, small-pox or such other epidemic, endemic, or contagious disease as may be from time to time notified in the Government Gazette, all receptacles, whether public or private, for excremental matter shall be kept thoroughly disinfected by the owner thereof to the satisfaction of the Medical Officer of Health or other duly authorized officer of the Sanitary Board, by causing to be thrown into every such receptacle after use a sufficient quantity of any such disinfectant as may be approved by the said Board. and channels as well as all partitions, seats and other fittings of every latrine shall be frequently washed and cleansed with water to which some such disinfectant has been added.
- 24. During the prevalence in the Colony, or in any district thereof, of any of the aforesaid diseases any building or part of any building certified in writing by the Medical Officer of Health or by any legally qualified and registered medical practitioner, to be unfit for human habitation, even although the same may have been cleansed and disinfected, as provided in Bye-law 23, may be closed by order of the Sanitary Board during the prevalence of any of such diseases or for such less period as the Medical Officer of Health or such legally qualified and registered medical practitioner may certify to be necessary, and the occupants of the same may be removed, after 24 hours' notice has been given to the householder or occupier to vacate the premises, by the service of a notice, duly signed by the Secretary of the Sanitary Board, or by the posting of such notice upon any portion of the premises.

In no case shall such premises be re-occupied except under a certificate of the Sanitary Board

signed by the Secretary that such premises are fit for human habitation.

The said Board may, when necessary, erect matsheds, or hire buildings or charter vessels and use them for the accommodation of the persons so removed.

25. Any officer of the Sanitary Board may, during the prevalence in the Colony or in any district thereof of any of the aforesaid diseases, and within such limits as may from time to time be defined by the said Board, make a house to house visitation for the purpose of inspecting the sanitary condition of any premises so visited and of all and every part thereof, and of ascertaining whether there is any person in or upon the said premises attacked or affected by any of the said diseases or the body of any person who has died therefrom. If the premises so visited or any part thereof shall be found in a dirty or insanitary condition in the opinion of any such officer he shall report the same to the Medical Officer of Health or to any such other officer as may be appointed for that purpose by the Sanitary Board, with the approval of the Governor, who shall inspect such premises and, if he considers them or any part thereof to be in a dirty or insanitary condition, he may forthwith take steps to have all furniture and goods removed therefrom and to have the said premises thoroughly cleansed and disinfected by persons acting under his instructions; and whenever, in his opinion, it is necessary for the thorough cleansing and disinfection of such premises to do any or all of the following acts, namely, to take down, remove from the premises or destroy any mezzanine floor, cockloft, partition, screen or other similar structure or fitting, or any portion thereof, or when in his opinion any mezzanine floor, cockloft, partition, screen, or other similar structure or fitting prevents the free access of light and air to the said premises; he shall forthwith have the same taken down, and if he considers the removal from the premises or the destruction thereof, or both, necessary in the interests of the public health, he shall forthwith cause the same to be removed from the premises or destroyed or both. Such destruction shall be carried out with such precautions and in such manner and in such place as the said Board may from time to time direct.

### Penalties.

26. Any person who shall commit any breach of any of the above Bye-laws shall on conviction thereof be liable to a penalty not exceeding \$25 in every case.

Made by the Sanitary Board this 13th day of May, 1897.

HUGH McCALLUM, Secretary.

Approved by the Legislative Council this 17th day of May, 1897.

J. G. T. Buckle,

- (5.) An Ordinance to enable the Government to provide suitable latrine accommodation for the Public (Ordinance No. 8 of 1897).
- (6.) An Ordinance to prevent the spread of Infectious Disease arising from the consumption of contaminated or unwholesome milk (Ordinance 17 of 1897).

### EXISTENCE OF PLAGUE IN THE VICINITY OF THE COLONY.

Kwangtung Province.—Information was obtained of its existence in an epidemic form at Tung Kun up the East River, towards the end of January; undoubted cases of the pneumonic variety then occurred there.

Formosa.—Information was obtained of its existence at Formosa in April.

Swatow.—The disease prevailed in the neighbourhood of Swatow in April.

Macro.—Towards the end of May cases were reported as having occurred at Macao.

Amoy.—The disease prevailed here in June.

The importation and immigration of all Chinese into this Colony from Swatow and the Island of Formosa was prohibited by proclamation on 20th April; this was revoked on May 1st.

Swatow and the Island of Formosa were proclaimed as infected with Plague on 1st May; this necessitated the medical examination of the passengers and crews of all ships arriving from these places before they were allowed to land in the Colony.

This proclamation was revoked as regards Swatow on the 17th July and as regards Formosa on

the 20th August.

### DISTRIBUTION OF WORK.

The work in connection with the plague was distributed as follows: -

The Sanitary Board undertook all duties in connection with the removal of plague cases to Hospital, the subsequent isolation of those who had been in immediate contact with the disease and the disinfection of premises.

The Medical Department undertook the care of the sick after the arrival in Hospital; and

The Public Works Department undertook the erection of the necessary temporary buildings, the preparation of graves, and the interment of the deceased.

### PREVALENCE OF PLAGUE IN HONGKONG 1898.

The first case of plague was reported from Cheung Hing Street on the 2nd January; during this month 9 cases occurred.

In February 67 cases occurred.

The disease became epidemic in March; during that month 137 cases were reported and on the 25th of that month Health Districts 2, 4, 5 and 6 were declared infected; the disease rapidly spread to the remaining Health Districts of the Colony as the following table, giving the number of cases reported in each month, will show:—

•	
January,	9
February, 6	7
March,13	
April,46	
78 DI 119 *********************	٠.,
May,53	4
	2
July,	7
August,	
September,	
October,	2
November	0
	i
December,	1
Total,1,32	0

In April the neighbouring peninsula of British Kowloon was declared infected on the 18th April. On the 9th June Aberdeen and Aplichau were similarly declared infected.

### METEOROLOGICAL DATA.

(a.) The rainfall was much below the average.

(b.) The months of maximum mean temperature were followed by marked diminution in the number of cases

(c.) Number of hours of sunshine was much less during the months January-May when the disease was most prevalent.

PROCEEDINGS ADOPTED WITH A VIEW TO PREVENTING THE SPREAD OF THE DISEASE IN 1898.

The following procedure was adopted:—

(a.) House to House Visitation.—A daily visitation of houses in Health Districts Nos. 2, 4, 5, 6, 7, 8 and 9 was mada by sections of Police and Military. See Appendix C.

(b.) A house to house inspection was made in the infected districts by the Medical Officer of Health assisted by the following Officers:

Hon. F. H. May, c.m.g., Captain Superintendent of Police.

Mr. Frank Browne, Acting Government Analyst. Mr. Joseph T. Bryan, Assistant Sanitary Surveyor.

(c.) All cases of plague were removed to the Government Isolation Hospital at Kennedy Town, situated at the extreme west of the City and were under the charge of officers of the Medical Department.

Suspicious cases were placed in observation wards at the Government Civil and

the Tung Wah Hospitals.

This occurred until the opening of the Native Plague Hospital on the 2nd of May after which date Chinese suffering from this disease were allowed the option of being sent to the Branch Hospital of the Tung Wah where they were treated by the so-called Chinese medical methods, or to the Government Isolation Hospital.

(d.) Removal of sick persons and dead bodies.—Until the 5th May this was undertaken by the Inspectors of Nuisances, after that date this was effected by the Police.

Dead bodies were all taken direct to the Public Mortuary at West Point and were examined by the Medical Officer in charge. Those who were certified as having died from plague were removed to the Plague Cemetery at Kennedy Town and buried there.

(e.) Segregation.—Compulsory segregation of those who had been in immediate contact with the disease at the infected houses was not enforced, but the following was done:-

Those who had been in contact with the sick were supplied with clothing and were detained in their own dwellings whilst their own was being disinfected, the clothing was then returned to the owners who were required to vacate the house whilst it was being disinfected and cleansed, during this time they could go to matsheds which had been erected in different parts of the city and stay there; they were at liberty to go to their daily work but were examined every morning by a Medical Officer; after the cleansing and disinfecting was finished they returned to their own houses.

(f.) Infected premises.—On 24th March the following neighbourhoods were declared to be

infected by plague :-

Health Districts 2, 4, 5 and 6.

The boundaries of No. 2 Health District are:-

East—Wanchai Road. North—Harbour. West—Garden Road. South—Taitam conduit.

The boundaries of Nos. 4, 5 and 6 Health Districts are: -

North--Harbour. West—Cleverly East—Wyndham Street and Glenealy. Street and Tank Lane. South-Caine Road.

On the 14th April the villages in British Kowloon were declared areas infected with plague.

On the 9th June the villages of Aberdeen and Aplichau were declared to be

areas infected with plague.

Steps were taken to thoroughly disinfect all the premises in which cases were found and to cleanse and lime-wash those houses certified by the officers mentioned in section (b) as requiring it.

(g.) Maintenance of cleanliness throughout the city.

Special attention was paid to the cleansing and disinfection of all the latrines, chloride of lime being the disinfectant used.

The flushing of the sewers was effected by the Public Works Department.

With regard to sanitary legislation:

The Insanitary Properties Commission issued their report this year, and the Sanitary Board were

requested by the Government to consider and report on it.

This they did and their recommendations which were more drastic than those of the Commission, are practically embodied in a Bill entitled an Ordinance to make further provision for the sanitation of the Colony and to repeal certain enactments of the closed houses and insanitary dwellings Ordinance, 1894, which was first read in the Legislative Council on 22nd November, 1898.

Existence of Plague in the Vicinity of Hongkong in 1898.

Macao.—Information of the existence of plague at Macao was obtained towards the end of March. Canton.—Plague became prevalent in Canton in the month of April, previously cases had occurred in the surrounding districts.

Canton, Whampoa, and Macao—were proclaimed to be infected on the 9th April; this proclamation

was revoked on the 2nd July.

Amoy—was proclaimed to be a port infected with Plague on the 4th June; this proclamation was revoked on the 31st August.

### DISTRIBUTION OF WORK.

The Sanitary Board undertook all duties in connection with the removal of sick persons to Hospital and of dead bodies to the Mortuary up to the 5th May, after this date it was found more convenient for these removals to be effected by the Police.

The Inspectors of Nuisances superintended the cleansing and disinfection of the premises and the disinfection of the clothing from the infected premises, the Police seeing to the detention of persons

who had been in contact with the sick whilst the clothing was being disinfected.

The Medical Department undertook the care of the sick after the arrival at the Infectious Diseases Hospital Kennedy Town up to the 2nd May after which date all Chinese patients were allowed the option of proceeding either to the Government Hospital or to a Native Plague Hospital erected by the Tung Wah Hospital authorities with the sanction of the Government. Although the patients were treated by the so-called Chinese medical methods the sanitary arrangements were under the supervision of the Visiting Surgeon to the Tung Wah Hospital.

It was thought that if this concession was made to the Chinese it would prevent the deposition of dead plague bodies in the streets. However, as I pointed out to the Government at the time the reason why the Chinese deposited the dead plague bodies in the streets was not their fear of medical treatment in the Government Hospital but their strong objection to the disinfection and cleansing of

the premises where plague patients were found.

The Public Works Department undertook the erection of additional matsheds at the Government Hospital at Kennedy Town, the preparation of graves, and the interment of the deceased. There was ample accommodation at the Government Hospital for all the cases that occurred including those that were treated at the Native Hospital.

The Sanitary Board was augmented by the following additional staff:-

13 European Police Officers.

1 Naval Chief Petty Officer.

24 Sappers and Privates.

16 Chinese Constables.

Some 300 coolies.

#### STATISTICS.

The following table gives the number of cases occurring in the separate Health Districts, the ratio per 1,000 of population, and the percentage mortality:—

District.		No. of Cases among Chinese.	Estimated Population Chinese only.	Rate per 1,000 of population.	Total Cases.	Total Deaths.	Percer tage Morta lity.
City of Victoria No. 1 Hea  " " " No. 2 "  No. 3 "  No. 4 "  No. 5 "  No. 6 "  No. 6 "  No. 7 "  No. 8 "  No. 9 "  No. 10 "  Hunghom No. 11 "  Yaumati, Kowloon Pt. No. 12 "  Victoria Peak  Shaukiwan  Aberdeen	,,	153 29 120 110 70 87 87 154 76 32 96 5	7,885 21,626 4,294 23,794 22,244 17,072 16,380 18,993 24,435 7,527 29,356 1,650 10,938 7,446	6.7 7.0 6.7 5.0 4.9 4.1 5.3 4.5 6.3 10.0 4.3  3.0 1.1	59 169 44 135 112 72 87 91 154 76 34 103 6	57 161 37 126 102 64 68 82 135 68 30 84 4 11	96.6 95.2 84.0 92.5 91.0 88.8 78.1 90.1 87.6 89.4 88.2 81.5 66.6 84.6 71.4
Stanley			2,400 23,170 	0.4 5.0 	$egin{array}{c} 1 \\ 122 \\ 28 \\ \end{array}$	1 108 27	100 88.5 96.4
	*	1,254	239,210	5.2	1,320	1,175	89.

Appendices .-- In Appendix A. is given the cases of Plague reported during 1897.

In Appendix B. is given the meteorological observations registered at the Hongkong Observatory for the last three years.

In Appendix C. is given the report on the House to House Search Party by Honourable F. H. May, c.m.g.

## Appendix A.

### CASES OF BUBONIC PLAGUE REPORTED DURING 1897.

No. of Cases.	Date of Occurrence,	Residence of Patient previous to discovery. Treatment or Segregation.	Name,	Sex.	Age.	Date of Admission into Kennedy Town Hospital.	Date of Death.
1 2 3 4 5 6 7 8 9 10 11 12 13	21st May, 23rd " 25th " 5th June, 12th July, 12th " 14th " 14th " 14th " 21st " 23rd " 26th "	14, Heung Lane, 14, Heung Lane, 12, Heung Lane, 7, Kau U Fong, 22, Wing On Street, 88, Third Street, 9, Sing Hing Alley, 24, Gough Street, 10, Hillier Street, 3, Ng Kwai Fong, Found at Canton Str. Wharf, Found at Wing Kut Street, From Kowloon City,	Mak Iu, Chu Yau,	Female,  ""  ""  Male,  ""  ""  Female,	30 " 24 " 27 " 30 " 12 " 7 " 11 " 14 " 24 " 32 " 36 " 19 "	•21st May, 23rd ,, 25th ,, 5th June, 12th July, 12th ,, 14th ,, 14th ,, 14th ,, 21st ,, 23rd ,, 26th ,,	'21st May. 24th " 26th " 7th June. 12th July. 12th " 14th July. 14th " 16th " 21st " 23rd " 26th "
14 15 16 17 18 19 20 21	26th " 31st " 3rd Aug., 26th Sept., 13th Nov., 13th " 18th Dec., 19th "	Praya East,	Ho Tak, Leong Ping, Ip Hau, Lam Hau, Lam Chung, Shum Heng Fa,	Male, "Female, Male, " "	30 ,, 16 ,,	26th ,, 31st ,, 3rd Aug., 26th Sept., 13th Nov., 13th Nov., 18th Dec., 19th Dec.,	26th ,, 27th Sept. 13th Nov. 13th Nov. 18th Dec. 21st ,,

Appendix B.

METEOROLOGICAL OBSERVATIONS REGISTERED AT HONGKONG OBSERVATORY, 1896-1898.

1896.			1897.	1897.	1897.	1897.	1897.						1898.		
Mean ture.Mean Humidity.Mean Vapour Tension.Sunshine Total.Rainfall Total.Mean Total.Mean Tempera- ture.Mean Humidity.Mean Vapour ture.	Mean Vapour Tension.Sunshine Potal.Rainfall Total.Mean Temperature.Mean ture.	Sunshine Rainfall Tempera- Humidity.	Mean Mean ture.	Mean Mean ture.	Mean Humidity.		Mean Vapour Tension.		Sunshine Total.	Rainfall Total.	Mean Tempera- ture.	Mean Humidity.		Sunshine Total.	Rainfall Total.
o % ins. hours, ins. o % ins.	ins. hours.	hours, ins. ° %	ins. ° %	0	//		in S.		hours	24.	0				
	0.424 133.8 1.730 63.1 80	133.8 1.730 63.1 80	1.730 63.1 80	63.1 80	80		0.476		90.7	2.260	60.1	<b>~</b> 9	nns. 0.354	hours.	ins.
56.0         85         0.387         16.3         7.945         54.2         80         0.346	0.387 16.3 7.945 54.2 80	16.3 7.945 54.2 80	7.945 54.2 80	54.2 80	80		0.346		47.4	1.820	62.7	, %	0 464	10.0	1.100
59.3         88         0.451         59.3         1.445         63.3         90         0.532	0.451 59.3 1.445 63.3 90	59.3 1.445 63.3 90	1.445 63.3 90	63.3 90	06		0.532		7.1.7	0.815	64.3	85	0.504	111.5	0.55.2
70.8 87 0.664 76.9 2.100 68.4 81 0.569	0.664 76.9 2.100 68.4 81	76.9 2.100 68.4 81	2.100 68.4 81	68.4 81	18		0.569		122.7	3.240	69.2	81	0.586	086	3 440
76.0         79         0.714         176.0         1.150         79.1         85         0.842	0.714 176.0 1.150 79.1 85	176.0 1.150 79.1 85	1.150 79.1 85	79.1 85	85		0.842		195.5	14.860	78.4	88	0.810	256.0	5.700
85 0.886	0.886 145.1 18.630 81.5 84	145.1 18.630 81.5 84	18,630 81.5 84	81.5 84	84		806.0		141.7	23.355	91.8	. 89	0.894	135.1	14.250
0.924 220.1 12.420	0.924 220.1 12.420 82.1 79	220.1 12.420 82.1 79	12.420 82.1 79	82.1 79	42	<del></del> -	0.866		220.6	5.565	81.7	08	0.870	226.7	7.055
00 0.888 252.8 5.195	0.888 252.8 5.195 80.8 86	252.8 5.195 80.8 86	5.195 80.8 86	80.8	98		0.899		152.2	25.550	81.5	85	0.880	203.9	9.900
00 0.854 192.7 9.995	0.854 192.7 9.995 81.2 79	192.7 9.995 81.2 79	9.995 81.2 79	81.2 79	19		0.83	<u> </u>	229.5	8.340	6.08	80	0.844	218.8	5.295
13 0.704 195.2	0.704 195.2 7.905 76.8 76	195.2 7.905 76.8 76	7.905 76.8 76	76.8	92		0.70		150.9	6.425	74.9	89	0.586	168.6	6.720
76 0.591 134.0 2.975 69.8 65 0.511 0.511	0.591 134.0 2.975 69.8 65	134.0 2.975 69.8 65	2.975 69.8 65	69.8 65	65	-	0.51		176.1	7.320	69.4	19	0.449		0 700
62.2 65 0.386 167.0 1.290 60.6 68 0.363	0.386 167.0 1.290 60.6 68	167.0 1.290 60.6 68	1.290 60.6 68	60.6	89		0.36	60	146.8	0.480	62.1	52	0.279	254.4	0.025
72.0 80 0.656 1769.2 72.780 71.7 79 0.654	0.656 1769.2 72.780 71.7 79	1769.2 72.780 71.7 79	72.780 71.7 79	71.7	62		0.654		1745.8	100.030	72.2	7.5	0.628	2126.2	57.025

### Appendix C.

Report on House to House Search during epidemic of Plague by Honourable F. H. May, C.M.G.

 $\frac{No 75.}{M}$ 

Police Office, Hongkong, 14th July, 1898.

Sir,—I have the honour to forward, for the information of the Board, the following report on the work carried out during the recent epidemic of Plague in connection with the house to house search for plague patients.

The work, which began on the 19th April and ceased on the 11th June, was organised in the following manner:—

No. 2 Health District was divided into 2 sections and a search party consisting of 2 European Police Sergeants, 3 Soldiers and 3 Chinese Constables visited each section on alternate days.

No. 4 Health District was divided into 3 sections and a search party consisting of 1 European Police Constable, 2 Soldiers and 3 Chinese Constables visited one section a day.

No. 5 Health District was divided into 4 sections and a search party consisting of 1 European Police Sergeant, 1 European Police Constable, 4 Soldiers and 3 Chinese Constables visited one and a half sections a day.

No. 6 Health District was divided into 3 sections and a search party consisting of 1 European Police Constable, 2 Soldiers and 3 Chinese Constables visited two sections a day.

Nos. 7 and 8 Health Districts were divided into 3 sections and a search party consisting of 1 European Police Constable, 2 Soldiers and 3 Chinese Constables visited two of the sections each on alternate days.

No. 9 Health District was divided into 3 sections and a search party consisting of 1 European Police Constable, 1 Soldier and 2 Chinese Constables visited two of the sections each on alternate days.

The remaining section in No. 8 Health District and the remaining section in No. 9 Health District were visited by a search party consisting of 1 European Police Constable, 2 Soldiers and 3 Chinese Constables each on alternate days.

The total number of searchers employed was 45.

There were 62 cases of plague discovered by the search parties; of these 52 were alive and 10 dead. There were also 8 cases of suspected plague removed to Hospital which were pronounced not to be plague. All cases of plague or suspected plague, with the exception of those found in No. 9 Health District up to the 14th of May, were removed, in the first instance, to the Tung Wa Hospital where they were diagnosed by Dr. Chung and forwarded, if pronounced plague, to the Plague Hospital. After the 14th May the cases in No. 9 Health District were also forwarded, in the first instance, to the Tung Wa Hospital.

There was only one complaint made by the public against the Police engaged on house to house visitation. On investigation it was found to be without foundation. There were two complaints against the soldiers which were apparently well founded, and the men were removed from this duty, otherwise the soldiers did their work in a very orderly manner.

The search parties worked from 9 a.m. to noon and from 2 to 5 p.m. Each party was allowed half a day off duty once a week, and 24 hours' leave once a month.

The sections into which the Health Districts were divided, with a memor of the number of houses in each, are filed at the Police Office for reference in the future if desired.

I have the honour to be,

Sir,

Your most obedient Servant,

F. H. MAY,

Captain Superintendent of Police.