

HONGKONG.

THE COLONIAL SURGEON'S REPORT FOR 1889.

*Laid before the Legislative Council, by Command of His Excellency
the Officer Administering the Government.*

GOVERNMENT CIVIL HOSPITAL,
HONGKONG, 27th June, 1890.

SIR,—I have the honour to forward my Annual Report for the year 1889 together with the Tables shewing the work done in the Medical Department under my supervision also Reports from the Superintendent of the Government Civil Hospital, the Medical Officer of the Gaol, and the Government Analyst.

POLICE.

The admissions to Hospital shew a considerable decrease being 590, as compared with 657 in 1888. This is the more satisfactory as the strength of the Force has been increased this year by 73 men being 758 as compared with 685 in 1888. Five Europeans, three Indians and two Chinese died in the Government Civil Hospital. The admissions to Hospital from the various sections of the Police Force for the last nine years are given in the following table.

	<i>Europeans.</i>	<i>Indians.</i>	<i>Chinese.</i>
Admissions to Hospital, 1881,.....	88.....	212.....	198
Do., 1882,.....	92.....	230.....	227
Do., 1883,.....	113.....	246.....	239
Do., 1884,.....	87.....	224.....	175
Do., 1885,.....	124.....	208.....	163
Do., 1886,.....	138.....	243.....	221
Do., 1887,.....	139.....	293.....	187
Do., 1888,.....	147.....	279.....	231
Do., 1889,.....	166.....	230.....	194

By this it will be seen that there was an increase in admissions from the European portion of the Force, but a considerable decrease among the Indians and Chinese. The Europeans being the greatest sufferers in proportion to their strength, next the Indians and the Chinese. Amongst the latter the amount of sickness is very small see Table I.

The following Table gives the admissions to Hospital and deaths in the Force for the last ten years :—

	<i>Admissions.</i>	<i>Deaths.</i>
1880,	588.....	13
1881,	498.....	10
1882,	549.....	8
1883,	599.....	10
1884,	486.....	7
1885,	495.....	9
1886,	602.....	14
1887,	619.....	9
1888,	657.....	15
1889,	590.....	10

TROOPS.

There is an increase of admissions to Hospital among the Troops this year as compared with 1888, but there has also been a considerable increase in their strength. There is a decrease in the number of deaths, but both the sickness and mortality have been considerably above the average of the last ten years as is shewn in the following table :—

	<i>Admissions.</i>	<i>Deaths.</i>
1880,	1,075.....	13
1881,	1,116.....	4
1882,	1,019.....	9
1883,	1,105.....	10
1884,	1,097.....	12
1885,	1,190.....	24
1886,	1,607.....	9
1887,	1,749.....	14
1888,	1,485.....	21
1889,	1,732.....	16

GOVERNMENT CIVIL HOSPITAL.

The quarters for the Medical Staff and the European and Chinese Nursing Staffs are still in course of construction.

The new Hospital Mortuary has been finished and is now most conveniently situated. It can no longer be a cause of annoyance to the inmates of the Hospital as it always had been previously from its position on the grounds.

There is now an additional Medical Officer to the Staff which materially relieved the Superintendent.

There are also a Senior and two Assistant Wardmasters all trained men who have given great satisfaction in the performance of their duties.

I regret that the Nursing Staff of Sisters has not been so successful. They have found the work beyond their strength being delicately nurtured women also they are not permitted by the rules of their order to do much that is required in an institution of this kind so that a new staff of trained European Nurses has been sanctioned to take their place, and will shortly arrive I hope.

Mr. ROGERS, the Steward, has returned to duty much benefited by his well earned leave and an additional clerk has been appointed to help in the clerical work which increases yearly.

We have lost two old and valued officers in Mr. CARNEIRO and CHAN A LOCK; the former died a few days after being pensioned of heart disease. CHAN A LOCK after nearly thirty years' service retires on pension. Both these men were trained in this Hospital and more willing, kinder hearted, energetic and competent officers in the performance of their duties are not to be found. As a patient in the Hospital I had a good experience of their way of working and they were equally good to the poorest destitute as I have had many opportunities of observing.

Mr. LUCAS who takes the place of Mr. WATSON, the late assistant Apothecary, has arrived but there will have to be some changes in this Department as I have already reported. Mr. Crow will have enough analytical work to take up nearly all his time if he has to do the work connected with the new Health Ordinance.

The admissions to this Hospital shew a slight increase this year while the number of deaths shew a slight decrease. The largest increase has been among the private patients.

There were no admissions this year of a choleraic type.

The following table shews the number and classification of those brought to Hospital for the last nine years :—

	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.
Police,	549	599	486	495	602	619	657	590
Board of Trade,	116	110	60	100	132	103	153	135
Private paying Patients,	268	260	259	283	381	324	313	402
Government Servants,	88	105	96	124	144	147	159	135
Police Cases,	207	227	231	238	142	208	242	252
Destitutes,	230	201	222	270	222	255	248	279
	<u>1,458</u>	<u>1,502</u>	<u>1,354</u>	<u>1,510</u>	<u>1,623</u>	<u>1,656</u>	<u>1,772</u>	<u>1,793</u>

Tables V a to g shew the characters of the diseases admitted to Hospital.

Table VII gives the admissions into and deaths in this Hospital of the different classes during the years and for each month of the year.

The following table gives the admissions and deaths in this Hospital for the last ten years:—

	Admissions.	Deaths.
1880,	1,055	44
1881,	1,236	49
1882,	1,458	68
1883,	1,502	70
1884,	1,354	50
1885,	1,510	76
1886,	1,623	79
1887,	1,656	89
1888,	1,772	80
1889,	1,793	77

The percentage of deaths to total admissions (4.29) is much below the average of the last ten years, see Table VI.

The total amount of fees received from paying patients during the year was \$11,444.49—the largest amount received in any one year.

In the Superintendent's Report will be found some very interesting remarks on Fever Cases and gun-shot wounds admitted to the Hospital.

Some of his recommendations as regards increased accommodation for the Hospital are already being attended to and I can fully endorse all he has said in his Report concerning the Staff, Hospital Accommodation, &c. He is a most able and energetic Officer and has thoroughly earned the respect, confidence and good will of every one he has had to deal with in the performance of his duties.

SMALL-POX HOSPITAL.

There were sixteen cases of Small-pox admitted to this Hospital this year all of a mild type. Three other cases of infectious disease were admitted; there were no deaths. A good supply of calf lymph has been served out to all the vaccine stations which has been procured from Japan and has been most satisfactory. Next year I hope to report that calf lymph produced in the Colony is equally good. Dr. ATKINSON, the Superintendent of the Government Civil Hospital, and Mr. LADDS have made a series of experiments with this object which have been very satisfactory, so it has been decided by Government to establish a calf lymph station in this Colony.

PUBLIC MORTUARY.

Table VIII shews the number of bodies brought to the Mortuary for examination and the cause of death. This year 161 bodies were brought: in Europeans 4, Chinese 152, other nationalities 5. Of the Chinese 15 were children.

48 were found to have died of disease, 84 were accidental deaths, 19 suicidal and 10 homicidal.

VICTORIA GAOL.

The following table gives the number of admissions to the Gaol and the daily average number of prisoners for the past ten years:—

	<i>Total No. admitted to Gaol.</i>	<i>Daily average No. of Prisoners.</i>
1880,	3,530.....	575.25
1881,	4,150.....	666.00
1882,	3,498.....	622.00
1883,	3,486.....	542.15
1884,	4,023.....	552.00
1885,	3,610.....	530.00
1886,	4,600.....	674.00
1887,	4,302.....	584.00
1888,	3,627.....	531.00
1889,	3,705.....	581.00

The daily average has increased by 50 as compared with last year a very large number admitted now belong to the mendicant class and petty offences. I have drawn attention to this, as many as thirty mendicants have been admitted in one week sentenced to from 7 to 14 days none of whom were fit to perform hard labour many of them being put on the sick list being either deformed, blind, or having hedious sores which they expose to excite charity. They come from the mainland to make a harvest in this Colony. Imprisonment is no punishment to them as in any case they are better clothed and fed in Gaol than outside. They cost the Government 10 cents a day besides greatly adding to the over-crowding of the Gaol. Short sentences of one to three days, short commons and deportation, or the latter only would cost the Colony much less. A very large percentage of the Chinese population of this Colony belong to this class and greatly add to the over-crowding of the City. This class of immigrants should be discouraged in every possible way; they are a burden to the Colony; are of no possible service and only add to the filth and disease.

Table IX shews the number of prisoners admitted to Hospital, the cause and deaths.

Table XI shews the rate of sickness and mortality among the prisoners. There were 244 admissions to Hospital as compared with 306 in 1888, and only 4 deaths.

Table XIb shews the number of opium smokers admitted to the Gaol, as usual the habit has been ignored. Only eight needed to be taken into Hospital suffering from General Debility. There were no deaths amongst this class of prisoners. There are no particular cases worthy of note. Of 3,705 prisoners admitted to Gaol a class of society generally supposed to be addicted to most vicious habits and are mostly not in want of funds to indulge in them only 49 acknowledge themselves to be addicted to this habit. Yet opium can be procured better and cheaper in this Colony than in their own country. This does not go to show the prevalence of this habit even in moderation. Could any gaol in Europe show so small a percentage I don't say of those who habitually use spirits but of habitual drunkards.

LUNATIC ASYLUM.

There were eight admissions into the Asylum and one death. Some of them were very bad cases. The majority caused by the habitual use of intoxicants to excess.

TUNG-WA HOSPITAL.

The number of cases admitted to this Hospital during the year was 2,050 or nearly 250 less than were admitted last year, of these 1,011 died. In 1888 there were 2,298 of whom 1,428 died.

Of the 2,050 cases admitted this year 306 were moribund. As I have before remarked a Chinaman can seldom be induced to go into Hospital until he is in the last extremity or is absolutely destitute.

Four cases were admitted into the Small-pox Ward, of these 2 died.

2,494 vaccinations were performed successfully by the Public Vaccinator attached to this institution.

The number of out-patients treated was 144,864.

LOCK HOSPITAL.

This establishment is still in the same two houses, pending the building now in progress to accommodate the Hospital Staff.

The attendance of the women at the Hospital is the same as last year, the number who voluntarily submitted to examination and the number of examinations made are the same as last year.

The compulsory examination ceased September 1st, 1887.

The following table gives the number of examinations made in the past five years and the amount of disease found.

YEAR.	NO. OF WOMEN ON REGISTER.	NO. OF EXAMINATIONS MADE.	NO. OF EXAMINATIONS. EVERY WOMAN ATTENDING ONCE A WEEK.	DEFECT IN ATTENDANCE.	DISEASE FOUND AND HEALED.
1889,	269	10,924	13,988	3,064	83
1888,	269	10,924	13,988	3,064	66
1887*,	272	12,223	14,344	1,765	143
1886,	272	13,425	14,344	919	414
1885,	272	13,532	14,344	812	416

This table shews there was a great deficit in the examinations in 1887 the last four months' attendance being voluntary.

In the next two years the deficit in attendance is nearly doubled.

There were a few more that stayed in Hospital this year and there were not many refusals of those who submitted and were found diseased. It must be remembered that for some days every month a woman is not in condition to be examined. In the compulsory lines a mark was placed against her name on the Board hung up in the house she belonged to till that condition was removed. Hence there must always be a deficit in the number of examinations calculated by the week and those that can be made. The deficit used to be within bound in hundreds; now it is thousands.

Still even under these conditions something is done, but of course it is not the same as under compulsion. These figures speak for themselves.

There is an increase of disease all round.

Military Hospital an increase of 51 admissions compared with last year.

Naval Hospital an increase of 105.

Police Hospital an increase of 19.

Civil Hospital an increase of 64.

Table *E* gives the numbers of these different Hospitals for the last four years for comparison.

Out of the 452 Military cases 72 contracted constitutional disease. See Table *E* 3.

Out of the 349 Naval cases only 10 contracted constitutional disease in Hongkong and 20 elsewhere. See Table *E* 2.

Though still comparatively low the disease for which compulsory examination was employed with a view of stumping it out is slowly and surely increasing both in numbers and severity.

Every encouragement is given to the women to come to the Hospital and no compulsion whatever. If I were permitted to give certificates to the women who are clean I think more would come but this also is forbidden. Many come because I give them prescriptions as out-patients or orders for admission to the Civil Hospital for other disease not connected for venereal diseases, and some attend as out-patients for venereal disease.

HEALTH OF THE COLONY.

The number of deaths and percentage among the Foreign Residents of Hongkong is the lowest for the last six years.

* September 1st, 1887—The compulsory attendance was abolished.

There has been no epidemic even the influenza has only appeared in the ordinary form we have seen every year.

DEATHS AMONG EUROPEANS (BRITISH AND FOREIGN).

YEARS.	FEVERS.			DIARRHOEA.	CHOLERA.	VOMITING AND PURGING.	TOTAL.
	Enteric.	Simple Continued.	Typhus.				
1873, .....	...	6	2	17	...	...	25
1874,	1	4	4	17	...	...	26
1875,	1	5	...	18	...	...	24
1876,	1	9	...	14	...	...	24
1877,	5	8	4	10	...	...	27
1878,	3	15	2	9	...	...	29
1879,	3	21	...	14	...	...	38
1880,	1	12	1	10	...	...	24
1881,	2	17	...	10	...	...	29
1882,	10	13	1	13	...	...	37
1883,	1	9	...	9	...	...	19
1884,	7	4	...	12	...	...	23
1885,	7	11	...	9	19	...	46
1886,	5	8	...	5	...	...	18
1887,	7	10	...	6	...	2	25
1888,	5	4	...	16	25	...	30
1889,	2	3	...	10	...	1	16

The deaths from the above classes of disease for seventeen years among Foreign Residents shew a considerable diminution and is the lowest number in any of these year.

DEATHS AMONG CHINESE.

YEARS.	FEVERS.			DIARRHOEA.	CHOLERA.	VOMITING AND PURGING.	TOTAL.
	Enteric.	Simple Continued.	Typhus.				
1873,	12	96	16	195	...	...	319
1874,	125	46	...	231	...	...	402
1875,	31	291	2	288	...	...	612
1876,	94	343	...	259	...	...	696
1877,	145	370	8	311	...	...	834
1878,	89	481	33	701	...	...	1,304
1879,	116	733	21	608	...	...	1,478
1880,	309	373	...	348	...	...	1,030
1881,	438	168	38	435	...	...	1,079
1882,	679	71	...	465	...	...	1,215
1883,	262	571	3	660	...	...	1,496
1884,	132	600	2	301	...	...	1,035
1885,	105	755	...	561	7	176	1,604
1886,	9	772	10	326	...	19	1,136
1887,	9	441	25	276	...	13	764
1888,	2	299	2	361	17	236	917
1889,	1	363	...	180	...	7	551

Among the Chinese the deaths from the above causes are the smallest number for the last sixteen years. The diminution is most noticeable in the bowel complaints.

I regret that I have not been able to send in this report before this but a great deal of trouble has been in making up the Tables, and the clerks had to stop work while making duplicate bills for past months by Government order.

I have the honour to be,

Sir,

Your obedient Servant,

PH. B. C. AYRES,
Colonial Surgeon.

The Honourable W. M. DEANE, C.M.G.,
Acting Colonial Secretary.

POLICE.

I.—TABLE showing the ADMISSIONS into and DEATHS in the GOVERNMENT CIVIL HOSPITAL during each Month of the Year 1889.

MONTHS.	EUROPEANS.		INDIANS.		CHINESE.		TOTAL Admissions.	TOTAL Deaths.
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.		
Remaining on the 1st Jan., 1889,	4	...	6	...	4	...	14	...
January,	15	...	15	...	9	...	39	...
February,	13	...	18	...	8	...	39	...
March,	9	...	10	...	5	...	24	...
April,	9	...	11	1	18	1	38	2
May,	12	...	19	...	17	...	48	...
June,	14	2	30	...	22	...	66	2
July,	12	...	23	1	21	...	56	1
August,	15	2	28	1	22	...	65	3
September,	14	1	20	...	13	...	47	1
October,	16	...	25	...	11	...	52	...
November,	21	...	18	...	21	...	60	...
December,	12	...	7	...	23	1	42	1
Total,.....	166	5	230	3	194	2	590	10

J. M. ATKINSON,
Superintendent.

II.—TABLE showing the RATE of SICKNESS and MORTALITY in the POLICE FORCE during the Year 1889.

AVERAGE STRENGTH.				TOTAL SICKNESS.			TOTAL DEATHS.			RATE OF SICKNESS.			RATE OF MORTALITY.		
European.	Indian.	Chinese.	Total.	European.	Indian.	Chinese.	European.	Indian.	Chinese.	European.	Indian.	Chinese.	European.	Indian.	Chinese.
124	227	407	758	166	230	194	5	4	5	133.86	101.32	47.66	4.03	1.73	1.22

J. M. ATKINSON,
Superintendent.

III.—POLICE RETURN of ADMISSIONS to HOSPITAL from each District during the Year 1889.

Months.	CENTRAL No. 5 " 8 " 9			GOVERNMENT HOUSE No. 2 " 3			No. 1 STONE CUTTERS' ISLAND.			GAP No. 6 MOUNTAIN LODGE.			WATER POLICE STATIONS TSMHSATSUL, WHITEFIELD.			SHACKIWAN.			POKFULAM.			ABERDEEN.			STANLEY AND TAITAMUK.			No. 7.			YAMMATT, HUNGROM.			TOTAL
	European.	Indian.	Chinese.	European.	Indian.	Chinese.	European.	Indian.	Chinese.	European.	Indian.	Chinese.	European.	Indian.	Chinese.	European.	Indian.	Chinese.	European.	Indian.	Chinese.	European.	Indian.	Chinese.	European.	Indian.	Chinese.	European.	Indian.	Chinese.				
Remaining on 1st Jan., 1889,	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14
January,	7	10	3	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	39
February,	6	12	3	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	39
March,	5	8	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24
April,	3	5	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	38
May,	7	7	5	1	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	48
June,	4	19	5	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	66
July,	4	19	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	56
August,	8	15	2	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	65
September,	8	8	1	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	47
October,	4	10	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	52
November,	10	7	2	..	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	60
December,	2	4	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	42
Total,.....	74	126	38	4	16	6	4	12	7	38	7	112	2	10	2	3	4	4	8	..	10	6	8	1	8	26	11	19	12	3	590

J. M. ATKINSON,
Superintendent.

IV.—TABLE showing the RATE of SICKNESS and MORTALITY of the TROOPS serving in HONGKONG during the Year 1889.

AVERAGE STRENGTH.			ADMISSIONS INTO HOSPITAL.			DEATHS.			AVERAGE DAILY RATE OF SICKNESS.		RATE OF MORTALITY PER 1,000 OF THE STRENGTH.	
White.	Black.	Total.	White.	Black.	Total.	White.	Black.	Total.	White.	Black.	White.	Black.
1,432	178	1,610	1,535	197	1,732	9	7	16	76.44	6.13	6.28	39.32

W. S. PATERSON,
Deputy Surgeon General,
Principal Medical Officer,
China & Hongkong.

V.—TABLE showing the ADMISSIONS and MORTALITY in the GOVERNMENT CIVIL HOSPITAL during the Year 1889.

DISEASES.	ADMISSIONS.				DEATHS.			
	Europeans.	Indians.	Chinese.	Total.	Europeans.	Indians.	Chinese.	Total.
I.—General Diseases.								
<i>A. Diseases dependent on Morbid Poisons,—</i>								
Sub-Group 1,	71	46	16	133	5	3	2	10
" 2,	174	97	194	465	8	1	3	12
" 3,	2	1	4	7	...	...	1	1
" 4,	144	31	31	206	...	...	...	...
" 5, .....	...	...	1	1	...	...	1	1
<i>B. Diseases dependent on external agents other than Morbid Poisons,—</i>								
Sub-Group 1,	9	7	7	23	...	...	...	...
" 2,	2	2	8	12	...	...	6	6
" 3,	2	...	...	2	1	...	...	1
" 4,	36	3	8	47	1	2	...	3
<i>C. Developmental Diseases,</i>								
	5	...	3	8	...	...	...	...
<i>D. Not classified,</i>								
	33	20	11	64	2	1	...	3
II.—Local Diseases.								
1 Nervous System,	19	4	13	36	...	1	2	3
2 Eye,	14	7	17	38	...	...	...	...
3 Ear,	3	1	1	5	...	...	...	...
4 Nose, .....	...	1	...	1	...	...	...	...
5 Circulatory System,	10	4	4	18	...	...	3	3
6 Respiratory,	32	32	23	87	6	4	2	12
7 Digestive,	59	35	30	124	2	2	1	5
8 Lymphatic,	4	...	2	6	...	...	...	...
9 Thyroid Body, .....	...	...	...	...	...	...	...	...
10 Supra Renal Capsules, .....	...	...	...	...	...	...	...	...
11 Urinary System,	7	3	2	12	...	...	...	...
12 Generative System,	16	9	16	41	...	...	1	1
13 Female Breast, .....	...	...	...	...	...	...	...	...
14 Male " .....	...	...	...	...	...	...	...	...
15 Organs of Locomotion,	14	5	7	26	...	...	...	...
16 Connective Tissue,	13	3	4	20	...	...	...	...
17 Skin,	21	13	17	51	...	...	...	...
III. Poisons,* .....	...	...	...	...	...	...	...	...
IV. Injuries,	47	32	235	314	...	2	14	16
V. Surgical Operations,† .....	...	...	...	...	...	...	...	...
Under Observation,	4	16	26	46	...	...	...	...
Total,	741	372	680	1,793	25	16	36	77

* B Sub-Group 2. † Table Va.

J. M. ATKINSON,
Superintendent.

Va.—TABLE shewing the ADMISSIONS and MORTALITY in the GOVERNMENT CIVIL HOSPITAL during the Year 1889.

SURGICAL OPERATIONS.	ADMISSIONS.				DEATHS.			
	Europeans.	Indians.	Chinese.	Total.	Europeans.	Indians.	Chinese.	Total.
Removal of Tumours from Parts,—								
Enchondroma of Testis, (Excision), .....	...	1	...	1	...	...	...	...
Epithelioma of Tongue, (Excision),	1	...	..	1	1	...	...	1
Removal of Foreign Bodies,—								
Gun-shot Wound of Thigh, (Bullet), .....	...	...	1	1	...	...	...	...
" " of Back, (Bullet), .....	...	...	1	1	...	...	...	...
" " of Arm, (Bullet), .....	...	1	...	1	...	...	...	...
" " of Orbit, (Bullet), .....	...	...	1	1	...	...	...	...
" " of Leg, (Bullet), .....	...	...	1	1	...	...	...	...
Opening of Abscess,—								
Abdominal Abscess, (? Perinephritic), Aspiration,	1	...	...	1	...	...	...	...
Abscess of neck, (Incision), .....	...	...	1	1	...	...	...	...
Hepatic Abscess, Aspiration, (Dr. Manson's Aspirator),...	1	...	...	1	1	...	...	1
" " Incision, (Dr. Manson's Aspirator),...	...	1	...	1	...	1	...	1
" " Aspiration, and subsequent Incision,	1	...	...	1	...	...	...	...
Scrotal " Incision, .....	...	1	...	1	...	...	...	...
Mamma " of, Incision, .....	...	...	1	1	...	...	...	...
Mastoid " Incision,	1	...	...	1	...	...	...	...
Operations on the Eye and its Appendages,—								
For Pterygium, .....	...	...	3	3	...	...	...	...
" Lachrymal obstruction,	2	...	...	2	...	...	...	...
Iridectomy,	1	...	...	1	...	...	...	...
Excision of the Eyeball, .....	...	...	2	2	...	...	...	...
Operations on the Nose,—								
Plugging Nares for Epistaxis, .....	...	...	1	1	...	...	...	...
Operations on other Parts of the Head and Face, including the Mouth,—								
Trepfing, .....	...	...	1	1	...	...	...	...
Raising Depressed Bone, .....	...	...	1	1	...	...	...	...
For Ranula, .....	...	...	1	1	...	...	...	...
" Harelip, .....	...	...	4	4	...	...	...	...
Operations on the Respiratory Organs,—								
Paracentesis of Pleura, effusion, (Aspiration), .....	...	1	1	2	...	...	...	...
Tracheotomy, .....	...	...	1	1	...	...	...	...
Operations on the Digestive Organs,—								
Application of the Stomach-pump, .....	...	...	4	4	...	...	...	...
For Abdominal Fistula, (Injury), .....	...	...	3	3	...	...	1	1
" Hernia inguinal, (Reduction by Taxis), .....	...	1	...	1	...	...	...	...
" Fistula in Ano,	1	2	2	5	...	...	...	...
" Hemorrhoids, (Ligature, Abcision),	2	...	1	3	...	...	...	...
Paracentesis of Abdomen for Ascites, .....	...	...	1	1	...	...	...	...
Operations on the Urinary Organs,—								
Removal of Urethral Calculi, .....	...	...	1	1	...	...	...	...
For Stricture of Urethra,—								
By Forcible Dilatation, (Holtz),	2	1	...	3	...	...	...	...
Perineal Section (External Urethrotomy),	1	...	...	1	...	...	...	...
Operations on the Generative Organs,—								
I.—MALE.								
<i>Penis.</i>								
For Phimosis,	4	3	3	10	...	...	...	...
" Paraphimosis,	1	...	2	3	...	...	...	...
<i>Scrotum and Testis.</i>								
For Hydrocele,	2	...	...	2	...	...	...	...
Castration,	3	1	...	4	...	...	...	...
<i>Carried forward,</i>	24	13	38	75	2	1	1	4

Va.—TABLE showing the ADMISSIONS and MORTALITY in the GOVERNMENT CIVIL HOSPITAL during the Year 1889,—Continued.

SURGICAL OPERATIONS.	ADMISSIONS.				DEATHS.			
	Europeans.	Indians.	Chinese.	Total.	Europeans.	Indians.	Chinese.	Total.
<i>Brought forward</i> ,.....	24	13	38	75	2	1	1	4
II.—FEMALE.								
Obstetric Operations,—								
Application of Forceps, .....	...	...	2	2	...	...	...	...
Version, .....	...	...	1	1	...	...	...	...
Craniotomy, .....	...	...	1	1	...	...	1	1
Operations on the Organs of Locomotion,—								
<i>On Bones.</i>								
Removal of Sequestra,	2	...	...	2	...	...	...	...
<i>On Joints.</i>								
Shoulder, Reduction of Dislocation,.....	2	1	1	4	...	...	...	...
Knee, Reduction of Compound Dislocation, .....	...	...	1	1	...	...	...	...
Excision of the Hip, .....	...	...	1	1	...	...	...	...
<i>On Limbs as a whole.—Amputations.</i>								
Flap.—Arm, (Disease of Elbow Joint), .....	...	...	1	1	...	...	...	...
Flap.—Forearm, (Injury), .....	...	...	1	1	...	...	...	...
Flap.—Fingers, (Injury), .....	...	1	5	6	...	...	...	...
Flap.—Thigh, (Disease of Knee Joint),.....	...	1	...	1	...	...	...	...
Flap.—Leg, (Injury), .....	...	...	1	1	...	...	...	...
Operations on the Skin,—								
Capping,	3	...	...	3	...	...	...	...
Skin Grafting,	3	...	...	3	...	...	...	...
Operations not Classified,—								
Resuscitation of Drowned Persons, .....	...	...	2	2	...	...	...	...
Treatment of Cases of Poisoning,	1	...	3	4	1	...	2	3
Total,.....	35	16	58	109	3	1	4	8

J. M. ATKINSON,
Superintendent.

Vb.—TABLE shewing the ADMISSIONS and MORTALITY in the GOVERNMENT CIVIL HOSPITAL during the Year 1889.

GENERAL DISEASES.	ADMISSIONS.				DEATHS.			
	Euro-peans.	Indians.	Chinese.	Total.	Euro-peans.	Indians.	Chinese.	Total.
<i>Group A.—Sub-Group 1.</i>								
1. Small-Pox, (transferred to Small-Pox Hospital),	1	1	..	2	..	..	..	..
2. Cow-Pox, .....	..	..	..	..	..	..	..	..
3. Chicken-Pox, .....	..	..	..	..	..	..	..	..
4. Measles, .....	..	..	..	..	..	..	..	..
5. Epidemic Rose-rash, (Rotheln),	1	..	..	1	..	..	..	..
6. Scarlet Fever, .....	..	..	..	..	..	..	..	..
7. Dengue, .....	..	..	..	..	..	..	..	..
8. Typhus, .....	..	..	..	..	..	..	..	..
9. Plague, .....	..	..	..	..	..	..	..	..
10. Relapsing Fever, .....	..	..	..	..	..	..	..	..
11. Enfluenza, .....	..	..	..	..	..	..	..	..
12. Whooping Cough, .....	..	..	..	..	..	..	..	..
13. Mumps, .....	..	..	..	..	..	..	..	..
14. Diphtheria, .....	..	..	..	..	..	..	..	..
15. Cerebro-spinal Fever, .....	..	..	..	..	..	..	..	..
16. Simple-continued Fever,	2	..	1	3	..	..	..	..
17. Enteric Fever, Synonyms, Typhoid Fever, (Typhomalarial Fever),	1	1	1	3	..	1	..	1
18. Cholera, Synonyms, Asiatic Cholera, Epidemic Cholera, .....	..	..	..	..	..	..	..	..
19. Sporadic Cholera, Synonyms, Simple Cholera, Cholera Nostras, .....	..	..	..	..	..	..	..	..
20. Epidemic Diarrhoea, .....	..	..	..	..	..	..	..	..
21. Dysentery,	66	44	14	124	5	2	2	9
Total,	71	46	16	133	5	3	2	10

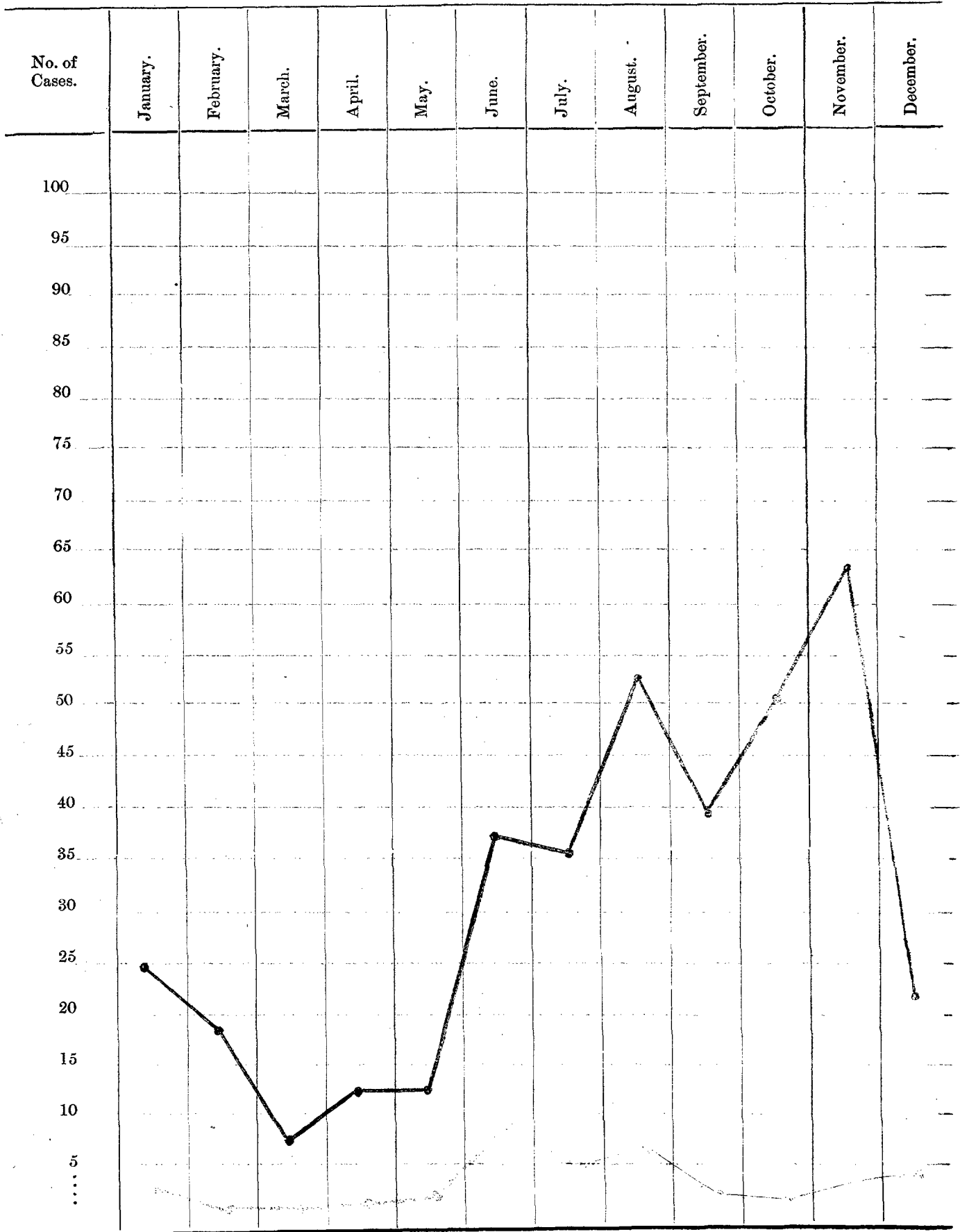
J. M. ATKINSON,
Superintendent.

Vc.—TABLE shewing the ADMISSIONS and MORTALITY in the GOVERNMENT CIVIL HOSPITAL during the Year 1889.

GENERAL DISEASES.	ADMISSIONS.				DEATHS.					
	Europeans.	Indians.	Chinese.	Total.	Europeans.	Indians.	Chinese.	Total.		
<i>Group A.—Sub-Group 2.</i>										
1. Malarial Fever,—										
<i>a.</i> Intermittent, Synonyms, Ague,	142	91	151	384	..	..	..	..
<i>b.</i> Remittent,	20	4	13	37	7	1	1	9		
<i>c.</i> Malarial Cachexia,	6	1	5	12	..	..	1	1		
2. Beri-Beri,	6	1	25	32	1	..	1	2		
<i>Monthly Table of Malarial Fever Cases.</i>										
MONTHS.	INTERMITTENT.				REMITTENT.				Total Number of Cases.	Total Number of Deaths.
	Europeans.	Indians.	Chinese.	Deaths.	Europeans.	Indians.	Chinese.	Deaths.		
January,	10	4	11	..	2	..	1	1	28	1
February,	5	5	9	..	..	..	..	..	19	..
March,	1	3	4	..	..	..	..	..	8	..
April,	5	1	7	..	..	..	1	..	14	..
May,	2	3	8	..	1	1	..	1	15	1
June,	11	13	14	..	6	..	3	2	47	2
July,	14	8	14	..	2	1	2	2	41	2
August,	29	9	16	..	5	1	1	1	61	1
September,	15	13	12	..	1	..	1	1	42	1
October,	16	20	16	..	1	..	..	..	53	..
November,	30	10	24	..	..	1	2	..	67	..
December,	4	2	16	..	2	..	2	1	26	1
Total,	142	91	151	..	20	4	13	9	421	9

J. M. ATKINSON,
Superintendent.

Vd.—DIAGRAM shewing NUMBER of CASES of MALARIAL FEVER admitted in each Month of the Year 1889.



Red Wave,.....Intermittent Fever.
 Blue ,,Remittent ,,

J. M. ATKINSON,
 Superintendent.

Ve.—TABLE shewing the ADMISSIONS and MORTALITY in the GOVERNMENT CIVIL HOSPITAL during the Year 1889.

DISEASES.	ADMISSIONS.				DEATHS.			
	Europeans.	Indians.	Chinese.	Total.	Europeans.	Indians.	Chinese.	Total.
<i>Group A.—Sub-Group 3.</i>								
1. Phagedœna, .....	...	...	...	...	...	...	...	...
2. Erysipelas,	2	1	3	6	...	...	...	...
3. Pyœmia, .....	...	...	...	...	...	...	...	...
4. Septicœmia, .....	...	...	1	1	...	...	1	1
Total,	2	1	4	7	...	...	1	1

J. M. ATKINSON,
Superintendent.

Vf.—TABLE shewing the ADMISSIONS and MORTALITY in the GOVERNMENT CIVIL HOSPITAL during the Year 1889.

DISEASES.	ADMISSIONS.				DEATHS.			
	Europeans.	Indians.	Chinese.	Total.	Europeans.	Indians.	Chinese.	Total.
<i>Group A.—Sub-Group 4.</i>								
1. Syphilis Synonyms—pox,—								
<i>a.</i> Primary, including <i>chancres molles</i> ,	45	5	12	62	...	...	...	...
<i>b.</i> Secondary,	17	...	3	20	...	...	...	...
2. Gonorrhœa,	82	26	16	124	...	...	...	...
Total,	144	31	31	206	...	...	...	...

J. M. ATKINSON,
Superintendent.

Vg.—TABLE shewing the ADMISSIONS and MORTALITY in the GOVERNMENT CIVIL HOSPITAL during the Year 1889.

DISEASES.	ADMISSIONS.				DEATHS.			
	Europeans.	Indians.	Chinese.	Total.	Europeans.	Indians.	Chinese.	Total.
<i>Group A.—Sub-Group 5.</i>								
1. Hydrophobia,	1	1	...	...	1	1
2. Glanders,
3. Horse-pox,
4. Splenic Fever,
Total,	1	1	...	...	1	1

J. M. ATKINSON,
Superintendent.

VI.—TABLE showing the RATE of MORTALITY in the GOVERNMENT CIVIL HOSPITAL during the last 10 Years.

Rate to Total Number of Admissions.		Rate to Number of Europeans Admitted.		Rate to Number of Coloured Persons Admitted.		Rate to Number of Chinese Admitted.	
Per cent.		Per cent.		Per cent.		Per cent.	
1880,.....	4.17	1880,.....	3.73	1880,.....	2.66	1880,.....	5.80
1881,.....	3.96	1881,.....	3.87	1881,.....	3.09	1881,.....	4.80
1882,.....	4.66	1882,.....	4.35	1882,.....	4.38	1882,.....	5.24
1883,.....	4.66	1883,.....	4.37	1883,.....	3.01	1883,.....	6.08
1884,.....	3.69	1884,.....	3.15	1884,.....	1.24	1884,.....	6.08
1885,.....	5.03	1885,.....	4.65	1885,.....	3.06	1885,.....	7.01
1886,.....	4.86	1886,.....	4.25	1886,.....	4.66	1886,.....	5.73
1887,.....	5.37	1887,.....	4.50	1887,.....	4.56	1887,.....	6.96
1888,.....	4.51	1888,.....	3.96	1888,.....	4.70	1888,.....	4.98
1889,.....	4.29	1889,.....	3.37	1889,.....	4.13	1889,.....	5.41

J. M. ATKINSON,
Superintendent.

VII.—TABLE showing the ADMISSIONS into and DEATHS in the GOVERNMENT CIVIL HOSPITAL during each Month of the Year 1889.

MONTHS.	EUROPEANS.		COLOURED.		CHINESE.		Total Admissions.	Total Deaths.
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.		
Remaining on the 1st								
January, 1889,.....	26	1	11	..	33	..	70	1
January,.....	52	2	20	..	47	..	119	2
February,.....	25	..	27	1	30	2	82	3
March,.....	33	2	18	1	42	3	93	6
April,.....	41	3	20	3	47	3	108	9
May,.....	50	2	32	2	63	3	145	7
June,.....	93	3	38	..	58	4	189	7
July,.....	79	4	32	1	54	3	165	8
August,.....	91	2	45	3	63	2	199	7
September,.....	60	2	34	2	53	5	147	9
October,.....	67	1	42	1	50	..	159	2
November,.....	77	..	40	1	58	2	175	3
December,.....	47	3	13	1	82	9	142	13
Total,.....	741	25	372	16	680	36	1,793	77

J. M. ATKINSON,
Superintendent.

VIIa.—TABLE of ADMISSIONS into and DEATHS in SMALL-POX HOSPITAL, 1889.

No.	Sex.	Nationality.	Age.	Date of Admission.	Date of Discharge.	No. of Days in Hospital.	Description of Patient.	Result.
1	Male	Indian	23	5th January	22nd January	17	Private Paying	Recovered.
2	"	English	27	15th "	24th "	9	" "	"
3	"	Danish	33	28th "	18th February	21	" "	"
4	"	English	13	30th "	6th March	35	Destitute	"
5	Female	"	11	11th February	2nd "	19	"	"
6	Male	"	4	11th "	6th "	23	"	"
7	"	"	8	12th "	2nd "	18	"	"
8	Female	"	6	14th "	2nd "	16	"	"
9	Male	Chinese	24	1st April	15th April	14	P.C. No. 157	"
10	"	Maltese	24	3rd "	12th July	100	Destitute	"
11	"	Malay	27	4th "	5th May	31	"	"
12	"	Indian	36	6th "	15th April	9	P.C. No. 695	"
13	"	Japanese	25	27th "	8th May	11	Destitute	"
14	"	German	35	3rd May	13th July	71	Private Paying	"
15	"	Indian	18	7th "	17th June	41	" "	"
16	"	Spanish	20	6th June	27th "	21	" "	"
17	"	Belgian	34	15th August	2nd Sept.	18	The Board of Trade	"
18	"	English	31	22nd Sept.	30th October	38	" "	"
19	"	"	37	22nd "	30th "	38	" "	"

J. M. ATKINSON,
Superintendent.

VIIb.—MONTHLY AGGREGATE NUMBER of PATIENTS visited in the HOSPITAL daily for 1889, 1888, and 1887.

Months.	1889.	1888.	1887.
January,	2,260	1,799	1,629
February,	1,983	1,614	1,413
March,	2,103	1,763	1,495
April,	2,114	1,674	1,448
May,	2,356	1,880	1,681
June,	2,617	2,258	1,847
July,	2,720	2,125	1,787
August,	2,866	2,025	1,908
September,	2,338	2,243	1,987
October,	2,354	1,911	2,024
November,	2,344	1,983	1,879
December,	2,402	2,194	2,570
Total,	28,457	23,469	21,668

J. M. ATKINSON,
Superintendent.

VIII.—RETURN OF DEAD BODIES BROUGHT BY THE POLICE TO THE PUBLIC MORTUARY DURING EACH MONTH OF THE YEAR 1889.

MONTHS.	EUROPEANS AND AMERICANS.				CHINESE.				OTHER NATIONALITIES.				CAUSE OF DEATH REPORTED PROBABLE OR ASCERTAINED BY EXAMINATION.																		
	Adults.		Children.		Adults.		Children.		Adults.		Children.		ACCIDENTAL.										SUICIDAL.				HOMICIDAL.				
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	From Disease.	Drowning.	Cerebral and spinal concussion.	Fracture of skull.	Burning.	Scalding.	Rupture of Viscera.	Asphyxia caused by landslides, fall of buildings, and by fire.	Lightning Stroke.	Strangulation.	Opium poisoning.	Arsenic poisoning.	Chloroform poisoning.	Hanging.	Wounds produced by fire-arms.	Hæmorrhage from Incised Wounds.	Contused wounds.	Drowning.	TOTAL.
January,	6	1	..	1	2	1	3	1	7
February,	1	..	..	..	7	1	..	1	..	..	..	6	1	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	10
March, .....	..	..	..	..	6	..	..	..	..	..	..	2	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	6
April, .....	..	..	..	..	4	1	..	..	1	..	..	2	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	6
May,	1	..	..	..	24	2	..	..	..	..	..	7	4	..	2	..	..	..	..	3	10	..	..	1	..	..	..	..	..	27
June, .....	..	..	..	..	11	2	1	..	1	..	..	5	3	..	1	..	..	..	..	2	..	..	..	..	..	..	1	..	..	15
July, .....	..	..	..	..	9	2	1	1	..	..	..	3	4	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	13
August,	1	..	..	..	9	2	..	1	2	..	..	5	5	..	2	..	..	..	..	..	..	..	1	..	..	1	..	..	..	15
September, .....	..	..	..	..	6	3	..	2	1	..	..	3	1	..	..	..	..	..	..	4	..	..	..	..	..	..	1	..	..	12
October,	1	..	..	..	13	2	..	2	..	..	..	3	9	..	2	2	2	..	..	1	..	..	..	..	..	1	..	..	..	18
November, .....	..	..	..	..	10	1	1	1	..	..	..	4	3	..	1	1	1	..	..	1	..	..	..	..	..	..	..	..	1	13
December, .....	..	..	..	..	15	1	1	2	..	..	..	6	5	..	..	3	..	..	..	..	..	..	..	1	..	1	..	2	..	19
Total,	4	120	17	4	11	5	48	37	1	11	6	1	1	4	13	10	1	10	1	1	7	2	2	5	1	161

L. P. MARQUES,
Medical Officer in Charge of Post Mortem Examinations.

IX.—K.—TABLE shewing the ADMISSIONS into VICTORIA GAOL HOSPITAL and MORTALITY during the Year 1889.

DISEASES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
Admissions.—Europeans.....	1	1	1	1	1	4	5	6	3	4	4	1	32
Chinese.....	11	15	21	17	16	24	22	16	14	21	24	9	210
Other Nationalities.....	1	...	...	...	1	...	...	...	2
Total Admissions.....	12	16	22	18	18	28	27	22	18	25	28	10	244
Remained.—Europeans.....	1	1	...	1	...	1	...	1	2	1	1	1	...
Chinese.....	9	10	7	6	7	10	19	11	10	12	10	11	...
Other Nationalities.....
Total Remained.....	10	11	7	7	7	11	19	12	12	13	11	12	...
Deaths.—Europeans.....
Chinese.....	...	1	...	...	1	1	...	...	...	1	...	...	4
Other Nationalities.....
Total Deaths.....	...	1	...	...	1	1	...	...	...	1	...	...	4
Febricula.....	1	3	1	...	...	...	...	5
Intermittent Fever.....	...	1	...	...	1	1	2	...	1	...	2	...	8
Remittent	1	...	1	1	3	2	4	2	1	1	16
" " and Dysentery.....	1*	...	...	...	...	...	...	...	1
" " and Aortic Patency.....	1	...	...	...	...	...	...	1
" " and Acute Pernicious Anæmia.....	1*	...	...	...	...	...	...	1
Hæmoptysis.....	1	...	...	...	...	1
Phthisis Pulmonalis.....	1	...	...	1	1	...	...	...	...	...	2	...	5
Catarrhal Bronchitis.....	1	1	...	1	1	3	...	...	...	1	...	...	8
Plastic	1*	...	...	...	...	1
Pleuro-pneumonia.....	...	1*	...	...	...	...	...	...	...	...	...	...	1
Pleurisy.....	1	...	...	...	...	...	...	1
Aortic Patency.....	1	...	...	...	...	...	1	...	...	...	...	...	2
Hypertrophy of Heart.....	...	1	...	1	...	...	...	...	...	...	...	...	2
General Debility.....	3	3	3	...	1	2	1	3	2	6	3	1	23
" " and Oedema of Legs.....	1	...	...	...	...	...	...	...	...	...	...	...	1
" " of Foot.....	1	1
" " (Old Age).....	2	...	...	...	...	...	2	...	...	...	2	1	7
" " (Opium smoker).....	1	...	1	1	...	1	2	...	1	1	...	...	8
Anæmia.....	2	...	...	...	...	...	...	1	...	3
Scurvy.....	1	...	...	...	1
Dyspepsia.....	1	...	...	...	...	...	...	...	1
Jaundice.....	1	1	...	...	...	...	2
Albumenuria.....	1	...	...	...	...	...	1	2
Acute Bright's Disease.....	1	...	...	1
Chronic	1	...	1	...	2
Cirrhosis of Liver.....	1	...	...	...	...	...	1
Dropsy.....	1	...	...	...	...	...	...	...	1
Diarrhœa.....	...	1	1	...	...	1	1	2	1	2	2	...	11
" and Oedema of Foot.....	1	1	...	...	...	1	...	1
Dysentery.....	...	1	...	1	1	1	1	5	1	...	1	...	12
" and Intermittent Fever.....	1	...	...	...	...	...	1
Colic.....	1	...	...	1	...	...	...	...	...	...	2
Hæmorrhoids.....	1	...	...	...	...	...	1
Lumbrici.....	1	1	...	...	...	...	...	2
Epileptiform Fits.....	1	...	...	...	...	...	...	1
Delirium Tremens.....	1	...	...	...	...	1
Unsound Mind.....	1	...	...	1
Carbuncle.....	1	1	...	1	...	...	1	1	...	...	5
Erysipelas.....	1	1	1	...	3	3	...	...	10
" and Abscess of Scrotum.....	1	...	...	1
Scalds of Foot.....	1	...	...	1
Conjunctivitis.....	1	...	...	1
Scleratitis.....	1	...	...	1
" and Ulcers of Cornea.....	1	1	...	2
Hypertrophy of Lymphatic Glands of Neck.....	1
Right Side.....	1	...	...	...	...	...	...	...	...	...	1
Fracture and Abscess of Right Ulna.....	...	1	...	...	...	...	...	...	...	...	...	...	1
Dislocation of the Jaw.....	1	...	...	...	...	...	1
Abscess of the Scalp.....	1	1	2
Alveolar Abscess.....	1	...	...	...	...	...	...	...	...	1
Abscess of Neck.....	1	...	1
" of Arm.....	1	...	...	...	...	...	...	...	...	1
" of Knee.....	1	...	...	...	...	1	...	2
" of Leg.....	...	1	...	...	...	...	...	...	...	...	...	...	1
" of Foot.....	1	1	1	...	...	...	1	...	1	...	...	1	6
Anal Fistula.....	1	...	...	...	...	...	...	...	...	1
Stricture of Urethra and Hæmaturia.....	1	...	...	1
Paraphimosis.....	1	...	...	...	...	...	1
Orchitis.....	1	...	...	...	...	...	...	...	...	1
" and Abscess of Scrotum.....	1	...	1
Soft Sore and Bubo.....	1	...	...	...	...	...	...	1
Ecthyma (Secondary Syphilis).....	1	...	...	1
Bruise of Knee-joint.....	1	...	...	...	1
Sprain of Right Ankle-joint.....	1	...	...	...	1	...	...	2
Chronic Ulceration of Foot.....	1	...	...	...	...	...	...	...	...	...	1
Deep Incised Wound of Right Arm.....	1	...	...	1
" " Foot.....	1	...	...	...	...	...	1
Contused Wound of Left Thumb.....	1	1
" " from Flogging.....	1	5	9	3	8	3	...	3	1	...	...	...	33
Abscess from Flogging.....	1	1	...	...	...	...	2
Observation.....	2	2	1	1	1	...	1	3	...	...	12

* Died.

L. P. MARQUES,
Medical Officer in Charge of
Gaol Hospital.

IXa.—I.—TABLE showing the NUMBER of PRISONERS ADMITTED into VICTORIA GAOL HOSPITAL, on the First Examination by the MEDICAL OFFICER, during the Year 1889.

Total Number of Prisoners admitted to Gaol.	Sick in Hospital.				Admitted to Hospital on First Medical Examination.				Percentage of Hospital cases on First Medical Examination.		Percentage of Hospital cases on First Medical Ex.	
	Europeans.	Indians.	Chinese.	Total.	Europeans.	Indians.	Chinese.	Total.	To total Gaol admissions.	To total Hospital cases.	Europeans.	Chinese.
											To total European Hospital cases.	To total Chinese Hospital cases.
3,705	32	2	210	244	3	...	25	28	0.755	11.40	9.687	11.90

L. P. MARQUES.

X.—M.—TABLE showing CASES not ADMITTED to HOSPITAL, treated by the MEDICAL OFFICER, during the Year 1889.

DISEASES.	Europeans.	Coloured Persons.	Chinese.	TOTAL.
<i>I.</i> Scurvy,	2	2
<i>II.</i> Condylomata,	2	2
<i>III.</i> Hysteria and General Debility,	1	1
<i>IV.</i> Mitral Regurgitation,	1	1
<i>VIII.</i> Diarrhoea,	1	...	...	1
<i>IX & X.</i> Prolapsus Uteri,	1	1
<i>XI.</i> Synovitis of Left Knee-joint,	1	1
Abscess of Left Knee-joint,	2	2
" of Right Foot,	1	1
<i>XII.</i> Whitlow,	1	1
Eczema,	2	2
Scabies,	77	77
<i>Wounds and Injuries,—</i>				
Contused Wound of Head,	1	1
" " from Flogging,	1	123	124
TOTAL,	1	1	215	217

L. P. MARQUES.

XI.—N.—TABLE shewing the RATE of SICKNESS and MORTALITY in VICTORIA GAOL, during the Year 1889.

Total No. of Prisoners admitted to Gaol.	Daily Average number of Prisoners.	Total Sick in Hospital.	Total Sick, Trifling Cases.	Total Deaths.	Percentage of Serious Sickness to Total Sick.	Rate of Sickness		Rate of Mortality.	
						To Total No. of Admissions to Gaol.	To Daily Average.	To Total No. of Admissions to Gaol.	To Daily Average.
3,705	581	244	217	4	0.157	8.037	3.586	0.107	0.688

L. P. MARQUES.

XIa.—O.—CASES admitted to VICTORIA GAOL HOSPITAL at the first MEDICAL EXAMINATION by the MEDICAL OFFICER during the Year 1889.

No.	SENTENCE.			DISEASES.	DATE OF ADMISSION.	DATE OF DISCHARGE.	REMARKS.
	Years.	M'ths.	Days.				
1	10	General Debility,	23rd Jan.	30th Jan.	
2	7	" "	30th "	4th Feb.	
3	7	" "	5th Feb.	11th "	
4	7	Fracture and Abscess of Right Ulna,	12th "	18th "	
5	42	Chronic Ulceration of Left Foot,	11th Mar.	20th April	
6	...	1	...	Diarrhoea,	11th "	19th Mar.	
7	10	Bronchitis,	6th April	15th April	
8	...	4	...	Sprain of Left Foot,	13th June	26th June	
9	Observation,	26th "	1st July	On Remand.
10	21	Dropsy,	29th "	18th "	
11	14	General Debility, (Opium Smoker),	2nd July	12th "	
12	35	Diarrhoea,	2nd "	26th "	
13	...	2	...	General Debility, (Opium Smoker),	9th "	10th "	
14	42	Cirrhosis of Liver,	15th "	24th Aug.	
15	35	Incised Wound of Left Foot,	18th "	23rd July	
16	42	General Debility, (Old Age),	19th "	24th "	
17	...	9	...	Intermittent Fever,	24th "	29th "	
18	Delirium Tremens,	27th Aug.	31st Aug.	Debtor.
19	...	4	...	Plastic Bronchitis,	28th "	22nd Oct.	
20	5	General Debility,	3rd Sept.	6th Sept.	
21	...	3	...	Chronic Bright's Disease,	14th "	28th Oct.	
22	14	General Debility,	4th Oct.	12th "	
23	Deep Incised Wound of Right Arm,	5th "	7th Nov.	On Remand.
24	Unsound Mind,	15th "	23rd Oct.	"
25	21	General Debility, (Opium Smoker),	23rd "	29th "	
26	21	Anæmia,	6th Nov.	14th Nov.	
27	...	1	...	General Debility, (Old Age),	12th "	10th Dec.	
28	...	4	...	Contused Wound of Left Thumb,	3rd Dec.	31st "	

L. P. MARQUES.

XIb.—P.—TABLE shewing the WEIGHTS of PRISONERS (OPIUM SMOKERS), for the First Four Weeks' Confinement in VICTORIA GAOL, during the Year 1889.

No.	AGE.	LENGTH OF TIME OPIUM SMOKER.		CONSUMPTION per diem.		WEIGHT WHEN ADMITTED.		WEIGHT FIRST FOUR WEEKS.				REMARKS.
								1st Week.	2nd Week.	3rd Week.	4th Week.	
1	29	2	Years.	1½	Mace.	100	lbs.	97	97	95	98	
2	36	4	"	2	"	109	"	111	110	108	109	
3	26	5	"	1	"	102	"	100	98	99	100	
4	60	4	"	1	"	110	"	106	104	103	102	
5	22	1	"	1	"	75	"	73	73	78	79	
6	41	10	"	1½	"	96	"	90	87	86	86	
7	47	20	"	2	"	100	"	99	98	96	...	
8	31	10	"	1	"	108	"	107	110	110	108	
9	30	12	"	2	"	119	"	120	123	123	120	
10	62	7	"	1½	"	97	"	97	96	96	...	
11	60	15	"	2	"	91	"	88	84	86	87	
12	44	20	"	2	"	115	"	115	114	113	110	
13	32	4	"	1½	"	102	"	102	102	100	99	
14	48	7	"	1	"	124	"	122	121	124	124	
15	33	10	"	1½	"	116	"	112	110	112	...	
16	60	20	"	2	"	109	"	106	104	103	103	
17	38	10	"	2	"	97	"	93	94	94	93	
18	22	6	"	1½	"	90	"	88	85	88	...	
19	52	30	"	2	"	103	"	100	98	96	97	
20	43	20	"	1	"	90	"	99	97	91	92	
21	48	30	"	1½	"	100	"	99	100	104	108	
22	40	20	"	2	"	109	"	107	106	104	102	
23	52	10	"	2	"	115	"	113	115	114	...	
24	45	18	"	2	"	110	"	101	99	102	100	
25	28	12	"	2	"	96	"	96	97	96	...	
26	32	10	"	1½	"	94	"	93	93	92	...	
27	38	20	"	1½	"	110	"	109	106	109	...	
28	25	5	"	1½	"	115	"	113	114	110	110	
29	24	8	"	1½	"	92	"	97	96	94	92	
30	42	20	"	1½	"	91	"	97	96	94	...	
31	54	20	"	1½	"	80	"	82	87	88	87	
32	43	20	"	2	"	135	"	132	134	132	130	
33	29	10	"	1½	"	98	"	98	96	96	...	
34	38	20	"	1	"	103	"	100	101	104	103	
35	62	30	"	2	"	105	"	104	102	101	102	
36	68	30	"	1½	"	98	"	95	95	96	96	
37	52	25	"	2	"	116	"	117	115	114	115	
38	40	10	"	1½	"	94	"	95	97	97	97	
39	31	10	"	1	"	102	"	103	102	103	104	
40	26	3	"	1	"	95	"	93	100	100	101	
41	30	8	"	1½	"	90	"	88	87	87	...	
42	45	12	"	2	"	117	"	116	115	119	121	
43	47	15	"	1½	"	94	"	93	92	96	100	
44	31	10	"	1	"	90	"	93	93	93	94	
45	40	15	"	1½	"	113	"	110	110	108	112	
46	40	18	"	1½	"	75	"	74	75	74	78	
47	36	16	"	1½	"	107	"	107	106	104	...	
48	27	1	"	1	"	100	"	99	101	102	102	
49	48	10	"	1½	"	91	"	89	89	94	95	

XIc.—TABLE shewing OPIUM SMOKERS admitted into HOSPITAL and treated by the MEDICAL OFFICER, during the Year 1889.

DISEASE.	ADMISSION.			
	Europeans.	Coloured Persons.	Chinese.	Total.
Remaining under treatment 1st January, 1889,.....
General Debility, Opium Smoker,	8	8
TOTAL,.....	8	8

XI.—TABLE shewing the NUMBER and DESCRIPTION of PATIENTS treated in the GOVERNMENT LUNATIC ASYLUM, during the Year 1889.

No.	Native of	Sex.	Age.	Disease.	Date of Admission.	Date of Discharge.	No. of Days in Asylum.	Description of Patients.
1.	Barbadoes,	M.	31	Mania,	1st Jan.	31st Dec.	365	The Board of Trade.
2	Ireland,	M.	34	Dementia,	" "	2nd April.	92	Private Paying.
3	Finland,	M.	42	Imbecility,	" "	17th June.	167	Destitute.
4	Sweden,	M.	46	General Paralysis of the Lusane,	19th Feb.	23rd July.	154	Private Paying.
5	China,	F.	31	Mania,	1st Jan.	31st Dec.	365	Destitute.
6	Macao,	M.	40	Dementia,	8th April.	16th April.	8	Destitute.
7	Ireland,	M.	22	Mania,	17th Oct.	31st Dec.	76	Private Paying.
8	England,	M.	...	Monomania,	13th Dec.	31st "	19	Private Paying.

* Died in the Asylum.

PH. B. C. AYRES,
Colonial Surgeon.

XII.—TABLE of STATISTICS relating to the TUNG WA HOSPITAL, during the Year 1889.

Remaining in Hospital 31st Dec., 1888.			Admitted during the year 1889.			No. of Cases Treated in the Hospital, 1889.			No. of Patients Discharged during the year 1889.			Died during 1889.			No. of Out-Patients Treated during 1889.			Moribund Cases, 1889.			Remaining in Hospital 31st Dec., 1889.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
72	16	88	1,748	302	2,050	1,748	302	2,050	930	112	1,042	807	204	1,011	103,617	40,864	144,481	218	88	306	80	5	85

J. J. CLERHEW,
Inspector of Nuisance,
Western Health District.

XIII.—CASES of SMALL-POX treated at the TUNG WA HOSPITAL, during the Year 1889.

Remaining in Hospital 31st December, 1888.			Admitted during 1889.			Discharged 1889.			Died 1889.			Remaining in Hospital 31st December, 1889.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
...	2	2	4	2	...	2	...	2	2	...	...	...

J. J. CLERHEW,
Inspector of Nuisance,
Western Health District.

XIV.—VACCINATION performed during the Year 1889 by TRAVELLING VACCINATORS of the TUNG WA HOSPITAL.

In the City of Victoria.	In Out-District.	Total.
2,376	118	2,494

J. J. CLERHEW,
Inspector of Nuisance,
Western Health District.

XV.—LOCK HOSPITAL.

TABLE A

SHewing the ADMISSIONS into the GOVERNMENT LOCK HOSPITAL, during the 32 Years of its Existence, with the Number of DIETS issued and the AVERAGE LENGTH of TREATMENT.

ADMISSIONS.		NUMBER OF DIETS ISSUED.		AVERAGE NUMBER OF DAYS TREATED.	
1858,.....	124	1858,.....	4,797	1858,.....	43.8
1859,.....	162	1859,.....	5,389	1859,.....	30.8
1860,.....	361	1860,.....	9,107	1860,.....	23.7
1861,.....	442	1861,.....	10,778	1861,.....	23.4
1862,.....	485	1862,.....	12,193	1862,.....	22.0
1863,.....	420	1863,.....	11,707	1863,.....	23.7
1864,.....	442	1864,.....	11,940	1864,.....	27.0
1865,.....	390	1865,.....	11,303	1865,.....	28.0
1866,.....	406	1866,.....	13,060	1866,.....	28.6
1867,.....	434	1867,.....	13,120	1867,.....	25.5
1868,.....	579	1868,.....	16,462	1868,.....	23.6
1869,.....	546	1869,.....	16,779	1869,.....	24.8
1870,.....	722	1870,.....	18,382	1870,.....	23.1
1871,.....	593	1871,.....	12,308	1871,.....	18.5
1872,.....	656	1872,.....	15,103	1872,.....	20.9
1873,.....	500	1873,.....	11,219	1873,.....	19.5
1874,.....	345	1874,.....	6,814	1874,.....	18.6
1875,.....	134	1875,.....	2,916	1875,.....	18.7
1876,.....	168	1876,.....	2,730	1876,.....	14.3
1877,.....	177	1877,.....	3,069	1877,.....	16.6
1878,.....	105	1878,.....	2,242	1878,.....	19.0
1879,.....	129	1879,.....	2,199	1879,.....	13.6
1880,.....	57	1880,.....	1,300	1880,.....	14.7
1881,.....	44	1881,.....	1,330	1881,.....	21.7
1882,.....	99	1882,.....	1,831	1882,.....	15.5
1883,.....	273	1883,.....	3,451	1883,.....	12.0
1884,.....	325	1884,.....	5,174	1884,.....	13.1
1885,.....	411	1885,.....	6,161	1885,.....	15.6
1886,.....	401	1886,.....	4,837	1886,.....	12.2
1887,.....	144	1887,.....	2,014	1887,.....	13.9
1888,.....	66	1888,.....	1,616	1888,.....	24.4
1889,.....	84	1889,.....	1,540	1889,.....	18.3

Daily Average, 4.21. Longest stay 60 days.

PH. B. C. AYRES,
Colonial Surgeon.

TABLE B.

CONTAGIOUS DISEASES.

RETURN of the NUMBER of PROSTITUTES during the Year 1889.

Number of Beds in Lock Hospital.	Number admitted to Hospital on Certificates of Visiting Surgeon.	Number who submitted voluntarily.	Total Number brought under the Provisions of the Ordinance.	Total Number of Examinations made during the Year.	Total Number of Examinations made when no Disease was found.	NUMBER DISCHARGED FROM HOSPITAL.		
						No. discharged free from Disease who still follow their former Pursuits.	Number who have returned to their Friends or Emigrated.	Total Number Discharged.
32	84	269	269	10,924	10,837	83	...	83

PH. B. C. AYRES,
Colonial Surgeon.

TABLE C.

CONTAGIOUS DISEASES RETURN for the Year 1889.

Total No. of Females admitted into Lock Hospital.	TOTAL NUMBER OF MEN DISEASED ADMITTED INTO				Total No. of Men Diseased.	AVERAGE NUMBER OF MEN IN GARRISON AND PORT (per month).				Average No. of Men in Garrison and Port (per month).	Average Percentage of Men Diseased (per month).	REMARKS.
	Military Hospital.	Naval Hospital.	Police Hospital.	Civil Hospital.		Soldiers.	Seamen.	Police.	Merchant Seamen.			
84	452	349	65	132	998	1,596	1,328	758	13,433	17,115	0.485	.....

PH. B. C. AYRES,
Colonial Surgeon.

TABLE D.

RETURN of WOMEN examined and treated in the GOVERNMENT LOCK HOSPITAL during the Year 1889.

EXAMINATION.				DISEASES.	HOSPITAL.			DISCHARGED.	
Average No. of days per month on which Examinations were held.	Total Number of Examinations made during the year.	Number admitted to Hospital.	Total Number of Examinations made when no Disease was found.		No. remaining in Hospital, 31st December, 1888.	Admitted.	Total Treated.	Cured.	No. remaining in Hospital, 31st December, 1889.
Every day, Sundays and Government holidays excepted.	10,924	84	10,837	Primary Syphilis, uncomplicated,.....	1	67	68	67	1
				Gonorrhœa, do.,.....	1	11	12	12	...
				Do., and Primary Syphilis, combined,.....	...	2*	2	1	...
				Leucorrhœa and Cystitis,.....	...	1	1	1	...
				Warts,.....	...	1	1	1	...
				TOTAL,.....	2	82	84	82	1

* One died of Remittent Fever.

PH. B. C. AYRES,
Colonial Surgeon.

TABLE E.
CONTAGIOUS DISEASES RETURN for the Year 1889.

DISEASES.	Military Hospital.	Naval Hospital.	Police Hospital.	Civil Hospital.
Primary Syphilis, uncomplicated,	*222	139	†22	48
Gonorrhœa, uncomplicated,	139	146	39	81
Do., and Primary Syphilis, combined, .....	...	15	1	3
Primary and Secondary Syphilis, combined,	72	30	...	...
Gonorrhœa and do., do.,	19	6	...	...
Primary and Secondary Syphilis and Gonorrhœa, .....	...	13	† 3	...
Gleet, .....	...	...	...	...
TOTAL,.....1889,.....	452	349	65	132
TOTAL,.....1888,.....	401	244	46	68
TOTAL,.....1887,.....	222	268	70	54
TOTAL,.....1886,.....	216	235	25	65

* 172 Cases Ulcer of Penis included in Admission for Primary Syphilis. † 2 Cases contracted in Glasgow.

PH. B. C. AYRES,
Colonial Surgeon.

TABLE E 2.
CONTAGIOUS DISEASES ORDINANCE.

TABLE shewing the number of NAVAL MEN admitted into NAVAL HOSPITAL, during the Year 1889.

SECONDARY SYPHILIS.

Months.	Contracted in Hongkong.	Contracted Elsewhere.	Total.
January,.....	1	...	1
February,.....	6	...	6
March,.....	...	1	1
April,.....	...	...	...
May,.....	1	1	2
June,.....	...	2	2
July,.....	...	1	1
August,.....	2	...	2
September,.....	...	...	...
October,.....	...	1	1
November,.....	...	4	4
December,.....	...	10	10
Total Number,.....			30

TABLE E 3.
CONTAGIOUS DISEASES ORDINANCE.

TABLE shewing the number of MILITARY MEN admitted into MILITARY HOSPITAL, during the Year 1889.

SECONDARY SYPHILIS.

Months.	Contracted in Hongkong.	Contracted Elsewhere.	Total.
January,.....	4	.....	4
February,.....	5	.....	5
March,.....	9	.....	9
April,.....	8	.....	8
May,.....	7	.....	7
June,.....	3	.....	3
July,.....	1	.....	1
August,.....	19	.....	19
September,.....	8	.....	8
October,.....	2	.....	2
November,.....	3	.....	3
December,.....	3	.....	3
Total Number,.....			72

XVI.—TABLE shewing the rate of MORTALITY among the FOREIGN RESIDENTS in Hongkong during the last 10 Years.

Years.	Number of European and American Residents.	Deaths.	Percentage of Deaths to Number of Residents.
1880,	2,767	69	2.49
1881,	3,040	64	2.10
1882,	3,040	55	1.80
1883,	3,040	81	2.06
1884,	3,040	94	3.09
1885,	3,040	99	3.25
1886,	3,040	103	3.38
1887,	3,040	108	3.55
1888,	3,040	122	4.01
1889,	3,040	93	3.06
Average of 10 Years,.....	30,127	88.8	28.79

Enclosure 1.

Report from the Superintendent of the Civil Hospital.

GOVERNMENT CIVIL HOSPITAL,
HONGKONG, 19th April, 1890.

SIR,—I have the honour to forward the Annual Report for the year 1889 with the Hospital Statistics.

I.—THE HOSPITAL BUILDINGS.

1. The main building of the Hospital has remained unaltered.

2. The new wing consisting of four public wards providing accommodation for 56 patients and two private wards providing accommodation for 4 patients has now been completed, making in all a total accommodation for 130 patients within the Hospital buildings.

There is also provision for two European Wardmasters in this wing which is in many respects better suited for the purpose than the old Male Lock Hospital now occupied by the French Sisters; the lavatory and bathing accommodation is however insufficient.

3. The Male Lock Hospital has been considerably altered in order to provide temporary accommodation for the Female Nursing Staff pending the completion of the New Block now under construction.

4. The new Mortuary situated between the Porter's Lodge and the main building has been completed during the past year, this additional and improved accommodation cannot be without benefit to the Institution.

5. The foundations of the new Barracks situated to the west of the main block for the Chinese Nursing Staff are now being prepared. This building when completed will supply a much needed want, as the present accommodation for the Chinese Nurses is both very inadequate and insanitary.

6. Adverting to the insufficient bathing and lavatory accommodation in the new wing I would suggest that the open space to the east be utilised for providing suitable lavatories and that hot water be laid on to both floors and the baths themselves replaced by others similar to those in use in the main building.

7. Referring to the recommendations contained in my report of last year I regret to say that as yet there are no signs of providing a suitable laundry, increased office, store accommodation, and better facilities for the distribution of hot water, the need of which is yearly becoming more evident with the increased number of patients and amount of work done as will be seen from Table VII *b* in the Appendix.

8. Further extension is required for private patients :—

If this Institution is to continue to meet the public requirements in this respect early steps should be taken to provide accommodation for patients of this class. In view of the increase that has taken place during the last two years it appears that additional accommodation should be provided for 6 first class and 8 second class patients. During the past year I have been unable on many occasions to provide private patients with the accommodation requested.

The following figures will shew the increase in the first and second class private patients during the past year.

	1888.	1889.
First Class patients,	6	17
Second Class patients,	12	32

9. I have also to call attention to the increased traffic along Hospital Road which is detrimental to the rest of the patients, especially in the early hours of the morning, and would suggest that the road be closed as a thoroughfare between the hours of 8 P.M. and 8 A.M.

10. The improvements recently carried out in the buildings in this neighbourhood have, I regret to say, led to the property being used as Chinese Boarding Houses the result being that the quiet previously enjoyed by the patients is no longer obtainable hence the importance of the Government as far as it is feasible doing all in its power to prevent innovations of this kind.

II.—SMALL-POX HOSPITAL.

11. The temporary small-pox buildings remain as before.

12. After careful consideration the construction of a hospital ship for the reception of all cases of infectious disease has been decided upon, and no time should be lost in completing and placing it at the disposal of this Department.

13. I recommend that the present premises after a little alteration be used as Reception Wards where all suspected cases of infectious disease should be retained for observation before removal to the Hulk.

III.—ADDITIONAL OFFICERS' QUARTERS.

14. This building situated at the corner of High Street and Eastern Street is not yet completed but it is to be hoped that it will be finished ready for occupation before the end of this year.

IV.—HOSPITAL PREMISES.

15. Flower beds have been laid down in the recreation grounds but from the nature of the soil improvements of this nature have been found difficult, but with the kind assistance of Mr. FORD their present condition is a marked improvement on that previously existing. The present staff consisting of one gardener is insufficient to keep the gardens as they ought to be kept. I therefore submit that in framing the Estimates for next year an assistant should be allowed for this purpose.

16. The suggestions contained in my report of last year have not yet been carried out viz. :—

1st. The substitution of a low parapet wall surmounted by a substantial open iron railing in place of the present high wall along the Hospital Road frontage of the premises adjoining the main building.

2nd. The substitution of an iron railing instead of the present temporary bamboo fence along the High Street frontage of the grounds adjoining the Superintendent's house and used as a recreation ground for the convalescent patients.

17. The insecurity of the Hospital premises on the north side also requires attention.

V.—THE HOSPITAL STAFF.

18. An Assistant Medical Superintendent, a long needed want in this Institution, was appointed by the Secretary of State and Dr. TOOGOOD assumed the duties of this office on the 28th July though unfortunately he resigned his appointment on the 10th September, but I am pleased to say the vacancy was filled by the appointment of Dr. LOWSON on the 1st of November.

19. Mr. CROW on the arrival of the Sanitary Superintendent returned to devote the whole of his time to the duties of Government Analyst and Senior Apothecary.

20. Mr. WATSON resigning his appointment of Assistant Apothecary, on 31st May we were deprived of the services of this officer. I take this opportunity of bearing testimony to the able and conscientious way in which he always performed his duties and regret very much to have lost his services.

21. Mr. ROGERS, the steward, left on the 10th January on a twelve months' leave of absence—a rest well deserved by this hard working and conscientious officer. Arrangements were made so that Mr. WATSON should fulfil this officer's duties. On Mr. WATSON's resignation Mr. WYLIE, the Ward-master in charge of the Lunatic Asylum, was appointed acting steward.

22. The two Chinese Apothecaries' assistants Mr. U I KAI and Mr. CHAU KAM-TSUN have performed their duties to my entire satisfaction.

23. The clerical department has been increased by the appointment of Mr. LEUNG FU-CHU which was necessitated by the additional work caused by the increase in the number of the patients. I take this opportunity of thanking the Government for the additional assistance granted me.

VI.—NURSING STAFF.

24. During the year this has been considerably improved by the appointment of two Army Medical Staff Corps men as European Wardmasters a recommendation made by me last year and based on my previous experience of such officers at the Kensington Infirmary.

25. Wardmaster CHAPMAN arrived in the Colony on 17th January and forthwith commenced his duties; he has had seven years' experience in the Army Medical Staff Corps and is in every way a typical man for the post he now fills. I cannot speak too highly of the way in which he has always carried out his duties.

26. It is with much regret that I have to report the resignation of Wardmaster CARNEIRO in charge of the Small-pox Hospital owing to failing health. This officer had, I am given to understand, faithfully served the Government for upwards of thirteen years and had on several occasions especially during the small-pox epidemic of 1887-88 performed arduous duties to my entire satisfaction, and I know his attention to patients generally has been very painstaking. He was laid up for the last two months of the year with bronchitis and cardiac disease he improved very much towards the end of December and much against my wish left the Hospital on the 31st of that month, he unfortunately had a relapse two weeks later and medical assistance was sent for but too late to be of any service.

VII.—CHINESE NURSING STAFF.

27. CHAN A-LOK, the Chinese Wardmaster, resigned on the 13th July after twenty-five years' service. This officer has always shewn great interest in his work and I am sorry to lose his services.

28. I have again to report a considerable amount of sickness amongst the Nursing Staff, out of 63 officers 23 were warded during the year 11 of these were cases of malarial fever, mostly of a mild type. No officer died during the year. When the Chinese barracks are finished I hope to find a considerable diminution in this respect.

VIII.—WORK DONE DURING THE YEAR.

29. Attached to this report are the following Tables :—

I.—Shewing the admissions into and deaths in the Government Civil Hospital during each month of the year, of the Police.

II.—Shewing the rate of sickness and mortality in the Police Force during the year.

III.—Police return of admissions to Hospital from each district during the year.

V.—General Return of the Sick treated in the Hospital.

Va.—Surgical operations performed during the year.

Vb.—Zymotic Diseases, sub-group 1.

Vc.— " " " 2.

Vd.—Diagram shewing number of cases of Malarial Fever admitted in each month of the year.

Ve.—Zymotic Diseases, sub-group 3.

Vf.— " " " 4.

Vg.— " " " 5.

VI.—Shewing the rate of mortality in the Government Civil Hospital during the last 10 years.

VII.—Shewing the admissions into and deaths in the Government Civil Hospital during each month of last year.

VIIa.—Table of admissions into and deaths in the Small-pox Hospital.

VIIb.—The aggregate monthly number of patients visited in the Hospital daily for the last three years. This last table is a better criterion of the work done as it shews the number of in-patients visited per day for the whole year.

30. From the foregoing it will be seen :—

(1.) That the number of patients under treatment in the Hospital during the year was 1,793 an increase of 21 as compared with the previous year, the total number of deaths was 79, thus giving a percentage of deaths 4.29, as against 4.51 of 1888 and 5.37 of 1887. Of these 79 deaths, 36 occurred within forty-eight hours after admission.

(2.) In addition to this there were 5,264 out-patients attended to during the year, this includes the minor surgery cases treated in the Receiving Ward; these were principally scalp wounds, lacerated and contused wounds, dog bites, &c.

(3.) Out of the total number of in-patients 89 were females an increase of 21 as compared with last year, 5 of these were difficult obstetric cases all requiring instrumental assistance. It is to be regretted that the Chinese women do not seek assistance earlier, when they do come it is simply as a last resource. Now that we have a competent Chinese amah in charge of the native female ward—a nurse who was well trained at Dr. KERR's hospital in Canton—I should not be surprised if more Chinese women avail themselves of the advantages of skilled hospital treatment.

(4.) There were 67 less Police admitted than during the previous year further on examining the different nationalities it will be seen there was an increase of 19 European, a diminution of 49 Indian and of 37 Chinese Police.

I regret to have to record the deaths of 5 European Police from remittent fever of a particularly malignant type.

During the past year there has been a greater prevalence of malarial cases no doubt a result of the severe rain-storms of last May.

The enormous down-pour of rain washed down great quantities of alluvial soil from the many landslips which occurred on the hillsides, this being deposited on the lower levels with the high temperature and the excessive humidity gives all the conditions necessary for the evolution of malaria.

(5.) There has been a remarkable immunity from cholera, and epidemic diarrhœa.

(6.) Dysentery contributed 124 cases, more than twice as many as in the previous year, with 9 deaths giving a mortality of 7.25 per cent. as against 9.26 last year. There is no doubt that dysentery and malarial fever are intimately connected as to their causation, the increase during the past year being coincident with the increase in malarial fever cases bears this out.

(7.) Malarial fever contributed 423 cases as against 371 last year with 10 deaths giving a mortality of 2.36 per cent. This disease was much more fatal this year, the remittent cases being of a particularly malignant type.

By far the greater majority of these cases were of the intermittent type viz.: 384 out of 423. I classify all those as intermittent in which with an initial high temperature often as high as 105° F. or 106° F. the temperature falls on the next morning to 99° F. or just above normal. In our treatment of these cases we have found the best result from the administration during the stage of fever of antipyrin in 10-grain doses repeated every hour until the temperature falls to within a degree of normal; this result is generally obtained after four or five doses, if the bowels have not been open in the previous twenty-four hours before giving the antipyrin one of Livingstone's powders containing 4 grains of calomel, 5 grains of quinine and 20 grains of compound Jalap powder is administered. As soon as the temperature has fallen quinine is administered in 5-grain doses every hour the result generally being that the temperature does not rise so high by 2 or 3 degrees as in the initial paroxysm of fever.

If we find the temperature is not kept down to this extent by these doses of quinine, after again giving the antipyrin as before, on the following morning after the fall has occurred quinine is given in 10-grain doses every hour and there are very few cases in which the fever does not succumb to this treatment and in from five to six days the patient is practically convalescent.

We have not lost one case of intermittent fever during the year.

Antipyrin certainly seems very efficacious in these cases, it promotes free perspiration and under its administration the temperature falls much quicker than when diaphoretics or other antipyretics are given.

In many mild cases in which the temperature only rises to say 102° or 103° F. in the initial stage a combination of antipyrin and quinine in the proportion of 8 grains of the former to 5 grains of the latter given every 4 hours is all that is necessary, the fever often succumbing to this treatment in three or four days.

Notwithstanding the large doses of quinine, in many cases as much as 2 drachms being given in the twenty-four hours, very few bad effects are produced and then only in a few cases tinnitus or slight deafness.

In the remittent type the patient is always much more prostrate, there is generally bilious vomiting present and the temperature does not fall more than a couple of degrees notwithstanding the hourly administration of antipyrin.

These cases during the past year have been of a peculiarly malignant type the nervous symptoms were much more marked and the temperature rapidly rose to as high as 107° F. or even 108° F., and in some cases 108.6° F. was registered, urgent measures are then required. As a rule when this occurs the stomach will reject everything.

I have tried antipyrin injected subcutaneously, aconite and large doses of quinine all without avail and now when such rise has taken place our sheet anchor is "ice-packing." by this I mean that, the patient is placed on a mackintosh sheet covered with a sheet dipped in ice cold water and exposed to any breeze that may be present, ice being placed all over the patient and an ice bag to the head.

Generally in less than half an hour the temperature will fall as much as nine or ten degrees. The patient has to be carefully watched as collapse may set in, if it does this is combatted by enemata of brandy and beef tea or injections (hypodermic) of brandy.

When the temperature has fallen the patient is placed in a fresh bed and hot baths applied to the feet, the hypodermic solution of the neutral hydrobromate of quinine in 10-grain doses is then injected this is repeated in an hour and again in another hour. In many cases such energetic treatment will only be once necessary as the temperature does not rise so high at the next paroxysm and the patient gradually improves. In the interval champagne and soda water, Brand's essence of beef, ice and iced milk are administered in small doses repeated frequently. No ill results in the way of pneumonia, &c. have followed such treatment and by its means many of the severer cases have recovered. See Appendix (medical cases).

In some of the worst cases the temperature notwithstanding this will rise again as high as in the initial paroxysm then nothing appears to be of any avail death rapidly ensuing the patient's temperature frequently rising as high as 110° F. or 110.4° F.

The Table of malarial fever cases shews plainly the rise which occurs during the hot rainy season (June-September), the rise in November was probably caused by the fact that the hot weather continued later on in October this year than is usual, the first spell of cold weather brought about a recrudescence of the disease in those who had been previously attacked the greater majority of these cases giving a history of a previous attack of malarial fever.

(8.) There were 32 cases of beri-beri under treatment, with 2 deaths as against 16 in the previous year. Two of these were of the acute variety (Beri-beri hydrops) one recovering, the remainder were of the chronic variety (Beri-beri atrophica) one death occurring.

(9.) VENEREAL DISEASES.—There has been a marked increase in this class of diseases the numbers being 206 as against 118 in the previous year. Although many of these cases have been introduced into the Colony from other ports, I have no reason to believe that this has been more so than in the previous year. It therefore appears evident that the propagation of this class of disease within the limits of the Colony has increased, the greater majority are those suffering from *Chancres Molles* and *Gonorrhœa*; the resulting *buboes* have been of a particularly indolent type many taking weeks to heal and then only after incision and the free use of Volkmann's spoon, this is no doubt accounted for by the fact that many of these cases occur in patients debilitated by previous attacks of malaria and alcoholism.

(10.) There was one case of hydrophobia during the year, a Chinese boy *æt.* 16 who had been bitten by a mad dog in Canton two months before his admission who was violently convulsed when admitted, hypodermic injections of Curari ($\frac{1}{8}$ -grain doses) were administered every half hour for three hours and although the paroxysms were lessened the improvement was only temporary. Chloroform was then administered for some 1½ hours, during its influence the paroxysms again abated, but it had to be discontinued owing to weakness of the pulse. The paroxysms again recurred and he died nine hours after admission.

(11.) SURGICAL OPERATIONS.—During the year there have been 109 operations performed.

There were five cases of gun-shot wounds admitted during the year the notes of three of which are given in the Appendix as being of some surgical interest.

HEPATIC ABSCESS.—There were three cases during the year all of which were operated on; two of which died. *Post Mortem* Examination shewed that these were *post dysenteric* and *multilocular*, in one case as many as fourteen abscesses were present. Although a large abscess had been opened in each case causing a temporary improvement, during treatment lasting in one for some weeks, an exacerbation set in and a fatal result ensued.

The third case was operated on in December last and improved very much after operation so much so that the fever entirely subsided and the patient was able to get up and walk about. The improvement continued the patient increasing in weight so that we had great hopes that this was a *unilocular* abscess, unfortunately the temperature arose on 23rd January he became much worse and died on 29th of that month. *Post mortem* examination shewed that the cause of this was the formation of three more abscesses, one about the size of an orange situated in the posterior part of the right lobe, the others being smaller. The original abscess which had been opened in November had healed up.

There is no doubt that dysentery was the cause of these abscesses as in each case there were well marked signs of previous ulceration in the colon.

MAJOR AMPUTATIONS.—There were four cases during the year, one of the arm and one of the thigh for extensive disease of the elbow and knee joint respectively, and one of the fore-arm and one of the leg for severe injury, all of these were attended with satisfactory results.

Amongst the other operations may be mentioned one of successful trephining for compound depressed fracture of the frontal bone, and one of excision of the hip-joint for advanced strumous disease. The notes of these cases were read before the Hongkong Medical Society the patients being present, the latter being also successful.

FRACTURES AND DISLOCATIONS.—In addition to the surgical operations the following cases of fracture and dislocation were successfully treated during the year :—

Compound Fracture of femur	1
" " " fibula	1
" " " tibia and fibula	1
" " " ankle joint	1
Fracture of humerus	2
" " olecranon	1
" " ulna	1
" " femur	2
" " tibia	1
" " tibia and fibula	2
" " clavicle	1
Compound dislocation of knee joint	2
Dislocation of shoulder (<i>Subcoracoid</i>)	2
" " olecranon	1

In two of these cases the union was somewhat delayed—in one there was a compound fracture of right tibia and fibula and a comminuted fracture of left tibia and fibula these bones however ultimately became firmly united.

(12.) Alcoholism contributed 44 cases of which 5 proved fatal, in three of the cases the patient was suffering from other diseases.

(13.) There were twelve cases of poisoning under treatment, ten of which were from opium of which six arrived too late for treatment; of the remaining two in one the poisonous agent was arsenic, and in the other stramonium.

Added to this Report are the notes of some cases of Surgical and Medical interest.

I also include a report of the cases treated in the Temporary Small-pox Hospital.

31. During the year thirty *Post Mortem* Examinations have been made.

32. The various appendices are as follows :—

Appendix A.—Notes of Medical Cases.

B.—Notes of Surgical Cases.

C.—Report of Small-pox Hospital.

D.—Some observations on the blood, &c. of patients suffering from Malarial Fever.

33. The total amount of fees received from patients during the year was \$11,444.49 of this the Board of Trade paid \$2,163.00 and the Police \$1,068.62. This is by far the largest amount yet received in any one year and shows an increase of \$1,639.34 on that of the previous year deducting the fees received from the small-pox patients during the last two years the increase is \$2,539.47.

This sum corresponding to over \$200 a month was received from the increased number of private patients treated during the year, as the Board of Trade and Police paid slightly less than in the year 1888.

34. I wish to thank the Naval and Military Surgeons and the Civil Doctors for their able assistance frequently rendered, particularly at operations.

GIFTS OF FLOWERS, NEWSPAPERS, &c.

I take this opportunity of thanking many residents of the Colony for numerous presents of newspapers, books, &c., and particularly several ladies for their visits and gifts of flowers to the patients.

I have the honour to be,

Sir,

Your obedient Servant,

J. MITFORD ATKINSON, M.B., (Lond.),
*Superintendent of the Government
 Civil Hospital.*

Appendix A.

CASE OF MALARIAL FEVER.

I.—MIXED INTERMITTENT AND REMITTENT. HIGH TEMPERATURE. RECOVERY.

A. W. *æt.* 22, sailor,

Admitted August 5th, 1889, 10.45 A.M.

On admission patient stated that he had been feeling unwell for the last two days, his temperature was 103.2° F. the following was prescribed:—

R. Tr. Aconit m iv.
Mist. Diaphoret ζ i. 4 horis s^{am}.

Low diet, milk and soda water was ordered; his temperature rose that evening to 105.6° F. the medicine was continued every four hours, during the night profuse perspiration set in and the next morning (the 6th) at 6 A.M. his temperature had fallen to 98.4°, a 5-grain dose of quinine was then administered, at 9 A.M. his temperature was 98.5°, ten grains of quinine were now ordered every two hours and his temperature that day rose only to 99° F. (8 P.M.).

The next morning his temperature rose to 99.6° F. and in the evening at 8 P.M. was 101° F. The quinine was now discontinued and the aconite mixture given every 4 hours—the next morning the temperature fell to 99° F. the quinine was again given every two hours in 10-grain doses—that evening the temperature rose to 100° F. the next morning (8th) it was down to 97.8° the quinine was given as before, a mutton chop was ordered and the highest temperature recorded that day was 98.5° F. the following day it was normal and as the patient felt quite well—at his own request he was discharged from the Hospital.

Temperature chart (No. 1.) Appended.

This patient was re-admitted on August 28th at 7.50 A.M. with a temperature of 105° F. he said he had been well since his discharge from the Hospital until the previous day when the fever came on again. The following prescription was ordered as his skin was very dry.

R. Antipyrin, grs. xv.
Tr. Jaborandi m., xxx.
Mist. Diaphoret ad., ζ i.
2 horis s^{am}.

with low diet, milk and soda water, 8 P.M. his temperature had fallen to 101.6°, 12 midnight temperature 102°; 29th August 6.30 A.M. temperature 102.8° as his bowels had not been opened for the previous 24 hours the following powder was ordered.

R. Calomel, gr. iv.
Quinine, gr. v.
Pulv. Rhei Co. ad grs. xv.
st. s^{am} medicine as before.

midday temperature 105° F. 2.15 p.m. temperature 106.2° patient now vomited everything, so the medicine was discontinued; at 3 P.M. his temperature was 108° F. and at 3.45 P.M. it had risen to 108.2°.

As patient was now comatose and skin very dry, ice packing was at once commenced he being placed on a mackintosh sheet covered with a sheet dipped in ice-cold water which was changed every few minutes and ice packed all over his body—at 4.15 his temperature had fallen to 104.2° 20 minims of the neutral hydrobromate solution of quinine (1 in 6) was now injected hypodermically, ice packing being continued, for the next few hours his temperature was as follows:—

4.50 P.M.	103° F.
5.15 "	102° F.
5.45 "	100° F.
6.30 "	99° F.

The ice packing was now discontinued and as he was slightly collapsed hot water bottles were applied and brandy administered internally. At 6.45 P.M. his temperature was 98.2°. Ten grains of quinine were now ordered every two hours which was retained, at 9 P.M. temperature 101.4°. 30th 6.45 A.M. temperature 101.6°; 9 A.M. temperature 102.4°.

R. Antipyrin, grs. xv.
Aq. ad. ζ i.
2 horis s^{am}.

That evening it rose to 102.8° and fell during the night to 100.8°.

31st. Temperature in morning 102.6° and at 8 P.M. 103° F. during the night it fell to 100°. Grains viii of quinine were now given every 2 hours in place of the antipyrin, as temperature rose next morning (1st September) to 103° the antipyrin was substituted that evening temperature fell to 101° F. and registered 100.4° at 8 A.M. on the 2nd only rising to 101.4° this day, two doses of antipyrin were given, and it again fell. One pint of chicken broth was now added to his diet.

The after course of the case will be seen from the chart (No. 2.) by the 10th the temperature had fallen to normal, and fish diet was now given, it took the patient some time to regain his strength. On the 12th full diet and the following medicine was prescribed.

R. Eastonii Syrupi, ʒss.
Aq. ad ʒi. tds^{am}.

He was discharged cured on the 20th September.

REMARKS.—The first attack was evidently one of intermittent fever, the second being of the remittent type. In these severe cases I am firmly of opinion that the only way to combat the fever is by the application of external cold and administering quinine hypodermically as soon as the temperature falls, it being useless to give it by the mouth as the stomach will not retain anything.

II.—CASE OF REMITTENT FEVER. HIGH TEMPERATURE. DEATH.

H. P. *æt.* 23, Scotch, Police Constable.

Admitted to Hospital at 8 P.M. 11th August, 1889. Temperature on admission 102·8° F., the following medicine was ordered :—

R. Antipyrin, grs. x.
Aq. ad ʒi. 2 horis s^{am}.

Temperature fell during the night and at 8 A.M. on the 12th was 99·8°, 5 grains of quinine were now ordered every hour, at midday the temperature was 100·2° F. One dose of antipyrin was substituted for the quinine and at 2 P.M. the temperature was 99°, in the afternoon the temperature had risen to 99·4°, and at 8 P.M. it was 102° F., at 9 P.M. it had risen to 106·2° F., notwithstanding the administration of antipyrin, Dr. TOOGOOD now saw the patient and ordered the following medicine :—

R. Antipyrin, grs. xx.
Tr. Jaborandi m. xxx.
Mist. Diaphoret ad. ʒi.

to be given at once and another dose in an hour's time as the skin was very dry and hot, at 9.45 P.M. the temperature had risen to 107·6° he was now placed in a bath temperature 98° F. this was cooled down by ice to 76° F. in 10 minutes his pulse began to intermit and became weaker in strength, he was removed from the bath and ʒi. brandy was given; his temperature was now 101·4° F.

At 11 P.M. it had risen to 105·6°, at 11.30 P.M. it was 106° F., at 12.25 A.M. (13th) 107·4° and at 12.45 A.M. 108·6° F. ice-packing was at once commenced; at 1 A.M. temperature was 107·6° twenty grains of quinine were now given. At 1.23 A.M. it was 107°, as the temperature did not seem to fall notwithstanding the wet-packing another twelve grains of quinine were given. At 1.33 A.M. temperature was 105·2° F. at 2.15 A.M. 104·8°, at 3.05 A.M. 101·4° F. and at 3.35 A.M. it registered 100·8° all during this time the pulse was quick and weak, small doses of iced champagne were frequently administered. Ice-packing was now discontinued; at 3.45 A.M. after he had been placed in bed sixty minims of the hydrobromate solution of quinine were injected hypodermically and 5 grains of quinine were ordered every hour in the form of a pill. At 5 A.M. it had however risen to 101·7° half an ounce of Warburg's Tincture was now given, at 6.30 A.M. it had risen to 104·2° F. and at 7 A.M. 105°. At 7.45 A.M. 105·8° F. was registered—wet packing was again commenced and continued to 10 A.M. when it was 102·2° this was now discontinued ten minims of the hypodermic solution of quinine were administered, the temperature however steadily rose again and at 4.45 P.M. was 106·6° F., wet packing was again used and continued to 7.30 P.M. when the temperature had fallen to 99·8° F. Quinine was given as before, but notwithstanding that this was persevered with every hour the temperature steadily arose again and at 4 A.M. on the 14th registered 108° F. Recourse was again had to wet packing and the temperature by this means was lowered seven degrees by 7 A.M.

As will be seen from the chart (No. 3.) the temperature rose twice again that day to over 105° F. when the same treatment was used, this last time at 12 midnight the temperature fell in half an hour three-and-a-half degrees. It arose again steadily that day (15th) until 6.45 A.M. when it was 105·2° F. wet packing was again commenced, and continued until 8.45 A.M. when temperature was 100·6° F.

In the evening (7.30 P.M.) as the temperature had again risen to 105·8° and the skin was very dry two-thirds of a grain of pilocarpin was injected hypodermically and although in few minutes it produced profuse perspiration this was only temporary. The temperature fell in 20 minutes to 105·4° the skin however soon became dry again and at 9.55 P.M. registered 108° F., wet packing was again commenced and notwithstanding this at 10.10 P.M., the temperature was 108·8°, at 10.25 P.M. it had fallen to 106·8°, as he was now in a state of collapse, pulse almost imperceptible, he was placed back in bed a hypodermic of brandy was now given, his temperature soon rose again, at 11.20 P.M. it was 108° and at 11.35 P.M. the patient died, shortly after death the temperature (*per rectum*) was 110° F.

REMARKS.—This was one of those peculiarly malignant cases of remittent fever in which quinine seems to have no effect.

III.—CASE OF INTERMITTENT FEVER. RECOVERY.

LUI A-KAN, *æt* 18, Coolie.

Admitted 10 A.M. 1st September, 1889.

On admission he stated that he had felt unwell the previous day; his temperature was 100·4°—skin very dry and complaining of pains in his limbs, headache and general feeling of “malaise”—at 11 A.M. his temperature had risen to 104° F., the following medicine was now given:—

R. Tr. Jaborandi m. xx.
Antipyrin, gr. xx.
Mist. Diaphoret ad ℥i.
2 horis s^{dm}.

At 11.30 A.M. his temperature had risen to 104·8° and at 12 noon to 106·6° F. As the medicine did not appear to have any effect and the temperature was steadily rising it was thought advisable to ice pack him; this was accordingly done in the manner already described in the previous case and in two hours his temperature by this means was reduced to 99·6°, the various observations during that time being as follows:—

12.15	P.M.	.....	105·6°
12.30	„	.....	105°
12.45	„	.....	104·2°
1.00	„	.....	103·8°
1.15	„	.....	103·2°
1.30	„	.....	102·8°
1.45	„	.....	102°
2.00	„	.....	101°
2.15	„	.....	99·6°

As he was now somewhat collapsed he was replaced in bed between blankets and heat applied externally, ten grains of quinine being given by the mouth and repeated every two hours, his diet being milk and congee.

At 8 P.M. his temperature had risen to 102° F. and at 10 P.M. to 103·2°, the following medicine was now given.

R. Antipyrin, grs. xx.
Aq. Camph. ℥i. o horâ s^{dm}.

and the result observed, at 11 P.M. his temperature had fallen to 102·8°, at 1 A.M. (2nd September) it was 102°, at 3 A.M. 101°, and at 6 A.M., it had fallen to 98·6° the antipyrin was now discontinued quinine given as before; that evening it rose again to 104·2° F. (8 P.M.) the antipyrin was now substituted and it rapidly fell, after 4 doses the temperature had fallen to 99·6° midnight, the quinine was again ordered and this time it was given in 10-grain doses every hour during the day, the temperature that evening did not rise above normal. As the temperature was normal on the morning of the 3rd 10-grain doses of quinine three times a day were ordered, a pint of beef tea being added to his diet with one pound of rice.

On the fourth the quinine was reduced to 5-grain doses thrice daily—and he was discharged cured on the 7th.

REMARKS.—This was a case of intermittent fever with the paroxysm more marked than is usually the case, during the year we have had many such cases, as a rule however the temperature does not rise above 105° F. when if antipyrin be administered it almost immediately begins to fall profuse perspiration setting in—if we find antipyrin has not this effect we invariably now ice-pack these cases.

This patient had no return of the fever; I have been able to keep him under observation since that time, as he was soon after engaged as a Hospital servant.

Temperature chart (No. 4.) appended.

Appendix B.

I.—GUN-SHOT WOUND OF THE LEG AND THIGH.

WONG SAI SU, *æt* 12, Chinese girl, admitted in the Hospital 27th January, 1889, at 4.15 A.M. suffering from gun-shot wound of right lower extremity.

On admission:—There was an abrasion of the skin on the contiguous sides of the great toe and the second toe of the right foot, a round wound about the size of a five cent piece with clean cut edges on the inner part of the right leg three inches below the knee, and another wound on the inner surface of the lower third of the right thigh some 2½" above the knee—this being much larger than the wound in the leg, the edges were not so clearly defined and more irregular.

Connecting these two wounds was a sinus running along under the skin.

The treatment consisted in syringing out the sinus with carbolic lotion, inserting a drainage tube between the two wounds and placing the limb on a macintyre splint; on the third day the temperature rose to 100·2° and there was evidence of “cellulitis.” Warm lead and opium fomentations were applied.

February 10th Temperature again rose to $100\cdot2^{\circ}$, an abscess formed in the inner side of the upper third of the leg behind the sinus, this was opened; another incision had to be made on the 16th February.

During the whole of this time there was a free discharge of slightly offensive shreddy pus from the original sinus.

The inflammation now subsided. On the 4th of March the drainage tube was removed as the discharge was very slight.

The sinus slowly healed up and on 14th March the limb was taken out of the splint, passive motion was commenced and continued with, and the patient was discharged cured on 28th April, she had then free use of her knee joint and could walk well with the aid of a stick.

REMARKS.—The wounds were caused by a bullet from a Martini Henry Rifle, the bullet evidently having passed between the great and second toes of the right foot then entered the leg three inches below the knee grazing the tibia and emerging on the inner surface of the thigh some $2\frac{1}{2}$ inches above the knee.

The girl at the time she was shot was lying in a sampan evidently with her leg somewhat flexed on the thigh.

II.—GUN-SHOT WOUND OF BACK.

YEE ON, *æt.* 26, chinaman, admitted 4.20 P.M. 7th April, 1889, suffering from a gun-shot wound of back situated 1" below the angle of the scapula and $1\frac{1}{2}$ " to left of the middle line. He was in a state of collapse having lost a considerable quantity of blood.

The patient was anæsthetised and the wound examined; after enlarging the orifice of inlet and carefully probing the wound the bullet was at last found lodged in the arch of the eighth dorsal vertebra, the angle of the ninth rib having been grazed by the bullet, considerable difficulty was experienced in finding it the patient being very muscular and the bullet being lodged pretty deeply some 4" from the surface thus necessitating great care in exploration.

It was firmly lodged in the vertebra so much so that after seizing the bullet with the forceps considerable traction had to be used before it was dislodged.

The wound was plugged with lint saturated in carbolic oil, a small vessel being tied, and half grain of morphia was injected subcutaneously.

He slept well that night. On the evening of the 9th his temperature rose to $101\cdot8^{\circ}$, on the morning of the 10th it was normal, 5 grains of quinine were given every four hours, temperature rose to $100\cdot4^{\circ}$ in evening of 10th, wound was doing well it having been dressed and syringed out each morning with carbolic lotion—11th temperature morning $98\cdot6^{\circ}$ evening $99\cdot8^{\circ}$ after this the evening temperature generally rose to $99\cdot4^{\circ}$, on the 12th the quinine was reduced to two 5-grain doses daily, he was discharged cured in May 22nd, 1889.

The bullet was about the size of a No. 44 and was marked by two irregular grooves evidently caused by its coming into contact with the rib and vertebra.

III.—GUN-SHOT WOUND OF THE ORBIT.

CHAN A-LEUNG, *æt.* 50, admitted on the 22nd April, 1889, at 6.15 P.M., suffering from a gun-shot wound of the head and face.

A meeting of the Hongkong Rifle Association was being held at Kowloon and this man was collecting pieces of lead behind the targets when he was struck, one of the markers at the 150 yards range seeing the man fall. I happened to be on the ground and was able to render immediate assistance.

I found him bleeding freely from the nose and mouth, the right eyeball evidently being ruptured, the nares were plugged and a bandage applied to the eye, the man being in a state of collapse pulse 34, he rallied after the administration of some brandy and was conveyed in an ambulance to the Hospital.

The patient was immediately anæsthetised the eyeball was found to be quite disorganised and was excised, there was now seen to be a large wound of the floor of the orbit 1" by $\frac{3}{4}$ ", this led down into the antrum and although I explored the wound thoroughly no trace of any bullet could be found the last molar on right upper jaw was extracted and an opening made into the antrum from the mouth for the purpose of drainage, his temperature that evening was 102° .

The temperature gradually fell and on the third day was normal, the wound granulated up very quickly, and the patient was discharged cured on May 25th—there being no further trouble.

The peculiarity in this case is that no trace of the bullet could be found, the man must evidently have been shot, whilst in the act of stooping, the bullet rupturing the eyeball and then entering the floor of the orbit.

Appendix C.

SMALL-POX HOSPITAL.

There have been remarkably few cases of Small-pox under treatment only 19 patients have been admitted during the year, their respective nationalities will be seen from the following table:—

Chart No. 3.

GOVERNMENT CIVIL HOSPITAL.

Patient's Name,.....HUGH PARKER, Age,.....23. Occupation,.....Police Constable.

Disease,.....Remittent Fever. Ward,.....X.

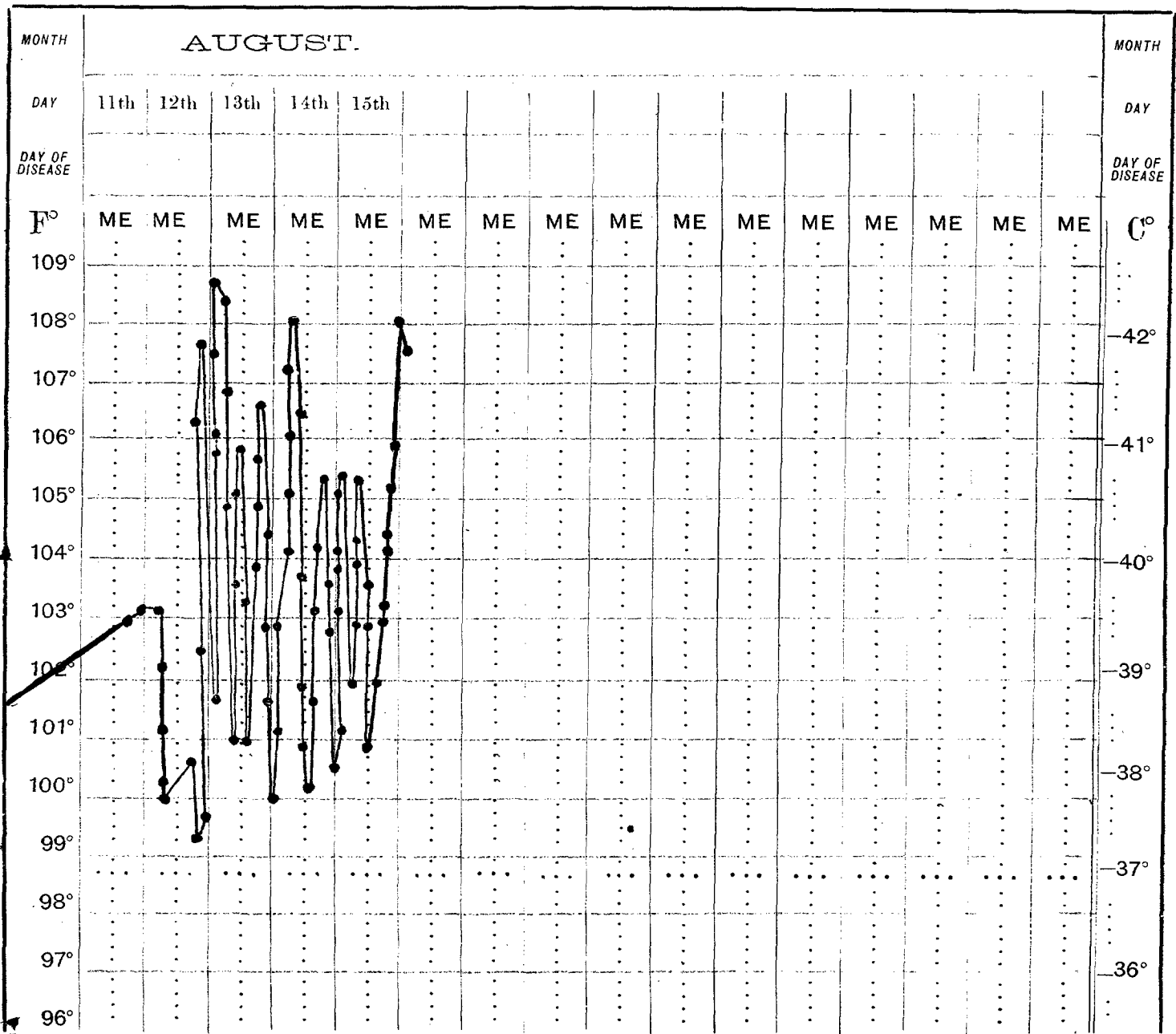


Chart No. 4.

GOVERNMENT CIVIL HOSPITAL.

Patient's Name,.....LIN A KAN, Age,.....18. Occupation,.....Coolie.

Disease,.....Intermittent Fever. Ward,.....XIII.

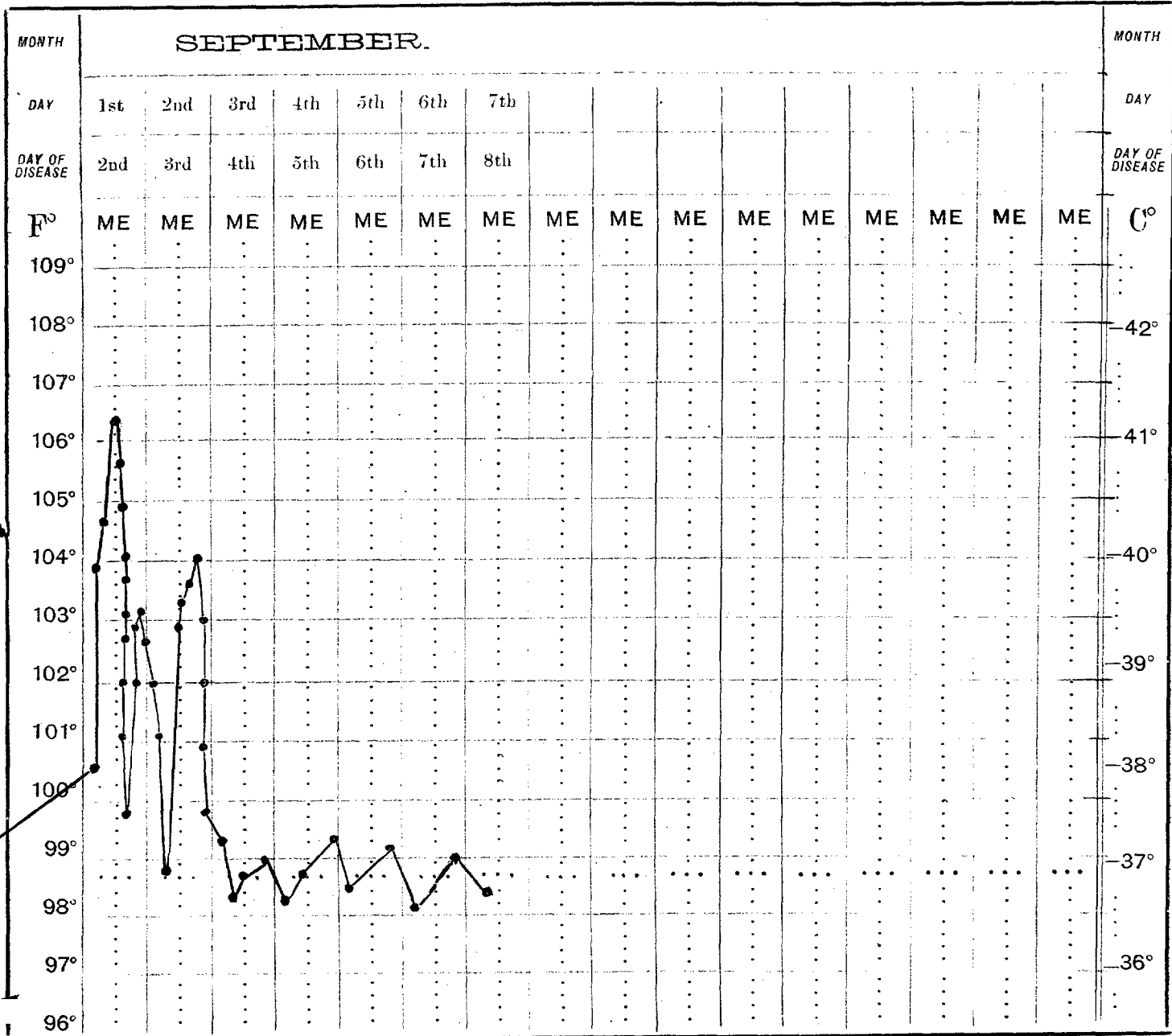


Table shewing the Admissions and Mortality in the Government Small-pox Hospital during the year 1889.

DISEASE.	Admissions.				Deaths.			
	Europeans.	Indians.	Chinese.	Total.	Europeans.	Indians.	Chinese.	Total.
Small-pox.....	12	5	2	19	...	...	...	...

In three of these the patients were found to be suffering from diseases other than Small-pox, two being cases of R \ddot{o} theln and the other one of Lichen. These were all vaccinated and did not contract Small-pox.

VACCINATIONS.

220 vaccinations have been performed, fifteen of these were unsuccessful.

CALF-LYMPH CULTIVATION.

During the past year certain experiments have been carried on by the Colonial Veterinary Surgeon with reference to the cultivation of calf-lymph in the Colony. The results obtained were highly satisfactory.

I reported to the Colonial Surgeon on these experiments on the 21st May. C.S.O No. $\frac{1889}{1889}$.

These demonstrate conclusively that calf-lymph can be cultivated locally and I recommend that a Calf-lymph Station be established, up to this we have been dependent upon England, America, Japan, and Australia for our vaccine lymph; it is unnecessary for me to point out the advantages of a constant supply of lymph being maintained locally.

Appendix D.

SOME OBSERVATIONS ON THE BLOOD AND SPLEEN OF CASES OF MALARIAL FEVER.

With regard to the intimate nature of malaria there is very little positively known.

Professors CRUDELI and KLEBS have described certain microscopic fungi met with by them in the Agro Romana, which they obtained from the lower stratum of the atmosphere, the soil and stagnant water—these when injected into rabbits produced a febrile disorder analogous to intermittent fever (KLEBS and TOMMASI CRUDELI, Archiv. f. Experimental Pathology 1879). Other observers in different parts of the world have discovered in the blood of patients suffering from malaria the presence of certain micro-parasites more especially LAVERAN, MARCHIAFAVA, and CELLI, Dr. OSLER of Philadelphia and of later years Dr. VANDYKE CARTER of Bombay.

In November of last year I made from the spleen of a patient who had died of remittent fever a microscopic preparation of the fresh pulp—prepared by taking some of the splenic pulp and treating it as one would the sputum of a phthisical patient in order to detect the tubercle bacilli—the staining agent used being rosaniline.

This showed distinctly with a Zeiss $\frac{1}{1\frac{1}{2}}$ Immersion lens O. 4. certain micro-organisms in the splenic corpuscles of the nature of diplococci—these taking the staining re-agent well.

I also during the summer months made frequent microscopic examinations of the blood of patients suffering from malarial fever, *e. g.* :—

On September 14th at 9.10 P.M. a drop of blood was taken from the finger of a patient who was suffering from intermittent fever in the paroxysmal stage, temperature 105° F. and examined with a Zeiss E obj., 0 4. and with the $\frac{1}{1\frac{1}{2}}$ Immersion lens, at first the blood looked perfectly normal at 9.20 P.M. the red corpuscles were found to be loaded with granules and here and there some large pigmented corpuscles with distinct motile filaments or flagella attached could be seen, at 9 25 P.M. a slight constriction was observed at the base of one of these flagella some of the granules could then be seen in the serum outside the corpuscles, at 10.30 P.M. the flagellum had become detached and at its side were seen some minute bodies (? sporules), at other times distinct motile filaments were seen moving about freely in the serum, whether these were detached flagella or not I cannot say.

These large pigmented bodies with flagella attached appear to be more of the nature of am \ddot{o} b \ddot{a} e (micro-parasites).

I frequently repeated these experiments and always with the same result—if the blood was examined in the period of intermission none of these granules or pigmented bodies with flagella could be seen.

These observations are in themselves inconclusive but as they substantiate facts observed by others I thought them worthy of record—in future years I hope to be able to devote more time to this interesting study.

J. M. ATKINSON.

Enclosure 2.

Report from the Medical Officer in charge of Gaol Hospital.

VICTORIA GAOL HOSPITAL,
HONGKONG, 24th February, 1890.

SIR,—I have the honour to submit a Report together with Statistical tables of the work done during 1889 in the Gaol Hospital.

2. It is gratifying to be able to state that the number of admissions into the Hospital was much smaller than it had been for the two preceding years. It amounts to only 244 men, 28 of whom were admitted on the first medical examinations (*Vide* Tables *K.* and *L.* and Table *O.* for the particulars of those 28 cases).

Table *K.* shows also these various admissions monthly.

3. Although we had eleven cases of erysipelas and five of carbuncles, they were with a few exceptions, of a mild form. Four prisoners died in the Hospital. These deaths resulted from pleuro-pneumonia, remittent fever, plastic bronchitis, remittent fever and acute pernicious anæmia.

One prisoner committed suicide by hanging himself in the cell on the same day in which he was sentenced.

4. The rates of sickness and mortality are given in the Table *N.*

5. The comparative immunity from serious disease during the past year is due, I think, to the improved sanitary condition of the Colony.

In this Gaol, as you are aware from your long professional connection with it and as Chief of the Medical Department, strict attention is always paid to hygienic injunctions.

6. Owing however to the fact that the prisoners belong to different social classes and occupations and come from all parts of the world, it happens sometimes that disease is seen in the Gaol long before it is met outside in the wards of hospitals. I was very much surprised when I found in the month of September of 1887, that a Chinese youth, who had been only nine days in the Gaol, was attacked by small-pox.

You will recollect that he was released on medical recommendation, by His Excellency the Governor, and sent to Tung Wah Hospital.

According to your Annual Report, small-pox did not become epidemic in the Colony till towards the end of November. Strange to relate, the case mentioned above was the only one which occurred that year in this Establishment, notwithstanding that small-pox prevailed in the neighbourhood. But in the following year in 1888, small-pox again made its appearance inside this Gaol, three prisoners suffering from it during the month of January and March.

7. The names of some cases that were attended outside the Hospital are given in the Table *M.* They reached a total of 217, which is greatly in excess of that of the previous year. No fewer than 74 prisoners had scabies.

Hitherto it has not been the custom to publish in the Annual Returns such diseases as trichiasis, small boils, pharyngitis and a few others which do not present serious character, yet these diseases and the treatment adopted are always registered in the books.

8. In this category is included a rather common complaint observed amongst those who go bare-footed and carry shot and stone.

The plantar surface of their feet are subject to one or more superficial abscesses about the size of a green pea. It would appear that cold weather favours its formation.

Of the 28 cases treated last year, 11 occurred in the month of February, 8 in March, while only 2 cases occurred in the month of April and 1 in May and June.

There were 40 such complaints in 1888. I am told that some Chinese purposely walk over any rough pointed ground that may present itself, with a view to developing these abscesses.

Almost all these cases were very easily cured by making a small incision for the pus to escape, and by applying afterwards a hot poultice over it.

9. Malingering is frequently resorted to by prisoners to evade punishment or for getting light labour.

This would at times have been very difficult for me to detect, but for the ready and able assistance which I always get from the Gaol Officers and above all, from the warders FLORES and HAMED.

10. Two prisoners, who were found to be suffering from leprosy, were deported. One of them returned to this Colony and was again committed to Gaol for larceny.

11. We began in January, 1888, to vaccinate the long sentenced prisoners with the exceptions of debtors and prisoners from Her Majesty's Army and Navy.

We found contrary to the current belief, that vaccination and inoculation are generally practised by the Chinese, but we have not yet met amongst the new prisoners a single instance of re-vaccination.

The result of our work and inquiry on this subject for the past two years are embodied in the subjoined table.

Year.	Total number of vaccination and re-vaccination.	Taken.	Failed at first vaccination and re-vaccination.	Total number of those who have been vaccinated or inoculated outside the Gaol.
1888	2,051	1,354	697	1,951
1889	2,060	1,445	615	2,057

Another advantage derived from this vaccination, is that old convicts that escaped identification by the detectives, are recognised at once by those marks they bore on their arms.

12. It is not to be wondered at that in China they have tried some means to check the virulence of small-pox which has repeatedly produced terrible havoc amongst its inhabitants. Chinese practitioners describe various methods of inoculation which, it is said, was discovered at the latter end of the second century for protecting a grandson of Prince TCHIU-SIANG (1). They have also learned by experience the dangers of inoculation.

13. Mr. FLORES has, as usual, carefully noted down and compiled the Table P. showing the weights of opium smokers during the first four weeks of their confinement in this Gaol. after having been deprived of the use of this drug.

14. The passing of Opium Ordinance has been the cause of many Chinese being convicted for breach of its provisions.

These offenders are generally weak and aged men. One was over eighty years old. Their advanced age precluded them from hard labour, and their state of health forbade them to be put entirely on the ordinary penal diet.

15. The great number of prisoners and the limited accommodation in the Gaol, do not allow the system of separate cells, so important also in hygienic aspect, to be uniformly adopted.

16. In a small Colony like Hongkong, it is not an easy thing for those who have been convicted of serious crimes to get situations.

The usual abode of these men is the Gaol, until by some way or other, they manage to leave this Colony.

It behoves the Surgeon to watch daily their power of physical endurance, and as often happens, when their health begins to break down, they are delighted with the idea that they will be excused, at least for a short time, from doing full penalty.

The repeated convictions and longer sentences which generally follow, render most of them callous and indifferent of their future welfare.

17. The aggregation of prisoners in the Gaol, is a constant source of anxiety to all those concerned and entails a large expenditure of money.

The majority of criminals are not permanently settled in this Colony. I believe that if influential Chinese would establish a benevolent society for helping old offenders who are willing to emigrate, to get employment in some recently explored lands, the problem of over-crowding in the Gaol could be solved very satisfactorily.

I have the honour to be,

Sir,

Your most obedient Servant,

L. P. MARQUES,

Medical Officer in Charge of Gaol Hospital.

Dr. PH. B. C. AYRES,

Colonial Surgeon,

&c.,

&c.,

&c.

(1) P. DABRY, "La Médecine chez les chinois."

Enclosure 3.

Report of the Government Analyst.

GOVERNMENT CIVIL HOSPITAL,
HONGKONG, 20th May, 1890.

SIR,—I have the honour to submit a statement of the work done in the temporary Laboratory of this Hospital during the year 1889.

2. In the middle of March I was relieved of my duties in the Sanitary Department by the return from leave of absence of Mr. HUGH MCCALLUM, the Sanitary Superintendent and Secretary to the Sanitary Board. The period during which I acted for this officer extended from October 1st, 1887, to March 14th, 1889.

3. On the 30th of April Mr. W. MALCOLM WATSON retired from the service but his successor did not enter on his duties until February 16th of the present year. The additional work in the Hospital Pharmacy caused by this vacancy devolved on the two Chinese student apothecaries and myself.

4. **Toxicological.**—Only one investigation under this head was ordered by the Government during 1889. In this case no poisonous principle could be detected in the contents of the stomach forwarded by the Officer in charge of the *post mortem* examinations.

5. **Alcoholic Liquors.**—In April and August, specimens of Brandy and Whiskey were analyzed at the request of the Acting Captain Superintendent of Police with the object of ascertaining if the samples were adulterated within the meaning of Ordinance 21 of 1886, sec. 2. Negative results were obtained in both cases.

6. In December an examination was made at the instance of the Police Authorities of an alleged medicated spirit. The question as to whether or not this preparation was an intoxicating liquor within the scope of section 6 of The Spirit Licences Ordinance was one for the Magistrate to decide. The sample yielded 6 per cent. of Extract and 84 per cent. of Proof Spirit. Personally I do not see how such a liquor recommended for the cure of a variety of ailments could be regarded as intoxicating under this Ordinance unless evidence was forthcoming that it was used as a beverage instead of ordinary wine or spirit.

7. **Milk.**—There were no analyses of milk during the past year.

8. **Water—Magazine Gap.**—In June an analysis was made for the Sanitary Board of a sample of water drawn from a well in the vicinity of the Magazine Gap. The water was certified as being in every way suited for drinking and general domestic purposes.

9. **Pokfulam Reservoir.**—During June and July a considerable amount of time was devoted to the analysis of the water supplied to the City from this reservoir. After the heavy rains of the preceding month the quantity of suspended matter in this water had considerably increased. The chief object of the analysis ordered by Government was to ascertain if there were reasonable grounds for assuming that sewage had gained access to the water. In this respect the results of the analysis were highly satisfactory. The quantity of nitrogen yielded as Albuminoid Ammonia was not excessive for water collected from large catchment areas in uncultivated districts. The amount of oxygen required to oxidize the organic matter was lower than the quantity that had been observed after very heavy rains in former years. The only objectionable feature was the dense brown turbidity, due for the most part to inorganic matter in suspension. This turbidity of the Pokfulam water had for some time past engaged the attention of the Government. At no period of the year with the existing works at the source of supply could the water be delivered perfectly clear and bright. It is therefore gratifying to know that the works for filtering this water are now in progress and that there is every ground for assuming that on their completion no complaint under this head will be made in future.

10. As to the cause of the presence of such a large amount of suspended inorganic matter, various opinions were at the time expressed. By many people it was attributed to the cleansing of the reservoir during the preceding dry season: by others to the loosening of the ground within the catchment area (a) by building works and (b) by the planting of trees. Not much weight could be attached to the former opinion as no physical comparison could be made between the *débris* previously removed from the reservoir bed and the deposit obtained on allowing large quantities of the water to settle. I am of opinion that the loosening of the earth was the primary cause. In connection with tree planting I remember that this question was brought before the Sanitary Board at a meeting held in the early part of 1888. The Board expressed itself in favour of the proposal, the Chairman (Mr. PRICE) being the only member who dissented from the opinion of the rest of his colleagues.

11. It is to be hoped that every effort will be made to prevent the cutting and exposure of earth, no matter what the object may be, in future, otherwise the skill of the engineers will, I fear, fail to ensure during the rainy season a supply of clear and bright water. The presence of suspended

matter to the extent of from 5 to 15 grains per gallon will severely tax the resources of the filter beds. However in any case the engineers will be able to fall back on the alum treatment. In the form of an appendix to this report will be found a few general observations on the application of this process to turbid waters of the Pokfulam type. I understand that the works now in course of construction for improving the quality of this water will include special facilities for treating the suspended matter by the alum method.

12. At the request of the Honourable Surveyor General periodical analyses of this water were made during the rainy season.

13. **Private Well.**—In October an analysis was ordered by Government of the water from a well within the precincts of the Hongkong Club. Now that there is an abundant supply of water from Taitam no excuse can be made for the use, for dietetic purposes, of water from shallow wells within the City of Victoria.

14. **Mineralogical.**—One specimen of Galena was examined in October.

15. **Students.**—Both the senior and junior student apothecaries have worked well during the past year. The pressure of work has at times been so continuous as to necessitate arrangements being made for one officer to be always on duty. In the undermanned condition of the Department this measure has made serious raids on the time that should be devoted to recreation. Both students deserve commendation for the cheerful assistance rendered during an unusually heavy year.

16. An important change has been sanctioned by Government respecting these native assistants in the Hospital Pharmacy. In 1881 a scheme was inaugurated on the recommendation of my predecessor under which Chinese youths would receive a training in the practice of Western Pharmacy. They were required to enter into an agreement to serve a pupilage of five years. Provision was made for their receiving an allowance of \$10 a month rising by *annual* increments of \$24 to \$18 a month. It was presumed that, at the end of their pupilage, they would be able to secure remunerative positions as trained pharmacists amongst their fellow countrymen. The majority of the youths appointed have, however, formed an opinion after becoming practically acquainted with their duties that the chance of their finding employment would be very remote.

17. Dissatisfied with their prospects two out of the three appointed since 1881 have sent in their resignations before serving half the period for which they engaged themselves. I might here point out that the primary object in appointing these students was to so relieve the Apothecary of mere routine work as to enable the Department to manufacture pharmacopœial preparations that hitherto had been obtained from England. In the original scheme it was contemplated that a new student would be appointed once in every two years and a half.

18. Under these circumstances it will be readily understood that the continual presence of untrained or half-trained youths in this branch of the Department would be a source of endless anxiety to the officer responsible for their actions. In May last the Government approved of a modification of the original scheme under which if the present students make satisfactory progress with their studies they will be retained as permanent assistants. Under the new arrangement the students will receive pay during their pupilage at the rate of \$10 a month rising by *annual* increments of \$60 to \$30 a month. It has not yet been decided what their pay will be if the Government retain them as permanent assistants at the close of their pupilage.

19. **Laboratory.**—The Government analytical work has been conducted in the temporary laboratory provided in this Hospital. I understand that within one year from this date, the new laboratory attached to the quarters for a portion of the Medical Staff will be finished, when it will be possible to finally dispense with the existing make-shift arrangements.

20. A proposal has been made that I should be allowed to devote full time to analytical work in order that I may undertake the periodical examination of the Colonial gas supply and also the analyses required by the Sanitary Department in connection with The Public Health Ordinance. In my dual capacity as Apothecary and Analyst I have been compelled to relegate to a subordinate place the analytical work contemplated in the duties of the office to which I was appointed in 1883, viz.: that required in cases of criminal poisoning. Any extension of these duties must obviously be accompanied by a corresponding limitation of the calls to be made on my time in respect of the work in the Hospital Pharmacy.

I have the honour to be,

Sir,

Your most obedient Servant,

W. EDWARD CROW,
Apothecary and Analyst,
Civil Medical Department.

Dr. PH. B. C. AYRES,
Colonial Surgeon and Inspector of Hospitals.

Appendix.

THE PURIFICATION OF DRINKING WATER BY ALUM.

Messrs. J. A. WANKLYN and E. T. CHAPMAN in their treatise on *Water Analysis* (1879, p. 121) refer, on the authority of the late Admiral SHERARD OSBORNE, to the use by the Chinese of alum for the purification of the water of the river Peiho at Tientsin; and many European travellers in China are familiar with the rough and ready method the natives adopt in out-of-the-way places for securing a supply of clear water by this agency.

2. To Europeans generally the method is perhaps not so familiar as that known as the "Clark process," chiefly because the necessity for the employment of alum is not so frequent as in cases where lime would be the more preferable reagent. Waters highly charged with carbon dioxide and containing a large amount of chalk in solution may be readily freed from the excess of chalk by the addition of lime; but for the purification of turbid water containing clayey matter in suspension there is no process which gives such satisfactory results as the alum treatment. Broadly speaking the lime or "Clark process" is applicable to clear water containing an excess of inorganic matter in solution; the alum method to waters containing but little inorganic matter in actual solution but a large amount in suspension. The water collected on the island of Hongkong on the hill-slopes between Victoria Peak and Mount Kellet and stored in the Pokfulam reservoir affords a good illustration of the latter type. In the report of the analyst to the Government of this Colony for the year 1882 Mr. McCALLUM gave the results of the monthly analyses of this water. The average quantity of total solid matter in solution in 1882 was 3.4 grains per gallon, 4.7 being the highest and 3.1 the lowest readings. The water was always more or less turbid.

3. About six years ago I made some experiments with a view to devising a scheme for treating this water with a precipitant as it was impossible with ordinary filters to clarify the water. It was found that alum in the proportion of 3 grains to the imperial gallon gave highly satisfactory results. After a few hours the water could be filtered perfectly clear and bright.

4. In June last year when the Pokfulam water was unusually turbid after the terrific rain-storms of the preceding month, I made analyses before and after the alum treatment. In the subjoined schedule will be found the results expressed in grains per imperial gallon. The figures are very instructive. Water containing 19.6 grains of total solid matter in solution and suspension yielded after treatment with alum and filtration only 2.8 grains per gallon. It will further be noted that the albuminoid ammonia figure and the quantity of oxygen required to oxidize the organic matter are reduced by one half. The appearance of water so purified leaves nothing to be desired. Such a water combines the organic purity of water from deep wells in chalk formations with the freedom from inorganic matter displayed by the best upland surface waters.

5. In the annual report of the State Geologist of New Jersey for 1884 the application of the alum process for the purification of the new Brunswick city water was dealt with at some length by Professors PETER F. AUSTEN and FRANCIS A. WILBER. *The Chemical News* of May 22nd, 1885, (Vol. 51, p. 241) contained a reprint of this section of the report. The authors found that "by the addition of 2 grains of alum to the gallon water can be clarified by standing and that neither taste nor physiological properties will be imparted to it by this treatment. By increasing the amount of alum the time required for the separation and settling can be diminished, and *vice versa*, by diminishing the amount of alum added, a greater time will be required for the clarification." They also found that 1.2 grains to the gallon was practically the smallest amount that could be employed so as to cause a separation and settling of the suspended matter. They further proved on subjecting the deposit to ultimate analysis that a large amount of organic matter was precipitated along with the silica, alumina, &c.

6. My own observations in the treatment of the Pokfulam water with alum are in the main identical with those of Professors AUSTEN and WILBER in the case of the New Jersey water. In practice it has been found useful to employ 3 grains of alum to the gallon. Within an hour of the addition of the salt the water can be readily filtered perfectly clear; complete subsidence of the suspended matter can be effected with this quantity in two or three days according to the state of the water. When the water is excessively turbid the proportion of alum should be slightly increased.

7. For the Pharmacy and wards of the Hongkong Civil Hospital the water is treated in a tank of the capacity of 400 gallons. The supply-tap communicates with a flexible india-rubber tube which is attached to a float so as to allow the orifice to remain about 2 inches below the surface. In this way by drawing off the upper layer, instead of waiting for the whole of the suspended matter in the tank to subside, the water is available for use in a much shorter time.

I have never found it necessary to use alum in a larger proportion than 1 oz. to 100 gallons ($4\frac{1}{3}$ grains to 1 gallon). On the direct testing of water so purified the presence of alum could not be detected with the reagents in ordinary use.

ANALYSIS OF POKFULAM WATER.

Results expressed in grains per gallon.

	i.	ii.
Total solid matter dried at 212° F.,	* 19·6	2·8
Chlorine,	·42	·42
Free ammonia,	None.	None.
Albuminoid ammonia,	·0098	·0042
Oxygen absorbed in 4 hours at 80° F.,	·065	·032
Hardness (Wanklyn's scale),	1·3	1·0

REMARKS.

- i. Collected on the 5th June, 1889.
 ii. Same as i. after treatment with alum and subsequent filtration.
 * Of this quantity only 3·9 grains were in actual solution.

W. EDWARD CROW,
Apothecary and Analyst.

17th June, 1889.

THE SANITARY BOARD AND THE ALUM PROCESS.

CIVIL HOSPITAL,
 27th May, 1889.

SIR,—In reply to your letter No. 172 of the 25th instant, I have the honour to transmit the enclosed Memorandum on the alum process for clarifying water.

If these directions are translated into Chinese I would recommend that the parts underlined in red ink, which would not be understood by the native population, be omitted.

I have &c.,

W. EDWARD CROW,
Apothecary and Analyst.

The Secretary,
 SANITARY BOARD.

DIRECTIONS FOR TREATING DRINKING WATER WITH ALUM.

Into an ordinary Chinese water bucket put *about 20 grains* of alum, in coarse powder *or* as much as can be easily placed on a one-cent piece. Add a small quantity of water and stir until the alum is completely dissolved then fill the bucket with water.

Or, prepare a standard solution of alum by dissolving half an ounce of the salt in sufficient water to fill an ordinary wine bottle and use a sherry-glassful of the solution for every bucket of water.

On a large scale the water may be clarified by dissolving a $\frac{1}{4}$ or $\frac{1}{3}$ rd of an ounce of alum in as much water as will fill an ordinary Shanghai bath-tub.

With this proportion of alum the water will become clear in twelve or eighteen hours; if, however, a supply is required in a shorter time, use double the quantity of alum.

The vessel should be rinsed out each time with fresh water before refilling and treating as above.

Water from the mains treated in this way should be used for domestic purposes in preference to water from any of the wells in the city of Victoria.

W. EDWARD CROW.

Hongkong, 27th May, 1889.