Thesis

by

Theodore Lordon Bone.

On the diseases of troops in British Cuba.

Given in on 31st March 1857.
Preface

The materials for the following thesis were principally obtained from my father's records. He was 17 years in the West Indies, and of that time four years in British Guiana.
British Guiana is bounded by Surinam on the East, Colombia on the West, the Sea on the North, and Brazil on the South. The Sea, is the distance of 20 Leagues from the coast, it slay colored from the bottom of muddy waters that fall into it from the Pinoes, Gipius, Demerara, Berbice, Surinam, Cayenne and Amazon, and the deepening of the water is to uniform, that Mariners can calculate their distance from the coast by sounding. The spring tides rise and fall about 9 feet, the ordinary tide about 4 3/5. The cultivated parts of the country are near the sea shore, and mouths of the Rivers, and are under the level of the sea at high water, and are kept dry by embankments to keep off the sea, & by canals having three gates in the embankments, and by drains opening into the canals. When the tide flows the sea water rushes into the canals, and communicating drains, and these being filled with water, the three gates called Tithes, placed in the canals, and at some distance from the sea, are shut at fine tide, and 2 hours after are opened, and the water rushes into the sea, and measurements of water flow into the canals and drains four times in 24 hours, but in practice the three gates are opened and shut only once in 24 hours. Here the canals and drains made of Brick, and lined with Roman Cement or Asphalt, the land could easily be kept dry and healthy, but
generally they are only ditches dug in the mud and require to be frequently cleaned out.

The Country is flat, low, marshy, and covered with jungle to the distance of 10 or 20 miles from the coast; but in some parts of it, there are Savannah, and in others Trees.

The line of plantations made by the Dutch and British, were only 10 to 20 miles from the bay, but the soil there becoming tallowd, the planters are relocating further to the interior, and now the partly abandoned estates are less carefully drained than formerly.

The principal produce of British Guiana is sugar, rum, indigo, cotton, coffee, and spices. The inhabitants are Dutch, British and mixed races. The native indians are few and they continue to live in the forest, but come occasionally to the towns to sell their Backides, Canoes, Bones and Arrow, and to purchase clothes and provisions. The principal city in British Guiana is Georgetown, the former Chatworth of the Dutch. The huts are rectangular boxes and macadamised. The houses are chiefly of wood, are raised from the ground on pillars, and have intervening gardens, but these near the rivers are not much raised, and are nearly in contact.
As British Guiana is between the Tropics it has 2
Winters and 2 Summers. The Latitude of Georgetown
is 7° and the Sun is Vertical there on 17 April and 27
August, and it has 2 Winters, the Middle of the that
Winter is the 21st June and of the long Winter, the
21st December. The Country has also 2 rainy Seasons
and 2 dry Seasons.

The short rainy Season is December
January and February.
The short dry is March and April.
The long rainy is May, June, and July & August.
The long dry is September, October and November.

But in this division, Rainy has Assisted Annualy,
For Frequently the Beginning of December and Later End
of February one day, and the Later End of November
Rainy, and Frequently Showers fall in the dry Season.
The Water in the Tanks is usually Bishop in the
Beginning of November, and the Roads Wettest and
Best in the Beginning and Middle of Jan.

Despots conjectured that in Lamb Domingo, the
Seasons followed Periodical Course of 14 or 15 Years, and
Wetter Periodical Course of 7 Years; the First Year,
Wet, the Last Dry. There are Persons who Mantain
That the Seasons in this District follow Course of 7
Years, and this Instance that Yellow Fever prevailed
Life in 1819 and 1820, and the Dandy Fever, a substitute for it in 1827.

The weather in this district is unpleasant, but to those who can afford to live in good houses, and to ride in chaises to the King in the evening, it is not unhealthy. The air is always cool when it rains. Sometimes the thermometer stands at 71° in a rainy morning, and the flow of water in the canals, trenches, and surface drains clears them.

But the soldier has not the means of keeping himself dry, and frequently has not the inclination. He is lodged in a Barrack, that has an open gallery or no gallery, and the wooden shutters called suffatons, in place of glass windows or splayed windows, and frequently the Barrack yard and the neighbouring roads are ankle deep with mud and water.

The temperature in British Guiana is not less than in Barbadoes and is more equable. The medium temperature is from 78° to 86°. The minimum 74°, the maximum 89°. The air is usually calm, and then the wind is from the South, every person is languid and sickly, but when it is from the north, the trade wind of the West Indies, every person is active and healthy. The trade winds
prevail in the long winters, and in dry weather, the

Irish Winds in the short winter, and in wet weather,

and the District is usually shaded by clouds, and

the atmosphere dark, dense, moist and like a steam

bath—Fires or Heats are not used in the living

apartments or in the Bed Rooms, and the Clothes of

every person are often damp. The calumnes and

moisture of the air is favorable to Sand Flies, Mosquitoes,

Lalainipes, and Hard Bats. These Vermin give

pernicious torture to man and Beast.

In the Press Rooms the Officers use a smoker

when they are at dinner. A pot is filled with grass which

is kept burning and evokes clouds of smoke, which is very

offensive to the Eyes, and Lungs, of the Officers and their

Servants, but no more offensive to the Sand Flies and

Mosquitoes. The Hard Bats, etc., a kind of Beetle, invade

the lands, and generally after sunset. They fly

towards the light of the Candles, are intercepted and

burned by the Candle shade and then are easily

caught. We caught in 1831, the Press Master of the 25th

cought about 2 Gallons of them, and put them in a

Candle shade, which they half filled. And not only

is the air hot, moist, stagnant, and filled with Vermin

and Euphorus Vapors, but the surface of the earth, is

alive with Crabs, Ants, Rats, and the Rouches with
Cape Santa, and therefore a residence in this country can apparently neither be pleasant nor healthy. Yet Staff Surgeon Donkin, who except in that interval resided in Demerara from 1798 till 1819, was of opinion that Guiana was not more unhealthy to Europeans than Barbados. In his time it was less liable to yellow fever, and the Colony found under his careful and mild treatment with Hall's and Barm, was never very fatal. Yellow fever with Black Vomit first appeared here in 1819, and in February 1818 Inspectors Greenwich arrived in Barbados, declared yellow fever to be contagious, and zealously endeavored to introduce quarantine regulations into the West Indies. It was not long that the departure of Staff Surgeon Donkin, and the arrival of Inspectors Greenwich, caused the advent of Yellow Fever with Black Vomit in British Guiana, but the coincidence may be noticed.

It is usually stated that the healthy season begins in the 1st November, and that the Dutchman then takes the new coat; but there are some who maintain that there is no healthy season in this district, like a tickly season that begins in the 1st January and ends in the 31st December, and is only varied, like the season of comparison, into tickly, more tickly, and most tickly. The death by Munch in 1831 from
Strength of about 600 troops in British Guiana, is given below in the 1st column; and the deaths by months in the Naval Hospital Demerara, from 1835 to 1846 inclusive, as taken from a return by H. Blau, in page 5 of his book on Yellow Fever, is given in the second column:

<table>
<thead>
<tr>
<th>Month</th>
<th>Troops</th>
<th>Sailors in the Naval Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>2</td>
<td>109</td>
</tr>
<tr>
<td>February</td>
<td>4</td>
<td>94</td>
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<tr>
<td>March</td>
<td>13</td>
<td>54</td>
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<td>April</td>
<td>3</td>
<td>25</td>
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<td>May</td>
<td>3</td>
<td>38</td>
</tr>
<tr>
<td>June</td>
<td>11</td>
<td>102</td>
</tr>
<tr>
<td>July</td>
<td>10</td>
<td>115</td>
</tr>
<tr>
<td>August</td>
<td>6</td>
<td>109</td>
</tr>
<tr>
<td>September</td>
<td>11</td>
<td>147</td>
</tr>
<tr>
<td>October</td>
<td>5</td>
<td>136</td>
</tr>
<tr>
<td>November</td>
<td>5</td>
<td>27</td>
</tr>
<tr>
<td>December</td>
<td>4</td>
<td>116</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>Total 1072</td>
</tr>
</tbody>
</table>

From these returns, it appears that February, March, and April, and May are less severely than the other 8 months of the year, to sailors at Demerara, and January, February, April, May, November, and December is whole troops in
British Guiana in 1831, but in that year 137 inches of rain, an unusually large quantity, fell in Demerara.

Having offered these preliminary observations, I shall give a brief Medical history of the Forces in British Guiana from 1796 to 1845.

The colonies of Demerara, Essequibo & Berbice were conquered from the Dutch by Sir Ralph Abercrombie in 1796.

The troops left in Demerara were the 39th Dutch Battalion, and the South American Rangers. The General Hospital was at La Buitade in Demerara. The deaths recorded in 1797 were 39. The Dutch at that time in the city of Demerara visited each other in hospitals.

1797.

In this year the same troops were in the Colony. Dr. Dunham was the Carleton Surgeon. The deaths recorded were 62.

1799.

The same while forces, the 1st West India Regt. were in Demerara, the deaths were Whites 38, Blacks 30.

1870.

The 39th left the Colony. Sir Royal Range were part of the Carleton, and Dr. Dunham was appointed Surgeon in the Colonial Hospital & Carleton Surgeon. The
water was scarce and bad. A general Hospital for the
Military was established. The deaths were Whites 56
Blacks 6.

1801.

The deaths were Whites 48, Blacks 3. Weekly & Monthly
Returns just handed in to Head Quarters.

1802.

The weather was very wet; the roads unpassable. The
Sick walked to their knees in mud, and were carried by their
Comrades from barracks to Hospital. In the beginning of
March the Sea Dam broke at Demerara, and the town
& neighbourhood were inundated. Two feet of water
in the Hospital yard. The Colony was given up to the Dutch.
The deaths not recorded.

1803.

The British again in possession of
British Guiana. The 1st Battalion Royal, 77 West
India were the Troops. The sick of the Dutch prisoners
were removed from the Hospital on the 23 October. The
Hospital was originally used for the sale of corpses
and required repairs, and reserve for water. The
Deaths were Whites 9, Blacks 2.

1804.

The same Corps. Deaths Whites 57, Blacks 2.
Water bad and scarce. Allowance of water for a
patient 2 Gallons per day. The sick frequently
without their Breakfast till 12 O'clock. Hospital
lines different, a Return to hold 30, 070 Gallons of Water
required.

1805

Forps the same with the addition of Royal
Artillery, Mr. Dunkin apoplectic and had
several Eczele, was bids ten times. Désility
swelled legs succeeded, and he went home by a
Medical Board. Deaths Whites 18 Blacks 11
1806

Forps Royal Artillery. Royals 16 & 64, 44
East India. Deaths Whites 28 Blacks 3. Mr. Dunkin
returned from England about 11 May. Complains
that our Bark is bad, and brought from London
some good Bark, and paid 16 Pounds for it. Does
not think wine very necessary in sick soldiers, as
feeling especially in the Autumn, for an assault
of Maple. Dr. Kerr then in Barbadoes and regulating
the Medical Department.

1807

Strength Whites 546 Blacks 665.
Deaths Whites 73 Blacks 6. D'nez makes many
sculent Regulations, and from this time the
Hospital Returns are correctly kept. Good for Jul.
deficient, and the patients burn, palinge and stingles
and Brands. Mr. Dunkin attributes the sickness of
previous years to the poor state of the drains and
grounds. He reports that Edward Broadbent is
recouered and may receive the remainder of his
punishment. He is succeeded by Dr.
Muddleberry. Enchona Bank $10 1st in Demerara
1808

Length Whiles 620 - Blacks 685 - Deaths
Whiles 32 - Blacks 5 - Several Surgeons are
Commissioned to be Surgeons to the Fleet. The
Troops were healthy

1819

Length 653 - Deaths Whiles 71 - Dr. Balloe
Succeeds Dr. Muddleberry at Head Quarters, and
Physician Dr. Duncan succeeds Mr. Dunkin in
Demerara. In July the Fever very axes, 4 Weeks
of continued Rain succeeded the dry hot Weather.
The grounds and trenches were cleaned.

1810

The Strength and Number of Deaths this
Year not on the Books, but 12 Men died in July and
26 in August. Mr. Dunkin wrote to the
Inspector at Head Quarters, notices the badness
of the Bank. The ground near the Barracks
was drained and cleaned at the Expense of the Colony.
A gallery all round was given to the Hospital.
The Barracks were originally built on pillars 2 feet high, but the Barrack Yard was raised with earth
and bricks, and then the floor of the Barracks
was 28 inches lower than the Barrack Yard.
In 4 Weeks 2 Companies in the upper room
lost 7 Men, and 1 Company in the lower room of
the same Barracks lost 9 Men, and in another
room 7 Women and 2 Children, died being 13 of
those quartered in it.

1811

Strength Whiles 784
Deaths 26

Physician S. Duncan was relieved by Dr
Dankin. Mahaica used as a convalescent
Mr Dankin was made a Committary to take
care of the Government Grounds and of the
Health of the Garrison.

1812

Strength Whiles 675
Deaths 36

A small Hospital was established for Government
Regoes. The creek water at Mahaica is reported to
cause a distempering affection of the Stomach.

1813

Strength Whiles 646
Deaths 91
Jackson Inspect at Barbados. Royals relieved by the 2\textsuperscript{nd} Battalion to 5\textsuperscript{th} Detillery and Frequent visits to the patients noticed. Weather in September hot and sultry. Thermometers 86° to 88°. The fever general in Town. Drains and Sewers foul. Brick pillars required to replace the wooden pillars at the Hospital. Convalescents receive a daily ration of fresh meat. Dr. Jackson arrives here on 20 October and went to Berbice,22nd. Sewers near the Hospital not properly cleared.

1873

White 762. Deaths 46.

Drainage in a bad state. May 11 at 11 a.m. Mr. Maj. General Carmichael died of Cholera. He had previously been ill with slight cold 2 or 3 days and was bid by Mr. Donkin. His death was unexpected.

An ingenious Mechanic proposed to sail the 3 Baracks 5 feet for $1,000, and to prepare the Barrack Yards with Brick Drains and Gravel Roads for $10,000, but his offer was not accepted.

Dr. Jackson attributes the sickness of 1872 to foul Drains and unscientific draining. Mr Dunkin makes strong representations concerning the drainage, and affirms the method of managing the three gales.
1814.

Strength Whites 857 - Blacks 177. Deaths Whites 62 - Blacks 61. In July very wet - half the Forces non-effective. Dr. Jackson orders Directions and Reports of the Medical Cases to be made. Water bad and Learee.

1815.

Strength Whites 981. Blacks 175.
Deaths Whites 83. Blacks 1.
Hospital at Derbie bad. Dr. Jackson thinks the Demersa Hospital the best in the Command. It can accommodate 50 men. Dry Weather, the 1st shower was on the 24th November. Dr. Jackson recommends Rails with Canvas. Bottons for Hospital. He is relieved by Dr. Ferguson.

1816.

Strength Whites 938 - Blacks 171. Deaths Whites 27 - Blacks 4 - 750 Invalids of the 60th arrive, they had been affected with Bowel Complaint. A Gain from 13 July, but the 24th September Dry Weather favorable for Black Frosi: wet weather unfavorable. Pestery prevailed. 2 Shock of Earthquake on 23 December. Showers of Rain followed. Blankets and Hammocks ordered in the Barracks.
1817

Strength Whites 873, Deaths Whites 62, Blacks 9.

First three months very wet; great mortality of the troops. Many of the 2nd Battalion 60th had suffered severely from Typhus Complaints in Barbadoes, and such men die rapidly here. Weather hot and calm during the rains. Sudden deaths, Cline and Dysentery prevailed. 181 men on Hospital. On the 17th September Mr. Dunkin appointed a member of the Board of Health. Mr. Ferguson leaves the Command in May; Rheumatism notably cured in this country.

1818.

Strength Whites 559, Blacks 468. Deaths 34. Blacks 1. Inspectors Gunn arrived in Barbadoes in February. Mr. Dunkin remarks that men long in this Colony do not bear loss of blood. 46 Invalids were sent to Barbadoes on 21st July. 3 men scalded were affected with Dysentery, 3 days after and died. The 6th Foot India Regiment left the Colony in August. The years 1813, 14, 15, 16, 17 were dry years. Mr. Dunkin recommends that troops should be sent direct from Great Britain to this Colony. He states that Ague occurs in the 14th and 28th days.
1819.

Strength: Whites 571. Blacks 254. Deaths

Whites 173. Blacks 7. Mr. Dunkin resides, and is succeeded by Mr. Surgeon Walker on 24 March. Mr. Dunkin had cleared by his practice and public appointments about £2,500. He embarked for England in the Jamine. The year was luckily, half the Queen's non-effective, and at one time 124 in Hospital.

The Head and Stomach principally affected. Many Sailors and many young men lately from Europe died, and with Black Vomit. The old Residens escaped the disease. This is the 3rd Epidemic that has affected the Queen's in the West Indies; none of them are effective. At Barbados it is supposed to put Vessels from Demerara in quarantine, in that it is believed that the Disease is contagious and imported. The Medical men in town declare that the Disease is not contagious. 320 Persons died in town from 25 September to 24 November. Captain Dupont K. I. died on 25 December. She was attended by civil Practitioners, Alexander, Guine, and Biddle, Mr. Walker being then sick—Mr. Walker succeeded Mr. Dunkin as health Officer and Eternal Surgeon.

1820.

Strength: Whites 677. Blacks 258. Deaths
Whites 99; Blacks 3. In the 1st Quarter 12 men of the
Queen's died of Yellow Fever, with Black Vomit. Some
of them entered the Hospital with Ague. At Berbee
the Troops were affected with Yellow Fever, and Black
Vomit in the last Quarter. The Colours in Kington
were luckily. Incessant Rain began in September
169. Inhabitants died in Kington. The Queen's at
Berbee from 157 Men, lost 26 in the last Quarter
1821.

Strength. Whites 528; Blacks 322.

Deaths. Whites 139; Blacks 3. In this Return the deaths
of 4 Women are included. The Weather in August,
September, October and November, was wet, hot, and
Lumpy. 91 Deaths to September inclusive. 2
Suspected cases of Yellow Fever in Town, in a House
supported the healthy. When the Weather
became dry the sickness dropped. The Queen's in
Berbee, from 105 Men lost 15 Men in 3 Months.
The 21st received the Queen's in March.

1822.

Strength. Whites 553; Blacks 216. Deaths.

Whites 95; Blacks 10. In May 25th Surgeon Carey
21st relieved Mr. Walker, and in June, Surgeon
Sharpe relieved Surgeon Carey; but did not succeed
in. Surgeon Walker as health, or as Surgeon to the
Loyal Hospital. Dysentry prevailed, 478 men died of yellow fever, in November and 21 in December. The question whether troops should be sent here direct from Europe is discussed.

1823

The strength was Whites 582, Blacks 160.
Deaths: Whites 37, Blacks 7. In the last week the rains were incessant, and fell in torrents. Mr. Sharp never saw such deluge of rain. In June the 21st Regt. became sickly, and an additional ration of pork meat was given to them. Mr. Casey, Surgeon 21st, died in June. The 21st became healthy in December. The Negroes on the estates were sickly. In one estate from 250 only 20 were effective. The sickness began in Cayenne, then came to Demerara, and then to British Guiana. There was a strike and rebellion of the Negroes in Demerara this year, and many of them were punished, and a Methodist clergyman, Mr. Smith, was accused of fomenting this rebellion, and tried in prison. The Medical Returns from Barbise were sent direct to Barbados.

1824

Strength: Whites 697, Blacks 187. Deaths: Whites 71, Blacks 6. In the 27th January, the 27th relieved the 21st. Sickness began in February. The disease
was designated by Mr. Sharpe, the ship's surgeon, and he stated "were we, with our present form of fever, to use the lancet, I do not think we should save the life of the man further by much depletion, nor do much stimulation will answer." The officers of the 27th were in a panic, complaints against the quality of the Bawb were triumphantly answered by Mr. Sharpe. It had been examined by Sir T. Brodie, and found to be excellent. The 2nd Battalion 60th arrived in October, relieved the 9th West India which sailed for Barbadoes. The convalescent post was established at Panchatin, Rome, and another in a house hired in Rome.

1725

Strength - Whites 896 - Blacks 359 - Deaths
Whites 99 - Blacks 6 - Pat D'Urban, a Jack on the East Coast, was occupied by a Company. Mr. Sharpe went to Barbadoes, on leave and returned on the 25th July and died in Fungilton in the 9th October. When he was sailing to Barbadoes, the cabin boy pitched some boiling water on one of his legs, a large poultice formed, fever followed, and then death. Draper, the Surgeon, arrived at Barbadoes in September. Mr. Draper, Deputy Inspector, relieved Mr. Sharpe, on the 21st September, Yellow Fever with Black Vomit reported to have been fatal to 2 persons in Rome.
Mr Draper reported in September that a drought had changed the face of nature, and that there had been little rain for 18 months. He recommends the building of a new hospital. The troops were supplied with water from Cocks 30 miles up the river. The greatest number of fever cases were from the lower part of the Benneki. The hospital was represented to be bad, and too small, an additional White Regiment being now stationed in this colony - 1826.

Strength - Whites 842, Blacks 64. Deaths Whites 107, Blacks 7. On the 13 July 20 men, 2 women and 12 children, of the 27th and 40th Men, 6 women and 12 children of the 60th were selected and sent to Barbados. The troops were in a state of melancholy, although the weather was fine. Rome and Rheumfieldt were occupied by the 60th. The 19th Regiment direct from England arrived in December, and the 27th sailed for St. Vincent.

1827.

Strength - Whites 787, Blacks 77. Deaths Whites 97, Blacks 8. Mr Draper wrote a salmy report in the 26th March, but the troops soon after became sickly. At one time 127 men were in the regimental hospital, and in a点了 hospital...
The men had an inordinate dislike to go unto Hospital, and when they went there, took leave of their companions. Heavy Rain fell. The Winds were South West, strong and hot. The Medical practice was bleeding to 80, 90 or 100°, then Colonel naturally, and Mercury Fission. Infallibly, 20 men were at one time in Hospital and 1/3 of the men were non-effective. 30 men were sent to Barbados.

1828

Length: Whites 658 - Blacks 137 - Deaths
Whites 121, Blacks 6. Dr. Arthur Physiceman to the Forces relieved Dr. Draper, on the 28th December and Dr. Draper proceeded to Jamaica. The 25th arrived in Demerara. The same medical practice were employed and the same kind of Medical Practice was continued. Inspector Dr. Bafler arrived in Barbados.

1829

Length: Whites 631 - Blacks 149 - Deaths
Whites 26, Blacks 6. On the 4th February Dr. Bone, Deputy Inspector of Hospitals relieved Dr. Arthur who proceeded to Barbados. Dr. Bone wrote on the 31st April to Mr. B. Urban, and to Dr. Bafler a statement of the Appulse for an Hospital in the West Indies, and especially in British Guiana.
and on the 23rd February gave a copy of this statement to Sir Charles Smith, Commanding Royal Engineers, then on a visit at Demerara, with Sir Edward Eyre, the Commander of the troops in the West Indies. Dr. Rose wrote a system of Hospital Regulations which were put in distinct orders, and he wrote and introduced into the Hospital a system of keeping in the Patients. The Hospital had a Salooned Gallery, but the space in the Gallery was divided by partitions into small rooms for particular cases, and for servants, and consequently the Hospital was dark and ill ventilated. These partitions were knocked down, and the inner wall cut down to the height of 3½ feet, and the building immediately became healthy. A fatigue party of 12 Men and a Non-Commissioned Officer were employed under Dr. Rose's orders, one hour in the evening and one hour in the morning, in clearing the Hospital enclosure and casting it in the centre, and in filling up drains in it, especially a cesspool in which a large foul drain, close to the North Wall of the Hospital. When the side drains are cleaned, the clearings are frequently thrown upon the sides of the drains, and the plot becomes hollow in the middle.
and a month. The plasterings should be spread on the centre of the fields, and the plots should have a slope from the centre to the side fences. The Hospital regulations were founded on No. 4 Regulations; but the morning drill was changed from 10 A.M. to half past four A.M., and the hospital floor was thoroughly washed, and well aired twice a week, and before the time of the morning visit. This system met with some objection when first introduced in the Hospital, but soon was very pleasing to the patients, and to the Medical Officers. T. Bone preferred the, purging, sweating and burning practice, and the moderate use of Gin, Lime, or Caffeine, to the Sangrado, and Peruvian practice and he also recommended economy in the use of Ethad. The Right Wing of the 65th was the Right Wing of 60 at Barbice, and the Left Wing of the 65th relieved the Left Wing of the 60th at Demerara. The Left Wing of the 60th did not lose human, the last year they were in Demerara; Many of them were guards, and their lungs were not equal to Double Quick Marching, but they were good Cooks, used plenty of pepper, and considerable quantities of Rum, and did not crowd the Hospital.

The following Table extracted from T. Bone's annual report dated 24th Oct. gives an account of the Medical supernumeraries in the West Demerara in 1828-29.
Statement of No. of Days in Hospital & of
Deaths, & Expence by Months and Quarters from
25 Decr 1827 to 24 Decr 1828 in the Phys. Hospital
Longtown.

<table>
<thead>
<tr>
<th>Periods</th>
<th>From</th>
<th>To</th>
<th>No. Days in Hospital</th>
<th>Monthly Expence</th>
<th>Quantity Amount</th>
<th>Annual Amount</th>
<th>Remarks</th>
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<tbody>
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<td>1828</td>
<td>25 Decr 1827</td>
<td>24 Janry 1828</td>
<td>1</td>
<td>374</td>
<td>44.10.2</td>
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<tr>
<td></td>
<td>25 Janry 1828</td>
<td>24 Febry</td>
<td>4</td>
<td>162.5</td>
<td>158.18.8½</td>
<td>307.18.2</td>
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<tr>
<td></td>
<td>25 Febry</td>
<td>24 March</td>
<td>9</td>
<td>134.9</td>
<td>104.9.1½</td>
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<tr>
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<td>25 March</td>
<td>24 April</td>
<td>7</td>
<td>147.1</td>
<td>116.18.4</td>
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<tr>
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<td>25 April</td>
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<td>1</td>
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<td>91.16.8</td>
<td>345.12.2½</td>
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<td>25 May</td>
<td>24 June</td>
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<td>167.6</td>
<td>136.17.2½</td>
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<td></td>
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<td>25 June</td>
<td>14 July</td>
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<td>238.9</td>
<td>151.8.4</td>
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<td>25 July</td>
<td>24 August</td>
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<td>156.2.10</td>
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<td>113.13.10</td>
<td>333.3.1</td>
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<td>24 Decr.</td>
<td>3</td>
<td>130.2</td>
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Statement of No. of days in Hospital, No. of Deaths & Expenses by Months, and Quarters from 25 Dec 1828 to 24 Dec 1829 in the Regt. Corps Georgetown.

<table>
<thead>
<tr>
<th>Period</th>
<th>From</th>
<th>To</th>
<th>No. Deaths</th>
<th>Days in Hosp.</th>
<th>Punishment &amp; Expenses</th>
<th>Quarterly Amount</th>
<th>Annual Amount</th>
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1830


This was a very wet year. A campane for the conveyance of
Leek from Hospital W.Benacks was provided. The 68th
drill from Ireland, arrived. 12. Blue Sargeon E5.
went home sick. The worst cases of disease were from the
out post Chinnemeldt

1831

Strength Whits 748. Blacks 150. Deaths Whites 88. Blacks 13

157 inches of rain fell in this year, and principally in the
first 8 months of the year. Surgeon Collis 25° arrived on the
11th September. The New Hospital was occupied on the 17th Septr.
and continued nearly all the accommodation. St. Bone
inquired in his letter to Sir B. D'Urban, dated 25. April 1829
The Architect was Capt. Smyth. Royal Engineers. The New
Hospital is in 2 pavilions joined by a gallery, and in 2
stories high. The length of the Wands is 26 feet, and of the
gallery 10 feet. The third of the Superior Wand is glass
window with moveable shutters under the window; to the
floor. The Interior Hall on the lower floor is to the ceiling and
Shuttered doors are placed between the beds. The Interior
Space of the Upper Wand is 20 10 feet high, and each floor
of each pavilion is divided into 2 wards by large sliding
doors, and therefore there are in each pavilion 3 lower and
2 upper wards. Total 8 wards; and there are servants
rooms in the Janet. The Building is 12 feet from the ground, on brick pillars, and the ground under the lower walls, was covered with twisted brick, and afforded a cool place for the patients to sleep, eat, dine, walk or rest. Captain Smith defects the high interior wall, and glass windows in the outer walls, and on a letter dated 27 Dec 31. he says they are not the continued saloons in the outer walls of buildings, on this damp and variable climate, but proper glass windows with saloons under them. The system suggested by Dr. Bone and the Constructions of Hospital and Barracks in this Command, viz. of having an outer wall and inner gallery with low parapet walls I entirely approve, but after differing with Dr. Bone on some minor points, it is a source of great satisfaction to me, have arrived by a separate mode of reasoning at the same general result, on a subject of such great importance with an officer of his great ability, and long experience of the West Indies, and I sincerely trust that this system of building may be established, beyond the powers of invasion, as I am convinced that the result will be highly satisfactory, in the increase of health and comfort of the troops, besides which it doubles the accommodation in cases of sudden emergency. The New Hospital conducted by me, for me hundreds and
 Ibene men, one quarter of the garrison's strength, had contained two hundred patients without inconvenience.

Captain Smyth is now dead. He was a very able engineer, and built this excellent hospital, and also Barrack, on the same plan for the troops in Demerara. St. Bone left the Great Indies in 1834, but having returned to the St. I in 1841, he was informed that this hospital had been stated to be unhealthy, but Staff Surgeon Melville then in Demerara did not attribute the sickness to any fault in the construction of the hospital or barracks, but to the formation of a bank of shells, and clay, and to the bad state of the drainage, and an extensive marsh to the windward of the hospital and Barrack. In 1844, the inner wall of the hospital were cut down to the height of 3½ feet, and St. Bone clean them Staff Surgeon there reported, that the improvement was obvious to any one entering the hospital for the light and free circulation of the air being greatly increased.

The floor under the hospital had become low by the sinking of the building, but was then raised 20 inches by a layer of burned brick, and the drains were cleaned, and since that time the hospital has been healthy. But the garrison has been principally black troops and not numerous.
+ inconvenience
Dr. In 2 dean on 1st October 1441, was relieved by T. Surgeon Connex. On the 1st September 1831, Major Lefferts made an Adelian Well in his garden in Demerara, and at the depth of 123 feet found water, which rushed with great force to the height of 4 feet above the level of the sea. The water is saltpeter, but by distillation to the brine pocket, the Eton, and is yet for sale. Dr. Bone gave to the Council a certificate that the water was fit for domestic purposes, and the Council gave to Major Lefferts £1000. This discovery has been of immense value to the Colony. Adelisian Wells are now common in the City and in the Country.

1832

Shipted Whiles 660 Blakes 260 Deaths Whiles 29
Blakes 4. The weather was very dry. The Corps in Essequibo
were under the allowance of 1 gallon per man, per day,
from 24th September till the end of October. Water was
told at Major Lefferts's Well at 2½ per pint, or a $1 per
pint. Extension 120 Liberated Crown Slaves received
medical attendance from the Military Officers. The New
Hospital was convenient and healthy, and the new
Barracks was built, and occupied. In this year there
was a destructive hurricane in Baratador; and in the
beginning of December 1833 it. Some was reached to
Baratador. From 1833 till 1836 inclusive, the Corps in
British Guiana continued to be tolerably healthy, but in 1837
Yellow Fever affected the inhabitants of Georgetown, and
the sailors, and also the Forces in Guiana. The prevalence
of Yellow Fever continued among the Forces, till the middle
of 1844, and the New Hospital, and New Barracks had
been twice vacated. The stagnant Canals of the disease
were continually in the Drainage, and to an offensive
Branch formed to Windward of the Hospital and Barracks
and to a Bank of Clay, and also formed on the North
East Shore of the Mouth of the Demerara River. The
Royal Engineers are not regularly furnished with funds
to carry for cleaning the Trenches, and some Commanding
Officers do not like to employ their Men in cleaning
the Grounds. But in addition to the proper Drainage
and cleaning of the Military Grounds, the Drainage and
Cleansing of the Town, Streets, and Neighbouring Sheds, should
be managed by a Scientific Engineer, and a Board of
Health, paid by the Public, and thus terrible epidemics
would probably be less frequent, and certainly less fatal.
It is stated in a Barbados Newspaper of 8 Feb last,
that the prevalence of Cholera in Jamaica and
Cayenne, has caused the Board of Health and People
of British Guiana to make great exertions to improve
the sanitary state of the Town, and Estates, and
that now Georgetown, and its Environs have not looked
to clean for many a long year.

I shall now notice briefly the diseases that most commonly affect troops in British Guiana.

Intermittent and Remittent Fevers are the prevailing diseases, that affect them in ordinary seasons. Yellow Fever is not recorded to have affected them since 1878; but it has since very frequently.

The Intermittent or Ague in British Guiana is of two kinds, the shaking ague, and the silent or death ague. The shaking ague is Contractian indian, but spreaden more frequently than blinian; probably in nearly the proportion of one to thirty. The Guaran is seldom noticed in Military Returns.

The Times of Invasion of Ague are uncertain to ordinary observation, but in 2 days after the Full Moon or after the Change of the Moon, or after the Quarter Moon, are periods when Ague is more frequent in the weather usually severe, and at these times the attack of Ague are believed to be most frequent. The East Wind and Rain are frequently existing causes, presageful of tidal or Lunar inclination. There are persons who state that Ague attacks them, when the tide rises, and leaves them when the tide ebbs, but this certainly is not a general occurrence. For Ague
Patients in the Hospital are not seen shivering with Ague at the same time. The most frequent time of the Invasion of Ague, is the Morning or fore Part of the Day, but as frequently as it is anticipated, is preceded or followed by wet or cold, so that no certain time of its Invasion can be named.

The usual Symptoms of the Cold stage are chilliness, shivering, rigidity, shaking of the limbs, small slow and weak pulse, and sometimes nausea and vomiting. The hot stage succeeds and is marked by frequent heat, frequent respiration, headache, and sometimes delirium; then the sweating stage succeeds, and continues sometime and then the patient are restored to their usual state.

The Cold stage is managed by keeping the patient in bed and covering him with Blankets, and applying warm feet, back, and Cheeks, artificial heat, and giving him warm rum, tea with a small quantity of rum or brandy in it; answers well; and in the hot stage, cold drunks, and in the sweating hot drunks are the need, and when the sweating helps the shirt and shirts, blankets should be changed.

The Ague Ague is irregular in its invasions, and uncertain in its Symptoms. It is
usually marked by headache, spasms of the limbs, and uneasy sensations not easily defended, and it usually occurs when the winds is from the East. This kind of Ague is annoying but not very dangerous to life. It afflicts many officers and those who have served in British Guiana, in St. Vincent, or in other Agued countries.

The cure of shaking ague is usually conducted by giving some purgative medicine, and then Cinchona or Sulphate of Quinine, in the intervals of the disease, and by giving a liberal diet. A good medicine for the feverous soldier is 1/2 oz. of Cinchona Bark, 10 grains of Quinine, in a 1/2 pint of Rum, and a pint of Water, given to him before breakfast. This medicine the soldier takes very readily, but he makes many faces when he has to swallow the Bark in Water. The Sulphate of Quinine is a more popular remedy with the officers and with the men, and 15, 16, or 20 grains of it, taken in the interval is often soon followed by cessation of the paroxysms, but the warmth and good diet, and comfort of a well regulated House very frequently stops the paroxysms of Ague, and without the exhibition of Bark, Quinine, barkenis or any other medicine. It is indeed not infrequently impossible to keep Ague alive in a well regulated Hospital, and hence credit undeserved is given to any among the patient may have swollowed The shaking Ague
alcohol early stoped while the patient is in hospital is with difficulty permanently cured. The patient recovers again and again and becomes worn out and a hopeless bird, with swelling of his legs, liver and spleen, and unfit for military service. He is sent to Barbados or Great Britain. There is a plan for the cure of ague shaking that St. Borne used himself and with success.

He was affected with a tertian at Colombo in 1813, and had taken cinchona in two dram doses, but unable and being unwilling to go into the sick list, and tried of the mixture, heat and sweating, caused by his ague, which first affected him after the break. Cinchona, the jointed 35 of Cinchona bark, and a temper of brandy in a bottle of port wine, and both the whole of this mixture in one glass, and has never since been affected with shaking ague, as this occasionally occurs from ague.

This prescription was also used in Egypt by J. Simpson Hall in 1840, but with what results? Dr. Bone has not ascertained.

As the intermittent is the most prevailing tertian disease in British Guiana, the Colony Governor is the first judicial. The principal symptoms of the disease intermittent are: asthenia, pains of the joints, cold shivering, or chilliness, alternating with heat, frontal headache. The tongue foul and bad.
red edges, frothy coughing and hoarseness, but not of Black Vomit, pain at the pit of the stomach, yellowness about the third day, and frequently previous to death, haemorrhage from the mouth. These

The stomach and head were the parts chiefly affected. The severe cases generally begin with chills, the mild cases with alternate chills and heat, and the Prognosis is favorable or unfavorable according to the severity of the symptoms, and to the conclusion and habits of the patient. The principal unfavorable symptoms are despondency, inattentive habits,本案 abdomen, dry mouth, thirst, and in the corners of the mouth, heat, icterus, pain at the pit of the stomach, swelling of the abdomen, red dry tongue, vomiting, lividity, haemorrhage, delirium, coma, convulsions.

The favorable prognostics are, the absence of mental chills, thirst, good spirits, and good temper, the tongue green but not red, at the edges, the general tenderness of the symptoms, a sound and healthy condition.

The diagnosis of this disease is facilitated by a knowledge of the prevailing disease.

It is distinguished from Intermittent by the absence of intermissions, and from Yellow Fever by the absence of Black Vomit, and by the absence...
Of remissions, altho' these are not at all very perceptible, and by the greater disturbance of the functions of the brain.

The principal cause of the Remittent in British Guiana is the Trias, of Marshes; first is marked by perceptible remissions, and is based on Ague.

But the Trias is often rendered more poisonous by inhalements from foul drains and from uncleaned bush and jungle.

The more immediate poisoning causes of the disease are, exposure to rain, and allowing the wet clothes to dry upon the body; keeping or sitting some time in an ill ventilated building, or where the air is poisonous from flagel inhalements, as near jute bunches or jute binnings. It is not well ascertained why in some seasons, the simple colony fever prevails, and in other seasons the yellow fever and black vomit; some people maintain that yellow fever is only exaggerated Remittent, but this doctrine cannot be correct for the Remittent fever never prevails in Barbadoes.

It is probable, therefore, that the apparent cause of yellow fever, is some terrestrial fluid, formed by the conjunction of some principal baking
from the earth, meeting with some influence in the
air, so that it is some influence proceeding from
certain soils. The Yellow Fever never spreads far from
the sea—never two miles from the coast is the height
of its march.

In the Army since 1872, when T. J. Jackson
was the Inspector in the West Indies; and in the
then existing stations of the Yellow Fever have regularly been
proved, and recorded; and there read the record gave
point. All the Yellow Fever that occurred in British Guiana
from 1879—80, 81, 82—The following extract relative
to 27 Yellow Fever cases of permanent fever is taken from S.
Bone's Report, dated 30th September, 1871.

The time the patient was in Krapf was
generally less than the whole period of his illness,
by one or 2 days, although great care was taken to
send every soldier to Krapf immediately when he
was taken ill, or immediately after the sweating stage
of Ague.

Of these persons and probably a greater
number were affected with Ague previous to admission.
The Ague symptoms were more common in Krapf
when the weather was hot, dry and dusty than
in July and August when the weather was very cool.
Those who were convalescent convulsed
were terrible to presence on the Spinalyrium and Hypochondriu, and in those regions was the principal seat of the Ailence.

Eleven of these Cases were yellow, but the Yellowness was less common, and less deep than in the preceding quarter.

Three of these Patients were laboured, but no alliance was placed by my Father on Colonel.

The fit that preceded death very frequently commenced suddenly, and unexpectedly. The character of the fit varied; sense and power of voluntary motion were often lost; the action of the heart and lungs remaining; frequently the patient was violently convulsed as in epilepsy, and frequently his jaws were locked as in hystera. The pupils were generally dilated. The mussels were not tense as in lethargy, but loose and flabby; the Carotid and temporal arteries were greatly throbbing, yet the pulse was seldom full or strong, and bleeding and every other remedy tried were useless.

Examination of the head after death gave little information relative to the immediate cause of the fit. No effusion of blood, vascularly not remarkable, effusion of serum rarely observed. The cause my Father believes is to be sought for in the abdomen, but in the
head. The lumbar state of the Stomach, Liver, and Spleen must press on the descending Arteria, and ascending Vena Cava, and thus cause the Blood, to be principally directed to the Head—of the Black Venous state of the Blood may have caused the Fiss: of the diseased state of the Spleen, Liver, Stomach and Intestine.

Adhesions of the right lung were common. I think soldiers must generally sleep on their left sides, resting their right sides to currents of air, in their Barracks Rooms. The Cavities of the Throat were much diminished by the upward pressure of the Viscera of the abdomen, and such diminution and pressure relieved the causes of the breathlessness of persons who have resided a long time in this Country and have deceased the first Jenny.

The heart was flabby, thin, empty, or contained in the Ventricles a small quantity of Fluid Venous Blood.

The Pericardium in some cases was not.

The serous coat of the Cardiac portion of the Stomach was in every case, except one or two, red a dark brown color, and easily removable from the Muscular Coat; the Pump of the Stomach in contact with the Spleen was principally affected. The ventricle was not dissolved. The fluid
found in the stomach was brown, not black vomit. The stomach was small, and in perhaps three fourths of these people, it was found lying under the colon which was immensely inflated.

The duodenum was in the same state as the cardiac portion of the stomach. And in this disease the obstruction that seems to the passage of fluids. My father believes it is principally caused by the state of the duodenum, and cardiac region of the stomach.

Potions of the intestine in many instances contained feces. This having been the principal medical treatment, hence the ancient medicines should be given in liberal and frequent repeated doses, and at the earliest period of the disease, and in smaller doses during the whole course of the disease and of convalescence.

The colon was generally inflated and lying over the stomach, and therefore escaping the epigastrium can scarcely be suspected to have greatly benefited the stomach, or duodenum.

The size of the liver was remarkable.

The right lobe was cotten, the middle lobe and the right lobe were not healthy, so that the circulation of blood in the veins partly, could not have continued when the great lobe of the liver was in this state.
The gall bladder in every case, was distended with black bile, except in the case of a dyspeptic patient, doddering, and in the case of a patient whose gall bladder was nearly obliterated which probably was caused by a previous severe illness when he was very yellow.

The fulness of the gall bladder, Dr. Bone believes, the nearly connected with the effusion of bile, even of the mildestague as well as of the most formidable. Persistent; and therefore he believes that a regular and constant discharge of bile into the intestines must be solicited by supinen, or made appeatible, whether as preventive or curative of ague or remittent.

The weight of the liver was in 19 cases as follows: 4 lb. 4 oz. 4 lb. 4 oz. 4 lb. 12 oz. 5 lb. 8 oz. 4 lb. 15 7/8 lb. 6 lb. 4 lb. 12 oz. 4 lb. 12 oz. 5 lb. 8 oz. 1 lb. 1 oz. 12 oz. 1 lb. 1 oz. 1 lb. 1 oz. 1 lb. 1 oz. 1 lb. 1 oz. 1 lb. 1 oz. 1 lb. 1 oz. 1 lb. 1 oz. 1 lb. 1 oz. 2 lb. 8 oz. 2 lb. 8 oz. 1 lb. 1 oz.

The size of the spleen remarkable, and if the patient had been sick 2 or 5 days, it was 2 3/4 by 6 3/4. This size of the spleen is one of the most common of the Fortini appearances in the bodies of those who are of permanent fever in Sicily, Canada, or Spain.

The weight in one case 3 lb. 4 oz. and 2 the 6 2/3 oz. was the most common weight. In this last stage the circulation of blood was impossible.

The urine was usually licentious, and the
quantity of urine passed was of a deep yellow color. The pure secretion and natural color of the urine are good tests of established convalescence, and of good health in this or in any climate; while the cloudy secretion and redness of the urine, indicate disease, and the retention of the urinary elements, according to Sir Henry Halford, may be the cause of the fits that occur in dysentery fever.

The pancreas was red and could not have been discharging its fluid into the duodenum. The bladder was empty, for the kidney did not secrete, and the urinary elements were not separated from the blood. The kidney was red, but of the usual size.

The medical practice was partly formed from considering the best modern appearances and partly from experience of what was useful in curing the disease.

In a letter dated 15 September 30, from my Father to Dr. Grafton Ligon 61st then stationed in New Amsterdam, Belize, the principle of prevention and of cure of dysentery fever are stated as follows.

The Preventive Measures are the excellence of the whole system of the Regiment.
Space in Banackes. The neighbouring drains and grounds clean; the impresa never to remain longer than 4 hours on its passage through the Prime View, as should be ascetinised at the daily inspections, and temperance in the use of wine, the ration of wine is sufficient, and during the state collapse, a duty after inoculation, severe fatigue, or privations, welcomed of food or drink, can not be well endured by any person, and with respect to the mind, the dependancy of the soldier is to be discouraged. The climate is not as bad as is commonly supposed. Lastly, almost every officer, and almost every white soldier in Georgetown has been ill, yet none of the officers, and very few of the men died.

When a patient with fever is admitted into Egypt and shall be instantly, when he is taken ill, whether with cold or illness, headache, vomiting, or other symptoms of disease, I direct that he be cleansed in a tepid bath, and put on a clean shirt, and then immediately commence taking different saline medicines.

Four ounces of sulphate of magnesia, four pints of tincture of antimony, in a quart of water, 30 grains or 4 gr. every 2 hours or 3. This above is commonly used in the Georgetown Hospital.
This medicine given to produce 12 or 20 stools in 24 hours generally cures the disease, provided it is not dangerous or the other treatment be judicious. As a general rule, some dose of this medicine, or some equivalent medicine should be given like the tongue is clean or nearly clean, and then during the disease, 6 or 10 pt. of a mild Aperient Pill, maybe given at bed time, and a calomel in the morning; and a saline inflow during the day. When the stomach expels other aperients readily, powders are usually retained, and are pleasing to the patient, and act as an aperient or as a diaphoretic; 2 or 3 of the Ligni Ammoniacae Acetatis or 40 or 50 cm of the Lignum of Opium are powerful to restrain vomiting, and also injure in the hist of the stomach with soap and Opium tincture. When the tongue begins to clean and while the patient is convalescing small doses of quinine or of cinchona may be given, and poultice diet. Other remedies for the cure of this disease may be given, but the general principle that the purging is to be commenced suddenly, and continued gently till the tongue clean, and by medicines that are pleasing to the palate, and are retained in the stomach is to be carefully regarded by the Physician. During the course of the disease, the patient should have a tepid bath every evening and a clean shirt every
Morning, and clean sheets daily, or every second day, or at any time when soiled, and the nursing should be careful and continued on the tight, equally as in the day. A close shirt should be near the patient's bed, and be changed never to expose it currents of cold air. The favorable cases of this disease is generally the perspiration, which continues several hours, and is often so copious that it wets the patient's sheet beneath, and drips on the floor. To stop the sweating process in this disease may cause relief, and endanger the patient's life. The sweating having ceased to flow, the patient must change his shirt and bedclothes, and this time is then lined, but he must be carefully nursed for some time to prevent his relapsing. Nurses are seldom employed from the military hospitals, but careful nurses kept to attend the sick soldiers by day and by night. When any patient is very ill, one orderly attends him till midnight, and is then relieved by another orderly.

The drinks in the hospital, cold water, barley, milk water, tea, barley wine, gruel, soup, and other stimulating liquors are given according to the prescription of the attending medical officer, but lately the consumption of stimulating liquors on long vessels has not been past.

Officers are attended by their own servants
and by regular Medics. These Medics understand their business well, and assist the Medical Officer in curing the disease quickly. The usual remuneration they receive is $1 to $3 a day. If the patient in the course of severe disease is neglected in the night, or in the day, the most judicious prescriptions of the Physicians are of little use; but with Carbitol and food giving the most judicious prescriptions of the Physicians may do little harm.

In the West Indies various humble modes of Practice have been used in curing Remitted fever. Bleeding to 50, 60, or 100 oz. Colomel on tempole doses, juncton with intensest vomiting to cause Salivation, and during the last 20 years, 20 pams of Colomel and 20 pams of Sulphate of Quinine, in repeated doses, let the ears ring and are deaf, but these humble modes of Practice do not appear to be successful, and doubtless have given origin to the homoeopathic Practice, which, if it do little good, do little harm. Remitted fever is joked on the 3 or 5 day, Salivation can scarcely be induced in that time, and Dr. Wishon the Author of Euvonics, and in the best writer of all the Colomelists, maintains that Salivation is an abuse of Colomel. From the bleeding system introduced is encouraged by Dr. Jackson, induces anemia.
ability and slow convalescence, and is followed by epilepsy and by slow convalescence; but a patient treated by my father's mild acumen and aphoristic practice, is at once cured; he has no tedious convalescence, his system is restored, and his subsequent health permanently improved.

S. Surgeon 52 Medican Army. Deputy Inspector General, states in his report, dated Georgetown 1st July 1843. A favourite prescription of the private practitioners in Demerara is of Calomel of sulphate of Bumme followed in three hours by a dose of castor oil, and then repealing the Calomel and Bumme six times doses at short intervals, till a buzzing noise is heard by the patient in his ear, and wine is freely used in convalescence. He thinks this practice may succeed in curing the mild Colony fever, but has tried it in some of the malignant incessant cases, and without any such success; and he cannot speak favorably of it. The best part of this prescription is the castor oil if it stays in the stomach and then effect the poison from the venous side, but the vomiting usually is incessant and will usually effect the Calomel Bumme and Castor Oil. The convalescence of the lean stomach slow, but of the intestines are ulcerated by Calomel and the nervous system depressed by Calomel & Bumme.
Now convalescence is to be expected. In reference to this heroic practice, my father remarks in his report dated 21 December 1843. There is a knack for healing the Remicent in British Guiana, & there is reason to believe has been lost in Demerara, and be briefly recapitulates the practice he recommends:

The patient should be put on medical treatment immediately when taken in, the sweating stage should never be interposed with for the Curtis is generally by profuse perspiration, purging and sweating by saline medicines first 24 or 48 hours should be used to relieve the stagnation of blood in the spleen, liver and pancreas and in the whole system of the veins. Spleen, sweating is then to be collected by the hot bath, or by hot hand bath, and hot foot bath, and by pleasant exercises; unless the central stagnation is relieved in 24 or 48 hours, the patient's life is in great danger. his spleen, liver and intestines become rotten, and he dies on the 5th day from the commencement of the Cold Yet; but if healed in the mild manner my father recommends his life is almost always saved, and his constitution and health are improved.
In 1831, every officer of the 25th Regiment except the Pay Master, was ill with Remittent Fever, and all, except one, and he a hard gorer, and who had lately returned from sick leave, were cured by this practice; and whenever it has been fairly tried it has been successful, but all the foregoing modes of practice have been terribly unsuccessful.

The Soldier in the Guiana District, in addition to Ague, and Colony Fever is liable to other Diseases; some of these I have noticed.

A very common disease among them is Hydrocele. The disease was cured in the usual way by tapping and injection, or by tapping and snipping off a small part of the tunica Vaginalis.

The Barbadoe Leg, the gede an Ague the Pulmonia Tropicia, if good, seldom affects the Soldier in British Guiana, but very frequently the women and Children belonging to the Army.

The disease begins with a cold stage and the hands in the form of a cold, and an inflamed lymphatic appears on the outside of the thigh, and the thigh and leg inflamed, and if the disease is imperfectly healed, the leg swells, and remains permanently swollen. The swelling of the leg frequently becomes permanent, the
swelling increases after every fit of fever andague.

And the ankle is sometimes a foot in diameter.

This fever and ague frequently attacks the
vessels of men, and the breasts of women, and
sometimes other parts of both. When it attacks the
vessels of men it is excert by the physician's body.

The cure at the invasion of the ague best

be treated by applying toasted flour, or
brown paper and spirits of wine, or hot vinegar
or the juice of the bitter cattara, to the inflamed
wrist and leg, and remaining in bed and
taking some laxative medicine: the disease is
usually healed in seven or eight days, but if
neglected or treated by cold applications the
swelling becomes fixed.

The fever and ague of the leucemum is of
this kind, and is frequently combined with
hydrocele, and hernia. The tumor of the leucemum
sometines attains a very great size. In 1829
my father saw Dr. Allayne amputate a tumor
of this kind from a black man; he quarts of
water boiled with great fire from the knees
vaginales, and 14 lbs of disease thence were
amputated. This man died, the operation was
insteaded by taking the bottle, but Dr. Allayne
had previously operated upon another black man for a similar disease, and the man was then alive. The weight of the part amputated was one hundred and two pounds.

I shall conclude my thesis by noticing a case of maggots in the face.

David Houston 26th Regiment was admitted into hospital on the 25th May, complaining of headache, pain of throat, difficult digestion, nose swollen and inflamed, and presenting an appearance altogether new. The throat showed the appearance of Cypriake. Dr. Bone could not discover or suspect the cause of this disease, but Dr. Bell, who had treated cases of this disease before, said that he suspected that the man had maggots in the face. In 26 May, about 50 maggots, "strong white, length about half an inch, color black while head darked colored: were discharged from his face. Injections of various kinds were used, linseed oil, oil of Turpentine, thin oil, &c. and also a vegetable substance called Canarice Cole, by the natives, and recommended by civil practitioners as a specific. The larvae continued to discharge in great numbers, alive and standingly active, creeping across the ward.
with great facility. Dr. Bone recommended that an
Infection of Frijoles steeped in urine, or urine filtered
and boiled, should be injected into his nose. This was
done, and with complete success; on the following
day, the maggots were killed or discharged.

Cases are given in the Report of 1829 of this
disease, are recovered but one, who had before been
healed for Rheumatic headache, he was placed
and elevated EVE and left the basis of his nose.
The maggots were crowning on his cheek, and the
sense was insufferable; after death the maggots
were found to have perforated the sub-corn
plate of the Ethmoid bone.

When the soldier is lying drunk
the fly deposits her egg on his nose, and then
they are hatched.

Dr. Bone obtained some of these
larvae, and watched their development, they
remained in the enucle state for 12 days,
and if not fed, died after an active life of
26 or 14 hours. The fly was the Empoia
Horridana, a species of blow fly, with a red head
and white speck under each wing.

Theodore Gordon Bone

Edinburgh.
31st March 1857.