

THE ASYLUM JOURNAL

Volume 1
(1881-1882)

Robert Grieve
THE ASYLUM JOURNAL
with an Introduction by Letizia Gramaglia
Volume 1 (1881-1882)

First published in 1881-1882

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**Series Preface by the President of Guyana,
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SERIES PREFACE

Modern Guyana came into being, in the Western imagination, through the travelogue of Sir Walter Raleigh, *The Discoverie of Guiana* (1595). Raleigh was as beguiled by Guiana's landscape ("I never saw a more beautiful country...") as he was by the prospect of plunder ("every stone we stooped to take up promised either gold or silver by his complexion"). Raleigh's contemporaries, too, were doubly inspired, writing, as Thoreau says, of Guiana's "majestic forests", but also of its earth, "resplendent with gold." By the eighteenth century, when the trade in Africans was in full swing, writers cared less for Guiana's beauty than for its mineral wealth. Sugar was the poet's muse, hence the epic work by James Grainger *The Sugar Cane* (1764), a poem which deals with subjects such as how best to manure the sugar cane plant, the most effective diet for the African slaves, worming techniques, etc. As John Singleton confessed (in his *General Description of the West Indies*, 1776), there was no contradiction between the manufacture of odes and that of sugar: "...a fine exuberant plant, which clothes the fields with the richest verdure. There is, I believe, scarcely any cultivation which yields so lucrative a return per acre as under favourable circumstances, than that of the sugar cane. So bountiful a gift of Providence seems not only calculated to call forth the activity and enterprise of the agriculturalist and merchant, but to awaken also feelings of a higher and more refined enthusiasm." The refinement of art and that of sugar were one and the same process.

The nineteenth century saw the introduction of Indian indentureship, but as the sugar industry expanded, literary works contracted. Edward Jenkins' novel *Lutchmee and Dilloo* (1877) was the only substantial fiction on Guiana, and whilst it was broadly sympathetic to the plight of Indian labourers, it was certain of Britain's imperial destiny, and rights over mineral

resources. It was not until the period leading up to Guiana's Independence from Britain (1966) and the subsequent years, that our own writers of Amerindian, African, Asian and European ancestry (A.J. Seymour, Wilson Harris, Jan Carew, Edgar Mittelholzer, Martin Carter, Rajkumari Singh et al.) attempted to purify literature of its commercial taint, restoring to readers a vision of the complexity of the Guyanese character and the beauty of the Guyanese landscape.

The Guyana Classics Library will republish out-of-print poetry, novels and travelogues so as to remind us of our literary heritage, and it will also remind us of our reputation for scholarship in the fields of history, anthropology, sociology and politics, through the reprinting of seminal works in these subjects. The Series builds upon previous Guyanese endeavours, like the institution of CARIFESTA and the Guyana Prize. I am delighted that my government has originated the project and has pledged that every library in the land will be furnished with titles from the Series, so that all Guyanese can appreciate our monumental achievement in moving from Exploitation to Expression. If the Series becomes the foundation and inspiration for future literary and scholarly works, then my government will have moved towards fulfilling one of its primary tasks, which is the educational development of our people.

President Bharrat Jagdeo

THE ASYLUM JOURNAL

CONDUCTED BY THE MEDICAL SUPERINTENDENT
OF
THE PUBLIC LUNATIC ASYLUM
FOR
BRITISH GUIANA

ROBERT GRIEVE

**Volume 1
(1881-1882)**

Introduction by
Letizia Gramaglia



The Caribbean Press

The Guyana Classics Library

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Letizia Gramaglia

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INTRODUCTION

DR. ROBERT GRIEVE (1839-1906) An "Apostle of Science"

Long forgotten in the folds of history, Dr Robert Grieve enjoyed in his lifetime a justified reputation as one of the most progressive and insightful figures in the medical profession of British Guiana. A talented physician and keen public health reformer, Grieve was born in 1839 in Lilliesleaf, a secluded village in the Scottish Borders, and graduated in medicine from Glasgow at the age of 22. As a young doctor he served in military expeditions across Europe and China, and in 1875 he followed his medical vocation to British Guiana to take charge of the Public Lunatic Asylum at Berbice, the only mental institution in the colony.

The refuge, isolated on the periphery of Guianese society, echoed the medical periphery in which Grieve suddenly found himself, distant to the activity and research of Europe and America. But peripheries can also be frontiers, and the Asylum became the site of his pioneering work into the treatment of mental illness. As the Medical Superintendent of the institution, Grieve implemented a new humanitarian regime,⁷ a radical departure from the practices of his predecessors,⁷ which involved decorated wards, amusements, adequate nutrition, and most vitally, a policy of non-restraint and an emphasis on the recuperative power of productive labour.

Five years of the Asylum's history, a period of unprecedented health, recovery and development, were chronicled in meticulous detail in Grieve's *Asylum Journal*. This unique document contains a comprehensive record of all the statistics associated with the running of the Asylum, along with the

doctor's own research into the sanitary conditions, diseases and sociology of the colony. The erudition, morals and humour of Dr Grieve emerge strongly from his writing, showing him to be a man of considerably generous and tolerant character in the capitalist, imperial British Guiana of the day. There is no doubt that the phenomenon of the Berbice Asylum, preserved in unusually precise form by the Journal, is a testament to the success of Grieve's treatment strategies and an indication of this man's remarkable legacy.

The Public Lunatic Asylum in British Guiana before 1875

In the decades preceding Grieve's arrival in British Guiana public provisions for the mentally ill had been extremely poor. A very rudimentary institution for the treatment of the local 'insane' had been first established in the colony in 1842; over the first five years the Asylum received 195 patients, mainly of African origin.¹ The inefficiency and scantiness of the place were openly deplored by Messrs Alexander and Chandler in the account of their tour to the West Indies in 1849-1850 given by the *Anti-Slavery Reporter* of 1st April 1851. Over the following years, although much needed, the erection of a new Lunatic Asylum was long delayed due to great diversity of opinion in respect to its appropriate location.² A suitable plot of land was ultimately procured in Georgetown, close to the General Hospital and, in 1859, Governor Wodehouse announced at last the construction of an establishment which was to "take the place of the very unsatisfactory and inadequate accommodation provided for the reception of pauper lunatics" in the colony.³ In the same year, one large building was completed on this site and the patients under the care of the colonial government were transferred to the new premises; by 1861 the institution hosted about 60 inmates of various ethnic backgrounds.⁴

Though improvements had unquestionably been made since 1850, the general and particularly the hygienic conditions of the new Asylum still failed to meet acceptable standards and were harshly condemned in the Digest of 1864. As a consequence, by Ordinance No. 4 of 1867 the facility was once again relocated; a new permanent site was established "on the fort lands outside the town of New Amsterdam", adjacent to the Berbice Hospital, and the Asylum was placed under the government of a Board of Directors.⁵ A resident surgeon was

assigned to the institution and, given the absence of a salaried government inspector on site, the surgeon was responsible for submitting a full report to the Governor every six months. In addition, the visiting physician of the General Hospital was obliged to visit the Asylum at least once a month and to report to the Governor of any matter worthy of special notice. By 1869 the daily average number of patients in the Asylum had reached about one hundred; this rapid increase prompted the construction, the following year, of an additional female ward with ten single rooms, and the planning of a similar expansion for the men's ward.⁶ The official reports for the year 1870 also mention plans for the erection of an open building, "where the patients can find a place for recreation sheltered from the sun" and, in 1873, the sum of 1,427*l* was spent for the completion of these works.⁷

By the early 1870s the Lunatic Asylum in British Guiana was indubitably committed to some sort of development. A number of alterations to the structure were carried out under the supervision of Dr. Cramer, who also attempted the introduction of amusements and entertainment for the patients, mainly in the form of music and occasional dances. In accordance with the principles recommended in the Digest, the new Asylum was provided with sufficient land for exercise and cultivation and by 1872 a daily average of 34 out of 165 inmates were tentatively employed in various constructive activities. Yet, beyond the implementation of these measures, nothing much was done to improve the living and sanitary conditions of the inmates, nor to modernise and catalyse the curative process. On the contrary, obsolete and detrimental methods of therapy were firmly and consistently enforced at the Asylum; some of the patients were locked up in cells for extensive periods of time and numerous forms of physical restraint (including canvas jackets, leather straps and iron handcuffs) were regularly used to manage and control their behaviour. By June 1875, when Dr. Grieve took charge of the Lunatic Asylum in Berbice, the institution hosted 180 patients, the majority of which showed signs of malnutrition and abuse.

Grieve's management of the Berbice Asylum

Although still common to most of the Asylums under British colonial administration, the use of coercive measures in the care of the insane had been widely rejected in England and Europe

for quite some time;⁸ following a more scientific approach to mental illness, chains and shackles had been largely abandoned in favour of a more 'humanitarian' treatment of the patients.⁹ Grieve's greatest achievement was the establishment of a similar trend in British Guiana through the successful introduction and application of humanitarian treatment at the Lunatic Asylum in Berbice; he freed his patients from all forms of mechanical restraint, introduced a plentiful and regular diet for the inmates, and employed them in a system of light and regulated labour.

As the *Demerara Times* of 22nd December 1875 reports, shortly after his appointment Grieve submitted to the Governor a paper advocating the need to reorganise the Asylum.¹⁰ Before leaving England, he had spent four months visiting the main lunatic Asylums in the country to make himself acquainted with the treatment of the patients and also with "a great many technical matters which would ordinarily lie outside of his professional duties."¹¹ This qualified him to offer recommendations and to suggest that, for the good of the patients, the Medical Superintendent should be the chief executive officer of the Asylum, responsible for everything that went on in the institution. The commissioners in charge of the Asylum, whose unpaid services had never actually been effected, supported the doctor's proposal and, in 1876, the responsibility of the management of the Asylum was officially transferred from the Board of Commissioners to the Medical Superintendent.

Having attained overall control of the institution, Grieve began at once to implement his programme of reform. Acting on the belief that "the conditions surrounding the patients have all of them an influence, either good or evil, upon the progress of the disease from which they suffer", Grieve aimed at producing a comfortable and caring environment where order and discipline were compelled by example rather than by force.¹² He rigorously banned physical restraints and firmly instructed the members of his staff to treat the inmates with kindness and compassion.¹³ Numerous architectural renovations were zealously planned and executed to remove the vestiges of the old prison style Asylum; the wards were redecorated, the walls were painted with lively colours and adorned with mirrors, pictures, statuary, and flowers. A new clean and beautiful setting was thus created with the aim of encouraging the inmates to respect the orderliness that surrounded them and to behave accordingly.

Another milestone of Grieve's reformist programme was the implementation of occupational therapy; as the doctor argued, idle patients would spend all day sleeping, eating and quarrelling, and this was the main cause of the "howling, yelling, and horrid clamour of all kinds which deformed the day and made the night hideous in "mad houses" of the olden times".¹⁴ Regular employment was therefore created for the inmates both through farming and through the establishment on site of dedicated workshops placed under the supervision of several experienced attendants. An agreeable result of this system was the generation of a substantial revenue, used by Grieve to cover a great part of the expenses of the institution and to procure "many little luxuries and amusements" for the inmates.

By the end of 1876 Grieve's successful management had visibly increased people's trust in the institution. Attempts to escape, which were almost daily occurrences at the beginning of the year, had become very seldom. Over the same period, there was an increase of 27 in the number of admissions, a fact which Grieve was confident to ascribe not to a rise in the level of insanity in the colony but to a more widely extended knowledge of the Asylum and of its methods of treatment.¹⁵ In his report for 1876 the doctor wrote with manifest satisfaction: "It may be of interest, as showing how easily and safely in some instances restraint or seclusion may be dispensed with, to state that before the 25th of September 1875, on an average there were 9 men and 2 women, confined all day in single rooms, or cells as they were more appropriately named. Some individuals had been so locked up night and day for years, and the same patients were after that date allowed to mix in the general wards without causing either injury or annoyance. The great change was that the work of supervision by the attendants became real instead of nominal."

The extraordinary transformation enacted by Grieve received commendations both in the official correspondence and in the local press. Governor Longden lauded the doctor's achievements in his Annual Report for the year 1876:

No appointment could possibly have proved a greater blessing to the unhappy patients in the Asylum, or given more satisfaction to the Government, and to many of the public who take a great interest in the Asylum. Dr. Grieve has relaxed much of the restraint which was formerly thought necessary, he has substituted open wards for close separate

sleeping apartments, introduced industrial employment, varied with music and recreation, and changed the entire aspect of the Asylum. The patients evidently appreciate the vast change, and are for the most part orderly and well-behaved.

Just a few years later, *The Berbice Gazette* of 23 April 1881, voiced the popular perception of Grieve's work by noting how "an Institution which in former days was looked upon with horror as a place where cruelty and torture was inflicted on its unhappy inmates now appears as a pleasant Sanatorium for well fed and well tended imbeciles".

The Asylum Journal

The primary source for the investigation of Grieve's work in Berbice remains *The Asylum Journal*, printed at the institution between 1881 and 1885. Grieve's distaste for intellectual inertia, which he often condemned as one of the highest faults of colonial life in the tropics, and the urge to overcome the isolation compelled by the geographical remoteness of the Asylum, prompted the zealous doctor to devise new means of intercourse with the external world. Knowing no limits to his determination, he set up a small Printing Office at the Asylum and, in February 1881, he launched the publication of *The Asylum Journal*, a monthly pamphlet aimed at increasing public interest in the institution and adding to the knowledge of local medicine.

Aside from a few essays contributed by Dr. Alfred D. Williams, Grieve authored the majority of the Journal, proving himself not only as a skilful physician, but also as a brilliant and prolific writer. His numerous papers, mainly on medical and sanitary subjects, are always characterised by a clear and pleasurable style, intended to attract the interest both of the member of the medical profession and of the common reader.¹⁶

A small number of inmates were employed in the process of making and stitching the Journal, of which 120 copies were regularly printed and circulated both in the colony and abroad. Its format aspired to be professional, yet highly accessible, offering a well thought combination of scientific and practical information; each issue opens with one or more thematic articles, followed by an overview of the life of the institution and by a detailed account of the Asylum's industrial and financial activities for the month. Grieve's methodical and thorough recording of every single item

produced in the Asylum betrays a fastidious character and testifies to the almost obsessive care with which he supervised and managed all aspects of the institution.

Equal meticulousness was applied to the registration of scientific and clinical data in order to produce valid and useful statistics. Proceeding with extreme accuracy, Grieve recorded not only the number of patients monthly admitted, dead and discharged, but also their sex, age, race, occupation, religion and place of birth. Drawing on these figures, the doctor made some fundamental observations on the etiology of madness in the colony. As a scientist, he was generally persuaded that the main causes for the development of insane neurosis in British Guiana were to be found in some physical imbalance induced either by natural causes or by human intemperance; much space is consequently afforded in the *Journal* to the investigation of physiological diseases and to the study of the relationship between bodily and mental deterioration.

In 1886, when Grieve was promoted to the post of Surgeon General and transferred to the capital, the publication of *The Asylum Journal* was suddenly interrupted. In a warm valedictory note printed in the last issue of the *Journal* the doctor formally takes leave from his readers and expresses his appreciation to the world and the colony for the “kind reception given to the little paper”.

The Georgetown years

Having distinguished himself for his exceptional medical skills and for his proficient administration of the Lunatic Asylum, Dr. Grieve was asked, in November 1885, to take on the appointment of Acting Medical Officer to the Immigration Service and Acting Surgeon General in the place of Dr. Manget, who had taken leave of absence for three months from the 1st October. Although Grieve was still in a junior position in the local medical service, his nomination had been strongly supported by Governor Irving with the implicit prospect of assigning him permanently to the post.¹⁷ As some in the colony had foreseen, upon Manget's official retirement, in January 1886, Grieve was confirmed to the substantive appointment of Surgeon General over the head of several men older than himself in the local service. His promotion, though entirely deserved, caused a good deal of indignation within the medical

community of the colony and made the doctor and his fast-ascending career the object of much criticism.

Irving's choice of a man like Grieve, who was by temperament not susceptible to corruption and whose passion for the profession had not been spoiled by involvement with local affairs, was functional to the realization of larger plans. In August 1886, through the Governor's enthusiastic involvement, a new Medical Ordinance was passed with a view of restructuring and reorganising the local Medical Service; in particular, under the new ordinance the Immigration Medical Service ceased to be a subdivision of the Immigration Department and was absorbed by an independent Medical Department placed under the authority of the Surgeon General, who became responsible for the whole rural population and took over the administration of estate hospitals.

At the inaugural dinner of the New Government Medical Service, held on September 1st 1886 in the ball room of the Garrison in Georgetown, Dr. Grieve "presided, having His Excellency the Governor on his right, and the Hon. Attorney General on his left".¹⁸ A heterogeneous company of 80 gentlemen attended the event as a testimony both of the high position that the medical profession occupied in the colony and of the important role of the new department.¹⁹ In a brief but incisive speech, delivered in response to the Chairman's toast, Governor Irving pointed to the twofold object that had motivated the creation of the new Service. The first was the desire to consolidate the local medical profession and to bring it as a united body more in touch with the profession at home; the other was to create for the colony a new and efficient medical administrative machinery which he believed would be of much benefit to all.²⁰ It was to this second object that Irving attached greater value; in particular, he aspired to create a more proficient system for the medical and sanitary care of the immigrants, who were mainly indentured labourers from India, and trusted Dr. Grieve, with his energetic commitment, to galvanise the Service into an active and efficient instrument. Indeed, Irving's trust was well-placed and Grieve managed to transform the Medical Service of the colony into one of the most consolidated and efficient services of the kind throughout the British dominions.

The new structure of the medical system, however, caused strong resentment on the part of the Immigration Agent-General,

Mr Alexander, who saw Irving's policy as an unjustified interference in the administration of immigration matters and remained overtly hostile to the new Medical Department. Tensions grew when the Medical Inspector of the colony, Dr. Alfred D. Williams, who was now in charge of the duties formerly performed by the Immigration Medical Officer and accountable to the Surgeon General, undertook a round of inspections in order to make himself acquainted with medical provisions on the estates and produced a detailed report on the sanitary state of the immigrants. Williams' report for the year 1886, submitted in August 1887, pointed to a large number of malpractices within the immigration system and exposed the unsatisfactory conditions of the hospitals provided for the care of Indian immigrants. Estate hospitals were found to be overcrowded, badly designed, not sufficiently ventilated and generally lacking in provisions. The poor and unsanitary state of the immigrants' dwellings on the estates was also severely condemned; disrepair, defective ventilation, and contamination of water supply by excremental matter, were faults found in the majority of the cases. Williams also denounced an excessive mortality rate among the immigrants; aside from a high percentage of suicides and wife murders, he suggested that large numbers lost their lives as a result of unsanitary conditions both on board the immigrant ships and on the plantations, or in accidents attributed to unprotected machinery.

The allegations made by Dr. Williams caused much indignation on the part of the planters and led to a political crisis in the colony.²¹ The elective members of the Court of Policy, all of whom planters, denied the legitimacy and accuracy of the Medical Inspector's report and urged the Governor to withdraw it. In response to Irving's refusal to satisfy their request, on the 11th October 1887 the electives abstained themselves from discussions in the Court of Policy, thus producing a deadlock in the government of the colony.²² Their decision, however, proved to be a double-edged weapon; the political deadlock ensuing from the conflict between the Governor and the electives made only too evident the dangerous obsolescence of the constitution and confirmed the necessity, supported by a majority of public opinion, for its urgent reform.²³ Appeals were presented to the Colonial Office by both parties; the Secretary of State, Lord Knutsford, ultimately decided against the

withdrawal of the report, but invited the Governor to make public the additional evidence that Dr. Williams had been asked to submit in support of his accusations.²⁴ On the 22nd November 1887 the Court of Policy resumed its ordinary activity; yet, in reprisal, on 15th December 1887, in the deliberation of the Estimates for 1888, the electives in the Combined Court reduced Dr. William's salary to the ridiculous and provocative sum of one cent.

Meanwhile Dr. Grieve, who had been absent on leave for several months, had made his return to the colony and had produced a second report, dated October 24th 1887, in which he reviewed the points raised by Dr. Williams and confirmed their accuracy. A copy of the report was forwarded by Grieve to the British Medical Journal, with the intent of bringing the matter to the attention of a wider and international audience, and in November 1887 Grieve, in the capacity of Surgeon General and Head of the new Medical Department, was requested by the Secretary of State to satisfy himself, as soon as possible, on the sanitary conditions of the estates.

An opportunity not only to review but to effectively influence the sanitary policy of the colony came to Grieve as a result of the constitutional reforms of 1891, that granted admission to the Court of Policy to three extra officials chosen by His Majesty or by the Governor among persons holding public offices in the colony.²⁵ Vested with considerable power, Grieve always had the strength to use his authority to promote the interests of the colony as a whole. His agenda was openly based on scientific rather than economic considerations and his initiatives often proved to be too radical for his times. He supported the introduction of rigorous protective measures against outside sources of infection and campaigned to bring medical aid within the reach of the general public. In his annual reports, Grieve repeatedly advocated the need for alterations in the system in favour of patients' admission to the public hospitals free of charge. He regarded as a tremendous injustice the fact that those able to pay were permitted, in time of sickness, to avail themselves of provisions intended for the deserving poor of the colony, who were otherwise unable to assist themselves. Predictably, the matter was repeatedly ignored by the Government and was still being debated at the time of Grieve's retirement.

In his activity in the Legislative Assembly Grieve met often with serious opposition and he was frequently the object of bitter attacks; yet, he always faced them with quiet dignity and with the courage of his convictions: "As a member of the Court of Policy his speeches were always delivered with force and fluency and one could not but be impressed that he uttered what were honestly his convictions on the subject, and that no pressure of any kind or oratorical or rhetorical efforts could seduce or dissuade him from what he believed to be right, just and proper."²⁶

The British Guiana Branch of the British Medical Association

Upon taking the appointment of Surgeon General, in 1886, Grieve was also elected President of the British Guiana Branch of the British Medical Association and he passionately committed himself to resuscitating this lethargic organ. A meeting to re-inaugurate the local branch of the Association was held on Thursday 9th September 1886 at the Colonial Hospital in Georgetown; in his opening speech Dr. Grieve stressed the importance of the revival of the branch for the progress of scientific medicine in British Guiana, and for the emergence of the local medical profession from the isolation to which they felt condemned in the colony. Confident that the sanitation of the country could only be achieved through the implementation of a joint programme of prophylaxis, education and sanitary reforms, Grieve considered of the outmost importance the establishment of a solid collaboration between the medical profession and the Legislature, and exhorted his colleagues to work together in that direction. Although fundamentally paternalistic, Grieve's outlook reflected a strong political acumen and an essential practicality of character.

Unfortunately, the circumstances of Grieve's life were to take an unforeseen turn and in 1894 the doctor was obliged to retire having contracted syphilis whilst operating on an infected patient.²⁷ At the quarterly meeting of the British Guiana Branch of the British Medical Association held on the very day of Grieve's departure at the Public Hospital in Georgetown, the same where Grieve had contracted his illness, a pledge was made by the members to continue the medical work of the Society with the same zeal and enthusiasm that their esteemed President had infused into it, "so that it would continue to grow

and to prosper as Dr. Grieve himself would have wished". Grieve could not restrain tears when the following resolution was moved by the councillor of the British Guiana Medical Association, Dr. Wallbridge, and presented to him:

That this Branch wishes to record its sincere regret at your compulsory retirement through illness acquired in the performance of your professional duties, and in wishing you good-bye on your leaving the Colony, and vacating the office of President of this Branch, desires to testify to the very high esteem in which you are held not only for your skill and ability in the practice of your profession, but also for your high scientific attainments. We are conscious that the Branch as resuscitated by you in 1886 has developed into one of the most important tropical, Colonial Branches, and that the work done at the meetings compares not unfavourably with that done at local Branch meetings in England. We feel that this success has been due to you, and earnestly hope that though you are leaving us the scientific and professional work so ably fostered by you may continue. The Branch wishes you a safe and speedy voyage, and hopes that your health will be materially benefited by the change to your native land.²⁸

Grieve left the colony on Thursday 19th April 1894. The day after, *The Daily Liberal* recorded with sorrow the decline in strength of a man who had sacrificed his own health in the endeavour to relieve human suffering: "It was truly painful to see, within the last few weeks, the slender frame of the doctor, once full of vigour racked with disease, slowly wending its way to the meetings of the Combined Court and Court of Policy, or to the office in Somerset House; and that feeling of sympathy was accentuated by the knowledge that within its slender confines were embosomed a vigorous intellect and a *mens sana*".

Biographical note and family life

Dr. Robert Grieve was a remarkable exponent of an equally remarkable family. His father, Dr. James Grieve, was born in Dunbar on December 4, 1810.²⁹ After qualifying in Glasgow, James worked briefly as surgeon on board a Scottish whaler and later became the assistant of Dr. Robert Weir of Galashiels. In 1836 he married Dr. Weir's daughter, Elizabeth, and in 1839 the couple moved to Gifford, where the young doctor set up his own practice and earned a reputation as a most helpful and efficient surgeon. In 1843, as part of a schism in the Church of

Scotland, most of the local congregation broke away to join the Free Church of Scotland; James Grieve was one of the few to remain loyal to the Established Church and in 1844 he was rewarded with the appointment of elder in the Church of Scotland.³⁰ In 1850, in order to advance his professional career, the doctor permanently relocated with his family to Port Glasgow, where he took a keen interest in local public affairs. An earnest supporter of the Tory party and an ardent educationalist, he served on the Town Council in 1858 and was for some time Chairman of the School Board. On Sunday 29th October 1882, his wife Elisabeth fell whilst coming out of Newark Parish Church after the morning service; as consequence of the injuries reported in the awkward fall she passed away on the 3rd November in their house at 65 Princes Street, the same where, after a long and active life, Dr. James Grieve also died on the 18th December 1895 of cardiac complications caused by an abdominal tumour.

James and Elisabeth's marriage was blessed by the birth of five children, three daughters and two sons.³¹ Robert, the eldest son, was born in Lilliesleaf on March 4, 1839. Having inherited his father's passion for scientific investigation, he graduated in medicine in 1861 in Glasgow and took the license of the Royal College of Surgeons of Edinburgh in the same year. One of his first experiences as a surgeon was as House Physician of the Fever Hospital in Greenock, where he contracted typhus in attending the sick. Having fully recovered, he later served as Assistant Surgeon in the Royal Navy and took part in actions against the Taipings near Shanghai in 1861-62. Compelled by *mal-de-mer* to leave the Navy, in 1862 he entered into private practice at Howden, in Yorkshire, where he formed his first connection with the British Medical Association. In 1864 Robert married Annie Maria King (1842-1909), at Sculcoates Church in Hull. Annie was the only surviving child (her older brother having drowned at sea as a boy) of the late John Bird King, a master mariner, and Ann Maxwell, whose brother Thomas Bird was the proprietor of a sugar estate in Tobago.

In 1870 Robert was attached for a time to the Orangeries Hospital, Darmstadt, a base hospital of the German Army during the Franco-Prussian War (1870-71), to assist and study Military Surgery under professor Friedrich Daniel von Recklinghausen (1833-1910) and other famous surgeons of the

time; on his discharge, Robert was awarded a German War Medal for non-combatants for his outstanding services.

Between 1870 and 1875 Dr. Robert Grieve worked as Medical Superintendent of the Metropolitan Asylum Hospital at Hampstead, London, one of the largest small-pox hospitals during the epidemic of the early seventies.³² In 1871 he became the target of a spiteful attack orchestrated by three of his subordinates who had been discharged from their duties. In a letter sent to *The Times*, and published on 29th August, the three assistant medical officers made a number of serious charges regarding the improper treatment of patients and the inadequate provision of care and food for the sick at the Hampstead Hospital.³³ Dr. Grieve, in his capacity as medical superintendent, was indicated as being responsible for the misdemeanours and, in response to the allegations made against him, he invited an official inquest into the matters. On the 29th September 1871 a public enquiry was opened into the management of the Hampstead Hospital. After 33 days of thorough investigation, Grieve was cleared of all charges and warm gratitude was expressed to him and the nurses of the hospital for their untiring and able work. After the small-pox hospital was closed, he chose once again to follow his profession abroad.

His varied and intense career as a young surgeon, and his experience in the administration of the Hampstead Hospital, well qualified Grieve for the appointment of Medical Superintendent of the Public Lunatic Asylum in Berbice, which he began on 1st June 1875. The story in the family is that upon their arrival at the Asylum, Annie, described by those who met her as a sweet and lovely woman, was horrified at what she saw and expressed grave concern over the prospect of living among people kept in such inhuman conditions. Sensitive to the distress of his spouse, Dr. Grieve promised he would act to liberate the inmates from their cages and to ease their suffering.

After nearly 10 years in Berbice, Grieve was promoted to the post of Surgeon General in Georgetown where he devoted another decade to the amelioration of sanitary conditions in the colony before being forced to retire in 1894 as a consequence of his deteriorating health. On his retirement Dr. Grieve was appointed by the Queen a Companion of the Order of St. Michael and St. George (CMG) in recognition of the outstanding and valuable services rendered in British Guiana and elsewhere.

In 1894, accompanied by his wife Annie, Dr. Grieve returned for a while to his native Scotland and resided for a short time at Lasswade, where he could be near both to his wife's mother's relatives, the Maxwells, and to Edinburgh, where his younger children were being educated at the time. Subsequently he moved to Elloughton, near Brough in Yorkshire where he remained until about 1900. At the time of his death, on 15th November 1906, his home was at New Hall, in Barton on Humber. Dr Grieve's death certificate states as cause of death "Digital primary syphilis 16 years. Spinal Preliry. meningitis 12 years. Pneumonia 1 day."

Robert and Annie had a large family. By the time they went to British Guiana, Annie had given birth to six children. Their first daughter, Elizabeth, was born in 1865 and died at the age of seven; a second daughter, Annie Maxwell, born in 1866, died as an infant. Jane Carnegie (d. 1954), was born in 1868, and from 1881 was registered as a resident scholar at St Agnes School in Howden, Yorkshire. The younger children, Robert (1871-1954), James (1873-1934), and a second Annie Maxwell (1875-1960), all born in Hampstead, probably spent a few years in the colony with their parents before being sent back to England to be educated. Robert went on to study medicine at Edinburgh University and graduated in 1894. He worked for many years as surgeon at the Hull Royal Infirmary and, on retiring from the infirmary, he continued to serve as honorary surgeon at the Victoria Hospital for Sick Children until the inception of the NHS in 1948. He was a member of the British Medical Association for 57 years and chairman of the East Yorkshire division in 1828-29. He took care of his siblings for several years, whilst their parents were in British Guiana, and died a bachelor at the age of 83. His younger brother James practiced as a GP in Hull and was the only member of the family to be married in his parents' lifetime.

Four other children of Annie and Robert, John Bird (1877-1941), William Weir (1879-1961), Janet Isabel Margaret (1881-1965) and Kelburne King (1883-1936), were born in Berbice, and a last son George Maxwell (1885-1940), was born in Bedford. William Weir became a successful and respected solicitor; on his retirement in 1960, at the age of 81, he was proprietor and Senior Partner of the A. & A.S. Gordon law firm in Edinburgh.³⁴ Kelburne King, who like his two older brothers followed his

father's career, joined the West African Medical Staff in Nigeria in 1913 and later became deputy-director in the Colonial Medical Service on the Gold Coast. He died suddenly at Accra on 11 November 1936, collapsing on the court whilst playing tennis with his wife Ethelwynne.

Of this large and extraordinary family very few members remain today, and it is to them that this reprinting of Dr. Grieve's *Asylum Journal* is dedicated.

LETIZIA GRAMAGLIA
University of Warwick

Notes

¹ Sixty of those patients were readmitted several times: 'One having been admitted eight times; one, four times; nine, three times; and 32 twice.' *Reports to Secretary of State on Past and Present State of Her Majesty's Colonial Possessions for the year 1846*. London: Stationery Office, 1847.

² *Reports to Secretary of State on Past and Present State of Her Majesty's Colonial Possessions for the year 1859. Part I West Indies and Mauritius*. London: Stationery Office, 1861. The report, produced by Philip Edmond Wodehouse, Governor of British Guiana from 1854 to 1862, reads: "A few years since it was decided that an Asylum should be built in the immediate vicinity of the convict establishment on the River Masaruni, and considerable progress had been made in its erection, when certain unfortunate transactions connected with the convict establishment gave rise to serious misgivings as to the propriety of sending the lunatics to so remote a part of the Colony, and thus depriving them of the constant supervision essential to their welfare".

³ *Ibid.*

⁴ *Ibid.*

⁵ *Papers Relating to Her Majesty's Colonial Possessions, Part II-1874*. London: Stationery Office, 1874. The buildings devoted to the purpose of the Asylum were a part of the old Fort Canje Barracks, the rest of which had been turned into a general hospital for the county of Berbice and an almshouse. Fort Canje was established in the 19th Century at the junction of the Canje and Berbice Rivers, where barracks were set up to house British soldiers. Today, the National Psychiatric Hospital (locally known as the Fort Canje hospital) is still located in the place where the old fort stood.

⁶ The Report on the state of the colony for the year 1870 states: 'The number of inmates at the beginning of the year was 107, 54 were admitted during the year; 18 were discharged cured and 10 died'. *Reports on the Present State of Her Majesty's Colonial Possessions for the year 1870*. London: Stationery Office, 1872. The number of inmates continued steadily to grow and the necessity to increase the capacity of the Asylum continued to be an issue for several years.

⁷ *Ibid.* See also *Papers Relating to Her Majesty's Colonial Possessions, Part I*. London: Stationery Office, 1873.

⁸ For a detailed overview of mental health provisions in the West Indies

in the 19th century see M.H. Beaubrun, P. Bannister, L.F.E. Lewis, G. Mahy, K.C. Royes, P. Smith and Z. Wisinger, (1976). "The West Indies". In John G. Howells (ed.), *World History of Psychiatry*, New York: Brunner/Mazel.

⁹The humanitarian treatment of the insane was first introduced by Pinel in France and Tuke in England. They had successfully demonstrated that if insane patients were trusted to behave, they would feel compelled to deserve that trust and would therefore develop individual forms of self-control which made physical restraint simply unnecessary. Philippe Pinel (1745-1826) was from 1793 chief physician at Bicetre, one of the most extensive lunatic Asylums in France; he removed the chains that restricted the patients of the psychiatric wards and engaged them in long therapeutic conversations. William Tuke (1732 - 1822) was cofounder of the Retreat in York where, though on a small scale, the treatment of the insane was radically reformed. He coined the expression 'moral treatment' to describe the new perspective on the treatment of the insane which did away with coercive methods.

¹⁰The paper was jointly signed by Dr. Grieve and Dr. Hackett, visiting physician at the public hospital in New Amsterdam. The governor at the time was James Robert Longden, in office from 10th March 1874 to 8th March 1877.

¹¹*The Demerara Times*, 22 December 1875.

¹²*The Asylum Journal*, February 1882.

¹³The rules of the Asylum for the use of the attendants were compiled by Grieve in February 1881 and collected in a 14 pages pamphlet, of which 120 copies were promptly printed and distributed.

¹⁴*The Asylum Journal*, March 1881.

¹⁵*The Royal Gazette*, 21 June 1877. Within 5 years of Grieve's arrival the number of patients increased fivefold, going from 105 to 505. Rearrangements and expansions were planned and carried out to fight overcrowding and a new dormitory with capacity for 22 patients was completed in November 1882. The buildings formerly used as a Alms House were acquired by the Asylum to face overcrowding and in April 1885 the Hospital buildings at Fort Canje were officially transferred to the Asylum to meet its growing need for space.

¹⁶Grieve wielded his pen as skilfully as his surgical scalpel. A number of his papers were reprinted in the columns of leading newspapers of the time and of the *British Medical Journal*. Besides his essays on medical subjects, he wrote several papers and addresses on different topics showing great mastery not only of scientific but also literary matters; a notable example is the long paper on friendship presented with the title "Some Old Friends" to a meeting of the Young Men's Christian Association in September 1886 and reproduced in *The Royal Gazette* of October 1, 1886.

¹⁷Sir Henry Turner Irving became Governor of British Guiana in May 1882 and soon gained a reputation as a strong administrator and an

active reformist.

¹⁸ *The Daily Chronicle*, 3 September 1886.

¹⁹ As the reporter of the *The Daily Chronicle* observes, "Such a gathering is too rare an occurrence to pass unnoticed, and it is one of which the medical profession may well be proud." *Ibid.*

²⁰ *Ibid.*

²¹ British Guiana's complex constitution divided the administration of the colony between the Combined Court and the Court of Policy. The Court of Policy, which exercised executive and legislative powers, was presided over by the Governor and comprised four official and five elective members. The Combined Court, which was responsible for financial matters, comprised the Court of Policy and six elected financial representatives. Holding a virtual monopoly of elected seats, the planters were in a position of great power in the colony and were able to influence the enactment of legislations in their favour; the unrepresented classes, instead, were "dependent for their protection on the personal qualities of the Governor for the time being". Irving to Holland, Conf., 27 Oct. 1887. 22778. CO 111/440, quoted in H.A. Will, *Constitutional Changes in the British West Indies 1880-1903* (Oxford: Clarendon Press, 1970), p. 116.

²² By tradition business in the Court of Policy could not be conducted unless at least one elective member was present and the Governor had no power to dissolve the Court. See Sir Cecil Clementi, *A Constitutional History of British Guiana* (London: McMillan & Co., 1937), Chapter XVI.

²³ There were three main bodies of opinion in the colony; a radical one organised in the British Guiana Constitutional Reform Association, which asked for a representative government; a more moderate one represented by the merchant class who simply sought representation in the Court of Policy; and the planters who were only ready to consider the most marginal reforms. After long and tiring negotiations some minor constitutional reforms, which left virtually unaffected the rights and privileges of the Combined Court, were passed in February 1891 with Ordinance No. 1 of 1891. The main changes effected were the enlargement of the Court of Policy to 16 members by the addition of 3 elected members and 3 officials; an enlarged Civil List; the direct election of non officials in the Court of Policy; the establishment of an Executive Council; and the power to the Governor to dissolve the Court of Policy.

²⁴ On completing his report, Dr. Williams was about to take a leave of absence from the colony, but Sir Irving, pressured by the electives, had asked him to delay the journey and to stay for one extra month in order to furnish further evidence to the Government. Reported in *The British Medical Journal*, 25 February 1888.

²⁵ For a text of the Ordinance see Clementi, *op. cit.*, Appendix J, p. 493.

²⁶ *The Daily Liberal*, 20 April 1894.

²⁷ The accident seems to have happened as early as 1887. On 24th March 1887, Dr. Williams presided over the quarterly meeting of the association

in place of Dr. Grieve, who was on leave from the colony and the session was opened with an address by Dr. Wallbridge expressing the deep sympathy of the members in regard to the unfortunate accident which had befallen their President whilst in the active discharge of his duties.

²⁸ *The Daily Chronicle*, 20 April 1894.

²⁹ The following information on Dr. James Grieve is based on "A Family Record" by Bobbie Grieve, unpublished.

³⁰ A new minister, Rev. Samuel Kerr, was appointed in Gifford in 1843 and, many years later, he married as his third wife Isabella Weir, younger sister of Elizabeth Grieve.

³¹ Robert Grieve's younger brother, William Weir was born in Gifford in 1847 and made a successful career in law. He occupied a leading position in the Glasgow bar and in 1903 he was elected Sheriff-Clerk to the County of Lanarkshire. Further information on William Weir Grieve's professional achievements can be found in his entry in *Who is Who in Glasgow in 1909*.

³² The Hampstead Hospital was a temporary erection, instituted under the powers of the Poor Law Board, and hastily built to meet the smallpox epidemic of 1870-71. During the first 8 months over 6,000 patients passed through the institution.

³³ The enquiry received profuse coverage in the London newspapers. The three complaining assistant medical officers were Mr. W. Greaves, Mr. A. E. Kynaston, and Mr. John Ackman; the first two had been recently dismissed by Dr. Grieve for disobedience and insubordination, and the third consequently submitted his resignation. Seven specific charges were made in the letter, namely delirious patients, especially children, were tied down to keep them in bed when their bodies were covered with illness eruptions; that strait-waistcoats were used for the same purpose; that patients in an acute ward had been provided with inadequate supplies of milk and fluids during the night; that patients on low diet were kept without food from 7 a.m. until 3 p.m.; that complaints were continuously made about the unfitness of the food provided; that, because of the inadequate number of nurses, children had been found dead in their beds; that the body of a patient who died at midnight had been removed into the bath room and left there all night in an offensive condition. At the same time a parallel enquiry was held to investigate the circumstances surrounding the disappearance of a child whilst in the care of the hospital.

³⁴ As Bobbie Grieve writes in his Family Record: "It had been intended that he [William Weir] should go to Glasgow to join the law firm (Weir-Grieve & Jeffrey) of his uncle and namesake but a family dispute between the two brothers (his father and his uncle) rendered this plan unacceptable and instead he joined as an apprentice the Edinburgh law firm of A. & A.S Gordon, W.S."

THE ASYLUM JOURNAL

FOR 1881

CONDUCTED BY THE MEDICAL SUPERINTENDENT

OF

THE PUBLIC LUNATIC ASYLUM

FOR

BRITISH GUIANA

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Asylum Staff

Medical Superintendent
ROBERT GRIEVE M.D.

Assistant Medical Superintendent
GEORGE SNELL, M.R.C.S. England

Steward
C.B. STEVENSON

Clerk
S. HOOTON

Matron
MRS. STEVENSON

Sewing Mistress
MRS. GEMON

FIRST CLASS ATTENDANTS, MALE.

J. Telford
C. Howard *Printer*
H. Bossinga
J. Campbell *Tailor*
S. Rogers *Painter*
J. Smith *Shoemaker*
J. Erskine *Carpenter*
H. Mickle *Wood-cutter*
S. Matthias *Baker and Cook*
D. Rose

SECOND CLASS ATTENDANTS, MALE.

T. Dreupal *Gardener*
W. Edward *Cattle Farmer*
J. Hyndman *Farm Labourer*
G. Fraser *Steward's Assistant*
J. Casper
F. Leach *Messenger*
W. Pitman
J. Frank *Farm Labourer*
H. Beresford
R. Bone
W. Phillips
C. Greenidge *Gate Porter*
Futtay *Groom*
S. Sydney *Farm Labourer*

FIRST CLASS ATTENDANTS, FEMALE.

L. Mathieson
Hesibeah
M.C. Henery

SECOND CLASS ATTENDANTS, FEMALE.

M. Mangham
M. Thompson
H. Briggs *Laundress*
M. Bradshaw "
Mary Turpin "

No. 1

THE ASYLUM JOURNAL
FOR FEBRUARY 1881.

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
1ST MARCH, 1881.
—

INTRODUCTORY.

—
In submitting to His Excellency the Governor and the Official visitors of the Asylum this the first number of THE ASYLUM JOURNAL, a few explanatory and introductory words may not be out of place. In issuing this publication there is no ambitious desire to add to the number of the newspapers which come forth from the Colonial press. Placed as the Asylum is in a remote and to many members of the legislature a rarely visited part of the colony, the work done in this institution must necessarily be imperfectly known to them. For some years past considerable interest has been taken in the Asylum and it is thought that an additional impetus may be given to this interest if a short account of the varied life of this busy place be given once a month. The Journal is intended to be a monthly report of the Asylum and a record of everything likely to prove generally interesting which transpires in connection with it, or the disease which is treated within its walls. For the latter purpose the whole colony will as far as practicable be laid under contribution. Slight as the present effort may seem it is hoped as the resources of the Asylum for scientific observation are increased the value of the Journal will increase correspondingly. Even now from time to time there may be found imbedded in the mass of statistical and formal material which necessarily forms its basis some facts valuable to the statesman as well as to the student of psychological medicine.

NON RESTRAINT FOR THE INSANE.

In the ears of an Englishman of the last century the assertion that mad people could be managed and ruled without the use of the chain and the whip would have sounded as visionary in the extreme and very unlikely to be realised. Coming down to later times those in which lived and worked Tuke, Connolly, and the other philanthropic pioneers in the movement for the human treatment of the insane even then it was only slowly understood by the public at large how unnecessary these coercive measures were in Asylum management. To-day the fact is fully accepted and in the Asylums of England the non restraints system reigns supreme. Thus one of its brightest ornaments has been added to the civilization of the present. Although English insane may be so treated can the lunatics amongst the varied races which make up the population of this colony be dealt with in the same way? To this question the answer given is an emphatic yes, but only of late years has this been possible. Six years since eight per cent of the patients in the Lunatic Asylum of British Guiana were kept locked up all day in cells some for months at a time, and there was in the Asylum a fair collection of canvass jackets, leather straps and even iron handcuffs. No doubt at the time these were honestly believed to be necessary. For the past five years mechanical restraint has not once been resorted to nor in a single instance has a patient been secluded, that is locked up in a room by himself in the daytime, whilst the armamentum of manacles and straight waistcoats has entirely disappeared. In that time the quiet and order of the wards have gone on progressively increasing, accidents have diminished in number whilst there has not been one which could fairly be ascribed to the disuse of restraint or seclusion. Within the same period a system of regulated labour and amusement has been organised and carried out which may have had some effect in producing these results. It is not denied that in some instances seclusion may be used with advantage and mechanical restraint may be needed for surgical reasons and if absolutely necessary they would be had recourse to. Cases requiring either are here very rare and whilst the experience of the abuse of the system is so recent the danger of reverting to it has to be carefully weighted against any probable advantage to be gained. The experience of this Asylum yields strong and clear evidence in support of the success which

attends the non-restraint system. Attention is directed to the subject at this time with the hope that it may have some influence on the treatment of unfortunate lunatics in the colony who are not in the Asylum whose condition when admitted too often shows that they are no strangers to stripes and bonds.

CRIME OR INSANITY.

On the morning of the 15th of February at daylight a report was brought to the Asylum that an attempt had been made to steal two of the boats belonging to the institution. This was true and the boats were found at the Canje Bridge where their passage had been arrested by a man that had been an attendant and who recognised them. The account this man gave of the matter was, that as he was passing the Canje Bridge he saw the two boats being drifted up the stream in charge of a black man who was naked and that he asked the man where he was taking the boats to, that the answer was "I am taking them up the Canje to a wood-cutting grant I have there" he told him this could not be true as they were the Asylum boats and ordered him to stop at once at the same time calling out for the assistance of the Police, on this the man jumped from the boat into the river and swimming ashore disappeared in the bush. The boats were found properly lashed together and in one several articles of clothing belonging to an officer of the Asylum were secreted. On examining the place from which the boats were taken it was seen that the iron chain with which one of them was made fast had been broken through apparently by a blow from a brick. This reads like an account of an ordinary theft distinguished only by its audacity. The fact of the thief being naked has no significance in this country where most burglaries are committed by persons clothed only in nature's vestments. That a man should attempt to carry off two boats by trusting to the current of the tide and without oars might in countries where crimes are neither so stupidly nor audaciously committed and where detection is more certain, have raised suspicion, here it was not considered so very extraordinary. The thief knew he was stealing and also tried to avoid capture, still in the strict sense of the word he was no thief at all, as it afterwards turned out the whole thing was the act of an undoubted madman. On the 22nd February a patient was admitted to the Asylum from the Colonial Hospital Berbice and

in his papers it was stated that he had on the morning of the 15th left the hospital naked and was brought back on the 19th by the police having found his way in the same condition to his brother's house at Glasgow a village about two miles from New Amsterdam. This was the individual who stole the boats, he is now and was then maniacal. He talks freely of his exploit and says he was commanded from heaven to do it. The lessons to be learned from this case are firstly that the actions of the insane are not always purposeless and secondly that "mad doctors" may sometimes be right when they ascribe the performance of what seems a well planned criminal act to insanity.

Staff.

By the arrival of Mr. Stevenson from England by the first mail in the month the vacancy which has so long existed in the office of Steward was filled up. He began his duties here on the 3rd February. On the same date Mrs. Stevenson took over the duties of Matron of the Asylum.

CHANGES AMONGST ATTENDANTS.

These have been much more frequent in the past month than is desirable but at present from various causes there has been a large number of vacancies and when permanent attendants are selected. It is expected that fewer changes will be required. The impossibility of getting attendants who will try to learn their duties sufficiently well to be able to retain their appointments is one of the great difficulties in the administration of the Asylum.

Two first class and ten second class attendants all on probation have left the service during the month these with one exception having been discharged for incompetency or irregularity of behaviour.

The following appointments have been made to fill their places. To be first class attendants on probation (male,) R.A. Quintin, J. Bessinga. To be second class attendants on probation (male,) W. Young, D. Rose, P. Benjamin, I. Allsopp, Prince Nelson, J. Payer and A. Lashley. To be second class attendants (female) on probation J. King, C. Bradshaw and M. Hercules. The post of painter attendant and shoemaker attendant have been vacant all the month.

Religious Services.

During the month the Sunday Services have been conducted on two occasions by the Revd. J Rannie and on one by the Revd. F.W.T. Elliot, once in the unavoidable absence of a clergyman prayers were read by the Medical Superintendent. The average attendance at these services has been males 121, females 52 total 173.

Amusements.

Two fortnightly dances have been held in the month and the weekly practices regularly continued on Mondays at these were present on the average male 85, female 47 total 132.

Accidents.

The only accident that has occurred in February as is the case in most instances was due to the carelessness of an attendant, on the 25th two patients quarrelled in the laundry and before they could be separated one struck the other over the arm with a piece of wood improperly left within her reach, breaking her arm. The Patient who was injured is doing well.

Reports.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st February	207	118	325
Admitted in February	6	4	10
Died in February	2	2	4
Discharged in February	0	0	0
Remaining on the 28th of February	212	120	332

Of those admitted 2 came from Essequibo, 6 from Demerara, and 2 from Berbice, nationality was as follows:

Native of British Guiana	4 (2 black 2 coloured)
Do " India	4
Do " England	1
Do " Madeira	1

The health of the Asylum has been very good during the month no zymotic disease present, and death rate below the average.

THE FARM.

During the month the weather having been favourable for planting cassava and sweet potatoes have been put in the oven a fair extent of ground. The following amount of produce has been brought in: Plantains 715 lbs., Sweet Potatoes 130 lbs, Sweet Cassava 225 lbs., Pumpkins 403 lbs., Bananas 464 lbs., Cocoanuts 131, Garden vegetables 323 lbs., Milk 105 pints, Eggs 113, Pork 319 lbs., Fowls 19 ½ lbs. (cleaned), Duck 5 ¾ lbs., Mutton (goat) 90 lbs.

Eleven heads of cattle have been killed yielding 2,125 lbs. beef. They were bought for \$198, which deducting the value of the hides, made the cost of beef eight seven-tenth cents per lb.

The increase of stock during the month has been, one calf and five lambs born, whilst 4 pigs and 4 goats have been killed and a small steer died. Two sheep were lost from the pasture and there is every reason to believe they were stolen but no trace of them can be found. The woodcutter and his gang have cut and brought into the Asylum 20½ cords of wood.

THE WORK SHOPS.

CARPENTER.

Besides the numerous small repairs required daily in such an institution as this the carpenter with his patient assistants have been busy preparing quarters for the Steward and this is still in progress. In the work-shop 31 coffins have been made. The number of patients employed with the Carpenter has averaged 5 men.

PAINTER.

In the absence of a painter attendant, the work in this shop has been done under the charge of a patient who is an expert workman if not much to be relied on for perseverance in his labour. In February the greater part of the Steward's quarters has been painted and papered sundry small articles have been painted in the shop.

TAILOR.

In the month of February the following articles of clothing have been made: Patient's jackets 6, jumpers 149, pairs trousers 60, uniform jackets for attendants 7, pairs trousers 6, caps 4, and 343 articles have been repaired. Thirteen patients are employed at this work.

SHOEMAKER.

One patient has been working in this shop as there is no attendant. He has made two pairs of leather boots and eight pairs of canvass shoes in February.

BAKERY.

During the month 32 barrels of flour have been baked yielding 8,195½ lbs. of bread. Besides the baking the cook and baker with his 6 patient assistants does all the cooking for the Asylum.

PRINTING OFFICE.

In this office 22 different forms have been printed and of these 5,947 impressions have been taken, 137 books and pamphlets have been stitched. The rules of the Asylum for the use of the attendants were printed forming a pamphlet of 14 pages and of these 120 copies have been issued. Two patients assist the printer and one of them a coolie sets up and distributes type rapidly and correctly but he must have printed copy to work from.

SEWING ROOM.

The women (18 patients in charge of an attendant) in the sewing room have made in February: print dresses 5, flannel gowns 10, shirts 17, day shirts (men's) 39, night shirts (men's) 12, cotton singlets 20, chemises 6, coolie laps 46, pillow cases 45, bed ticks 1, sheets hemmed 153, attendant dresses 1. The number of articles repaired cannot be given owing to the difficulty of getting a record kept when repairs are done in each ward, but an effort is being made to have a correct account of this work made out daily.

LAUNDRY.

In the Laundry 33 patients with two attendants are employed. Owing to changes amongst the attendants, the amount of work done has not been daily registered as it ought to have been, this can be approximately estimated as washing 7,000 pieces and starching and ironing 800 pieces. The washing of the Colonial Hospital as well as the Asylum is done here. Next month the exact figures will be given.

WORK ROOM (FEMALE).

In this department, where 10 women are at work under an

attendant, 278 lbs. of Chocolate have been made and all the coffee, curry powder &c. used in the Asylum has been prepared and ground, 5 lbs. of coir have also been cleaned and made ready for use in the Asylum.

TOTAL NUMBER OF PATIENTS EMPLOYED.

These have averaged during the month of February 145 males, and 81 females total 226.

DAILY AVERAGE NUMBER IN ASYLUM AND PERCENTAGE OF PATIENTS WORKING &c.

	M.	F.	Total
Daily average in the Asylum.	207.4	118.5	325.9
Percentage employed.	70.0	68.6	69.5
Percentage confined to bed.	1.4	1.7	1.5
Percentage attending amusements.	41.0	30.9	40.6
Percentage attending Church.	58.3	44.0	53.2

DIET.

As showing the importance which is attached to a full and liberal supply of food in the treatment of insanity a copy of the table of the Ordinary Diet of the Asylum is appended.

ORDINARY DIET EACH PATIENT RECEIVES.

Monday, at Coffee. ½ lb. bread and 1 pint coffee made with ½ oz. ground coffee and 1 oz. sugar. At breakfast, 4 oz. salt fish and 5 oz. B. Rice or 5 oz. corn meal or 1 lb. plantains and lard ½ oz. or cocoanut oil ½ oz. or salt pork ½ oz. At dinner 1 pint soup made with 2 oz. salt pork and 2 oz. split peas with 4 oz. rice or 1 lb. plantains.

Tuesday, at Coffee. ½ lb. bread and 1 pint tea made with ¼ oz. tea and one ounce sugar, at breakfast as on Monday, at dinner one pint soup made with 4 oz. beef and two ounces barley and one pound vegetables or 4 oz. brown rice.

Wednesday, at Coffee. ½ lb. bread and one pint chocolate made with ½ oz. chocolate and one ounce sugar, at Breakfast as on Monday, except coolie patients to have 4 oz. peas in place of salt fish, at dinner, one pint soup made with four ounces beef and two ounces of flour and one pound of vegetables or four ounces of brown rice.

Thursday, at Coffee as on Monday, at Breakfast as on Monday, at dinner, one pint soup made with four ounces mutton or salt

beef and two ounces barley and one pound vegetables or four ounces brown rice.

Friday, at Coffee as on Tuesday, at Breakfast as on Monday, at dinner, one pint soup made with four ounces mutton or salt beef and two ounces barley and one pound vegetables or four ounces brown rice.

Saturday, at Coffee as on Monday, at Breakfast as on Wednesday, at dinner, as on Tuesday.

Sunday, at Coffee as on Wednesday, Breakfast as on Monday, at dinner, as on Wednesday.

INDUSTRIAL FUND.

In the first number of the Journal a short account of this fund may appropriately be given because it forms one of the peculiar features in the system of management of the Asylum and to its existence may fairly be ascribed the low charge which falls upon the taxpayers of the country for the support of its insane. The fund is entirely formed from the proceeds of the labour of the patients with a small amount received for the board of paying patients, and the fines and stoppages from the attendants. At its expense or by the direct labour of the patients the following articles are supplied and necessary work done without cost to the colony.

All the bread, vegetables, pork, milk, fowls, eggs, cocoanut oil, fire-wood and coir used in the Asylum.

The whole of the labour required to keep the buildings in repair and to make necessary alterations including carpenter's, painter's, bricklayer's, blacksmith's and tinsmith's work. All the artificers tools are bought out of the fund. The materials are supplied by the colony.

The washing, making and mending of the clothes including shoes used in the Asylum.

The expenses of the farm including the purchase of live stock, agricultural implements carts and harness and the keep of mules and horses.

The funeral expenses, except burial fees of the patients who die in the Asylum.

The boats and implements required by the wood-cutter and all cooper's work making tubs, pails, buckets &c.

The organist's salary is paid as well as all the expenses attending the amusements of the patients, including the band,

also books and newspapers for their use are purchased from it. Besides these a large number of miscellaneous charges fall upon the fund.

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR FEBRUARY, 1881.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	637 49	For purchase of flour &c.	\$	624 25
Received for sundries sold		114 21	" " " plantains		75 14
" for funerals out door poor		45 00	" organist's salary (6 months)		30 00
" fines stoppages &c.		48 39	" band (one month)		14 00
			" shoeing mules (one month)		3 00
			" hymn books bought		5 28
			" type bought		7 80
			" repairing boat		2 00
			" cooper's work		1 92
			" gate-porter's wages		4 50
			" expenses bringing back patients boat &c		6 72
			Balance cash in hand		70 48
	\$	845 09		\$	845 09

No. 2

THE ASYLUM JOURNAL
FOR MARCH 1881.

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
1ST APRIL, 1881.
—

WORK IN AN ASYLUM.

—
Why do the inmates of the Asylum work? They are supposed to be sick and require treatment and if they are able to work they should be discharged. This opinion it is well known although rarely expressed in the Asylum, is held by many who are not quite so reticent amongst the general public. The assumption upon which it is founded is undeniable and is one which cannot be too often or too strongly insisted upon. The Asylum is above all things, a hospital for the treatment of those who suffer from the many and diverse diseases of the brain which pass under the generic name of insanity. It is because of the character thus claimed for it that work is so essentially a part of its daily routine. For all the medicaments which “minister to a mind diseased”, there is none whose efficacy exceeds that of the labour, when carefully proportioned to the needs and capabilities of the patient. Conducted, as medicine in hospitals always is, or ought to be administered, that is, under the direction and supervision of the medical authorities, labour holds in the Lunatic Asylum a foremost place in its pharmacopoeia. As in the Asylums of England so in British Guiana, from the workshops and the farm proceed the larger number of our recoveries. But whilst the first function of an Asylum is to play the part of a hospital for acute cases of disease, there is a secondary one almost as important and necessary and certainly quite as benevolent and productive

of good to the community at large. Which is to form a comfortable and as far as possible a happy home for those of the afflicted inmates who are never likely again to mix on equal terms with the world at large, that is to say the incurable insane. How are they to spend their time if work is not provided for them. In a country like this where the lower classes are totally unfitted to employ any leisure they may have in intellectual pursuit or amusement, even of the simplest kind, deprived of the chance of working, they can only sleep, eat and quarrel. To this cause amongst others was due the howling, yelling, and horrid clamour of all kinds which deformed the day and made the night hideous in "mad houses" of the olden times. But it may be asked are any of the incurable insane capable of continuous or remunerative labour. To this question the answer is that many who out of the Asylum would not work or who if willing to do so would be unable to get any one to employ them, when under the firm but kindly discipline of the institution make an attempt to do something even if little, and that little is gladly accepted, whilst many work steadily and well. As already stated so necessary a part of the treatment of the patients is work that it ought to be carried on even if pecuniary loss were the result. As well pay for labour as for narcotics and tonics. That there is no loss by the employment of the patients, but on the contrary, a distinct gain is an agreeable accident of the system. From the peculiar circumstances of this colony, the industrial pursuits followed by the patients have resulted in exceptionally large returns. In proof of this it is only necessary to refer to the following statement of the weekly cost to the public per head of those in the Asylum from 1875 to the present year, bearing in mind that the patients commenced to work in the beginning of 1876.

	s.	d.
1875	9	2
1876	7	8
1877	6	6
1878	6	2
1879	6	0½
1880	6	0

To this employment of the inmates is due the main part of the saving effected, for the gross expenditure continues much as it was, and during the whole time a persistent effort has been made

to increase the comfort of the patients. But be this as it may the fact remains to which it is the object of this notice to draw attention, that work is carried on here entirely with the desire of benefiting those who suffer from disease. The secondary results are gladly accepted - both on account of the fact that thereby the drain on the public purse is lessened and also because many little luxuries and amusements can thus be fairly and ungrudgingly procured for the patients. From the character for indolence generally borne by the labouring population of the colony it might have been expected that proportionally less work would be done by the insane here than by those of England but this is not the case. In British Asylums it is considered that the labour of four patients equals that of an ordinary workman, here the proportion is larger. Indolent habits are more characteristic of the attendants than of the patients. When the latter are well managed, the work done by two equals that of one ordinary labourer. It is believed that there are not many other places in British Guiana where to toil is looked upon as a privilege not as a punishment, and where the necessity of working in order to be happy is realized a lesson which it is good for all of us to learn.

THE PREVALENCE OF BRIGHT'S DISEASE.

—

That the rate of mortality amongst the population of this colony is much higher than is the case in European countries is a fact as undoubted as it is to be regretted, and it is also true that the death rate of this institution exceeds that of an English Asylum, although the comparative rate is much less in the case of the Asylum than in that of the general population. This fact whilst so far satisfactory still leaves the excess to be accounted for. It would indeed be easy to show that the patients when admitted here are in a miserable state of bodily health. To judge from their appearance the majority are suffering from old standing disease or from prolonged starvation and ill treatment, it may be that both causes have part in producing the visible effects. Still when death does occur it must result from disease of one organ or another and the question arises to what disorder is the comparatively high rate of mortality due. For five years at least there has not been an epidemic outbreak of fatal disease in the Asylum. Deaths from fever of any kind are nearly unknown, (only one instance in that time), phthisis there is, but not to any

great extent, whilst to dysentery the number of deaths ascribed is only eight. At intervals there are numerous cases of intermittent but the immediate effects are slight and a few doses of quinine puts all to rights at least seemingly. But there is one class of diseases to which is due a much larger number of the deaths than to any other and that is affections of the kidney in the forms of nephritis known as Bright's disease. That this was common in the colony has been long known and the fact has been noticed by previous writers on the subject, but the enormous extent to which it prevails does not appear to have been fully realized. The unquestionable evidence of the post mortem table comes to our assistance in determining this. In the last 100 cadaveric sections made in the Asylum, advanced degeneration of the kidneys sufficient to account for death or disease in a less advanced stage but still distinct and unmistakable was seen in 86 cases whilst only in 14 bodies were the kidneys found to be free from this change, so that 86 per cent of those who died and whose bodies were examined had been subject to Bright's disease. It will thus be seen that the importance of granular kidney as a cause of death has not been exaggerated. As far as the Asylum is concerned neither race nor sex seem to have any influence over the prevalence of the disease, this statement must be taken with great reservation when applied to Europeans of whom only two have died here. That this great extension of the disease is not confined to the Asylum there is reason to know because a few years ago Dr. Hackett kindly undertook to have an examination made of the urine of every patient under treatment at the time in the Berbice Colonial Hospital and the result showed the presence of albumen in the urine in nearly 90 per cent of the cases which closely corresponds with the facts now given, as revealed by necropsy. That in many instances the anaemia so frequently seen here is a concomitant of Bright's disease is most likely, and there is every reason to believe that much of the chronic diarrhoea of the colony holds the same position. The facts having been pointed out and the extreme prevalence of this disease ascertained the causes, prevention and cure of it are next to be looked to. With regard to the former it is suggested that changes in the circulation and in the composition of the blood induced by repeated attacks of malarious fever, in badly fed and in many instances intemperate subjects may account for the degenerative changes seen in the kidneys. The whole subject is

one which deserves the close observation and study of all medical men in the colony, but for its solution a prolonged series of microscopical examinations of the morbid changes in the earlier stages of the disease will be requisite.

NOTE. In a table annexed particulars are given of the hundred post mortem examinations upon which the statements contained in the foregoing paper are founded. It may interest medical readers to note that the order of frequency in which the different forms of Bright's disease are met with is the following; the contracted granular, the large white, very frequently, the cystic, rarely, and the lardaceous scarcely ever seen.

TABLE

No	Sex	Colour	Native Country	Weight of Kidneys in Ozs and Drs		Character of Kidneys from P. M. Book
				R	L	
1	M	White	Madeira	6 4	6 4	completely granular
2	F		China	2 4	2 4	normal
3	M	Coloured	Barbadoes	5	5 4	completely granular
4	M	Do	B. Guiana	5 4	6 4	very granular
5	F	Do	Do	3 12	3 12	completely granular
6	M	Black	B. Guiana	4 4	4 4	completely granular
7	F	Do	Do	4 12	5 8	completely granular
8	M	White	Madeira	4	4 8	granular
9	F		India	4 12	4 4	granular
10	F	Coloured	Antigua	2 8	3 4	right very granular, left less so
11	M		India	3 12	3 12	granular
12	M	Black	B. Guiana	5	6 8	granular, cystic granular also
13	M	Do	Surinam	3 12	3 12	acutely congested
14	M	White	Barbadoes	3 12	3 12	slightly granular
15	F	Coloured	St. Eustatius	3 8	4 4	granular and acutely congested

TABLE (Continued)

No	Sex	Colour	Native Country	Weight of Kidneys in Ozs and Drs		Character of Kidneys from P. M. Book
				R	L	
16	M	White	B. Guiana	4 8	3 4	right granular throughout and congested left granular not congested
17	M	Black	Do	3 12	3 12	slightly granular
18	F		India	3 12	3 12	slightly granular
19	M	White	B. Guiana	3 8	2 8	very granular
20	M	Do	Germany	5 4	4 12	granular
21	M	Black	B. Guiana	7	6 8	completely granular
22	F	Do	Barbadoes	2 12	2 12	right fairly healthy left granular
23	F	Do	Not known	3	3 8	pale waxy
24	F	Do	B. Guiana	Not Taken		normal
25	F	Do	Do	7 8	6 8	lobulated
26	M		India	3 8	3 4	acutely congested
27	M	Black	B. Guiana	4	4	pale granular
28	M		India	6 8	6 12	granular and acutely congested
29	F	Black	B. Guiana	3 12	3 4	completely granular
30	M	Do	Do	5 8	6	granular and acutely congested
31	F	Do	Do	6 4	6 12	granular
32	M	Do	Africa	3 12	3 4	granular
33	M		India	4 8	5	granular
34	M	Black	Africa	1 12	2	completely granular
35	M	Do	Do	3 12	3 4	granular
36	M		China	3	3 8	pale and waxy
37	M		India	3 12	3 8	granular
38	M	Black	Africa	4 12	4	congested

TABLE (Continued)

No	Sex	Colour	Native Country	Weight of Kidneys in Ozs and Drs				Character of Kidneys from P. M. Book
				R	L	R	L	
39	F	Do	B. Guiana	3	4	3	4	granular and acutely congested
40	F	Do	Do	4	8	4		much congested
41	F	Do	Do	4	8	3	4	granular
42	F	White	Madeira	3	8	3		granular
43	F	Black	Africa	4		4		slightly congested
44	F		China	3		3	8	granular and acutely congested
45	F	Black	B. Guiana	3	8	3	12	granular and acutely congested
46	F		India	4		4	12	granular
47	M	Coloured	B. Guiana	3	12	3	8	granular
48	M		India	4	8	4	8	slightly granular
49	M	Black	Africa	5	8	5		enlarged and pale
50	M		India	1	8	4	8	granular, right almost gone
51	M		Do	3	8	3	12	slightly granular
52	F	Black	B. Guiana	3	4	3	12	completely granular
53	F	Do	Do	7	4	5	12	very granular
54	M		India	3	4	3	4	completely granular
55	F	Black	B. Guiana	3	8	3	8	granular
56	F	Do	Do	3	12	3	8	slightly granular
57	M	Coloured	Do	3		3		left slightly granular
58	M	Do	Barbadoes	7		5	12	slightly granular
59	M	Black	Africa	3	8	3	12	slightly congested

TABLE (Continued)

No	Sex	Colour	Native Country	Weight of Kidneys in Ozs and Drs		Character of Kidneys from P. M. Book
				R	L	
60	F		India	4	3 8	softened and completely disorganized
61	M	Black	Africa	3 8	4	granular
62	M	Do	Do	3 8	3 12	granular and acutely congested
63	M	Do	B. Guiana	3 12	4	very granular
64	M		India	3	3 4	normal
65	F	White	Madeira	3 12	3 8	normal
66	F		China	3 4	2 12	slightly granular
67	M	Coloured	B. Guiana	4 4	3 12	congested
68	F	Black	Barbadoes	3 8	3 12	slightly granular
69	M		India	4 4	4	granular
70	F	Black	Barbadoes	4	4 12	granular
71	F	Do	B. Guiana	3 12	3 8	granular
72	F	Do	Do	3	3	normal
73	F	White	Madeira	Not Taken		normal
74	M		India	5	4 8	normal
75	M	Black	Montserrat	4	5 8	congested
76	F	Do	B. Guiana	3 4	4 4	completely granular
77	M	Do	Do	4	4	granular
78	M		India	3	3 4	granular
79	F	Black	B. Guiana	3 12	4 4	completely granular
80	F	Do	Africa	2 8	2 12	completely granular
81	M	White	B. Guiana	4	4	granular
82	M		India	4 12	3 4	granular
83	M	Black	B. Guiana	5 4	5 4	granular
84	F	Do	Do	4 4	4	completely granular
85	F	White	Madeira	4 4	6 12	right almost gangrenous left cystic

TABLE (Continued)

No	Sex	Colour	Native Country	Weight of Kidneys in Ozs and Drs		Character of Kidneys from P. M. Book
				R	L	
86	F	Black	B. Guiana	3 4	4	completely granular
87	F		China	1 8	4 8	granular
88	F	Black	B. Guiana	2	3 12	normal
89	F		China	2 8	2 12	granular
90	M	Black	B. Guiana	4 12	5 12	granular
91	M	Do	Africa	3 4	4	granular
92	M	Do	Do	3	3 8	granular
93	M	Black	Barbadoes	5	5 12	granular
94	M		India	3 4	3 4	very granular
95	M	Black	Africa	4 12	4 8	very granular
96	M		India	4	4 12	slightly granular
97	M	Black	Curacoa	3 8	3 4	completely granular
98	F	Do	Barbadoes	5 12	5 12	tubercular
99	M	Do	B. Guiana	4 12	4 8	granular
100	F	Do	Do	7 4	5 12	granular

Official Visit.

On the 16th of March the Asylum was visited by his Excellency the Governor who paid a surprise visit to the institution. He went round the wards and saw the patients in the Dining Halls as they were taking breakfast. Before leaving His Excellency made the following entry in the Official Visitors' Book.

"Visited the Asylum this day Wednesday 16th March, with the Inspector-General of Police and the Acting Colonial Civil Engineer, and went through the whole establishment and Dr. Grieve having shown me all details, was well satisfied with what I saw."

(Signed) C. H. KORTRIGHT,
Governor.

Staff.

Changes amongst the attendants have been less numerous this month than last, on the male side three first class attendants (two on probation) have left the service, one by resignation, the two

on probation were dismissed, one the carpenter attendant for bringing intoxicating liquor into the Asylum, the other the tailor for fighting with a patient. Two second class attendants on probation were dismissed for incompetency. Two second class attendants in the female side were not confirmed in their appointments for the same reason. The vacant places of shoemaker and painter attendants as well as the vacancies thus caused were filled up by appointment of Samuel Rodgers, Jacob Campbell, Timothy Leach, Lynch Thornhill and J. C. Holtzer, as first class attendants and Adam Wilson and E. Numa were appointed second class attendants on the male side. On the female side, Rosina Coulbourn and Matilda Toney, were appointed second class attendants. The whole of the existing vacancies were filled up and a large number of candidates now apply whenever there is an appointment to be made.

Religious services.

For these the Asylum has been indebted to the kindness of the Revd. J. Rannie who conducted the service on each Sunday during the month. The other honorary chaplain the Revd. F. W. T. Elliott was prevented by sickness and other unavoidable causes from being present. The average attendance has been males 133 females 64 total 197 an improvement on the preceding month.

Amusements.

The great event in this connection was the visit of Mr. Leslie Main who on the 3rd gave an entertainment to the inmates of the Asylum. His efforts were highly appreciated by an audience numbering over 200 persons. Those who understood English followed him from grave to gay and from lively to severe with delight, whilst he gave equal pleasure to the non English speaking portion of his hearers by imitating the natural language of some well known animals intelligible to all. Subjoined is the programme. Mr Main accompanied himself on the piano playing with good taste and effect.

PROGRAMME: Song, My Pretty Jane, Recital Ask Mamma, Song, Wait for the turn of the tide, Recital, Hodge and the Parson, Song, The jolly Miller, Recital the lord of Burleigh, Song, The Gold Diggers, Recital, The well of St. Keyne, Song, My old wife and I, Recital, The wreck of the Hesperus, Song, The whistling thief, Recital, The goose and the golden egg, Song, Jonny Sands, Recital, The shadow on the blind, Song, Where there's a will there's a way, Recital The one-leg'd goose, Song,

Old King Cole, Imitation of animals and instruments and the invisible band. GOD SAVE THE QUEEN!

The usual dances were held both fortnightly and weekly. Attendance males 84, females 52 total 136.

Reports.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st March	211	120	331
Admitted in March	3	3	6
Died in March	2	1	3
Discharged in March	2	1	3
Remaining on the 31st of March	211	120	331

Of those admitted 1 came from Essequibo, 2 from Demerara and 3 from Berbice, nationality was as follows:

Native of British Guiana	2 (1 black 1 coloured)
Do of India	3
Do of Surinam	1 (coloured)

Two patients were discharged, well being able to work and care for themselves one was given over to the care of his friends improved.

The causes of death in the three patients who died were:

Bright's disease	1
Epilepsy and Phthisis	1
Epilepsy and Cirrhosis of the liver	1

Again the number of deaths was under the average and the general health of the Asylum good. Daily average number of inmates of the Asylum during the month of March, males 209.96 females 120.09 total 330.05.

NOTE. By a clerical error in the table of numbers for last month the numbers of males and the total remaining on the 28th of February, were given as 212 and 332 respectively instead of 211 and 331 which they should have been.

NUMBER OF PATIENTS EMPLOYED.

During the month of March there were employed on the average of the men 149, distributed thus in agricultural work 83, in trades

22, in unskilled labour and household work 44. Of those who do not work 40 were unable to do so, whilst 21 were able but unwilling. Of the women the average number employed was 87 of these 29 were engaged in the laundry, 23 in the sewing room and 22 in the work room where chocolate, cocoanut oil &c. are made or in picking coir whilst 13 assisted in household work.

DAILY AVERAGE NUMBER IN ASYLUM AND PERCENTAGE OF PATIENTS WORKING &c.

	M.	F.	Total
Daily average in the Asylum.	209.96	120.09	330.05
Percentage employed.	71.6	72.5	71.5
Percentage confined to bed.	1.2	1.8	1.4
Percentage attending amusements.	40.1	43.3	41.2
Percentage attending Church.	63.6	53.3	59.7

THE FARM.

Another month of favourable weather has enabled the planting of provisions to be pushed on briskly and the young crops look fairly well. There has not been any general reaping of produce but the following quantities have been brought in as they ripened in small patches here and there. Plantains 655 lbs., Sweet Potatoes 97 lbs., Sweet Cassava 96 lbs., Pumpkins 248 lbs., Bananas 239 lbs., Garden vegetables 543 lbs., Milk 200 pints, Eggs 78, Pork 509 lbs., Fowls 22 ½ lbs. (cleaned), Duck 4 lbs.

The number of cattle killed for beef during the month was nine and the beef so obtained weighed 1,805 lbs., the cattle cost \$180 which making the usual deduction for the value of hides, gives as the cost of beef nine and three-tenths cents per lb.

The additions to the Stock by births have been 19 pigs and 2 goats, whilst 7 pigs have been killed one cow died under circumstances calculated to raise a very strong suspicion of its having been poisoned.

The wood-cutter has cut and delivered at the Asylum 13¼ cords of wood.

THE WORK SHOPS.

—

CARPENTER.

Owing to the dismissal of the carpenter attendant as already mentioned, the work in connection with the alterations in the

Steward's quarters has not been completed as expected but some progress has been made towards this result. Numerous small repairs have been as usual required and executed during the month, and 32 coffins have been made, these are required because the Asylum conducts the funerals for the Hospital as well as the out door paupers of New Amsterdam.

PAINTER.

In this shop also the work has been delayed by the want of an attendant in charge but the patients who work here have been employed painting and papering part of the Medical Superintendent's quarters and many small articles have also been painted.

TAILOR.

For the greater part of the month this shop was too, without an attendant in charge and so the record of work done is less than was that of February. There were made, of patient's trousers 79 pairs, jumpers 8, jackets 58, and of attendant's uniform jackets 2. There were repaired during the month 567 articles.

SHOEMAKER.

Here all the work done which only amounts to the making of seven pairs of canvass slippers was accomplished by one patient. It is hoped that next month's Journal will contain a very different account of the results of labour from the work shops as attendants have been appointed in charge of each.

BAKERY.

In March 35 barrels of flour have been baked and the yield of bread was 9,371½ lbs. The flour used is "St. Lawrence" unmixed and the bread made from it is usually good

PRINTING OFFICE.

Different forms 33 in number were printed in this office during March, and of these 4,302 impressions were taken, amongst them was the first number of this Journal which is not held up as a model of typography, but a new fount of type and better appliances having been procured it is expected that future numbers may do something towards redeeming the character of the "ASYLUM PRESS."

LAUNDRY.

In the laundry the washing has gone on as steadily as is possible with the very intermittent supply of water which is furnished by the pipes of the Board of Superintendence of New Amsterdam. The water is regularly turned off from 10 A.M. to 4 P.M., daily, whilst at irregular intervals the supply ceases suddenly and without notice sometimes for days at a time. In spite of this difficulty 9,822 articles have been washed during the month and nearly a thousand starched and ironed.

SEWING ROOM.

The sempstresses of the Asylum have made during the month, Print dresses 3, Flannel gowns 9, Night shirts (men) 69, Cotton singlets 52, Flannel singlets 18, Pillow cases 82, Aprons 17, Bed gowns 8, Women's skirts 44, Chemises 40, Bed ticks 49; six hats were trimmed and four attendant's uniform dresses made. The large amount of patching necessary to keep the clothing of so many people in good order was also done in the Sewing room.

WORK ROOM.

Here increased activity has been shown during the month as a good supply of cocoanuts has been obtained. Of chocolate 234 lbs. has been made and of cocoanut oil 11½ gallons, whilst 40 lbs of coir have been cleaned. Made as it is done here, cocoanut oil is not a remunerative article of manufacture, but the produce is of superior quality, no doubt with a proper press the oil could be got in much larger quantity. The husk is required for the making of coir and as the refuse of the nuts is good food for pigs no actual loss is entailed.

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR MARCH, 1881.

RECEIPTS			EXPENDITURE		
Balance cash in hand \$	70	48	For purchase of flour &c. \$	655	28
Received for sundries sold	94	09	" " Plantains	84	80
" Hospital account	582	54	" " Cocoanuts	82	80
" Alms House Do (2 months)	284	75	" " Milk	6	72
" Out Door funerals	2	00	" " Agricultural implements and workmen's tools &c.	150	75
" Hides sold	79	49	" " News paper and books	24	05
" Fines stoppages &c	27	32	" " Musical instruments	36	08
			" Band (one month)	18	50
			" Expense of entertainment	25	00
			" Shoeing mules (one month)	3	00
			" Repairing clocks	2	00
			" Bricklayer's work	1	28
			" Sums paid under one dollar	9	88
			Balance cash in hand	40	53
	\$ 1140	67		\$ 1140	67

No. 3

THE ASYLUM JOURNAL
FOR APRIL, 1881.

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
2ND MAY, 1881.
—

FIVE YEARS INSANITY.

—
Of late years in every part of the civilized world, the number of people who are under treatment in Lunatic Asylums or who are registered and officially recognized as bereft of reason has very largely increased. By some this assumed spread of Lunacy has been ascribed to the high pressure life led by denizens of the European centres of civilization, involving as it does much intellectual strain and mental wear and tear with consequent increased liability to break down. Perhaps if madmen amongst savage races were as carefully reckoned and tended as are those amongst the refined the difference in their proportionate numbers might not be found to be so great. Pity for weaker brethren and care or pride in their preservation is not a distinguishing characteristic of rude peoples and laggards in the race of existence whether they are so from mental or physical causes are allowed, or sometimes perchance helped, to disappear and so their numbers are kept down. Many who have studied the subject believe that the increase of insanity is more apparent than real and can be accounted for in various ways without the necessity of believing that the ranks of the deranged are being recruited from those of the healthy with such startling rapidity.

Insanity is now more generally understood and recognized, whilst greater and better provision for the lodging and treatment of the insane with a resulting increased public confidence in

Asylums and more readiness to send patients to these institutions exists, and to these facts is ascribed by many the augmentation in the numbers of the known alien population. In England there is an ever pressing necessity for erecting new Asylums or of adding to the size of those already built. Here the same want is felt and it has been found requisite to increase year by year the accommodation supplied in the Asylum.

On the 1st of January 1876 the number of patients under treatment was 182 on the 31st December, 1880, it had risen to 331 an increase of nearly 87 per cent. Still this number does not give as high a proportion of insane to sane as in England but it must not therefore be assumed that fewer colonists than Englishmen are affected with mental disease. Few of the creole patients come here until they have been for a considerable time afflicted, and in the meantime a good many of them die whilst some recover, and the same results ensue from the plan followed of submitting all patients to probationary treatment in the Hospitals before being sent here an arrangement which is unsatisfactory on other grounds. The number in the Asylum is the only means we have of estimating lunacy existing in the colony and it gives only an approximate return. In the same way the admissions show the amount of occurring insanity. Some particulars of these admissions for the five years ending 31st December 1880 are given in the following table:

ADMISSIONS FOR FIVE YEARS

NATIVES OF	1876			1877			1878			1879			1880			TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
British Guiana	12	21	33	18	23	41	13	14	27	16	12	28	17	15	32	76	85	171
India	22	15	37	18	18	36	27	8	35	22	12	34	35	8	43	124	61	185
Madeira	6	0	6	4	3	7	2	2	4	4	2	6	5	2	7	21	9	30
China	3	2	5	4	0	4	5	0	5	0	1	1	3	0	3	15	3	18
Africa	6	3	9	8	2	10	6	2	8	6	0	6	3	3	6	29	10	39
Barbadoes	9	3	12	4	6	10	8	3	11	5	5	10	2	3	5	28	20	48
Other W.I. islands	0	1	1	2	1	3	3	0	3	0	1	1	1	3	4	6	6	12
Europe	1	0	1	1	0	1	0	0	0	3	0	3	2	0	2	7	0	7
Unknown	1	0	1	0	0	0	2	0	2	0	2	2	0	0	0	3	2	5
Total	60	45	105	59	53	112	66	29	95	56	35	91	68	34	102	309	196	505

It is seen by the table that the admissions during the period dealt with have averaged one hundred yearly. Here again consolation is afforded in face of seemingly large figures by a comparison with English statistics. The latest report of the Lunacy Commissioners shows that in England the proportion of admissions to population was in 1879, 5.28 per 10,000 here it is 4.37 per 10,000. Reasons have already been advanced which lead to the belief that in this colony a smaller proportion of insane come under Asylum treatment than is the case in Great Britain and this may account for the lesser percentage. If the same perfection of observation were attainable in both places it would doubtless be found that the lotus eating of this land of perpetual summer afternoon is as destructive to the intellect as is the worry to strife where the struggle for existence rages at its keenest. The blade perishes more quickly by rust than by use.

An examination of the particulars shown in the table as to nationality reveals a striking diversity in the proportion of inmates given to the Asylum by the two great classes of the population here, native born and immigrant. Of the 505 admissions 171 were creoles and 329 immigrants. This gives for the five years a proportion of insane amongst creoles of 14.5 per 10,000 whilst among immigrants of all classes it is as much as 29.3 per 10,000, or more than double. For the purpose of this calculation the population of the colony has been taken for the five years at an estimate average of 230,000 – 118,000 creole, and 112,000 immigrants. A partial explanation of this surprising difference may be found in the diverse conditions under which the bulk of the two classes live. The creole in the midst of relatives and friends, the immigrant often alone and when un-indentured friendless, so when stricken with illness the latter comes more readily to public institutions for treatment than the former. Then too, some influence must be assigned to the fact that the change of circumstances, the separation from country and friends to which the immigrant is necessarily subjected has a certain effect in predisposing him to mental infirmities. Giving all due weight to these considerations experience amongst the Asylum patients proves they are insufficient to fully account for the preponderance of immigrants in that institution. Another explanation is suggested by the knowledge obtained of the

immigrants, more especially the East Indians who are to be found in the Asylum. Which is that it is amongst those who possess a tendency to the insane neurosis, those who are mentally unstable that the emigration agent most easily finds his recruits. A man who at the time may seem to be in his right mind, from possessing the restlessness of disposition and love of change which characterizes the class just mentioned, is easily persuaded to leave his country, but when difficulties of any kind meet him here the trembling balance is turned and he passes from the border land into the undoubted territory of insanity. This view gains support from the number of coolie immigrants who go mad on the voyage hither or within a very short period of their arrival in the colony, five years experience shows that insanity is not rapidly on the increase amongst us, but on the other hand it is evident that the number of lunatics has never been clearly ascertained and until this is known the difficulty remains of saying when sufficient provision has been made for their reception.

NOTES ON THE ETIOLOGY OF GENERAL PARALYSIS OF THE INSANE.

The assertion that the coloured races enjoy an immunity from general paralysis although it may not yet have reached the position of a generally accepted fact, is sufficiently ascertained to be ranked amongst extreme probabilities. If the dark races of mankind are not free from the disease its occurrence amongst them is an incident of great rarity. Now to what is the peculiarity due? It may be instructive to study this interesting question from its negative side and endeavour to find out which of the acknowledged factors in the causation of this disease are present or absent, amongst the inhabitants of this colony where there has only been one case of general paralysis in 700 patients suffering from insanity in its different forms and in that solitary instance it occurred in a white man. This protection can scarcely arise from climatic causes for the same immunity from the disease is found amongst the coloured population of the United States with a very different climate from this. Neither can it be peculiar to one race for the Aryan Hindoo, and Negro African, are likely protected. Let us then see which of the causes commonly assigned for general paralysis are found in the

colony and more particularly note those if any that are conspicuous by their absence. From this inquiry may at once be removed the physical causes often assigned for general paralysis in common with other brain diseases, such as falls or blows on the head, sunstroke, &c. Insanity consequent upon injuries to the head is seen but it never takes the form of general paralysis. Although situated in the part of the tropics "*coup de soleil*" is not with us a common accident, indeed there are as many if not more deaths from sunstroke in London than in Demerara and not a case of insanity, following such an attack has found its way to this Asylum.

When we turn to the mixed order of causes which possess in combination moral and physical elements, we find that under one head may be placed what are generally assigned as the most common antecedents of this disease, these are comprehended in irregularity of living. Intemperance in drink and in sexual indulgence are by many looked upon as the great factors in producing general paralysis. If so can anyone knowing the habits of the people claim that exceptional abstinence in these respects is the secret of the freedom they enjoy from the disease in question, assuredly not. The labouring classes are to say the least quite as much given to self indulgence in British Guiana as in England, yet the former are exempt and the latter suffer, and the same comparison can be drawn between all classes of society. Again by some the complaint is supposed to have a syphilitic origin, but a visit to the hospitals here shows that syphilis is widely prevalent in some of its most aggravated forms, and that tertiary affections including cerebral and nervous diseases are common enough but do not assume the form of general paralysis.

Another cause which has been assigned for the disease has not yet been mentioned and from it undoubtedly the population of this colony is comparatively free, namely the purely mental one of intense intellectual excitement. If we except the last all the assumed factors of general paresis are present yet it does not arise. It may here be noticed to prevent misconception that general paralysis is constantly watched for and if it existed could not have escaped observation. The essential element in its production must therefore be wanting in our population, but what that is has yet to be discovered unless we believe that intellectual stagnation whilst predisposing to dementia saves from the excitement of general paralysis.

Staff.

The changes during the month have been, on the male side one first class attendant on probation (the baker), discharged, one first class attendant (the shoemaker), left the service not being confirmed. Two second class attendants were dismissed and two on probation left the service. The causes of dismissal besides general inefficiency were, in one case from the attendant fighting with a patient, and in another, that of the baker, absence without leave after having asked permission to go away and having been refused, and as it was known that he did this with the intention of getting an immediate discharge the wages due to him were forfeited, whilst the third directly refused to obey orders. On the female side one second class attendant on probation left the service owing to ill health and one first class attendant was dismissed, after notice, for repeated disobedience of orders and persistent carelessness. The following appointments have been made. E. Numa, S. Adams, W. Smith, to be second class attendants (male) on probation. C. Graves to be second class attendant (female) on probation. To show that the position of the attendants here is fairly good the scale of pay and allowances is given.

Male attendants at the Asylum are of two classes first and second, the first class attendants (which includes artizans attendants) receive \$13 per month increasing by yearly increments of \$1 per month to \$17. Second class attendants receive \$9 per month increasing in the same manner to \$12. All attendants are provided with food and uniform, the latter when they are confirmed in their appointments. Attendants are at first appointed on one month's probation.

Female attendants at the Asylums are of two classes first and second, the first class attendants receive \$10 per month increasing by yearly increments of \$1 per month to \$13. Second class attendants receive \$7 per month increasing in the same manner to \$10. All attendants are provided with food and uniform, the latter when they are confirmed in their appointments. Attendants are at first appointed on one month's probation.

Religious Service.

These have been held on every Sunday in the month, having been conducted in two occasions by the Revd. J. Rannie and on two by the Revd. F.W.T. Elliott. The congregations have averaged 131 men and 62 women a total of 193.

Amusements.

One only of the dances usually held fortnightly was given during the month. This was on the 21st, the Thursday in Easter week on which occasion were present a considerable number of visitors from the town of New Amsterdam and neighbourhood. The new arrangements in the hall were then for the first time in force. The band occupied a platform at the east end of room whilst the raised gallery usually appropriated to their use was given up to visitors and the sitting room was utilized as a retiring room. The dance passed off very well the visitors seemed pleased, and all connected with the Asylum, especially the patients enjoyed it very much. There were of the latter 177 present, 120 men and 57 women.

The Monday evening dances were held weekly as usual and the playing of the band in the grounds on Monday afternoons continues to attract a considerable outside audience principally of juveniles.

The band now numbers 8 performers and although as is usually the case with musical people its members are difficult to manage, it is now in a fair state of efficiency and its possession adds materially to the enjoyment of the inmates.

Improvements.

It has been thought advisable to describe under one head the various changes and improvements made in the Asylum in its different parts. In previous numbers of THE JOURNAL these have only been noticed incidentally in connection with the labour of the artizans engaged.

In April additional progress has been made in the alterations at the Steward's quarters but from continual interruptions to the work owing to demands on the carpenter and his men to undertake pressing and necessary repairs this has not been so great as was expected.

The whole of Ward No. 4 (the male Infirmary) has been repainted and the walls made good, the only thing required to complete it, is the stencilling of the dado which will be done at once.

The want of a scullery in connection with the large dining hall has long been felt and a place being available until now used as a tool house, the bricklayer has begun laying the floor in tiles preparatory to it being fitted for the purpose.

In connection with the new workshops some bricklayer's work was required to complete them on the original plan namely the erection of low pillars for the sills to rest upon and of steps to the doorways these have been built and the workshops finished.

At the Old Fort Farm the water is washing away the land at a very rapid rate, not only threatening the stability of the cottage but even approaching a brick tank which has been in existence since the time of the Dutch occupation. In order to prevent this a number of bags full of earth have been rammed down in front of the ground, stakes driven in and the intervals between then filled with rubbish. It is hoped that this will be enough to prevent the necessity of taking more expensive measures to ensure the safety of the buildings mentioned.

Amongst the lately introduced minor improvements is the adoption of a new uniform for the male attendants. Their ordinary dress is made of white drill something after the pattern of a military patrol jacket, with red facings and they are provided with a similar dress in blue serge for Sundays. The women still continue to wear the uniform of brown linen.

Reports.

NUMBERS IN THE ASYLUM

	M.	F.	TOTAL
Remaining on the 1st April	210	121	331
Admitted in April	6	3	9
Died in April	4	0	4
Discharged in April	0	2	2
Remaining on the 30th of April	212	122	334

Of the patients admitted there came from Essequibo one, a man, from Demerara three men and two women, and from Berbice two men and one woman. Classed according to nationality they rank as follows:

Natives of British Guiana	2 (black)
Do of India	6
Do of Africa	1

Showing seven to be immigrants and two creoles.

Two female patients were discharged who had completely recovered, one after a residence in the Asylum of four years the other of two years and a half.

Four patients died from causes as follows:

Bright's disease	2
Organic disease of the brain	1
Cirrhosis of liver	1

Two of these were old inhabitants of the Asylum, one having been an inmate for 13 years the other for 6 years. On the other hand two died soon after their arrival (one after six days the other after a month).

Again it is pleasing to be able to report that the general state of the health of the institution continues good.

The daily average number of inmates increased in April to 211.3 males and 121.3 females a total of 332.6.

Again an apology has to be made for an error which however is self evident in the table of numbers in last month's Journal, the numbers remaining ought to have been 210 males 121 females and not as it was printed.

NUMBER OF PATIENTS EMPLOYED.

There were engaged in the different industrial occupations of the Asylum during the month of April on an average 154 men, occupied in agricultural work 78, in trades 28, in unskilled labour and household work 48, leaving 57 unemployed of whom 17 were unwilling to work and 40 unable. On the female side 30 women were at work in the laundry, 23 in the sewing room, 23 picking coir, making chocolate & c., and 14 assist in household work.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES OF PATIENTS WORKING &c.

	M.	F.	Total
Daily average in Asylum	211.3	121.3	332.6
Percentage employed	72.9	74.3	73.4
Percentage confined to bed	1.8	1.6	1.8
Percentage attending amusements	56.8	47.1	53.3
Percentage attending Church	62.8	51.2	58.1

THE FARM.

The quantity of produce received from the farm, was of plantains 374 lbs., Sweet Potatoes 331 lbs., Sweet Cassava 3 lbs., Pumpkins 95 lbs., Bananas 524 lbs., Garden Vegetables 215 lbs., Limes 34

lbs., Milk $220\frac{1}{4}$ pints, Eggs 65, Pork 311 lbs., Fowls $10\frac{3}{4}$ lbs. (cleaned). The number of cattle killed during the month was thirteen, weight of beef produced 2,750 lbs. The cattle cost \$260, deducting the value of hides this gives the cost of beef as eight four-fifth cents per pound. The increase of stock during the month has been by birth 3 calves and 2 goats, and by purchase one milk cow and calf. Four pigs were killed for pork and one sucking pig died.

The weather which in the earlier part of the month was dry has latterly been showery and in consequence the planting of provisions has been pushed on with fresh vigour. The pasture too was becoming very parched and has benefited much from the rain.

The wood-cutter has cut and delivered at the Asylum $28\frac{3}{4}$ cords of wood.

THE WORK SHOPS.

CARPENTER.

The new carpenter attendant has pushed on work more vigorously than has been done of late, it is to be hoped that this energy will continue. He has been working on the Steward's quarters and as usual a large number of small repairs have been required during the month. Seven new bedsteads and 29 coffins have been made.

PAINTER

The men have been engaged in painting Ward No. 4 and some painting and paper hanging has been done in the Medical Superintendent's house, besides the ordinary shop work. The record of work done is 1,548 square yards of painting, four pieces of paper hung, 32 chairs, 20 tubs, 26 coffins painted. Five hat bands lettered "Customs".

TAILOR.

There has been a new attendant in charge of the shop and the amount of work turned out has been, patient's trousers 47 pairs, jumpers 121, attendant's uniform jackets 6, pairs trousers 6. There were 492 articles repaired during the month. It is only fair to the attendant to state that two of the best tailor patients did not work during the month.

SHOEMAKER.

The record of work now given shows the reason that the new attendant in charge left the service after three weeks trial. There were made leather shoes 2 pairs, and canvass slippers 11 pairs, not much more than is done by a patient alone.

BAKERY.

In April 33 barrels of flour have been baked yielding 8912 $\frac{3}{4}$ lbs. of bread.

PRINTING OFFICE.

Of different forms 26 were printed during the month and of these 6593 impressions were taken. There were 17 books stitched and roughly bound. Besides the Journal, a form of case book foolscap size has been printed this month in the "Asylum Press".

LAUNDRY.

During the month there have been washed in the Asylum different articles to the number of 9330 and 1140 starched and ironed.

SEWING ROOM.

Those at work in this room have made during the month of April, print dresses 10, women's jackets 47, bed gowns 4, skirts 6, chemises 12, men's day shirts 71, night shirts 2, singlets 3, bed ticks 39, pillow cases 94, and strong suits 4. For an attendant one dress has been made. A large number of articles have been repaired.

WORK ROOM.

The women employed in the work room have made during the month 248 $\frac{1}{2}$ lbs. of chocolate and 15 $\frac{1}{2}$ gallons of cocoanut oil. Besides this 17 lbs. of coir have been cleaned. The coolie patients who work here prepare all the coffee and curry powder used in the Asylum.

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR APRIL, 1881.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	40 53	For purchase of plantains	\$	114 16
Received for sundries sold		81 51	" " of pony		100 00
" cocconut oil sold		4 80	" " of cow and calf		40 00
" fines stoppages &c.		7 65	" " of table for sewing room		21 42
" Hospital account		297 53	" repairing harmonium		10 00
" Alms House account		141 24	" " clocks		2 00
			" band (one month)		18 50
			" shoeing mules (one month)		3 00
			" bricklayer's work		21 00
			" cooper's work		5 48
			" saddler's work		3 00
			" expenses of attendants from Georgetown		10 60
			" sums paid under one dollar		4 49
			Balance cash in hand		219 61
	\$	573 26		\$	573 26

No. 4

THE ASYLUM JOURNAL
FOR MAY 1881.

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LUNATIC ASYLUM, FORT CANJE, BERBICE,
1ST JUNE, 1881.
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LOCAL HYGIENE.

I.

It is generally acknowledged that the due preservation of the health of the people is a question of the first importance and one which may fittingly engage the attention of every one. If this be true of places which lie in temperate regions the subject must possess still more absorbing interest for all whose lot it is to inhabit a country like this, where the great heat intensifies the evil effects of the neglect of sanitary precautions, and where as consequence epidemic diseases if they once get a footing, rage with startling violence. But if the punishment consequent upon hygienic offences be severe, the rewards which follow due obedience to the laws of health, are correspondingly great. This is strikingly exemplified in the history of military hygiene, for from West Indian experience, some of its most striking lessons have been drawn. By the improvement in the sanitary conditions under which the soldier lives, service in the West Indies has within the memory of the present generation completely changed its character. From being looked upon as something almost equivalent to certain death, it has become not much more dangerous than English barrack life which itself has made great advances in safety since the days of the Crimean war. Although the civil population have not progressed in healthiness at the same rate as the military, still it is satisfactory to note that both in England and its dependencies there has been progress in that

direction. The views held by many on the liberty of the subject have been a hindrance to this advance, for this liberty is construed by some to include not only the right of killing oneself by disease but of spreading the complaint so as to ensure the death of some of our neighbours. It is satisfactory to find that amongst the pioneers in the ranks of sanitary reformers, were to be found members of the Medical profession and that medical men generally realize that the prevention of disease is as much a part of their duty as is its cure when developed. From the attention thus given to the subject by trained and scientific men the laws which regulate the preservation of health, are being gradually formulated and a science of public health evolved, a knowledge of which makes the sanitary expert. If this fact were fully realized and the idea abandoned that the spread of zymotic disease is due to occult and mysterious influences, Boards of Health, Quarantine Boards, or similar bodies would show more disposition to be guided in their actions by settled principles and would be less liable to shift and change about as they do; sometimes exerting themselves in the frantic and too often mischievous hurry of a panic at others slumbering in the repose of a suppositious and false security. It ought to be generally known that the very measures which are at all times beneficial to the health of a community are its best safe-guards against the propagation of any epidemic plague which may be introduced. The seeds of disease do not flourish except upon a suitable soil and it is possible by adequate care to so sterilize the ground upon which they fall, that they may be cast there, and bear little or no fruit. The isolation of those affected with contagious illness is a valuable precaution the importance of which it is not intended in the slightest degree to depreciate, but as society is constituted to carry this effectually into practice is a difficult, nay almost an impossible task. So with quarantine it is as well not to place too much reliance upon it to the neglect of other precautions, much more certain in their results, indeed to be effective quarantine must be such a complete stoppage to trade as no civilized nation would in the present day submit to. Experience shows in this as in other instances that when the love of gain and the certainty of personal and immediate loss is balanced against a future and possible evil accruing to others, the former becomes the motive for action, and the latter is ignored or forgotten. In no country in the world is the maxim that, public health means public wealth, more self evident than in this, for in

none is the labourer more valuable or obtained at a greater cost. Treating it as a matter of political economy it is better to spend money on the preservation of the population at present in the colony than import others, and lately an effort has been made to effect this, but there has not been any opportunity yet of judging of its results. In the Asylum there is a community living under conditions which render close attention to sanitary requirements absolutely necessary for its preservation in anything like a fair state of health. It is therefore intended to draw attention in a series of short articles to a few points in connection with the local application of well known hygienic principles which are thought likely to prove interesting and which the experience of several years have shown to be of value. The first which will appear in the next Journal will be on subjects connected with the supply of pure air.

THE WEIGHT OF THE BRAIN IN DIFFERENT RACES

On the other side appears in tabular form a short series of brain weights, of East Indians, Africans and Chinese. These were taken at the Berbice Colonial Hospital, about three years ago and are from the bodies of patients who died in that institution and who at the time of their death were sane. The brains were very carefully weighed and the results can be relied upon as closely approximating to correctness. The numbers are not sufficiently large to prove a trustworthy foundation upon which to erect a superstructure of generalization, still it is thought they may possess some value as an addition to the small number of similar observations which are now upon record. They will also serve as an introduction to a much more extended series of observations on the weight of the brain in the insane amongst various nations which will find a place in future numbers of this Journal. There are one or two peculiarities which may be noted, and first as to the weight of the brain in the different races, it will be seen that amongst the adult male Hindoos examined it averaged 39.71 ounces, the females of the same people gave an average of 34.21 ounces. In the case of two male negroes born on the West Coast of Africa the average was 38.09 ounces, and of two females of the same people 37.04 ounces. The weight of the Chinaman's brain was 40.71 ounces. These weights may be compared with the average of that of Europeans which is given

as 49½ ounces for the male and 44 ounces for the female brain although some Continental observers make it about 2 ounces less. It will thus be seen that in East Indians as in Europeans the difference in weight between the male and the female brain is about 5½ ounces whilst in the Africans examined it was only a little over one ounce. Can an explanation of this marked difference be found in the fact that the female African stands more on a level both as to intellectual training, and in the necessity for physical labour with her male compatriot than is the case either with the Hindoo or the European. It ought to be mentioned that the East Indians who come here belong as a rule to the lower and uneducated classes. The weight of the African brain given in this table is somewhat less than that which is to be found in the table in Topinard's book on Anthropology, but in that work there is no information as to the part of Africa of which the subjects were natives, except in the case of a Cape Negro who had an exceedingly small brain. There may be a considerable diversity amongst the people inhabiting a large continent like Africa which would account for differences in weight. Of those examined here the two men belonged to the tribe of Mazumbas, the first woman was an Ackoo and the second a Bengoola.

The difference in weight between the European brain and these in the table is proportionately divided amongst the various parts of the encephalon. Thus the average weights in the case of East Indians were:

	Male	Female
Cerebrum	34.26 ounces	29.36 ounces
Cerebellum	4.58 "	4.06 "
P.V. & M.O.	.88 "	.78 "

of Africans

	Male	Female
Cerebrum	33.15 ounces	32.29 ounces
Cerebellum	4.03 "	3.93 "
P.V. & M.O.	.82 "	.81 "

in the European brain according to Dr. Reid, the weights are

	Male	Female
Cerebrum	43.98 ounces	38.75 ounces
Cerebellum	5.25 "	4.76 "
P.V. & M.O.	.98 "	1.01 "

BRAINWEIGHTS.									
Race.	No.	Age.	Weight in lbs.	Height in ft. in.	Weight of whole Encephalinozo	Weight of Right Cerebruminozo	Weight of Left Cerebruminozo	Weight of Cerebelluminozo	Weight of P.V. & M.O. in ozs
	1		60	5 1	43.61	19.00	19.00	4.68	.93
	2	56	50	5 2	33.49	14.37	14.25	4.06	.81
	3	35	54	5 4	41.30	17.50	17.62	5.12	1.06
	4	53	75	5 9	37.59	16.25	16.25	4.12	.97
	5	26	82	5 7	42.18	17.81	17.50	5.75	1.12
	6	27	50	5 7	35.92	15.87	15.87	3.81	.37
	7	24	88	5 8	43.74	19.12	19.25	4.62	.75
East Indian	8	44	96	5 4	41.86	18.06	18.00	4.87	.93
Indian	9	32	74	5 5	41.49	17.75	17.87	4.87	1.00
Males	10	36	60	5 1	34.86	15.06	15.06	4.12	.62
	11	30	40	5 7½	39.43	16.75	16.62	5.06	1.00
	12	30	50	5 4	38.87	17.00	17.06	4.00	.81
	13	22	60	5 8	43.37	18.87	18.75	4.75	1.00
	14	19	40	5 5	35.18	14.75	15.00	4.50	.93
	15	32	100	5 6	43.06	18.75	18.81	4.50	1.00
East Indian	1	25	90	4 10	34.62	14.75	14.75	4.31	.81
Females	2	40	70	4 6	33.80	14.56	14.68	3.81	.75
African	1	65	106	4 10	38.99	17.37	17.06	3.81	.75
Males	2	58	120	5 8	37.04	15.96	15.93	4.25	.90
African	1	45	74	5 2	36.14	16.21	15.25	3.87	.81
Females	2	50	135	5 2	37.93	16.75	16.37	4.00	.81

Whether as a general rule the right hemisphere of the cerebrum is heavier than the left or that the opposite is the case is a question which as far as Europeans are concerned has never yet been settled. On the one hand we have a long series of weightings by Dr. Boyd and Dr. Brown Sequard's statement to show that the left is usually the heavier, whilst Dr. Crichton Browne no mean authority, gives the weight of his opinion to the other side, believing that the right hemisphere in a large majority of cases is slightly heavier than the left, (Brain Vol. II, page 44). The present series of weights is too short to form the basis for any induction on this question. In the largest class and that is small, male East Indians, of 15 cases, in 4 the hemispheres were equal, in 5 the right was the heavier and in 6 the left, whilst the average weight was exactly the same for both sides, so the slight advantage in number in favour of the left was counterbalanced by the greater weight when the right was heavier, corroborating, as far as it goes, an observation of Dr. Crichton Browne to the same effect. But if there be any doubt about Hindoo brains, there can be none about those of Africans, for amongst these in every brain weighed the right hemisphere of the cerebrum was heavier than the left and when the much larger series of insane brain weights come to be examined it will be found that in the vast majority of instances this is the case, so much so that this preponderance of size in the right cerebral hemisphere may be looked upon as a distinctive character of the negro race.

Staff.

The changes amongst the attendants have been comparatively few during the month, and on the whole their behaviour has been good. The staff is now complete with the exception of the vacancy existing in the place of shoemaker attendant, artizans of the class suited for the work here are not easily found, as besides working their own special trade there is a certain amount of duty in connection with the patients which they have to perform. Three attendants have left the service, one of the first class, who was engaged in the stores did not return to his work at the end of his month of probation, one second class attendant also on probation, employed as a farm attendant, was dismissed for refusing to work himself although specially engaged to do so, and one second class

female attendant was dismissed for absence from duty without leave, this absence having been due, by her own admission, to a fit of drunkenness. To fill the vacancy thus caused and others that existed, the following appointments have been made. First class attendants on probation, male, Thomas Grant, E. McKinnon, female, Miss M. Henery. Second class attendants on probation, Lewis Henery, Amos Henery and J. Hyndman.

Religious Service.

These have been conducted on three of the five Sundays of the month by the Revd. J. Rannie and on one occasion by the Revd. F.W.T. Elliott, on another prayers were read by the medical Superintendent owing to the absence of a clergyman. The attendance at the above services averaged males 122.2 Females 57.8 total 180.

Amusements.

The opportunities for associated amusement have been in May, two fortnightly dances, and the Monday evening practices which have been held as usual. In these 98 males and 58 females, on the whole 156 patients, have participated.

Improvements.

At last the alterations to the quarters previously resided in by two of the attendants, to fit them for the occupation of the Steward, have been completed, with the exception of a little painting. The work done during the month of May for this purpose, has been the erection of a substantial gallery in size eighteen feet by eight. These cottages when so altered have made very suitable and comfortable quarters for the officer named.

The Sewing Room has been completely repainted and papered, and having been decorated with some new pictures which were procured from England for the purpose, has now a bright and cheerful appearance.

The stencil work in Ward No. 4 has been completed and this Ward too is much improved by the redecoration it has undergone.

The Dining Room of the East Block (female) is in process of being repaired and decorated in correspondence with the rest of the buildings.

Reports.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st May	212	122	334
Admitted in May	6	6	12
Died in May	2	1	3
Discharged in May	1	3	4
Remaining on the 31st of May	215	124	339

There were remaining on the 31st May the largest number that have ever been resident in the Asylum.

The admissions were from Demerara 4 men and 4 women in all 8 patients, from Berbice 3, two women and one man and from Essequibo one man, classed according to their place of birth they included:

Natives of British Guiana	3 (2 black 1 coloured)
Do of India	6
Do of Madeira	1
Do of Africa	1
Do of Barbadoes	1 (coloured)

which gives 9 immigrants and 3 creoles.

Those who were discharged were all recovered and able to care for themselves. The man had been in the Asylum for 2½ years and the women for periods of four years and fifteen months respectively.

The causes of death in those who died were:

Bright's disease	2
Cerebral Meningitis	1

The patients had been resident in the Asylum one for six months, one for three months and one for three weeks. In every instance they were suffering on their admission, from the bodily disease which afterwards proved fatal to them.

The deaths have again been below the average, and the health of the Asylum has been excellent. There is a marked increase on the number of patients, the daily average having advanced to 213 males and 124.3 females, a total of 337.3.

NUMBER OF PATIENTS EMPLOYED.

With the exception of printing and book binding the industries followed in the Asylum have remained almost without change for the last two or three years, although the numbers engaged in them have increased in proportion to the general growth of the Asylum. The patients who joined in the various occupations in the month of May numbered on the male side 157, in trades 23, in unskilled labour 27 and household work 23. Of the 56 who did not work 41 were unable from bodily sickness or their mental condition to do so, and 15 were unwilling. On the female side too, there were engaged in the Laundry 26 patients, in the Sewing Room 21, in making coir, cocoanut oil, chocolate &c. 23, and 11 assisted in the general household work giving a total of 81 employed. The number of those unable to work was 21 and 22 were unwilling to do so. Basket making is an occupation which it is thought might employ some who were not able to do anything else, but although many efforts have been made so far it has been found impossible to get an attendant competent to teach and supervise this industry.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES OF PATIENTS WORKING &c.

	M.	F.	Total
Daily average in Asylum	213	124.3	337.3
Percentage employed	73.7	65.3	70.6
Percentage confined to bed	2.1	1.9	2
Percentage attending amusements	46	46.8	46.2
Percentage attending Church	57.3	46.6	53.1

THE FARM.

The weather during the month has been most propitious for provision farming, the crops ripening nicely, and at the same time planting can be pushed on vigorously. During the month the produce reaped was Plantains 727 lbs., Sweet Potatoes 292 lbs., Sweet Cassava 647 lbs., Bananas 407 lbs., Garden Vegetables 259 lbs., Pumpkins 20 lbs. From the cattle farm 469 pints of milk were received and 4 pigs were killed giving altogether 336 lbs. of pork. One fowl (2½ lbs. cleaned) and 105 eggs were brought in.

The supply of cattle for slaughtering purposes was ample and of first rate quality, 13 heads were killed yielding 2,779 lbs. of beef, these cost \$254, which deducting the value of the hide makes the price of beef eight and six-tenths cents per lbs.

The stock has been increased in May by the birth of three goats and there have not been any deaths or losses.

The quantity of cordwood cut and delivered at the Asylum by the wood-cutter is $26\frac{1}{4}$ cords. The wood-cutter was several days off duty from illness.

THE WORK SHOPS.

CARPENTER.

In addition to the erection of the gallery at the Steward's quarters already mentioned the following is the amount of work done in this department. There have been made of Coffins 23, Baker's peels 2, Door frames 2, Handles for various implements 15 and repairs of different kinds have been executed in the buildings, in 28 instances.

PAINTER.

In the various works upon which the painters have been employed they have painted with two coats 388 square yards of wall, 26 coffins, 33 bedsteads, 10 benches, 4 tables and 4 commodes. There has been stencilled 150 lineal yards of dado in ward No. 4. The men were occupied for some days in scraping whitewash from the walls. Besides this 17 panes of glass have been put in by the painter and $13\frac{1}{2}$ pieces of paper have been hung.

TAILOR.

The record of work turned out in this shop in May is of patient's trousers 3 pairs, jumpers 81, jackets 69, of attendant's jackets 8, pairs trousers 6. There were repaired 603 articles.

SHOEMAKER.

The patient who works alone in this shop has made 2 pairs leather boots, 2 pairs of leather shoes and one pair canvass slippers.

BAKERY.

There was baked in May 9,170 lbs. of bread, to make this amount there has been used 36 barrels of flour.

PRINTING OFFICE.

There is in preparation here a form of prayer for use in the Asylum, which will form when completed a book of about 24

pages, this owing to the size of the press, has to be printed in small sheets, of these sufficient have been finished to extend to 16 pages. In addition to this 9 different forms including the Journal and a new post mortem book have been printed of which 1034 impressions have been taken. Five books have been bound.

LAUNDRY.

The supply of water to the Asylum has been kept up fairly well during May. The number of different articles washed this month is 7909 and 1064 were starched and ironed.

SEWING ROOM.

The sempstresses in the Asylum made in May, pillow ticks 4, pillow cases 37, men's night shirts 49, day shirts 4, flannel singlets 34, cotton singlets 29, flannel jackets 40, pairs drawers 8, cap covers 15, women's bed gowns 47, skirts 18, petticoats 12, chemises 18, flannel gowns 10, in all 325 articles and they did all the repairs required by the women's clothing.

WORK ROOM.

There were prepared by the women engaged here 115¼ lbs. of chocolate, 21 gallons of cocoanut oil and 21 lbs. of coir in addition to the usual amount of coffee and curry powder.

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR MAY, 1881.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	219 61	For purchase of plantains	\$	71 58
Received for sundries sold		93 17	" " baker's flour &c.		230 96
" coconut oil sold		14 40	" " sundry implements and articles of furniture &c.		230 95
" printing done		5 25	" " printed texts		3 36
" fines stoppages &c.		17 33	" " coconuts		1 80
" Hospital account		257 11	" " tiles		4 00
" Alms House account		155 15	" repairing clocks		2 00
			" hire of hearse		6 00
			" printing and stationary		109 54
			" gratuities to patients on discharge		6 00
			" band (one month)		24 50
			" shoeing mules (one month)		4 00
			" bricklayer's work		3 00
			" cooper's work		4 48
			" sums paid under one dollar		13 90
			Balance cash in hand		45 95
	\$	762 02		\$	762 02

No. 5

THE ASYLUM JOURNAL
FOR JUNE 1881.

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
1ST JULY, 1881.
—

LOCAL HYGIENE.

II.

With one disadvantage but that unfortunately of such importance as in the estimation of many to outweigh many advantages, the air breathed by the inhabitants of British Guiana is of such purity as might well rouse the envy of dwellers in England, more especially of those who are forced to reside in the mining and factory districts, or in the large cities. In this country the atmosphere is free from gross impurities, the sky is not darkened by floating particles of soot or the air charged with noxious fumes from manufactories. There is no necessity here to legislate against the production of smoke or suggest elaborated plans for the prevention of suffocating fogs. In the household fires used only for cooking, and few in number are burnt wood or charcoal whilst the sugar and other factories are not sufficiently numerous and are too widely scattered to produce any appreciable effect upon the atmosphere at large. Only in a few places, such as the confined and filthy yards of the towns are the emanations resulting from human habitation powerful enough to withstand the purifying effects of air put in motion by the fresh sea breeze which blows so steadily here. As already hinted there is one drawback to this otherwise pleasing state of affairs which detracts immensely from it, the air, is the medium by which miasma is conveyed and this miasma finding a suitable nidus gives rise to intermittent and the other endemic fevers of the

colony which though not as a rule dangerous in their immediate effects are troublesome enough. Of the serious secondary results dependent on them some notice has already been taken in the Journal. Whatever theory as to the composition or form of the poison we adopt, whether we believe that it is a chemical compound, or that the mischief lies hid in the minute germs of a micro-organism, or even that our familiar plague the mosquito diffuses the subtle cause in its blood-sucking visits, in either case, the air is the path through which the deleterious matter reaches us. There are only two points in the Asylum experience which are thought in this connection to be worth of notice. The first is the further exemplification given of a fact which is already well known in the history of malaria, and that is the great danger arising from the diffusion of the poison when an extent of ground dries up after being covered by brackish water such as is found in the lower reaches of tidal rivers. Immediately to the windward of the Asylum flows the River Canje and on the bank nearest to the institution, land has been gradually formed by the silt deposited there. There is now, from this action, a flat of a good many acres in extent which is only covered with water at high spring tides. Within 3 or 4 days after the occurrence of high springs there are invariably cases of intermittent amongst the inmates of the Asylum. The number varies and apparently this variation has some connection with the amount of ground submerged. It may be mentioned that the reclamation of this land is about to be undertaken and when it is brought into cultivation it may be expected that there will be less fever in the Asylum. The second point to be mentioned is in connection with the generally received belief that sleeping in an apartment well raised from the ground is a protection against malarious poisoning and the higher the room the greater the protection. There is one dormitory in the Asylum which is much higher than any of the others and whilst it is observed that patients sleeping in this ward do not suffer quite so much from fever as some of the others do, still the protection is not so great as might have been anticipated. As to the preservative effects of trees and other vegetation nothing bearing upon this point has been noticed with sufficient exactitude to be worthy of mention. The experience of the Asylum teaches that the most reliable protection against the evil effects of malaria is obtained by a close attention to personal hygiene. Any one who can have a full supply of good

nourishing food, who keeps regular hours, who takes sufficient exercise in the open air and above all who indulges only in the greatest moderation, or not all, in any form of alcoholic beverage, will not be likely to suffer very severely from colony fever.

One of the most prolific causes of air contamination in inhabited places is the effluvia arising from excremental matter, this will be noticed when the question of sewage removal with which it is so closely connected comes to be dealt with.

There is here an ample supply of pure air to be at all times obtained out of doors, but it must be borne in mind that in order to preserve health air equally pure must reach the dwellings of the people and more especially their sleeping apartments and that in quantities sufficient for their requirements. Air which has been once breathed or is loaded with the exhalations from human beings becomes a deadly poison and in order to prevent this a supply of at least 3000 cubic feet of pure air for each individual is required which can only be obtained by free ventilation. What has to be said on ventilation and the dangers of overcrowding must for the want of room be postponed to another number of the Journal.

INSANITY WITH BRIGHT'S DISEASE. CASE I.

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In text books on insanity it is stated that disease of the kidneys is not a common accompaniment of mental disease. This no doubt is the case as far as European countries are concerned but in this colony as has already been shown in the Journal, Bright's disease exists in a majority of the inmates of the Asylum. The question of interest to alienist physicians is the mode in which the disease of the kidneys influences the mental symptoms, if it does so at all. As a first step towards elucidating this connection it is proposed to put on record as opportunity offers notes of cases in which mental disease and granular degeneration of the kidneys were co-existent. The list of deaths this month includes one in a case of Bright's disease which occurred from an immediate cause common enough in this affection, namely apoplexy from a rupture of a cerebral blood-vessel.

The delusive ideas manifested by the patient during the progress of the disease were evidently to a great extent originated and directed by the uncomfortable or painful feelings dependent

upon changes in the cerebral circulation and the abdominal organs. A.B. female aged 50 a widow with three children a light coloured creole of British Guiana was admitted a patient of the Asylum, on the 29th July 1879. There was no history of her case sent with her and she was never in a condition to give one. The only information supplied was that she was quarrelsome, violent and destroyed her clothing. Her habits were said to be intemperate. When admitted here she was excitable and irritable incoherent and rambling in her speech, saying a few words and then breaking off with a silly giggle. Her memory was defective and she had a vacant look. She had occasionally fits of crying when as she said she was thinking about her children. She complained of her head being on fire or sometimes that it was being taken off, this she said the other patients did, she also accused them of tearing out her entrails. She also showed an erotic tendency whenever any of the opposite sex were present. She was pale and anaemic looking and had an ulcer on the sole of her right foot for which she was under treatment in the Infirmary Ward for some time. Her excitability decreased after she had been a patient for a few months and her general condition improved under tonics and good food but her mental powers remained as before. She was able to sew a little during the last year of her life. The morning before she died she said she felt very queer in her head and she was certain the Doctor had taken it off and put it on afresh. The same night when visited by the night watch she said she had some pain in her head but did not seem to be very ill, but when next looked at she was found to be dead. Her death took place on the morning of the 6th of June, 1851. At the autopsy made 6 hours after death, on opening the head the brain was seen to be covered with a freshly effused clot of blood which lay over the upper surface of the cerebellum round the pons varolii and medulla oblongata extending some way into the spinal canal, it also was thickly laid over the under and inner surface of the frontal lobes of both hemispheres and more thinly over the upper and outer surfaces. From the division of the blood vessels in removing the brain the place of rupture was not discovered, but the basilar artery was seen to be thickened and dilated irregularly, giving it a sacculated appearance. The brain substance was normal in consistence and apparently so in character. The brain weighed 2 lb. 5¾ ozs. The heart weighed 9¼ ozs., and there was concentric hypertrophy of the left ventricle. The lungs were

healthy. The spleen was somewhat enlarged and softened and the liver was light coloured soft and friable. The right kidney weighed $3\frac{3}{4}$ ounces and was completely changed, the left weighed $3\frac{1}{4}$ ounces, was wasted and contained small cysts. The right kidney when divided presented an appearance too common here, there being scarcely a trace of pyramids, calices or pelvic cavity visible, nothing but an even surface of light coloured granular looking tissue. In this case it is difficult to believe that the connection between the renal affection and the head symptoms was accidental, it is more likely that the capillary change which accompanied the former was the immediate cause of the cerebral excitement and we have therefore a case of insanity arising directly from Bright's disease and remotely from intemperance.

Staff.

It is a matter for regret that the expression of satisfaction at the general conduct of the attendants given in last month's Journal cannot be now repeated. From one cause and another many changes amongst them have been rendered necessary. During the month of June a female attendant has been prosecuted for unlawful possession of some of the Asylum property. The circumstances were these, a few yards of cloth which was being made up into garments in the Sewing Room was missed and could not be traced. One attendant was suspected and watched, the next Monday evening after the early dance this woman made a pretext to go into one of the day-rooms and on coming out to leave the Asylum was seen by the Matron to have a bundle concealed under her shawl. This was opened and found to contain some articles of clothing brought into the Asylum to be washed there surreptitiously and amongst them was folded up a new cotton singlet belonging to the institution and some biscuits part of the extra allowance given to the working patients. She was charged with the offence before the Magistrate Mr. Plummer and sentenced to two months imprisonment with hard labour. Besides this a male attendant was discharged for attempting to purloin a fellow attendant's ration, having been found with a loaf of bread concealed under his jacket but not having left the mess room. Another employed on the farm positively declined to work with his own hands although specially engaged to do so and had to leave the service on this account. A male attendant was dismissed for gross carelessness

in supervising his patients proved by his allowing a patient, known to have delusions which cause him to be dangerous to individuals against whom he has an imaginary grievance, to have for some time in his possession a brick which he took the first opportunity he had of throwing at the Assistant Medical Superintendent against whom at present he has an insane grudge. Luckily it did not strike that officer, two years ago the man made a similar attack on the Medical Superintendent who at that time was the special object of his hatred. His evil designs were then frustrated by the activity of an attendant. Another male attendant had to be discharged for absence without leave, and subsequent insubordinate conduct, whilst on the first of the month two male attendants left the service one at the end of his period of probation not being confirmed, the other simply absenting himself without explanation. The record of this month's changes has thus been given in detail not as possessing any special features for unfortunately many worse months can be found in the history of the Asylum but as exemplifying some of the difficulties of management of such an institution in this colony. In English Asylums although there may arise similar derelictions of duty it is only at intervals and they are not as here of weekly or sometimes of daily occurrence. The dislike of the labouring classes generally, to regular and steady employment, the popular notion that government work is synonymous with perfunctory work and chiefly means drawing so much pay, the absence of any pride in the proper performance of their duty, and the consequent necessity for resorting to the worst means of promoting labour namely punishment, the habits of pilfering so engrained in a people to whom the goal has no terror as it does not carry in its train loss of status or employment and in whose moral code the proposition that theft is perfectly legitimate when there is want holds a high place, all these give rise to special obstacles in the maintenance of steady discipline. One great redeeming feature in the character of the attendants must be mentioned and that is the complete absence of anything like deliberate harshness or cruelty to the patients, instances of such faults being almost unknown. But in the management of the Asylum one difficulty that in the end has proven insurmountable is in obtaining men sufficiently trustworthy to hold the place of subordinate officers, and as a consequence there is now no male head attendant, the attendants in charge of each

ward all the different artizans and farmer attendants, taking their instructions directly from the Medical Officers and being responsible to them.

To fill the vacancies caused by the changes just mentioned as well as that of shoemaker attendant which had not been filled up for some time the following appointments were made: First class attendants (male) E. Moses. Second class attendants (male) Frederick George, Aaron Nelson, I. E. Lowe and Timothy Albert. (Female) Maria Thompson and L. Beaton. There are a very large number of applicants for any vacancy which is made as an ordinary attendant.

Religious services.

In connection with these it may be stated that the special form of prayer which was noticed in last month's Journal as in preparation has been completed. The Revd. F.W.T. Elliott kindly undertook its arrangement and it was submitted to the Lord Bishop of the Diocese for his approval. This His Lordship at once signified through the Rural Dean of Berbice the Revd. F.W. Austin and in doing so referred to the work in the following gratifying and sympathetic manner he said: "Please thank Doctor Grieve for this additional effort to soothe the minds of the unfortunate people placed under his kind charge. Should a gleam of light at any time pass through the minds of those for whose benefit the form has been put together, the sympathy so happily expressed through prayer and praise can hardly fail to touch a chord in their hearts." The form will be used for the first time at the services on Sunday the 3rd July.

During the month of June services were held regularly on each Sunday being conducted on two occasions by the Revd. J. Rannie and on the other two by the Revd. F.W.T. Elliott. The average attendance at them was of males 122 of females 61 a total of 183.

Amusements.

The fortnightly dances one of which fell on the last day of the month have been held on three occasions in June and have as usual been much enjoyed by the patients. There have also been continued the early dances on the Monday evenings and the band has on the same day played during the afternoon in the grounds of the Asylum. The attendance of patients at the dances has been 123 men 61 women in all 184.

Accidents.

There have occurred two accidents during the month, the first was from a patient on the night of the 6th suddenly without warning or provocation springing at another who was passing her bed and biting her on the ear taking a small piece off. First class attendant Bossinga had a finger rather severely cut whilst trying to prevent one patient injuring another with a knife during a quarrel which had sprung up between them at the dinner table the patient who injured him was an epileptic and the excitement under which he suffered came on suddenly.

Improvements.

The decoration of the East Block dining room has been completed and the dormitory of female Ward No. 5 has been repainted and decorated in the style lately adopted. The dormitory of Ward No. 6 is now undergoing the same process.

Alterations have been made in the stabling to provide additional accommodation which was needed.

Reports.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st June	215	124	339
Admitted in June	8	1	9
Died in June	1	3	4
Discharged in June	1	0	1
Remaining on the 30th of June	221	122	343

There were in the Asylum on the 30th 4 patients more than the 1st, a continued rise over any previous numbers. There are not more than ten beds available in the Asylum which at the present rate of increase will not be sufficient for more than three months.

Of the patients admitted five men and one woman came from Demerara and three men from Berbice. Their nationality was as follows:

Natives of India	7
Do of Barbadoes	1
Do of British Guiana	1

being of immigrants 8 and creoles 1.

The man who was discharged was sent out well after six months residence in the Asylum. He had suffered from mania the result of use of ganje.

The causes of death in the four patients who died were:

Apoplexy with Bright's disease	1
Bright's disease and cirrhosis of liver	1
Bright's disease	2

They had been resident in the Asylum 2 years, 5 months, 4 months, and 3 months respectively.

The deaths were about the average but as is seen were not due to any zymotic disease, and the general health of the Asylum continues exceptionally good.

NUMBER OF PATIENTS EMPLOYED.

The number of patients who engaged in the different industries of the Asylum in June was on the male side 175, of these there worked at the various trades 34, on the farm 80, in work requiring only unskilled labour 30 and in household work 31, of the 45 who did nothing 34 were unable to do so from mental or bodily infirmities, whilst 11 were able to do so but refused. On the female side the Sewing Room employed 24, the Laundry 25, in making chocolate oil &c. 22 were engaged, and 16 assisted in the household work giving a total of 87. Twenty-one were unable to work and thirteen unwilling.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES OF PATIENTS WORKING &c.

	M.	F.	Total
Daily average in Asylum	219.8	121.9	342.7
Percentage employed	79.9	71.3	76.3
Percentage confined to bed	2.3	1.6	2.1
Percentage attending amusements	56.4	50.0	54.0
Percentage attending Church	53.7	50.4	53.5

THE FARM.

Another month of propitious weather has allowed the replanting of the provision grounds to be finished and now every inch of land in the possession of the Asylum at Fort Canje is covered with growing crops. The work necessary to prepare for cultivation the flat beside the Canje will be begun at once and if

successful will be the means of giving a welcome addition to the farm as well as of improving the sanitary condition of the Asylum. As the following statement shows there has also been an increase of returns. There has been received of plantains 925 lbs., of sweet potatoes 903 lbs., of sweet cassava 1408 lbs., of bananas 262 lbs., of garden vegetables 372 lbs., and 88 coconuts. From old Fort farm 470 pints of milk have been brought in, six pigs have been killed giving 487 lbs. of pork. Four pounds of fowls (cleaned), and 161 eggs have also been received.

Cattle for killing of good quality have been easily obtained, 14 heads were killed which gave 2913 lbs. of beef. The cattle cost \$278.50, allowing for the value of the hides &c. this makes the price of beef 8½ cents per pound.

The live stock has been increased by the birth of 9 pigs, 1 sheep, and 1 goat, besides the animals killed, 1 calf and 1 goat have been lost by death.

The quantity of firewood brought to the Asylum by the wood-cutter and his gang was 32½ cords.

THE WORK SHOPS.

CARPENTER.

The carpenter and his men have been employed during the month on the alterations already mentioned as having been made in the stable. Besides this a mule cart was thoroughly repaired, and in the shop 18 coffins, 4 bedsteads, 2 pairs of crutches and 3 trestles were made. The different small repairs of the buildings and furniture amounted to 49.

PAINTER.

In repainting the wards upon which the men have been engaged this month there were covered 584 square yards. In the shop the following articles have been painted 18 coffins, 23 bedsteads, 2 doors, 72 tubs, 4 tables, 1 cart, this was also lettered, 9 benches, 1 chair, 7 cans, 2 commodes. There were stencilled 21 lineal yards and 8 panes of glass were put in.

TAILOR.

There is now a difficulty in finding employment for the men working in this shop, there is on hand a large stock of clothing for the Asylum, so that if they are to be kept fully employed work

from without the institution will have to be found for them. There were made in June of patient's trousers 87 pairs, of jackets 18, of jumpers 33, of attendant's trousers 9 pairs, of attendant's jackets 7, of bed sacks 14 and of pillow sacks 6. The articles repaired were 575.

SHOEMAKER.

The new attendant did not take charge until the middle of the month. The work done amounts to 4 pairs of boots, 2 pairs leather shoes and 16 pairs canvass slippers made. Articles repaired 12.

BAKERY.

The amount of bread baked was 9218 lbs. and to make this 35 barrels of flour were used, this gives a yield of 263 lbs. per barrel.

PRINTING OFFICE.

A hand ruling machine has been added to this office which does its work very well. Besides finishing the prayer book and printing the Journal, 2620 impressions of 12 different forms have been struck off, and 720 cards printed. There have been ruled 1456 forms and 16 books have been stitched.

LAUNDRY.

The work here has been kept back by the irregular supply of water there was none obtainable from New Amsterdam for a whole week in the latter part of the month. This is a cause of great inconvenience in many ways to the Asylum and no intimation of any kind is given either as to the cause of the stoppage or the likelihood of its continuation. There were washed in the Asylum 9069 different articles and 1146 were starched and ironed.

SEWING ROOM.

The activity here is still kept up but from a similar cause to that mentioned in connection with the tailor, it is feared that difficulty may arise in getting a full supply of work. There were made the following articles, pillow cases 73, bed ticks 39, pillow ticks 8, sheets hemmed 205, men's night shirts 19, day shirts 18, cotton singlets 55, flannel singlets 20, men's drawers 12, men's trousers 27, cap covers 16, women's print skirts 32, wincey skirts 64, print dresses 7, chemises 2, petticoats 3, in all 604, besides the mending of the female clothing.

WORK ROOM.

There is a difficulty in connection with this as well as in the other kinds of work in finding suitable employment for some of the women who are not fitted either to sew or work in the Laundry. Agricultural labour was tried but did not answer owing to the number of men moving about in every part of the grounds. The women have made 145½ lbs. chocolate, 11 gallons cocoanut oil and have cleaned 14½ lbs. of coir, besides preparing the coffee and curry powder.

ABSTRACT CASH ACCOUNT INDUSTRIAL FUND, FOR JUNE, 1881.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	45 95	For purchase of plantains	\$	57 76
Received for sundries sold		106 42	" " sundry implements and articles of furniture &c.	368	45
" " cocoanut oil sold		9 60	" repairing clocks	2	00
" " printing done		1 20	" band (one month)	18	50
" " fines stoppages &c.		7 49	" shoeing mules (one month)	4	00
" " Hospital account		248 40	" cooper's work	4	24
" " Alms House account		147 47	" sums paid under one dollar	9	30
" " Out Door funerals		20 00	Balance cash in hand	129	28
" " Prison Do		9 00			
	\$	595 53		\$	595 53

No. 6

THE ASYLUM JOURNAL
FOR JULY 1881.

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
1ST AUGUST, 1881.
—

LOCAL HYGIENE.

III.

Fresh air to the amount of three thousand cubic feet per hour being required for each individual the practical question arises how is this supply to be obtained. This must be had so that the products of respiration may be rapidly and effectually removed, especially from sleeping apartments and the air of the room kept in such a state of purity as is absolutely necessary for the maintenance of health. The difficulties which beset the question of ventilation are happily much fewer here than in colder climates. In these at seasons in which the temperature is low the outer air cannot be admitted with safety in large quantities and directly on account of the cold. In this colony where the thermometer usually stands over 85 degrees Fahrenheit and very rarely even in the night time falls below 75 degrees there is no risk in admitting air at all hours and in any quantity. The steady trade winds blowing from one direction make the obtainment of effectual ventilation by perflation an easy task.

The plan adopted in the Asylum has been to have on each side of all the dormitories a large extent of fixed jalousies or louvered apertures with the spaces so arranged as to prevent as far as possible the ingress of rain but sufficiently open to allow a constant current of air to enter and to flow through the rooms at all levels. These openings are made so that they cannot be closed as they undoubtedly would be if it were possible to do so, for

the people if left to themselves, have no objection to sweltering in an oven like and fetid atmosphere indeed they rather prefer it. This preference is in accordance with the local prejudice against fresh air induced by an abnormal dread of the dangers arising from exposure to draughts. With the temperature of the air as high as it is here the risk attending its admission even in a direct draught is infinitesimal except the current should be sent directly upon anyone whose clothing is from some cause damp. On the other hand the evils which abundantly flow from breathing contaminated air cannot be exaggerated in their importance.

One fact may be noted as showing the soothing and balmy nature of the atmosphere and that is the marked absence of cough as a symptom in chest affections a visit to sick wardens in the colony brings home this fact in a striking manner to any one accustomed to the sounds of English hospital life. The mode now described of procuring a thorough circulation of fresh air has been followed in the Asylum for several years past and the results have been most striking and satisfactory. Phthisis to which in former periods a considerable proportion of the patients fell victims has nearly disappeared, only one case having arisen in the institution for the last two years, though a few deaths have been ascribed to it which occurred in cases in which the person had been admitted to the Asylum whilst suffering from the disease. Chest affections so common in English Asylums are seldom seen and when as sometimes though rarely it happens that an attack of pneumonia comes on it is as a complication of intermittent fever. Bronchitis is never met with. Although improvement in the diet and in the various comforts of the patients may have had some share in reducing the amount of phthisis, undoubtedly the chief factor in this result has been free ventilation. The history of the complaint in the colony at large supports this view, amongst the black population consumption is a disease of comparatively recent origin and its increase has accompanied an apparent improvement in the condition of the dwellings of the labouring classes. Their huts through which the winds of heaven freely blew and which in consequence though packed full could scarcely be overcrowded have been replaced by wooden houses which when closed at night are boxes with scarce a chink left to admit a breath of air, and which are used to lodge numbers limited only by the extent of floor room for sleeping accommodation. Thus is consumption made and

thus is its increase guaranteed. The existing freedom from chest diseases has been mentioned to show that as far at least as the Asylum is concerned no ill effects have followed the free admission of air currents. It may be noted that rheumatism is here as rare as bronchitis. Idiopathic bowel affections have also become very rare diseases but this may in some measure be owing to causes which will receive notice when the question of excremental removal comes under examination.

The total absence from the institution for some years of epidemic complaints is believed to be in great part due to the attention given to the subject now under discussion, overcrowding which is only another name for a deficient supply of air is a most powerful auxiliary to the spread of zymotic disease. Even that dreaded scourge of West Indies yellow fever may as experience has shown be deprived of much of its power by attention to cleanliness combined with free ventilation.

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In connection with the subject of hygiene it may be advisable at the present moment, when yellow fever though not epidemic in the colony at all events threatens to become so, to draw attention to the admirable epitome of the epidemiology of the disease and the preventive measures to be adopted against it which is contained in the well known and classical work on hygiene of the late Professor Parkes of Netley. The part which relates to yellow fever in common with the rest of the work is characterized by a complete scientific knowledge of the subject under discussion and by careful induction from ascertained facts so temperately and thoughtfully expressed as almost of necessity to carry conviction to reflecting minds. The most cogent proof of the benefit to be derived from carrying out the principles there inculcated is shown by the greater freedom from the disease possessed by the garrisons in the West Indies in late years compared with former times. How different has been the history of the present epidemic in its progress through the West Indies from that of others which raged within the memory of many but before the Crimean war the turning point in military sanitary reform. Before that time if there was any difference between the soldier and civilians the advantage lay with the latter, now the opposite is the case. If the information relating to epidemic diseases contained in the work referred to and others of the same

class was more widely diffused there would be less tendency than now exists to the display of frantic terror at the outbreak of yellow fever. It would then be seen that its prevalence was a consequence of the neglect of the teachings of sanitary science and not dependent on unknown and occult influences. The mysterious to many minds becomes the dreadful and in this as in other cases ignorance is the parent of panic. Under the circumstances a reprint of extracts of the kind might just now be usefully published and the knowledge thus given would tend to allay unnecessary fears and prevent mischievous action.

In the latest edition of Niemeyer's Practical Medicine (American edition) the conclusions reached by the National Board of Health of the United States in 1879 when yellow fever prevailed in New Orleans, are given. The following extract states so concisely the means of preventing the spread of the disease when it is once introduced that it is thought that it may advantageously be reproduced here. They suggest that "every suspicious case of sickness should be at once isolated and every possible precaution taken to prevent infection by providing attendants who have had the disease and thorough disinfection of all discharges from the sick. If the disease proves to be yellow fever all articles of clothing and bedding used about the sick should be burned the house should be vacated and every room tightly closed and fumigated with burning sulphur". This is one of the most recent official and authoritative utterances on the subject.

INTEMPERANCE AND INSANITY.

That intemperance in the use of alcohol holds a leading place amongst the causes of insanity is acknowledged by every one who has studied the subject, although there may be found differences of opinion as to the relative importance to be assigned to it. Insanity does not depend entirely upon an immediate and exciting or even a personal cause, in no form of disease is hereditary predisposition of greater weight. In all kinds of illness this predisposition has to be taken into account and very often its action seems to be overlooked. Even leading text books on medicine both in dealing with etiology and treatment speak too much of diseases as entities, ignoring altogether or passing lightly over the so called idiosyncrasies of the patients and many practitioners of medicine are liable to err in the same way.

Proclivity to any disease is influenced by all the previous conditions of life not only of the patient but of his ancestors. Alienists as a body cannot be justly accused of overlooking this fact for they with scarce an exception admit the extreme importance of the insane neurosis. It is held that a man is not likely to go mad unless he possesses this, although every man who succeeds to its inheritance must not of necessity become insane, for by taking heed to his conduct he may avoid the dangers that beset his path. Insanity as has been well said by Maudsley is but a step and that one of the last in the progress of the "evolution of degeneration" of which too often over indulgence in drink forms the starting point. The insane neurosis is a degeneration which produced originally by vice, may also conduce to the display of vicious habits in its possessor. Even in the immediate production of madness intellectual or emotional excitement, over work, or the worries incidental to high civilization and the other so called moral agents are but secondary and subordinate to the physical causes. Chief amongst the latter is indulgence in vicious habits, especially in drunkenness. In this way only can be explained the large amount of insanity existing in this colony, which is believed if the truth were known, to exceed that in England. It is an event of the rarest occurrence here to find a patient who has become insane from moral causes. An exception may be taken to this statement in reference to one class of the community the East Indian immigrants who have a large proportion of insane amongst them even shortly after their arrival which by some may be ascribed to the grief caused by expatriation or home sickness. Another explanation and that more likely to be true, has already been hinted at in the Journal namely that many either already insane or on the brink of insanity find their way to the colony. From the great difficulty there is in obtaining a personal let alone a hereditary history of the patients who come for treatment to the Asylum, it is impossible to give statistics relative to causation which would possess any value above that of the expression of opinion of those who are familiar with the cases. In the medical certificates upon which the patients are admitted the question is put, Is the patient of temperate or intemperate habits? and in a certain number of instances the information is supplied although in a majority the answer is, "not known." Allowing for this imperfection, the results of an examination of the returns for the

last five years are in some respects of value. During that period 505 patients were admitted to the Asylum 309 males and 196 females, in the case of the males the enquiry as to temperance was answered in 288 instances, of these 73 were said to be temperate 62 intemperate and of 143 their habits were not known. Amongst the females answers were got concerning 169 and of these 77 were said to be temperate 19 intemperate and 73 of unknown habits. It will thus be seen that of the men whose habits were ascertained 45 per cent were drunkards, and there is every reason to think that the same proportion holds good with regard to the large number whose habits were unknown. The tendency in making these returns is to underestimate intemperance, this subsequent acquaintance with the patients demonstrates. It may therefore be assumed that nearly one half of the men who come to the Asylum have been previously intemperate to such a degree as to be known as drunkards. As was to be expected the same addiction to this vice is not found amongst the women the percentage of drunkards there being about 20 but here subsequent acquaintance gives still more reason to doubt the correctness of the estimate. The amount of drunkenness thus shown to exist amongst the admissions to the Asylum must be explained either by the assumption that the same proportion rules in the population of the colony generally or that this vice is a proximate cause of insanity or a consequence of the insane tendency. It is difficult to say that the first hypothesis is not the correct one for the extent to which excess in drinking prevails amongst the classes of the population from which the inmates of the Asylum are drawn can only be fitly described as enormous. Without intellectual resources, with no mode of enjoyment known to them but what is connected with sensual indulgence, can it be wondered at that drinking with most is not looked upon as a vice but what they themselves term it, "sport or amusement" and one that they revel in whenever their means permit it. Whatever the nature of the connection between drink and insanity may be, their union cannot be doubted and addiction to its intemperate use now and for generations past goes a great way in explaining the present large amount of madness. It must also be remembered that this is only one in several forms of intemperance widely prevalent here, for amongst the East Indians the use of Indian hemp is common nay almost universal, and opium is smoked. Over indulgence in the former produces

its own special kind of insanity which will receive notice at a future time. Experience in British Guiana teaches a lesson which cannot be too often repeated that the dangers to the mind from intellectual culture and employment even in excess, are as nothing to those that arise in consequence of their absence and their replacement by the practice of the different forms of sensual vice. But by temperance in all things is mental health best preserved.

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RECEIVED with thanks. The Twenty-second Annual Report of the General Board of Commissioners in Lunacy for Scotland. The number of the Journal of Mental Science for July 1881. The Twenty-fifth Annual Report of the State Lunatic Asylum Northampton, Mass. U. S. of America. The Report of the Medical Superintendent of the Lunatic Asylum for Trinidad for 1880 &c., &c.

Staff.

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This month has been marked by an absence of serious offences committed by the attendants and consequently the changes amongst them have not been so numerous. The shoemaker attendant who was on probation left the service as he proved to be inefficient and one first class attendant and three second class left for a similar cause, one was discharged for irregularity of conduct, absence without leave. The following were appointed second class attendants on probation to fill the vacancies thus caused G. A. Fraser, J. Casper, H. E. Bone, R. P. Ned, F. Leach. The changes were all on the male side, there were none amongst the female attendants.

Religious services.

These were continued during the month with their accustomed regularity being conducted on two occasions by the Revd. J. Rannie and on three by the Revd. F.W.T. Elliott. The new form of prayer was used by Mr. Elliott when he officiated. The average number of patients attending was of men 137, women 62 in all 199.

Amusements.

Two fortnightly dances were held in July and the Monday evening practices went on as usual. The number attending the dances was of men 126 of women 61 a total of 187.

Each Sunday afternoon as many of the patients as can be trusted to do so, go out for a walk in the neighbourhood, in charge of the attendants. The number to whom this privilege is extended is usually about 60 men and 50 women.

Accidents.

The month passed without the occurrence of any accident. Although a large amount of freedom is given to the patients this fact does not seem to increase the liability to accidents in the Asylum.

Improvements.

The dormitory Ward No. 6, has had its redecoration completed and now looks as bright and cheerful as such an old building could be expected to do.

The scullery in connection with the male Dining Hall has also been fitted up, water laid on and the place is now in use.

A beginning has been made in reclaiming from the Canje the flat mentioned in last month's Journal, a trench has been partly dug round the first division of ground and an eighteen inch koker box put in. Already the water has been prevented over-flowing this part of the banks and the work will be pushed on steadily so as to keep it off entirely round the Asylum.

Reports.

— NUMBERS IN THE ASYLUM

	M.	F.	TOTAL
Remaining on the 1st July	221	122	343
Admitted in July	6	6	12
Died in July	0	1	1
Discharged in July	0	0	0
Remaining on the 31st of July	227	127	354

The increase in the number of patients during the month has been so great that all the beds reported vacant in last month's Journal are already filled. It has been possible by rearranging the beds to find accommodation for a few more, but the largest number that can be so provided for is only five. It will therefore be necessary in some way to obtain another dormitory on the male side to provide for the patients until the Hospital buildings are given over to the Asylum.

Of the patients admitted in July eight, four men and four women came from Demerara, a man and a woman from Berbice and a man and a woman from Essequibo. Their nationality was:

Natives of India	6
Do " British Guiana	3
Do " Surinam	1
Do " Madeira	1
Do " Barbadoes	1

or 9 immigrants to 3 natives of the colony.

One woman was a readmission her case illustrates one of the difficulties met in discharging patients. She was subject to recurrent mania and having had a long interval of good health at the earnest request of her son who faithfully promised to take good care of his mother, she was handed over to his charge. Within a year she returns to the Asylum in a very bad condition having found her way to the Alms House in Georgetown and then sent on here without any one knowing that she had ever been an inmate of this place before.

There have not been any patients discharged in July.

One death occurred in the month from acute hepatitis, in a woman who had been in the Asylum for a little over two months. During the course of her illness two days before her death she was delivered of a female child. The Asylum had therefore a birth in July. The girl who survived the mother was taken charge of and removed by her relatives.

The deaths were much below the average and the sanitary condition of the Asylum notwithstanding the season has been excellent.

NUMBER OF PATIENTS EMPLOYED.

The different kinds of work engaged in at the Asylum employed during the month of July 251 patients 177 men and 74 women as follows on the male side 33 at different kinds of trade 83 on the farm 30 in various forms of unskilled labour and 31 assisted in the wards of the 46 male patients who did not work 33 were unable to do so and 13 were able but refused. On the female side the Sewing Room occupied 22, the Laundry 26, making chocolate &c. 14, and 12 assisted in the wards, of the 49 women who did not work 20 were unable and 29 unwilling.

The number of women employed was smaller in July than in

previous months, this is owing to the difficulty found in getting a regular supply of cocoanuts, from which to make oil and coir. It will be necessary to find some alternative form of labour for the women inmates, this is a difficult task owing to the women of the colony being unaccustomed to any kind of handiwork except what is connected with agricultural pursuits.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES OF PATIENTS WORKING &c.

	M.	F.	Total
Daily average in Asylum	223.5	123	346.8
Percentage employed	79.3	60.1	72.5
Percentage confined to bed	1.1	2.4	1.6
Percentage attending amusements	56.5	49.5	54.0
Percentage attending Church	61.4	50.4	57.5

THE FARM.

The weather during the month has again been favourable for farming operations, so the cultivation has been fully kept up, the fields being replanted as the crop is reaped. The produce received has been plantains 961 lbs., sweet potatoes 238 lbs., sweet cassava 904 lbs, bananas 341 lbs., pumpkins 239 lbs., garden vegetables 290 lbs., and cocoanuts 27. From the cattle farm 454 pints of milk have been received, and eight pigs have been killed giving 518 lbs. of pork. There have also been brought in 6¼ lbs. cleaned fowl and 88 eggs.

Twelve heads of cattle were killed during the month which cost \$217.75 and yielded 2454 lbs. of beef. Deducting the value of the hides &c. this gives the cost of beef as eight and one tenth cents per lb. The live stock was increased during the month by the birth of one lamb and eighteen pigs whilst the loss by death was three goats and three sheep.

The quantity of firewood delivered at the Asylum was 31 cords.

THE WORK SHOPS.

CARPENTER.

The heavier part of the carpenter's labour has already been noticed under the head of improvements. The other work done in the shop has been to make bedsteads 1, coffins 19, trestles 4, shelves 3, benches 2, axe handles 1, and a koker box 13 feet long and 18 inches in diameter. The number of small repairs executed was 39.

PAINTER.

The workmen employed in this shop have in redecorating the wards painted in two coats 232 square yards of wall and whitewashed 304 square yards. There were painted besides this tables 2, commodes 2, tubs 21, chairs 2, coffins 13, bedsteads 27. A patient who works with the painter lettered 13 tubs for the Dining Hall, and painted in good style the British Guiana coat of arms in front of the platform of the amusement room, he also did 57 lineal yards of stencilling in ward No. 6.

TAILOR.

The work in this shop has not been pushed on vigorously for the reason given in the last Journal. The tailor attendant was absent from duty for a week on leave. There were made pairs of trousers 4, jackets 29, jumpers 4, attendant's uniform trousers 7, attendant's jackets 8. The articles repaired numbered 721.

SHOEMAKER.

There was an attendant in charge here for two-thirds of the month. There were made leather boots 3 pairs, leather shoes 4 pairs canvass slippers 12 pairs, and sundry repairs done.

BAKERY.

There were used here 36 barrels of flour producing 9567 lbs. of bread this gives an average yield of 265 lbs. of bread per barrel of flour.

PRINTING OFFICE.

The printer attendant was absent from duty for a few days from sickness, besides the Journal the following work was done in the office, 4963 impressions of 10 forms were taken, 40 cards printed, 8 books stitched, 1333 forms were ruled.

LAUNDRY.

The supply of water has been much more regularly given and kept up for a longer time each day. The articles washed numbered 12030 and 1325 were starched and ironed.

SEWING ROOM.

The following articles were made by the sempstresses in the Asylum men's night shirts 9, day shirts 49, pairs trousers 6, cotton

singlets 1, cap covers 8, coolie laps 12, flannel gowns 14, women's dresses 4, jackets 36, night gowns 45, wincey skirts 26, pillow cases 57, and attendants uniform dresses 7 in all 277. Beside this all the mending of the female side and the underclothing on the male side was done.

WORK ROOM.

For the reason already given there was not so much work as usual in this department. There were made 198 lbs. of chocolate and 1½ gallons of cocoanut oil and the curry powder and coffee used in the Asylum was prepared.

ABSTRACT CASH ACCOUNT INDUSTRIAL FUND, FOR JULY, 1881.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	129 28	For purchase of plantains	\$	73 00
Received for sundries sold		114 00	" " sundry implements and articles of furniture &c.		332 37
" cocoanut oil sold		6 72	" repairing clocks		2 00
" printing done		2 60	" band (one month)		19 00
" fines stoppages &c.		18 02	" shoeing mules (one month)		4 00
" Hospital account		241 44	" cooper's work		5 44
" Alms House account		146 37	" bricklayer's work		13 00
			" blacksmith's work		50 00
			" tinsmith's work		6 60
			" magazines, papers &c.		8 00
			" hire of hearse		4 00
			" sums paid under one dollar		10 48
			Balance cash in hand		130 54
	\$	658 43		\$	658 43

No. 7

THE ASYLUM JOURNAL
FOR AUGUST 1881.

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
1ST SEPTR. 1881.
—

LOCAL HYGIENE.

IV.

In order to preserve the purity of the air supplied to the dwellings of the people it is required that human exuviae should be removed from their neighbourhood. The putrefactive changes which these waste matters undergo give rise by their volatile products to the most dangerous kind of pollution to which the external air is liable. Therefore the early removal of all excremental matter and the maintenance of the most scrupulous cleanliness around inhabited houses must be enforced if health is to be preserved. The question of how this can be best done is one of the utmost importance and often owing to local conditions where numbers live together in towns, it is one solved only with great difficulty. In the fits of popular enthusiasm on sanitary subjects which arise at times induced by the dread of an existing or impending epidemic and unfortunately only then, the enforcement of cleanliness is looked upon at the one thing to be done and thereupon arises a vigorous upturning of various depositories of decaying filth. Privies, cess pools, and foul drains, are emptied of their unsavoury contents and this activity at such times does a great deal more harm than good. It should be always borne in mind that in these matters, prevention is not only better than cure, but in reality is the only cure. The fundamental rule on this subject upon the strict observance of which safety depends is

that excremental matter or organic refuse should never remain in or near a dwelling place long enough to undergo putrefactive change. This means in the tropics its removal within a very short period for here the process of putrefaction goes on with a rapidity scarcely conceivable to the inhabitants of more temperate climes. The local conditions in this colony render impossible the general application of the system of sewage removal by water. Destitute of a reliable high pressure water supply, and with scarcely any appreciable fall for the drains even the towns happily cannot adopt this plan. Happily because experience has shown that in a tropical country the existence of close sewers is fraught with extreme danger to the people. The example of Rio de Janeiro sufficiently proves this, in that town concurrently with the establishment of a system of sewers on the European model, there has been a marked increase in the prevalence of yellow fever which from being occasionally epidemic became for years endemic. If records of zymotic disease were only kept in these West Indian Colonies with sufficient care and accuracy as to be useful for epidemiological purposes it would doubtless be seen that the inhabitants of houses possessed of close drains are more liable to disease in epidemic periods than are those living in places destitute of that luxury. In the Asylum there is not a single close drain the surface and slop water is conveyed away into the trenches by surface drains which near the buildings are formed of brick. The simple pail system is the one followed in the closets both in connection with the day accommodation and the dormitories. The pails are made in the institution out of American beef barrels and are well tarred inside. These are emptied daily and the contents placed either round the roots of the growing plantains or in small pits dug in different parts of the grounds. The soil from the Colonial Hospital is also disposed of in the same way within the Asylum farm. This mode of excremental disposal has so far been successful, it has not created any nuisance and by it the wards have been kept thoroughly sweet and healthy. It has already been mentioned that diarrhoea which at one time was very prevalent is now unknown and so far the institution has been free from any other disease fairly traceable to filth. Besides this the ordure has proved very useful as a fertilizer on the farm and at the present time there are to be seen luxuriant plantain trees in full bearing on spots where they have stood for five years and the productiveness of the land generally,

has kept up to a fair standard for that period. At first dry earth was used in some of the closets but this was found to have the disadvantage of increasing the weight of the soil without reducing its offensiveness for the amount of liquid in the excrement made the whole into a stinking mud, besides this the dust from the earth formed a favourable breeding place for that insect pest the chigoe. The use of dry earth was therefore abandoned and reliance placed wholly upon very frequent removal of the contents of the pails and the cleanliness which is dependent upon a plentiful supply of soap and water. Here as in England the adoption of earth closets where accommodation is required for a large number of people, has not proved a success. If for any special reason it is wished to disinfect or deodorize the discharges as in the commodes of the infirmary wards finely powdered charcoal is had recourse to. On disinfectants such as carbolic acid and other strong smelling materials no reliance can be placed and they are never seen in the Asylum. Their own odour overpowers the smell which might otherwise give timely warning of uncleanness and in this way they prove a hindrance more than a help in the attempt to attain to sanitary purity. In any arrangements made for excremental removal the first consideration in connection with the plan to be adopted is, that it should possess the merit of simplicity. This is an advantage in all countries, but more especially here, for those of the so called systems that involve the use of any kind of special apparatus are foredoomed to failure when applied amongst a population such as ours. The golden rule in this matter is to put no trust in disinfection but to let all filth and refuse be removed daily for so alone can safety be obtained.

INSANITY FROM THE USE OF GANJE.

In the Lunatic Asylums of India are to be found many cases of insanity resulting from the use or abuse of bhang and other preparations of Indian hemp, the favourite intoxicant of the Hindoo. In this Colony the Indian immigrants who now form a very large proportion of the population preserve their fondness for the narcotic and many of them indulge in it to an extent which is only limited by their power of purchase. As might be expected disease of the brain dependent on Indian hemp is to be seen

very frequently in this Asylum. This class of mental affections possesses distinctive characters which are well marked although several different forms are included under it, varying as in alcoholism in accordance with the amount of the drug taken and the length of time the indulgence has lasted. Coining a word to denote the whole class on the model of alcoholism, it may be named cannabism. Of cannabism as seen in this place there are three kinds which may be looked upon as typical of the different stages of the disease, although cases combining some of the features of two of these forms or intermediate between them are to be met with. These typical forms will now be briefly described.

In the first the patient shortly after a bout of extra indulgence in ganje, but after the immediate effects of the drug have passed off is seized with a fit of excitement. He is extremely restless. Keeping constantly in motion evidently as a means of working off excess of cerebral energy. The mental condition is usually one of exaltation, the patient indulging in occasional fits of hilarity and when questioned expressing the feeling of *bien-etre* seen in his looks. Occasionally there are short periods of reaction in which he cries and complains of something, but his complaints refers to a grievance against others and he does not cry because of any unworthiness or wrong doing on his own part. There is always impatience of contradiction and this makes the patient very quarrelsome and ready to strike when interfered with. Delusions if present which is not often the case, are connected with visits from the deity or there is a belief in direct inspiration. Hallucinations of sight or the other special senses are absent. It must always be borne in mind that the mental symptoms as now described are those seen in an uneducated and unrefined class of Hindoos. The memory is good and questions are answered readily but the excitement of ideas leads to occasional incoherence, sleeplessness is not a marked symptom, although there is restlessness in the night time there is not a complete absence of sleep. The eyes are bright and glistening and whilst there is occasionally an injected conjunctiva there is not the sodden appearance of alcoholism. The tongue is clean and never tremulous nor is there tremulousness of the hands or any appreciable disturbance of the function, of the sensory motor portion of the nervous centres. The temperature of the body is normal, the pulse quiet and the appetite but slightly if at all impaired, indeed the bodily

functions are in general fairly performed. Sufferers from the disease of this type usually recover rapidly without medical treatment merely by being kept from the consumption of ganje. But the habit becomes too fixed to be easily eradicated and an attack of the kind with the consequent short detention in the Asylum is not as a rule sufficient to prevent a return to it on the discharge of the patient, who in consequence may again suffer in a similar manner or may have the disease in its more severe forms.

In the second typical form of cannabism, the exaltation is less marked, there is more incoherence and a much greater tendency to fits of depression without cause, the delusive notions if there are any are of grandeur or connected with exalted ideas. Occasionally there are hallucinations of hearing. The patients are very irritable and still more quarrelsome than in the first stage and often destroy their clothing. Although district anesthesia cannot be discovered the patient shows an abnormal indifference to pain when accidentally or as sometimes is the case self inflicted. The patient's habits are cleanly. The temperature of the body is not raised. There is still a marked absence of tremulousness or paralytic symptoms. The tongue keeps clean the appetite good but the sleeplessness and restlessness at night are more noticeable and there is less inclination to be in constant motion in the daytime. Recovery from this form is not so certain as from the first and takes place only after a residence in the Asylum of months or it may be years, whilst in some instances the patient passes into the last or chronic stage of the disease which is one of pure intellectual dementia. This may be described in a few words, it is a kind of premature second childhood in which the sufferer without ideas and with few wants passes a purely organic existence, which being free from suffering is doubtless not very unhappy even if destitute of much active enjoyment. This condition may be accounted for by the pathological changes being limited to the cerebral organs and to the freedom which this class of sufferers enjoy from the severe and painful affections of the abdominal viscera to which insane drunkards are liable.

Looking at the symptoms as they show themselves in the different stages of the complaint a very striking point to be noticed is that throughout they are such as might be expected to arise in the course of a disease whose seat was the higher brain

centres which are to be found on the surface of the cerebral convolutions or more especially in the controlling centres of the intellectual faculties. When the intoxication arising from Indian hemp is examined it is found to be accompanied by intellectual exaltation as shown by excessive hilarity and by a development of nervous energy which finds vent in rapid and excited motion whilst at the same time there is indifference to pain, this is markedly shown when the Malay dosed with bhang runs "a muck". The coolie appreciates this action and when he wants to nerve himself to some act of violence he too often resorts to ganje for a supply of the East Indian equivalent for Dutch courage as well as to drown reflection. There is no staggering and helplessness such as is seen in alcoholic intoxication and although there is plenty of quarrelsomeness there is little of stupid drunkenness. In the insanity which results from the abuse of the drug one can trace the sane features, we have the primary effect repeated somewhat too often passing into a stage of greater permanence than the usual fit of intoxication, the indulgence continued longer produces more persistent changes. Then too is seen an additional result in a time of reaction and depression after the extreme functional activity which had been created. Ultimately this exhausted condition becomes the permanent state if the previous excitement has been sufficiently prolonged to cause it and we have the demented stage of the disease. In this form of insanity more than in many others is evidenced the production of disease by direct action on the brain and not as may be the case in some forms of alcoholism in an intermediate way by deleterious effects on other organs.

If it be as supposed that the higher and controlling centres placed in the grey matter of the surface of the cerebral convolutions are the seat of the changes caused by Indian hemp, the fact of indifference to pain being exhibited, points to some inhibitory power possessed under excitation by these centres over sensation. However much it is to be regretted that Indian hemp or any other drug should be perverted from beneficial uses to the destruction of that noblest part of man his intellectual faculties still it cannot be denied that in a comparison between hemp and alcohol the advantage lies with the former for both in its immediate and remote effects it occasions less display of the ignoble side of human nature.

Official Visit.

On the last day of the month the Asylum received a visit from Mr. D. C. Cameron, Financial Representative for the County of Demerara an official visitor of the institution. He was accompanied by several gentlemen who with himself are members of the Commission of Inquiry into the administration of the Poor Laws, which at the time was sitting in New Amsterdam. After making a very careful inspection of the Asylum the following note was entered in the Official Visitors' Book: "Made my first visit to the Lunatic Asylum this day 31st August, 1881, and am very much impressed with the highly satisfactory condition of everything connected with the institution."

D. C. CAMERON
Financial Representative for the
County of Demerara

We entirely endorse the above
J. S. HILL,
G. A. FORSHAW,
F. J. WYATT,
Archdeacon of Demerara.
Members of Poor Law Commission.

Staff.

The changes amongst the attendants in the month of August have been of much the usual kind and number. On the first, a second class attendant (male) left at the end of his period of probation having been found to be unsuited for the kind of work required of him. During the month one of the same class, who acted as gate porter was discharged for direct disobedience of orders and general inefficiency, another who worked on the farm left under the same circumstances. A first class attendant (male) the attendant in charge of the Infirmary Ward although he had been for some years in the service had to be discharged for gross neglect of his duties and disobedient and insubordinate conduct. One female second class attendant had to be summarily discharged having been found asleep on the floor during the time she was on duty. To supply the vacancies thus caused. W. Pitman, R. Williams, A. Aaron and J. Johnson were appointed

second class attendants, (male.) Hannah Briggs second class attendant, female. The post of shoemaker attendant was vacant during the month.

Religious Services.

These have been held as usual regularly every Sunday morning, the duties having been taken on two occasions by the Revd. J. Rannie and on the other two by the Revd. F.W.T. Elliott. The numbers of patients attending were of men 133 of women 63 a total of 196.

Amusements.

At the two fortnightly dances which were held in the Asylum there were present a more than numerous gathering of visitors from without the Asylum. The presence of strangers at these dances adds much to the enjoyment of the patients who like to see anyone from the outside world and it is a gratification to the staff of the Asylum. The Monday evening practices were held weekly as usual on the evening of the 9th an exhibition of a magic lantern was given by Mr. Waby of Georgetown who was on a visit to Berbice. The patients of all nationalities thoroughly enjoyed the exhibition and all were very thankful to Mr. Waby for his kindness in taking so much trouble to please them. The patients attending the amusement have averaged of males 124 females 63 total 187.

Accidents.

Another month has passed without the occurrence of any accident.

Improvements.

The gang of shovelmen who work in the farm have been engaged during the month in finishing and strengthening the dam round the land that has been enclosed on the bank of the Canje. A new latrine has been put up in connection with the dormitory of Ward No. 2. Concrete foot paths have been made leading to the work shops and dwarf pillars built to carry the sills for the new dormitory to be enclosed under Ward No. 3 A.

The whole of the guttering has been overhauled and put into a state of good repair.

The repainting of the out side of the South Block has been partially accomplished.

Reports.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st August	227	127	354
Admitted in August	6	4	10
Died in August	3	2	5
Discharged in August	5	0	5
Remaining on the 31st of August	225	129	354

The numbers in the Asylum were the same at the end as at the beginning of the month the discharges and deaths exactly counterbalancing the admissions. Of the patients sent to this Asylum during the month there came from the County of Demerara 4 males and 1 female, from the County of Essequibo 2 males and 2 females, and from the County of Berbice 1 male and 1 female.

Their nationality was as follows.

Natives of India	7
Do " St Thomas	1 (white)
Do " Barbadoes	1 (cold.)
Do " Madeira	1
Do " British Guiana	1

being 10 immigrants to 1 native of the country. No readmissions. Five male patients were discharged all recovered and able to work. They had resided in the Asylum for the following periods one for 2 years and 9 months, two for 1½ years and two for 8 months. Three were East Indians and two natives of British Guiana.

There were 5 deaths in the Asylum caused as follows:

Bright's disease	2
Do do with cirrhosis of liver	1
Endocarditis and Bright's disease	1
Lardaceous disease and do do	1

As will be seen these were all the result, of chronic affections so that considering the season the sanitary condition of the Asylum continues good although the death rate is higher than the immediately preceding months. Of the patients who died one had resided for 11½ years in the Asylum, one for nearly five years, one for 3 years, one for 14 months and one for 4 months.

NUMBER OF PATIENTS EMPLOYED.

In the various industries of the Asylum there were engaged in August altogether 267 patients, 184 men and 83 women. Of the men there worked at different trades 44, at agricultural work 89, at various kinds of unskilled labour 29, and at household work 32. The male patients who did not work numbered 42, and of these 32, were unable to do so and 10 refused. Of the women employed there were engaged as sempstresses 21, as laundresses 29, there worked at making chocolate, cocoanut oil &c. 20 and at household work 13. There were 32 unable to work and 13 refused to do so a total of 43 unemployed. The difficulty of obtaining for some of the patients suitable employment still continues and it is feared is one which will not easily be overcome.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES OF PATIENTS WORKING &c.

	M.	F.	Total
Daily average in Asylum	225	126.9	351.9
Percentage employed	81.7	65.4	75.8
Percentage confined to bed	2.3	1.8	2.1
Percentage attending amusements	55.1	49.6	53.1
Percentage attending Church	59.5	49.8	55.8

THE FARM.

The weather still continues most favourable for farming operations and never did the growing provisions on it look more promising than at the present time. The quantity of produce received from the farm is more and the quality has been good. There has been some instances of theft from it, several bunches of plantains having been carried off. There were reaped of plantains 1988 lbs., of cassavas 2289 lbs., of pumpkins 85 lbs, of garden vegetables 169 lbs., and of cocoanuts 67. From Old Fort farm 410 pints of milk have been received and three pigs were killed yielding 201 lbs. of pork, of cleaned fowls 13¼ weight and 79 eggs. Eleven heads of cattle were killed during the month bought for \$222.49 and yielded 2189 lbs. of beef. Deducting the value of hides &c., this gives the cost of beef at nine and six-tenths cents per lb. The live stock was increased by the birth of 2 calves, 2 goats and 1 donkey whilst 1 calf died.

The quantity of firewood brought into the Asylum was 33 cords.

THE WORK SHOPS.

CARPENTER.

The work done in this shop has not come up to the usual average, as is too often the case in this colony, an attendant does his work fairly for a month or two and when the immediate pressure of necessity is off and he has in hand a few dollars as attendants here easily get, he ceases to take interest in his employment. This has happened with the carpenter attendant. Besides erecting the latrine in No. 2, there have been made in the shop, bedsteads 4, coffins 25, axe handle 1 and 46 different repairs of various kinds and extent done to the buildings and utensils.

PAINTER.

The amount of work done was 224 square yards covered with two coats of paint, 12 barrels, 1 bench, 2 closets, 3 cans, 1 door, 1 chair, 22 coffins and the hearse were also painted.

There were put in 18 panes of glass and various articles were lettered. The patient mentioned in the last Journal has continued decorating the Amusement Room having added a crown and Prince of Wales feathers with monograms to the colony arms. There was also some white washing and tarring done.

TAILOR.

In this department the men have not been fully employed because of the difficulty already mentioned of obtaining work for them. There were made of patient's trousers 41 pairs, of Jackets 24, of attendant's uniform trousers 8 pairs, of attendant's jackets 9, and caps 1. Articles numbering 362 were repaired.

SHOEMAKER.

There was no shoemaker attendant and the patient who usually worked in this shop refused to do anything so that there is no work to show for the month.

BAKERY.

The quantity of flour used was 37 barrels and the bread produced 9648 lbs., giving an average of 260 lbs. to the barrel.

PRINTING OFFICE.

During the month there has been added in this office a machine

for perforating paper and another for numbering the pages of books both of small size for hand use. These finish the outfit of the office, and cheque books &c. can now be completed in the Asylum. Besides the Journal 5809 impressions of different forms were taken and 347 cards printed. There were ruled 4452 forms and 87 books were bound.

LAUNDRY.

There were 12055 articles washed and 1295 starched and ironed during the month.

SEWING ROOM.

In this a fair amount of activity has been shown. There were made print dresses 1, women's jackets 109, skirts 13, gowns 30, bed gowns 2, chemises 35, handkerchiefs 20, apron 1, bed sacks 9, pillow sacks 2, towels 39, men's day shirts 32, night shirts 17, cotton singlets 48, flannel singlets 16, draws 30 pairs, coolie laps 12, cap covers 6, and attendants' uniform dresses [missing], in all 422 articles. There were repaired 764 different articles.

WORK ROOM.

Ten gallons of cocoanut oil and 295 lbs. of chocolate were made here.

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RECEIVED with thanks, The sixteenth Annual Report of the Glamorgan County Lunatic Asylum.
The Report of the West Riding Pauper Lunatic Asylum for the year 1880.

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR AUGUST, 1881.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	130 54	For purchase of plantains	\$	43 92
Received for sundries sold		99 80	" " sundry implements and articles of furniture &c.		46 26
" cocoanut oil sold		2 40	" " flour		446 31
" printing done		11 20	" repairing clocks		2 00
" fines stoppages &c.		6 50	" band (one month)		16 50
" Hospital account		301 23	" shoeing mules (one month)		4 00
" Alms House account		149 18	" cooper's work		3 32
" Out Door poor funerals		14 00	" bricklayer's work		15 00
" hides sold		60 05	" charcoal		2 88
" board of patients		10 00	" slate slabs		19 00
			" gratuities to patients &c.		7 48
			" sums paid under one dollar		11 23
			Balance cash in hand		167 00
	\$	784 90		\$	784 90

No. 8

THE ASYLUM JOURNAL
FOR SEPTEMBER 1881.

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LUNATIC ASYLUM, FORT CANJE, BERBICE,
1ST OCTR. 1881.
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LOCAL HYGIENE.

—
THE article on Local Hygiene which this month would have been on the subject of water and its impurities is postponed until the next Journal to make room for the following paper on Town Sewage Removal which may prove of more general interest at the present time.

SEWAGE REMOVAL FOR TROPICAL TOWNS.

—
The general principles which ought to be followed in organising a system of sewage removal were incidentally referred to in the paper on Local Hygiene contained in the Journal of last month. It is thought that these may advantageously be dealt with in greater detail and with special application to towns as at the present time, the colonial public excited by the presence amongst them of yellow fever show a larger interest in sanitary matters than is usually the case. At the outset it may be assumed as agreed upon that the local conditions in British Guiana render removal by water inapplicable to any town. With an irregular and deficient supply of water as well as scarcely any fall for the drains, and that only available at certain states of the tide, closed sewers must at times be nothing more than elongated cesspools. These acted upon by tropical heat become retorts for the manufacture of sewer gas which is sure to find its way to the interiors of

houses. At all times sewer gas is a most dangerous kind of atmospheric contamination but when it contains as frequently is the case the subtle cause of some epidemic disorder it is then a most potent agent in the dissemination of specific disease. If water removal cannot be obtained throughout the whole extent of a town it ought not to be applied to any section of it or to individual houses within its system of drainage. When such section or houses possess independent outlets for their drainage then both the dangers and the advantages rest with the inhabitants of them alone. Otherwise the use of water will only be to convey the filth from their own to their neighbour's premises and he in his turn must either remove it or suffer the consequences if it accumulates, surely this is not justifiable. The safest practice is to forbid the use of water closets or similar contrivances in any town which does not possess a complete system of sewers. Disposal of excremental matter by water carriage being thus out of the question one or other of the varieties of what is known as the dry method must necessarily be had recourse to. In order to help to the full understanding of the advantages and disadvantages of the different systems of dry removal it may be useful to state shortly the fundamental principles, upon the carrying out of which, the efficiency of the various forms of town cleansing depends. Excretal matters from healthy individuals and organic refuse as long as they remain fresh and unchanged are comparatively inoffensive and harmless. Whenever they begin to evolve gas under the process of decomposition they become both disgusting and injurious to health. The first object of any system ought to be to obtain the removal of such matters from the neighbourhood of dwellings before the putrefactive change takes place and the more nearly this result is attained the more perfect the system is. The regular and frequent cleansing of all closets and dustbins without which dry removal cannot be looked upon as safe is often inconvenient and it may be difficult to carry out. This difficulty suggested the possibility of adding to the contents of those receptacles some deodorizing and preservative substance which should retard or prevent putrefaction and allow them to be cleaned out at longer intervals. Upon this principle is based Goux patent and similar plans as well as the different kinds of dry earth and ash closets. Whatever virtues these contrivances theoretically possess it will afterwards be seen that in practice they have disadvantages

which render them useless for large communities or except under special circumstances. They all depart from the fundamental principle just laid down in the encouragement they give to retain in or near houses that which had better be at once carried away. So far the excremental matter from healthy persons only has been thought of but there are some complaints in which the discharges from the sufferers contain the virus of the disease in its strongest and most diffusible form. In this class yellow fever is placed by the best authorities. The discharges from patients in these diseases ought never to be thrown into the common receptacle or into any drain or sewer without first having been disinfected. The disinfectant, used in this case should not be a mere deodorant or preservative, like charcoal or dry earth but a strong destructive chemical agent such as chloride of lime or chloride of zinc. Keeping clearly in view the principle just enunciated it has next to be seen in what mode it can be best be put into practice in the towns of the colony and under existing conditions. Experience has clearly shown that to be properly managed in a town the removal of the whole of the refuse and night soil must be undertaken by one central authority possessed of a sufficient and trustworthy staff. If it be left to be done by the individual occupiers of houses where there is a large proportion of cottages or other small tenements, it will not be performed regularly even if penalties for enforcing it be inflicted. In the tropics where dead organic matter decomposes with great rapidity any kind of cleansing which does not provide for the daily removal of night soil cannot be looked upon as anything like satisfactory. Whatever form of closet and dustbin may be adopted, these ought to be emptied of their contents every night and the compost removed without the precincts of the town. The practical difficulty to be overcome here is to obtain a staff of men to be trusted to carry this out properly. Which can only be effected by having amongst them a proportionately large number of persons of a better class who would constantly inspect work during its progress. At the same time the inspectors could see that all the refuse had been put into the places provided for it and not thrown into the trenches or open drains. The latter dangerous practice must be prevented as far as possible by constant watchfulness and the punishment of offenders. It will be seen that it is a prime requisite that all night soil should be removed without the town. This requirement cannot be met if

on any property within it cesspools or blind wells are tolerated. Their use is manifestly dangerous and has been condemned by all sanitary authorities for many years. The sooner they are filled up if any exist the better it will be for the health of the community. An objection may be made to daily removal on the ground of the expense but the money required for this can be saved by the adoption of some simple and cheap form of closet. It is far better to use the money in removing the filth than to sink it in carrying out an elaborate scheme for retaining it, which from irregularities not at all unlikely to occur would prove a danger instead of a safeguard for the inhabitants. The form of dry closet to be used in houses above a certain annual value and inhabited by only one family may safely be left to the choice of the individual occupier with one proviso which is that the whole of the days soil and refuse be left in a place from which it can [be] conveniently removed by the scavenger on his nightly rounds. For yards of small houses, tenements occupied by more than one family and institutions where numbers reside, the question of the kind of privy which most simply and effectually answers the purpose and therefore ought to be adopted, is one of great importance. For small tenements this point has to be settled by the sanitary authority who must in their case provide the necessary accommodation. In this colony the question is from the local conditions already alluded to narrowed to a consideration of the relative merits of the two classes of dry removal. Either that form in which the excrement is mixed with one kind or other of deodorant material or the simple pail system must be chosen. Of the former there is the Goux plan of lined pails of which partial trial has been made in Georgetown but apparently not with any great success. There is also the combined ash and privy pail which is inapplicable here as coal fires and their consequent ashes are unknown and, lastly there is the dry earth closet. As there seems to be an idea prevalent that earth closets could be utilized in connection with latrines resorted to by numbers their advantages and disadvantages deserve full consideration. At the outset it may be mentioned that the system has never been applied to a town and consequently there is no experience of that kind to fall back upon. On the introduction by Mr. Moule of the earth closet, it was extensively adopted in Lunatic Asylums and similar institutions in England but after a dozen years trial there is not now one place in which its use is

continued, except on sufferance, and until another method can be substituted for it. Hastily adopted it has been quickly abandoned. Certainly Dr. Mouat spoke highly of the system in India but as Dr. Mouat left that country before 1871 his experience of it could only have been short. The fact that the very high rate [of] mortality in the Indian prisons is just now occupying public attention in England does not say much for it as a sanitary measure if it be still in use in these institutions. The truth is that the conditions necessary for the successful use of the earth closet are such that they can not be complied with by uneducated and careless human beings and it is for that class they are required here. Dr. Wilson in his Handbook of Hygiene gives the following requirements as necessary: "It is essential that the earth be previously dried and sifted, that a sufficient quantity be thrown into the pail before the closet is used and that the same amount be delivered before each particular stool. The quantity requisite for the deodorisation of each stool (inclusive of the urine) is found to be 1½ lb. The slops and the rest of the urine must be removed in some other way." This last requirement is fatal to its adoption as a system of town sewage removal. The same author thus states its disadvantages. "The disadvantages of the system are - the difficulties of procuring drying and storing the earth particularly in crowded localities; the special service and attention which the closets require: the frequent discomfort attending their use when the earth is very dry and powdery and the inadequacy of the system as a means of removing the whole excreta and slops." Earth closets can only deal with part of the excreta all has to be removed if safety is to be obtained. It must be borne in mind that dry earth is only known to be a deodorant, and that it has not been proved to possess any disinfectant action. It cannot therefore be relied upon to render innocuous the discharges from patients suffering from infective diseases a great objection to its use in Hospitals. Even its deodorant action depends upon its thorough dryness, if either intentionally or inadvertently the contents of chamber utensils or other slops are emptied into the pails the earth becomes at once a stinking mud as offensive as the feces themselves. Professor Corfield in this connection says of earth closets that they are not advantageous "From an economical point of view because of the great expense of procuring, drying, sifting and carting away the large amount of earth required and of constantly removing the contents of the

closet, added to the fact that the value of these contents as a manure even after the earth has been passed several times through the closets can be but trifling - the usual statements upon this head being manifest exaggerations." The difficulties attending the use of the earth closets are thus seen to be such as to be in this country unsurmountable therefore the only remaining available plan is the simple pail system. Professor Corfield's description of this is so far as it goes so clear that it is given here "In this plan the pail or tub is placed immediately beneath the seat of the closet at some places disinfectants are placed at the bottom of the tubs with the view of retarding decomposition and preventing offensive smells. At Rochdale, the pails are made from disused parafine casks - each cask being cut into two. They are fitted with iron handles and tightly fitting lids and cost only 3s. 4d. each. They of course require to be changed frequently and it would be well wherever this system is at work to insist on daily removal, the pails being placed except in cases where closets can be easily got at by the scavenger outside the houses as is the practice in Edinburgh. This is a system, which, although causing a certain amount of temporary nuisance is beyond all question the least injurious and the most thorough going of all the plans which depend upon hand and cart labour for removal. In its simplest form it makes no pretence at deodorizing, and it is perfectly impossible that collections of decomposing matter can accumulate. In cases of infectious disease the refuse matter can be thoroughly disinfected in detail; and lastly the manure is produced in the most available form being unmixed with any extraneous materials. It is a variety of this system that has been practiced for thousands of years in China where all refuse matter is most carefully preserved and it is the same system which is practiced in the Department of the *Alpes Maritimes* where the great value of excretal matters is thoroughly appreciated and where they are used in the cultivation of corn, orange trees, green vegetables and especially scented flowers such as roses and violets which are required in large quantities in the preparation of perfumes." If efficiency simplicity and economy are recommendations for a system all three are possessed by the Rochdale method the one followed in the Asylum and its success there shows its adaptability to the conditions existing in British Guiana.

THE AFRICAN TREATMENT OF INSANITY.

The following letter received from the wife of an aboriginal African now a patient in the Asylum tends to controvert the opinion held by some that insanity is unknown on the dark continent. It shows that, it is sufficiently common for its hereditary character to be acknowledged and for a recognized method of treatment to be formulated. Many alienist physicians in more enlightened countries may well envy the certainty with which a cure is effected in three months and if the same result could be promised to them they might be inclined to try the plan. Although non restraint and soothing principles of treatment are adopted it will be seen that prolonged seclusion is enjoyed. Like the Gods of old the patient must have a special food and drink, unfortunately what these are is not specified. Does this not resemble the coloured light treatment so lately in vogue in Europe and is it much more irrational than it?— “I came to the Doctor to let him understand about my husband’s sickness. So Master he is not a native for this country the sickness he is troubled with is not a sickness for him to be here, some of his country men from Georgetown made me to understand so. They did went up the river to see him so I tell them he is in charge of the Doctor, they say that this sickness is from their country it is the gift of God from their country from generation to generation as far as they know. If they were he wouldn’t have been here today because would have known what to do to keep down the sickness from him. Sir the sickness don’t require no noise at all he must be in a house him alone and those who attended to him, and they does not use him every kind of food, purpose food must be for him, and he must close him in a house for nine days then you will hear he himself call to go out and when you hear him call you must not keep him back at all that will make him cross. So I humbly beg you Doctor please to let him out, that countrymen may try with him a little, Sir because they fully understand what is his sickness and in they country it takes only three months to get better and since he is here this now twelve months, so please Doctor let him out let me try with him. They are Crumanty nation nobody don’t understand ways excepting to their own country people.”

Staff.

The following letter of resignation sent in by a female attendant illustrates what is found to be a great difficulty in conducting this Asylum namely that arising from the objection to settled labour and the restless disposition of the class from which attendants are drawn. The attendant who wrote it had been in the service of the Asylum for seven months – “I do herein give notice that at the end of the month I will resign the office of an attendant of the institution on account of the salary being too small for the work that is to be done and there are some of the rules of the institution that are also too stringent.” The value of the reasons given will be understood when it is stated that she was employed as an under laundry woman, that she received in money seven dollars a month, board costing five dollars a month and uniform one dollar, in all thirteen dollars a month. The second reason is also characteristic although she complained of the amount of work, her objection to the rules of the institution was found on enquiry to be confined to that which forbids her bringing any of her own family’s clothes to be washed by her in the Asylum Laundry. Such objections it may be are always to be expected to a position requiring a whole week’s work in a country where to labour for four days is sufficient to earn subsistence for seven. During the month of September the following changes have taken place amongst the attendants, three first class attendants (the wood-cutter, carpenter and baker) left the service two having received notice for inefficiency and one giving notice of his own accord. One second class attendant on probation left at the end of the month having been found to be unsuited for the duties. Joseph Smith, John Erskine and Henry Mickle were appointed first class attendants on probation, second class attendant John Davidson promoted to first class, and R. A. Burnett appointed second class attendant on probation to fill the vacancies. The post of baker attendant has been vacant during the month.

Religious services.

The Revd. J. Rannie and the Revd. F. W. T. Elliott have each conducted the Sunday morning services on two occasions. The congregations are most orderly and many of those who understand English listen attentively and join heartily in the singing when a favourite hymn is introduced. The numbers present at the services were of men 131, women 68, in all 199.

Amusements.

The September fortnightly dances of which there have been two have again been graced with the presence of visitors in numbers from the town of New Amsterdam. They have passed off pleasantly and as well of the Monday evening practices have been the source of great enjoyment to many of the patients. There attended the amusements 106 men and 65 women a total of 171. The band playing in the grounds on the Monday afternoons has also attracted a good many visitors as the weather during the month has been fine.

Accidents.

In the early part of the month one of the female patients had the left arm broken by another patient with whom she had a quarrel. They were working together in weeding the airing court and when they quarrelled before the attendant could interfere the one patient had struck the other over the arm with the round handle of the cutlass causing a simple fracture of the humerus. The patient who was injured is doing well.

Improvements.

The painting of the exterior of the South Block has been completed and the repainting and decoration of Ward No. 1 begun. An attempt has been made to improve the appearance of the wards by hanging on their walls pictures, illuminated texts &c. and some brackets and vases for flowers have also been placed there. This has been done throughout the female side and in the male Infirmary Ward. A large bagatelle table has been got from England for the sitting room of the North Block and will soon be fitted in its place. The carpenter has been engaged during the month in making the new cots which the increasing numbers render necessary.

Reports.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st September	225	129	354
Admitted in September	6	3	9
Died in September	2	0	2
Discharged in September	5	1	6
Remaining on the 30th of September	224	131	355

There has been an increase of one in the numbers in the Asylum in the month, the discharges have been above the average which has helped to keep down the numbers although the admissions still continue high.

All the patients received at the Asylum in September came from the County of Demerara. Their nationalities were as follows.

Natives of India	2
Do " British Guiana	4 (2 black 2 coloured)
Do " Barbadoes	3

being 5 immigrants to 4 creoles of this colony. One was a readmission a man who had been discharged well in October 1876. Five male patients and one female have been discharged well and able to work for themselves, the periods of residence of the male patients were of one 4 years and 10 months, of one 2 years and 8 months, of one 3 months and of the other 2 months. The female patient had been an inmate for 6 months. Three males were East Indians, one a Portuguese and one a native of British Guiana. The female was a native of Dutch Guiana. The deaths two in number were below the average and were both caused by Bright's disease. One of the patients who died had been [in] the Asylum for close upon ten years, the other for nearly three. As might be expected at this season there have been a few cases of intermittent fever but that of the mildest form and very amenable to treatment, in other respects the sanitary condition of the Asylum has been excellent, indeed but from the prevalence of disease of the kidneys which is very marked, there would be almost no sickness in the Asylum.

NUMBER OF PATIENTS EMPLOYED.

The different industries pursued in the Asylum have continued without change and the number of patients engaged in them remains much as usual. It was altogether of men 180 and of women 96 a total 276 or rather more than two-thirds of the whole number of patients. The men were employed as follows in agricultural work 87, in trades 33, in work requiring unskilled labour 27 and assisting in the wards 33 whilst an average of 35 were unable to work and 8 unwilling to do so. The women were engaged thus, in the Laundry 32, in the Sewing Room 20, in general work making cocoanut oil, chocolate, coir, &c. 31 and in household work 13, whilst 20 were unable and 14 unwilling to work.

DAILY AVERAGE NUMBER IN THE ASYLUM AND
PERCENTAGES OF PATIENTS WORKING &c.

	M.	F.	Total
Daily average in Asylum	223.2	130.4	353.6
Percentage employed	80	73.8	78.1
Percentage confined to bed	3.2	1.5	2.6
Percentage attending amusements	47.5	50	48.4
Percentage attending Church	58.2	52.3	56.3

THE FARM.

The dry weather which prevailed in September although it put an end in the latter part of the month to the further planting of provisions has been favourable to the ripening of the crops. The quality of these reaped has been good and a fair return has been got, this has been especially the case with the cassava grown. There were received from the farm the following quantities of produce; plantains 3630 lbs., (free from stalk) bananas 547 lbs., sweet potatoes 141 lbs., cassava 1752 lbs., pumpkins 339 lbs., and garden vegetables 407 lbs. From the cattle farm at Old Fort 419 pints of milk have been sent in, 3 pigs have been killed giving 223 lb. of pork, besides these 25¼ lbs. cleaned fowls and 77 eggs have been got. Twelve heads of cattle have been killed yielding 2352 lbs. of beef the cost of these was \$238.50 which deducting the value of the hides makes the price of the beef eight and nine-tenths cents per lb. The live stock was increased by the birth of one sheep and thirteen pigs and the loss was one sheep died, besides the pigs killed one was sold.

The quantity of firewood brought in was only 20 cords as for part of the month the woodcutter's men did not work.

THE WORK SHOPS.

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CARPENTER.

With a new attendant in this department the work done has been confined to repairs and shop labour. The number of different repairs executed in the buildings and the fittings was 60 and the following articles were made bedsteads 8, coffins 25, notice boards 2, axe and hammer handles 3.

PAINTER.

As already mentioned the painter and his men have been occupied

in the month chiefly in painting the outside of the South Block in doing this there were laid on 528 square yards in two coats. The rails of 7 bridges were painted as well as chairs 22, tubs and pails 48, bedsteads 7, and coffins 25. There were put in 34 panes of glass.

TAILOR.

There have been made in the tailor's shop of patient's jackets 36, trousers 45 pairs, jumpers 17, and of bed sacks 39, attendant's uniform jackets 3, and trousers 4 pairs. There were repaired 500 articles.

SHOEMAKER.

Articles made in this shop leather boots 1 pair, leather shoes 3 pairs and canvass slippers 13 pairs. There were repaired 24 articles.

BAKERY.

There was baked during the month 36 barrels of flour, the quantity of bread produced was 9183 lbs. giving an average yield of 255 lbs. per barrel.

PRINTING OFFICE.

Besides the Journal of which 120 copies are printed there have been struck off 3173 impressions of different forms and 561 cards, amongst which was a pamphlet of 16 pages. There were 35 books bound. The coolie patient who assisted in the printing office was discharged well some time ago and his help is now much missed there.

LAUNDRY.

The work of the laundry and the attempt made to get cleanliness throughout the Asylum is much hindered by the deficient supply of water obtained from the pipes of the Board of Superintendence of New Amsterdam. At the present time the water is completely cut off from 9 A.M. to 4 P.M. a period which comprises nearly the whole working day. If this is to continue some arrangement will have to be made for storing a supply in the Asylum. There were washed during the month 12476 articles and 1246 starched and ironed.

SEWING ROOM.

The work here as well as in the tailor's shop it is only right to

state has not been pushed in any way as there is a difficulty in getting work for the patients employed there. There were made in the month men's night shirts 31, flannel singlets 32, day shirts 47, drawers 8 pairs, cap covers 12, women's jackets 36, bed gowns 44, petticoats 7, infirmary gowns 14, aprons 6, print dresses 9, attendant's dresses 1, bed sacks 9, pillow cases 57, sheets hemmed 76, in all 329 articles. The repairs were 338.

WORK ROOM.

There were made here 34 gallons of cocoanut oil, 156½ lbs. chocolate and 15¼ lbs. of coir besides coffee and curry powder ground.

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RECEIVED with thanks. The number of the American Journal of Insanity for July 1881, and the numbers of Morningside Mirror for July and August 1881.

ABSTRACT CASH ACCOUNT INDUSTRIAL FUND, FOR SEPTEMBER, 1881.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	167 00	For purchase of plantains	\$	48 60
Received for sundries sold		70 35	" " sundry implements and articles of furniture &c.		13 00
" cocoanut oil sold		7 68	" " flour		432 06
" printing done		2 40	" repairing clocks		2 00
" fines stoppages &c.		19 58	" band (one month)		18 00
" Hospital account		259 10	" shoeing mules (one month)		2 72
" Alms House account		169 56	" cooper's work		2 76
" Out door poor account		13 50	" tinsmith's work		43 81
" board of patients		10 00	" tiles		18 00
			" cocoanuts		64 80
			" gratuities to patients &c.		2 00
			" sums paid under one dollar		8 34
			Balance cash in hand		72 08
	\$	728 17		\$	728 17

No. 9

THE ASYLUM JOURNAL
FOR OCTOBER 1881.

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
1ST NOVR. 1881.
—

LOCAL HYGIENE.

V.

For the due preservation of health there are certain essential requisites. Chiefly is it necessary to breathe pure air to drink clean water to eat good food, and to be regular in the use of the bath. In the present series of notes on Local Hygiene the first requirement, that of pure air has been considered now the second falls to be noticed. Where wells are unknown as in the colony and where the streams come to us from the interior, loaded with decaying vegetable matter to such an extent as to equal in colour a moderately strong infusion of tea, the rainfall is naturally looked to, as the source from which a supply of water for drinking purposes is to be drawn. Fortunately this is here very abundant. As has already been mentioned the atmosphere is remarkably free from the grosser impurities common in other climates. Thus the water in passing through it remains comparatively uncontaminated. If care be taken to prevent trees from overshadowing the buildings and shedding their leaves in the gutters and if birds are not allowed to roost in numbers on the roof the water will reach the tank in a state of purity sufficiently perfect for all domestic purposes. The mode of storing it generally adopted is one which preserves it nearly as pure as when it reaches the reservoir, that is if the tank be regularly cleaned out and it be kept covered in such a way as to exclude the sun light and animals whilst admitting of free ventilation. The fact of the

tanks and vats being above ground renders the fouling of water by leakage from filthy soil impossible. But for this impossibility much more disastrous consequences must have followed the bad habit that exists of burying in the ground a few yards from houses all the excremental matter for the express purpose of allowing it to diffuse itself by soakage and so to disappear. As the amount of water which could be collected from the roof a house that is occupied by one of the well to do classes would be sufficient for yield a supply to all purposes, the question so far as they are concerned resolves itself entirely into one of providing sufficient means of storage. Take an example, on a house 50 feet long by 35 broad, there can be gathered in one year 90 thousands of gallons, a quantity which gives a supply at the rate of 17 gallons per head per day for a family of 14 persons. This is quite sufficient for all needs. Even in large institutions like the Asylum if none of the water were allowed to run to waste nothing further than rain would be required if care were taken to prevent loss in its distribution. To do this a very large increase in the amount of storage room is necessary and to provide it on the plan now adopted is a matter involving a considerable expenditure of money. As it is the Asylum possesses a doubly supply, one of rain water kept in iron tanks which is intended for drinking only, and another brought from the Calabash creek through the town of New Amsterdam for bathing, cleaning the wards and washing the clothes in the laundry. No ill effects have yet been traced to the double supply and situated as the Asylum is the possession of the town water has been a great convenience especially during periods of drought. The convenience would be still greater if it was not that every now and again the water leaves the pipes. The purity of the drinking water here is best vouched for by the fact that for the last six years there has not been a single case of illness which could be traced to its use. The diarrhoea which at one time prevailed was due to other causes as was clearly shown by the cessation of the disease when these were removed. For washing clothes the Calabash creek water answers well but for one drawback, its colour which is apt to impart a dingy hue to the linen, it is very free from hardness. Experience in the Asylum does not lend any countenance to the belief, that those who bathe in it are liable to contract parasitic disease of the skin. Whilst as has been shown the owners of good houses have the control of their water supply in their own hands, the occupiers of small

tenements and of huts often possessed of a roof as absorbent as a sponge have not the power to provide themselves with rain water except in the wet seasons. At other times many of them who are not in the towns or on sugar estates in cultivation must perforce drink water from trenches loaded with decaying organic matter animal or vegetable and which is the habitat of organisms many in number and various in kind. This practice is certainly productive of internal parasites as well as of diseases such as diarrhoea and dysentery and if a complaint like cholera were introduced amongst them it would simply lead to the wholesale destruction of the population. In a sanitary point of view it is impossible to overestimate the bad results which flow from a water supply either deficient in quantity or unsatisfactory in quality. To provide for all classes pure drinking water in plenty, is a work, beneficent in itself and which even though costly must in the end be profitable to the community at large.

EPIDEMIC NOTES.

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That the average term of duration of human life has increased in England during late years is a fact which although previously recognized receives further confirmation from such results of the recent census as have already been made public. This satisfactory increment in one of the essential elements of the material prosperity of the country is admittedly due to the greater attention which has been paid to sanitary matters, and the measures adopted in consequence. Whilst thus sanitary reformers in England receive encouragement to continue their efforts, the effect upon the colonies to which an increase of population is of much more value, ought to be to rouse their inhabitants to make some effort to follow in their footsteps. Much of the improvement has been obtained by acting on the broad principle that increased cleanliness in and around dwellings with an ample supply of pure water is followed by a diminution of sickness. By degrees out of this comprehensive rule there is arising a more exact system of disease prevention in which the specific mode of causation of each diverse complaint is recognized and so means of neutralizing it can be directly applied. The labours of the Medical Staff of the English Local Government Board have given a great impetus to work in this direction; to them is entrusted the task of tracing the causes and

history of serious outbreaks of disease in all parts of the country. The published reports of these officers may be advantageously studied by all interested in the subject both for the information contained in them and also as examples of the method to be followed in conducting similar enquiries. These investigations and others carried out in a similar spirit are gradually leading to the possession of a reliable etiology of communicable diseases and a more exact knowledge of the laws which regulate their diffusion, but the field is still far from being exhausted. An isolated community of small size such as this presents favourable opportunities for the scientific observation of epidemics. At the present time when cases of yellow fever have been met with, in at least a part of the colony it is thought advisable to recall to mind the points in its epidemiology which being doubtful stand most in need of elucidation and indicate how their settlement can be hastened. If actuated by a wish to ascertain the truth and that alone, and not by the desire to perceive only such facts as yield support to a pet theory and to ignore all others; there is no one who sees a case of yellow fever who could not put on record some fact which would be both interesting and valuable. Good theories are raised only on generalizations from facts and these in their turn are valuable but so far as they are inductions from the largest attainable number of instances. Pet theories, too often are supported more obstinately the smaller the number of observations upon which they rest, the experience of a single individual suffices with many, and who has not seen an elaborate theory laboriously constructed and vigorously defended whose narrow basis was a single case. Whilst an epidemic exists the chief thing to be attended to from an epidemiological point of view is to observe and put on record the circumstances of each case as they arise. By putting on record is meant committing them to writing, one fact thus registered is often of infinitely more value than any numbers of general impressions floating in a memory which is too often treacherous. It is a popular idea that epidemic invasions of disease are in some way connected with meteorological changes. That there may be some relation between the meteorological conditions and the waves of diffusion of epidemic disease which periodically recur, is quite possible, but very little progress has yet been made in scientific knowledge on this point. A series of meteorological observations taken at a station in the colony would in time prove of great value for this

and other purposes. To be of use it must be continued for many years including epidemic and non-epidemic periods and ought to be full and accurate. Manifestly this task is beyond the reach of any single individual and must be undertaken by the Government or some public body. In addition to the mode thus assigned for the spread of disease which as far as scientific knowledge is concerned is still entirely hypothetical; and that is reached in the popular mind by a process of exclusion and believed in as something beyond proof as well as disproof, there are theories towards the explanation of which much help can be given by single observers. In this connection when a case of yellow fever occurs it is desirable to note first the conditions under which the patient has been living, that is the position with regard to the prevailing winds of the room in which he has slept, the condition of the house as to drainage, whether there is any connection with closed sewers or not and the general cleanliness of its surroundings as well as the character of the water supply. Then it is to be noted whether there has previously been a case of fever in the same house or in any other connected with the same system of sewerage or drainage and the date of such a case if any. The personal history of the patient ought then to be traced and the following facts carefully recorded, the patient's sex, age, length of residence in the colony or the tropics, general appearance and habits of life. The whole of his movements for at least a month previous to the attack ought to be enquired into, for it must be borne in mind that it is held on good grounds that in yellow fever as in cognate diseases there is a period of incubation of the disease comprising the time between exposure to its cause and the development of the first symptoms, and that during this period the patient may feel and seem perfectly well. The exact length of the incubation period is one of the points of interest to be settled, when possible it ought to be determined in each case, to fix it with certainty it is necessary to discover the exact time at which the disease was caught or fix two dates between which this must have happened. Only in a very limited number of instances are the circumstances such as allow of this being done, but when these are met with the points should be carefully noted. There are many and various vehicles which are believed to have at different times been instrumental in propagating the disease and the possibility of any one of them being the mode in any case under observation should always

receive consideration. It should therefore be asked whether the patient has visited anyone labouring under yellow fever, whether he has been in contact with any bedding or clothing used by a sufferer from the disease, here keeping in mind the laundry as a medium for the spread of contagion. Places as well as persons are said to have become infected and capable of communicating the fever, ships in which it has existed have been held to have been impregnated with the contagious matter and to have communicated the disease to visitors when no one on board was at the time ill. If this be so the same thing may easily happen with the wooden buildings of the colony and this possible channel of infection should not be overlooked, it should therefore be noticed whether the patient had within the month been in a place of the kind. Lately in England it has been shown that a contaminated water supply both directly and through the milk with which it has been mixed, has been in some cases an active agent in the dissemination of the poisons of certain fevers, perhaps yellow fever may be capable of being thus spread. In this paper the subject has been dealt with entirely from the causation point of view as it is scarcely necessary to remind the medical men of a colony which has produced the standard work on yellow fever of the value of noting fully the symptoms progress and effects of remedies in each case which may come under their care. It ought especially to be observed whether other fevers and complaints prevailing at this period present any peculiar type or character. For anyone possessing a good microscope and the requisite skills in using it another field of observation is open. The diligent and competent labourer in this field if fortunate may make a discovery of infinitely greater value than anything that has yet been hinted at, for to him it is open to find and identify the *fons et origo mali*. The tendency of scientific belief is now to move in the direction of ascribing the different communicable diseases to the presence of a minute organism in the human body and their diffusion to the transmission from one person to another of these organisms or their germs. The animalcule causing yellow fever has yet to be found, since the last striking and successful experiments, performed by Pasteur with the virus of a plague affecting sheep, the discovery of this organism if it exists, may be looked upon merely as a prelude to a far grander result. Some persons now alive may yet see the day when yellow fever will be controlled in the same manner

and to the same degree as small pox now is. The line of investigation advised in this paper is not one intended merely to gratify idle curiosity or even to form only the foundation upon which to build a theory of the disease. The end and aim of the whole is to discover its essential cause and the conditions of its diffusion. Provided with this knowledge it would be as if the enemy could be met and grappled with in the broad light of day, now it is a mere hitting out at it at random and in the dark. To compass such a result is a task which may be worthily engaged in by all and with the hope of enlisting in the cause even a small detachment of recruits this paper is written. Towards alleviating human sufferings and prolonging the life of man, preventive medicine has already done much and has still more to do in the future.

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For putting on record facts of the kind referred to [in] the preceding article and others of a kindred nature the columns of this Journal can be utilized. A place will always be found for anything bearing upon medicine in its scientific aspects.

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RABIES has appeared amongst the dogs at the Asylum, one of them having to be killed for the disease, before this was effected he had managed to bite some seven or eight of the ownerless curs which flock to the Asylum grounds as to a harbour of refuge. These were all destroyed. As there is every reason to believe that the complaint was introduced from the town of New Amsterdam, this note is inserted to draw attention to the fact and put the inhabitants on their guard.

Staff.

There have been few changes amongst the attendants during the month of October. Two second class female attendants left the service one having resigned and the other was dismissed for refusal to obey orders. One male attendant who had been found inefficient in the place which he occupied, was changed to another but rather than take this he left the service forfeiting his pay. To fill this vacancy and others which existed, T. W. Carrington was appointed first class attendant (baker) and James Evans and R. Benjamin second class, all on probation. There were two vacancies on the female side.

Religious services.

On the five Sundays of the month morning service was held as usual in the Dining Hall. These were conducted on one occasion by the Revd. J. Rannie, on two by the Revd. F. W. T. Elliott and on the other two prayers were read by the Assistant Medical Superintendent Dr. Snell. The average attendance at them was of men 122 of women 63 in all 185.

Amusements.

These were of the usual character comprising two fortnightly dances and five Monday evening practices attended by 171 patients, 113 male and 58 female. The new bagatelle table which has been fitted up in the men's sitting room of Ward No. 2 has been a source of much amusement to the patients there.

Accidents.

The month has passed off happily without the occurrence of any accident.

Improvements.

The redecoration of the interior of ward No. 1 has been continued during the month and two of the rooms have been finished. In the large dormitory A the effect of the style of painting has been good and it is a great improvement to the look of the room. Looking glasses have been added to the dormitories and in several have been up for some months and there is no attempt made to destroy these or the other ornaments which have been placed in the room.

The carpenter and his men have been occupied during the month preparing material to refloor the day room in the West Block (female) in addition to the other work mentioned under the head of workshops.

Reports.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st October	224	131	355
Admitted in October	3	2	5
Died in October	0	1	1
Discharged in October	1	1	2
Remaining on the 30th October	226	131	357

The number of admissions has been below the average and in consequence the increase in numbers for the month is small, being only two. One man is included both under the head of discharges and admissions under rather peculiar circumstances, he was discharged on the 21st October quite well and not having shown any symptom of insanity for a very long time in the Asylum. He showed great disinclination to leave the Asylum and said to one attendant that he would soon see him back again. Sure enough on the 31st October the man turned up again having been forwarded from Demerara to the Asylum. This man is not insane but was shamming madness this he has admitted and his motive was well explained by himself to an attendant, whom he told that he was well fed and comfortable here and was very much the opposite whilst away. As feigning insanity for the purpose solely of being sent to an Asylum is not very common, full particulars of the case will most likely be given in next month's Journal. Including this case, of the patients admitted three came from Demerara one from Essequibo and one from Berbice. Their native countries was as follows:

Natives of India	1
Do of England	1
Do of British Guiana	3 (2 black 1 coloured)

Three creoles of the colony and two immigrants. Two patients one male and one female were discharged the man (referred to above) had been an inmate of the Asylum for 6½ years, the woman (an East Indian) for nearly 3 years. There has only been one death during the month a case in which pulmonary embolism supervened in a patient suffering from heart affection and Bright's disease. The Asylum has been in a very healthy condition during the past month, little or no intermittent and there has been complete freedom from any other kind of zymotic disease.

NUMBER OF PATIENTS EMPLOYED.

This has continued without much change whilst every effort is made to engage people in work, there is great difficulty in finding suitable employment for them and still greater in obtaining attendants able and willing to direct them in it. There were engaged in the different kinds of work done in the Asylum an

average of 176 men and 95 women. There were of the male patients 35 who from bodily or mental infirmity were unable to work and 14 who being able, could not be induced to do anything. The corresponding numbers amongst the women were 23 and 14 respectively. Of the men employed 83 worked on the farm 35 at different trades 26 in unskilled labour such as portorage &c. and 32 assisted in the wards. Of the women 33 were employed in the laundry, 21 in the sewing room, 28 in various kinds of labour such as making cocoanut oil, chocolate &c. and 13 assisted in the wards.

DAILY AVERAGE NUMBER IN THE ASYLUM AND
PERCENTAGES OF PATIENTS WORKING &c.

	M.	F.	Total
Daily average in Asylum	224.2	131.9	356.1
Percentage employed	78.5	71.7	76.1
Percentage confined to bed	4.0	1.0	2.8
Percentage attending amusements	50.4	43.9	48.0
Percentage attending Church	54.4	47.7	51.9

THE FARM.

The continued dry weather has put a stop to the planting of provisions and a good many of the field hands have been kept at work in cleaning out and deepening the draining trenches. The dam enclosing the piece of ground reclaimed on the banks of the Canje has now stood good for several spring tides, the piece will be planted up as soon as the weather changes. The plantains have not suffered at all from the drought. There have been reaped during the month of plantains (free of stalk) 3286 lbs., bananas 634 lbs., sweet potatoes 1559 lbs., sweet cassava 379 lbs., pumpkins 239 lbs., and garden vegetables 684 lbs. From the cattle farm 361 pints of milk were received as well as 68 eggs and 9¼ lbs. of cleaned fowl. Four pigs were killed which gave 323½ lbs. of pork. There were killed 11 heads of cattle yielding 2272 lbs. of beef. These cost \$215.25 which deducting the value of the hides &c. makes the price to the institution of the beef used eight and seven-tenths cents per pound. The increase of live stock by births was three goats, whilst two goats and one calf died.

The quantity of cordwood brought to the Asylum was 28 cords.

THE WORK SHOPS.

CARPENTER.

The men in this shop have worked well during the month both in preparing the boards for the new floor and in turning out the following. They have made of coffins 20, bedsteads 3, benches 2, axe handles 8, pairs of crutches 2, scrubbing boards 12, splinter bars for wagon 2, as well as a new door for the main koker and a stand and cover for the bagatelle table. There were 86 different repairs of buildings or furniture executed or at the rate of 3 for each working day.

PAINTER.

In carrying out the work already mentioned 859 square yards of painting in two coats have been done and 76 lineal yards of stencilling. There have been painted of tubs 6, buckets 4, chairs 21, bedsteads 50, coffins 15, window frames 6, and the stand and cover for the bagatelle table was stained and varnished. There were 15 panes of glass put in.

TAILOR.

In the tailors shop were made of patient's trousers 126 pairs, jumpers 40, and of attendant's trousers 10 pairs, jackets 8, and cap 3, as well as 63 bed sacks. There were 459 articles repaired.

SHOEMAKER.

The work done here was, making 24 pairs, of canvass and one pair of leather shoes and repairing 31 articles.

BAKERY.

The quantity of bread baked was 9597 lbs. To produce this 36 barrels of flour were used, a yield of 266 lbs. per barrel.

PRINTING OFFICE.

Besides the Journal (120 copies) there were struck off 11124 impressions of different forms, 190 cards were printed, 2440 forms ruled and 194 books and pamphlets stitched.

LAUNDRY.

There were washed in the laundry 11884 articles and 1250 were starched and ironed. It is a most difficult matter to get attendants

who will work willingly and well in the laundry, women of sufficient education and intelligence to be able to supervise this work in accordance with a prevailing creole prejudice have a very great objection to go near a place where they have any chance of getting wet.

SEWING ROOM.

The following articles were made in the sewing room during the month, print dresses 26, women's jackets 35, chemises 31, men's day shirts 4, night shirts 1, jumpers 1, coolie laps 2, pairs drawers 5, cotton singlets 88, cap covers 14, flannel gowns 11, cotton gowns 13, bed sacks 14, pillow cases 48, pillow sacks 27, towels 69, in all 389. There were repaired 462 articles.

WORK ROOM.

The patients engaged here made 233 lbs. of chocolate, 5³/₄ gallons of cocoanut oil and 7 lbs. of coir and the usual amount of curry powder and coffee were prepared.

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RECEIVED with thanks, the Twenty third Annul Report of the General Board of Commissioners in Lunacy for Scotland. The number of The Journal of Mental Science for October 1881.

ABSTRACT CASH ACCOUNT INDUSTRIAL FUND, FOR OCTOBER, 1881.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	72 08	For purchase of plantains	\$	78 72
Received for sundries sold		80 83	" " flour		389 50
" fines stoppages &c.		8 18	" repairing clocks		2 00
" Hospital account		230 42	" band (one month)		21 50
" Alms House account		168 01	" shoeing mules (one month)		5 00
" Out door poor account		11 00	" cooper's work		5 36
" board of patients		10 00	" tiles		19 30
Jail account		4 50	" gratuities to patients &c.		3 00
			" making a boat sail		4 00
			" sums paid under one dollar		5 19
			Balance cash in hand		51 15
	\$	585 02		\$	585 02

No.10

THE ASYLUM JOURNAL
FOR NOVEMBER 1881.

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
1ST DECR. 1881.
—

LOCAL HYGIENE.

VI.

It is generally believed that in hot countries a smaller quantity of food is required than is necessary in cooler climates. This is accounted for by the less amount of fuel needed to maintain the normal temperature of the body. A high temperature too is supposed to have an enervating effect on the appetite, and tropical residents are in England popularly pictured as sparingly and with difficulty partaking of the lightest food, requiring to be tempted to eat by the most dainty delicacies. As a matter of fact with digestive organs stimulated partly by the climate and partly by the style of cooking an average West Indian manages to consume as much if not more animal food than an English squire and, as he takes less active exercise, the effect is seen in the small number of slim figures to be found amongst the colonists. But if in this country as elsewhere full diet and a sedentary life prove in the end prejudicial or destructive to health on the other hand experience amply shows that a plentiful supply of nourishing food more especially of the animal kind is absolutely necessary to enable anyone to withstand the evil effects of malaria. If the demand for heat is less, this is made up for by the greater requirements to supply the waste of tissue consequent on the increased activity of the skin and of the secretory organs generally. In the Asylum the beneficial effects of good feeding are very plainly seen, especially amongst the

coolies. Here they have a diet in which is a fair proportion of animal food, butcher's meat of some kind given every day, and under its influence they almost invariably and rapidly gain weight and improve in their bodily health. As in an early number of the Journal there was printed a copy of the Asylum diet table, it is unnecessary to repeat it here. The present scale of diet has been in use for several years and has been found to be suitable. Its sufficiency will be evident when it is stated that there is allowed for each patient in the Asylum who is on the ordinary diet of the institution food containing the following amount of the two great classes of nutritive material, of the nitrogenous 195 grs. carbonaceous 3940 grs. besides salts and water in the usual proportions. This is allowed for every patient and practically it is found that all have as much as they can eat, besides this the working patients (76 per cent of the whole) get in the form of a light luncheon additional food causing their diet to contain 242 grs of nitrogenous and 4492 grs. of carbonaceous matter. This is equal to the amount of nourishment required by an ordinary European who does not work very hard and constitutes a full diet for the labouring populations of the colony who are of less average weight than Europeans. Variety as well as quantity of food is considered and as much obtained as can be arranged for in dealing with large numbers. In settling the diet of the Asylum the fact of food being an important medicament in the treatment of insanity has been borne in mind. Yet under all circumstances if the preservation of health is an object a full and regular supply of nourishment must be taken. To provide this is a duty which amongst certain classes is too often neglected and unfortunately the money which ought to be thus spent is squandered in other and more objectionable ways. A good deal of the sickness amongst the lower classes here can be traced to underfeeding and the consumption of unsuitable and innutritious food. A great improvement has taken place generally in the health of the attendants at the Asylum since they were allowed rations and compelled to eat at least one meal a day containing a fair proportion of animal food. Alcoholic fluids do not enter into the diet of the patients in any form because it is thought that they are for regular and general use neither necessary nor beneficial. As a medicine they are given whenever they are required, but this occurs but seldom. The whole expenditure here for wines and spirit does not amount to ten pounds per annum. That no advantage is lost by the small amount of stimulants

consumed the death and sickness ratio of the Asylum amply demonstrates. Debility and anaemia are found to be much more satisfactorily removed by ample supplies of food likely to be easily assimilated than by the use of alcohol in any form. A consideration of the physiological action of alcohol which has been so fully investigated of late years as well as experience of its use shows beyond the shadow of doubt, that to a person in good health stimulants in any form are not necessary. This is true under all vicissitudes of climate. Even more than this is proved, as it is now ascertained and agreed to by the best authorities that beyond a certain small amount the daily consumption of stimulants is more or less prejudicial to health. The quantity within which safety lies is very limited not more than a wineglassful of ordinary spirits or its equivalent in the twenty-four hours. The injurious results vary much in kind and degree being influenced by the peculiar constitution of the individual and the form in which the alcohol is taken. Nothing can be more pernicious than the system of dram drinking especially when begun early in the day before a meal is taken. This is so even although the dram be clothed in the seductive form of the local swizzle. The luxury of drinking ought only to be indulged in, when eating and to the moderate extent already mentioned. To those who see much of insanity the fearful consequences to the individual which flow from the abuse of stimulants are brought home in the most vivid way. Not only have they to witness the premature death which so often closes the drunkards career, but it falls to their lot to deal in many instances with the sad death in life, of the man who from indulgence in this vice lingers on a mere animal bereft of reason man's proudest glory. Having these terrible effects before their eyes is it to be wondered at that there are some who ask themselves if the possession of any luxury be worth the risk of reducing a single fellow being to such a state and that filled with an honest enthusiasm they labour hard to banish what they believe to be such an accursed thing from the face of the earth. The taste for stimulants is one so generally diffused amongst the human race that to eradicate it if such a thing be possible must be the work of ages. One thing is within the power of every one gifted with even a moderate degree of self control namely to limit his indulgence as far as drinking is concerned so as to preserve for himself the "*mens sana in corpore sano.*"

CARBOLIC ACID IN YELLOW FEVER.

When the paper in last month's Journal headed Epidemic Notes was written, the report of the address of Dr. Cameron M.P. on Micro-organisms and Disease, had not reached the colony. This address containing as it does the epitomized results of recent investigations in connection with the subject of epidemic disorders and their causation by micro-organisms will well repay careful perusal. There is one portion of it which at the present moment has a most vital interest for the inhabitants of this colony.

He says "But, guided by exact knowledge you can go straight at the source of mischief. With this object Dr. Declat to whom I have before referred, suggested the vigorous use, of phenic acid by injection into the veins and otherwise as a means likely to prove effective against the organisms of yellow fever and kindred acute forms of malarial poisoning. The suggestion went out to Brazil and in June last, M. de Lacaille a French physician resident in Rio wrote home his experience of it. The first case on which he tried it was a young lady apparently on the point of death from the worst form of the disease, a fever attended with the fatal black vomit. In three days she was out of danger. "During the twenty years in which I have been employed in fighting yellow fever" writes M. de Lacaille, "this is the first patient whom I am certain of having snatched from death at such a period of the disease." In a dozen other cases the treatment was crowned with equal success; but in most of them adds M. de Lacaille, "the cure was so rapid that notwithstanding my long experience I have asked myself if they could really have been yellow fever. Called in at the hour of incubation, the triumph is easy".

It is hoped there will not now be much further necessity for treating the disease in this country but if so, the remedy, (carbolic acid) so highly lauded in the foregoing extract might be tried but with all the caution such a powerful drug requires. It must be borne in mind to prevent disappointment, that after all the theory upon which it is based is as yet merely an assumption from analogy. The organism of yellow fever has not been found and even if seen it remains to be proved that its presence in the system is the cause of the disease. Besides M. de Lacaille's enthusiastic but general assertions are not quite so convincing to the professional mind as the full details of half a dozen cases

would be. Still the remedy is well worth a fair trial in a disease which so far has not been found very amenable to treatment.

The concluding sentences of Dr. Cameron's address point out very clearly the source from which improvements in sanitation may be expected, and indicate to all but more especially to the medical profession the duty that is incumbent upon them to study and to impress upon, the people the facts and methods necessary for the prevention of disease. His opinion is "After all, the law in such matters can only follow in the wake of science and for its effective operation must everywhere depend on the diffusion of correct and exact ideas as to the cause of diseases and the modes of preserving health. Every year, experience therefore convinces me more and more that it is to the spread of scientific knowledge rather than to Parliament that we must look for the full development of preventive medicine; that to the physician rather than the statesman we must appeal "to stand between the living and the dead and stay the plague."

CASE OF FEIGNED INSANITY.

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Several years ago it was no uncommon thing to see in the Asylum men who had feigned insanity with sufficient acuteness to obtain the necessary certificates for admission. They were criminals who after conviction had chosen to spend their time in a Lunatic Asylum in preference to a convict prison. Their motives and their method were similar to those of Edgar in King Lear when he resolves

— While I may 'scape
I will preserve myself and am bethought
To take the basest and most poorest shape
That ever penury in contempt of man
Brought near to beast; my face I'll grime with filth
Blanket my loins: elf all my hair in knots
And with presented nakedness out face
The winds and persecutions of the sky.

Mania was the kind of insanity usually imitated or a form of the disease bordering upon acute dementia, characterized by a sham incoherence or an obstinate silence, with filthy habits or even something more degrading. The motive was one which could be easily appreciated and the shamming was rather

cleverly done and kept up with a good deal of perseverance. Last month saw a patient admitted here who feigned insanity for the purpose simply of obtaining the shelter of the Asylum and who chose to try an imitation of epilepsy with dementia. These he simulated so clumsily as to do little credit to his imitative powers as he had the advantage of years of observation of the disease in the Asylum.

A. J. had been a patient for some years in the Asylum and was retained there latterly more owing to his bodily condition, as he suffered from the effects of rheumatism, than to any mental symptoms of which he had been free for months prior to his leaving the institution. He had never been epileptic but had suffered originally from mania. He was discharged on the 21st October 1881 perfectly sane if not very strong minded, and on the 31st October he returned to the Asylum, as it was said that he had suffered from epileptiform convulsions and then remained demented. His early return to the Asylum which he had left so well, of itself raised suspicions especially as he had told an attendant when he was discharged that he would soon see him back again. When he arrived in Berbice by the steamer he walked without any difficulty to the Asylum a distance of nearly a mile. On entering the grounds he met several of the attendants to whom he spoke quite freely and sensibly. When seen by the Steward he put on a foolish look and began to talk nonsense. On being visited that evening by the Medical Officer he lay down on the floor and commenced to kick and tumble about rolling his eyes from side to side. The pupils were normal in size and sensible to light. The movements were general and not at all spasmodic. After this visit he remained very well sleeping soundly all night and in the morning conversing freely with the patients and attendants whom he knew until the time of the morning visit came round when on the appearance of the Doctors, down he went on the floor and began to kick about. He quite evidently understood what was said to him and rather ludicrously when told firmly to keep still, answered in a stammer "I c-c-can't." Pupils were natural. It was now almost certain that he was shamming as there is no known disease presenting the symptoms he displayed. To make sure he was brought to the Medical office for further examination in the afternoon. When coming there he pretend not to be able to walk and had to be assisted along between two attendants but on

their suddenly letting him go he came very gently to the ground putting out his hands to protect himself. On entering the office he began to tremble and kick again but being blindfolded and a mild galvanic shock given him this soon stopped. He was then placed on his feet still blindfolded and did not fall when the support was taken from him. He then refused to answer questions trying to look as if he did not understand them, and not succeeding well in this. The medical men suddenly leaving him, he removed the bandage from his eyes put on his jacket which had been taken off and began to talk to the attendants near him. On Dr. Snell's return after a short absence he admitted to him that it was all a pretence and that he had acted in this way in order to come back to the Asylum. It was then thought that there would be no further difficulty with him and he was sent back to his ward to await his discharge. To the surprise of every one next morning on the medical visit a repetition of the performance began. He was thereupon removed to a small cottage in the grounds the door of which was kept open and he was left alone and fed on plain diet for some days whenever he saw anyone looking at him or was visited by the Doctor he lay down at once on the floor at other times he looked out at the window and at last began to climb out of it although the door was open, as it was not very far from the ground and it was seen that he took good care not to hurt himself no alarm was felt on this account. He soon tired of this, as it did not get any notice taken of it and he saw that he was not likely to be kept in the Asylum a fact that was constantly being impressed upon him. About a week after admission he finally dropped it and assumed his natural behaviour. He again said that he had been feigning all through giving as his reasons for doing so that he found he could not from his lameness get work in Georgetown and that his sister to whom he went would not keep him after the few shillings he took with him from the Asylum had been spent. His discharge from the Asylum was postponed on account of a slight attack of fever but he left on the 25th November with a recommendation to the Almshouse. When leaving he said he was disappointed as he thought he had made sure of being kept in the Asylum. This case is noteworthy chiefly as a reminder that there is such a thing as feigned insanity and that every one is not mad who would like to seem so, as beyond the astonishing persistence of the man it does not possess any striking character.

Staff.

Another month has passed with comparatively few changes amongst the attendants. Three male attendants have left the service. One was dismissed because contrary to instructions given to him and the general rules of the institution he left his patients together in a room without supervision leading to an accident to be afterwards mentioned. Another was dismissed for general inattention to duty and one who had been under suspicion of being concerned in a theft of clothing preferred to go of his own accord. To fill these vacancies and two that existed in the female side the following appointments were made on probation, to be second class attendants male James Frank, H. Beresford, Robert Bone. To be second class attendants female Mrs. Blackman and Francis Davidson.

Religious Services.

The Rev. J. Rannie and the Rev. F. W. T. Elliott each conducted these on two occasions during the month. The average attendance of patients was 118 males and 64 females in all 182.

Amusements.

At the fortnightly dances which were held on two occasions and the weekly practices there was an average attendance of 114 male patients and 61 female, a total of 175. The band has been so reduced in strength by the secession of two of the principal members that the playing in the Asylum grounds which has been a source of amusement to the people of New Amsterdam has had to be given up.

Accidents.

One accident which although not very severe ought to be noticed, happened owing as already stated to the dereliction of duty of an attendant, two patients were left together in the Dining Hall who quarrelled and fought and before they could be separated one of them bit the other on the lip.

Improvements.

The floor of the large day room in the West Block has been relayed in pitch pine, as it was completely worn out. The repainting of the different rooms in Ward No. 1 has been finished and that of the day room in the West Block begun.

Reports.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st November	226	131	357
Admitted in November	5	2	7
Died in November	0	0	0
Discharged in November	1	1	2
Remaining on the 30th November	230	132	362

The admissions during the month have been about the average and as there have been few discharges and no deaths, the increase of the numbers in the Asylum amounts to five. Of the patients admitted five belonged to Demerara and two to Berbice. Their place of nativity was as follows:

Natives of India	4
" " Bermuda	1 (black)
" " British Guiana	2 (black)

Five immigrants and two creoles. The male patient discharged was the person who shammed insanity. The female patient who left the Asylum well was an East Indian who had been an inmate for two years and eight months. There was not a single death during the month and little or no sickness.

NUMBER OF PATIENTS EMPLOYED.

The different kinds of work carried on in the Asylum occupied on an average 171 men and 109 women, of the male patients 28 were unable to work from mental or bodily infirmity and 19 were able but unwilling. Amongst the female these numbers are respectively 21 and 11. The farm engaged the labour of 82 men, different trades 36, portorage and other form of unskilled labour 22 and household work 31. On the female side the laundry occupied 33 women, the sewing room 22, making cocoanut oil &c. 31 and household work 13.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES OF PATIENTS WORKING &c.

	M.	F.	Total
Daily average in Asylum	228.0	131.6	359.6
Percentage employed	75.0	82.5	78.0

Percentage confined to bed	4.8	3.0	4.1
Percentage attending amusements	50.0	46.2	48.6
Percentage attending Church	51.7	48.4	50.5

THE FARM.

For a few days at the end of the month there were occasional rains which allowed the replanting of provisions to be vigorously resumed. For the earlier and greater part of the month the men were employed in preparing the ground and cleaning out the draining trenches. The produce reaped was of plantains (free of stalk) 3832 lbs., bananas 706 lbs., sweet potatoes 31 lbs., sweet cassava 1301 lbs., and garden vegetables 496 lbs. From the Old Fort farm 312 pints of milk were got, 98 eggs and 12¾ lbs. of cleaned fowls. Six pigs were killed giving 469 lbs. of pork. There were slaughtered 18 heads of cattle yielding 2643 lbs. of beef. The cattle cost \$272.50 which deducting the value of hides &c. made the price of beef 9½ cents per lb. the beef used in the Asylum is of good quality, nothing but steers being killed and care is taken in the selection of the animals. The live stock was increased by the birth of 9 pigs and one goat, and 1 pig died, besides those killed for pork. The woodcutter brought to the Asylum 26 cords of firewood.

THE WORK SHOPS.

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CARPENTER.

Work has gone on actively in this shop besides laying the floor mentioned there have been made coffins 24, bedsteads 2, benches 4, axe handles 4, and a trough and two stands for the bakery. There were 87 different kinds of repairs executed.

PAINTER.

There has been painted during the month 832 square yards. Of stencilling 58 lineal yards has been done. One of the patients who works with the painter has drawn on a panel a large copy of the Royal Arms which has been put up at one end of the Dining Hall. There were also painted of coffins 24, bedsteads 22, chairs 29, tubs 28 and tables 2. There were put in 21 panes of glass.

TAILOR.

Of patient's clothes there were made jumpers 32, pairs trousers

58 and caps 187. Of attendant's uniform 3 jackets and 5 pairs of trousers were made. There were 475 articles repaired.

SHOEMAKER.

The work done was making 1 pair boots 3 pairs of leather shoes and 10 pairs of canvass slippers. The articles repaired numbered 48.

BAKERY.

There were baked in November 35 barrels of flour yielding 9327 lbs. of bread. This gives 266 lbs. of bread for each barrel of flour.

PRINTING OFFICE.

Besides the usual number of copies of the Journal there were struck off in the Asylum Press 5497 impressions of different forms. There were also 612 tickets and 2260 were ruled and 55 books were stitched and covered. The office is now in a position to print, rule, perforate and stitch, the order books and the other many forms required in the Asylum.

LAUNDRY.

Much to the convenience of the Asylum the Board of Superintendence of New Amsterdam has now agreed to afford a constant supply of water in the daytime unless prevented by accidental circumstances. This has been very fairly carried out during the month and it has facilitated the work of the laundry. There were washed in November 14768 different articles and 1563 pieces of clothing were starched and ironed.

SEWING ROOM.

A good deal more work could be done here, if the necessity for it arose, as it is there is a difficulty in getting sufficient to keep the patients employed. There were made during the month pillow ticks 40, pillow cases 2, men's day shirts 48, night shirts 10, cotton singlets 4, women's bed gowns 70, chemises 15, print dresses 13, jackets 96, skirts 32, aprons 12, 6 baker's cloths, and 12 attendant's cap covers, in all 360 articles.

WORK ROOM.

In this department are employed the women mostly coolies who are too weakly to work in the Laundry and who have not learned

to sew. There was made here in November 36 gallons of cocoanut oil, 203 lbs. of chocolate, 24 lbs. of coir, with the usual amount of coffee and curry powder.

RECEIVED with thanks. The Report of the Inspector of Asylums for New Zealand for 1880. The numbers of the Morningside Mirror for September and October 1881.

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR NOVEMBER, 1881.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	51 45	For purchase of plantains	\$	71 28
Received for sundries sold		75 38	" " flour		340 68
" fines stoppages &c.		11 40	" repairing clocks		2 00
" Hospital account		219 01	" band (one month)		20 00
" Alms House account		184 29	" shoeing mules (one month)		4 48
" Out door poor account		6 50	" cooper's work		4 96
" board of patients		10 00	" tinsmith's work		5 00
			" sums paid under one dollar		8 47
			Balance cash in hand		101 16
	\$	558 03		\$	558 03

No. 11

THE ASYLUM JOURNAL
FOR DECEMBER 1881.

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LUNATIC ASYLUM, FORT CANJE, BERBICE,
2ND JANU. 1882.
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LOCAL HYGIENE.

VII.

There are several points in connection with personal or individual hygiene which possess peculiar local interest and which may therefore be fitly glanced at, in this the last of the series of short papers on hygienic subjects. In all temperate climates, the need of getting sufficient exercise in the open air in order to preserve health is fully recognised. When the necessities of labour do not call for out door exertion, this want is generally met by taking part in the various forms of open air recreation or in riding or walking. In the tropics there is a tendency amongst Europeans to ignore the requirements of nature in this respect, and under cover of the excuse afforded by the high temperature to pass a life, entirely sedentary. It is true that Europeans are not fitted to undergo continuously in this climate physical labour if severe in kind. The weakening effects produced on the constitution by such a course would undoubtedly predispose to disease. And in a country where sunstroke is almost unknown, it is in this secondary way that exposure to the heat injures. On the other hand it should always be borne in mind that a healthy existence is rendered impossible to any living animal or vegetable which is kept out of the reach of sunshine. The beneficent glow of the sun is the *alma mater* of every form of organic life on the face of the globe and it jealously resents interference with its rights. Man, as partaking in this organic life to be healthy, must receive a fair share of its bounty. Like plants

grown in the dark, people who live too much in closed up rooms become pale complexioned and weedy. How much better to have faces with something of a ruddy hue even if inclined to be dark and bronzed, than to keep the white and bleached look, too common here more especially amongst ladies and children of European descent. This is not unattainable if health and strength be preferred to a fancied purity of complexion. A fair amount of exercise may be safely taken at any time of the day provided the head be kept covered from the direct action of the sun's rays, and children as a rule would benefit much by being allowed the freedom of the play ground at all hours. The overseers on the sugar estates in the colony are not as a class more sickly than the clerks in the stores; yet if exposure to the sun be so deadly as many believe it, the former should survive but for a short time as their daily task keeps them in the fields for hours together, after the sun is high in the heavens. The perspiration which readily flows here is the cause of discomfort but unless it becomes excessive, not of ill health. The natives of Africa and India perspire very freely during their work and do not seem to suffer harm from it. This full action of the skin is a reason for the regular and free use of the bath. Attention to bathing is a characteristic of the refined Englishman of modern days, and both as a sanitary precaution and as a means of promoting comfort, residents in the tropics ought not to neglect that which is at once a benefit and a luxury. Considering the class from which the Asylum patients are drawn there is not found to be much difficulty in inducing them to wash thoroughly and the daily bath which they take has a beneficial effect upon them. The choice of the kind of clothing to be worn, ought also to be influenced by the fact of moisture being freely exuded from the skin. It is of advantage to carry as little weight as possible in the form of clothes, at the same time the fabrics of which these are made should not be good conductors of heat. They ought to be fitted both to exclude the direct rays of the sun and also to prevent the rapid loss of body temperature, owing to the very quick evaporation from the outer clothing in a dry wind. Chills are thus kept off and for the same reason flannel or a similar material ought to be worn next the skin. Clothed in garments not too thin and yet not too heavy neither heat nor draught are much to be feared. Residents of the colony usually recognise the need as a restorative of a full measure of sleep. Late hours cause more

discomfort, and their bad effect upon the health is even more marked here than in temperate climates.

Before leaving the subject it may be good to recapitulate very briefly the different points to be observed in order to maintain good health. There must be the most scrupulous cleanliness both within and around the dwelling. Every particle of refuse must be removed to a distance before decay begins or smell arises from it. So is the air to be kept pure and of this a free supply must be had night and day. Through the sleeping apartments a constant current ought to pass. The water drunk should be free from all impurities organic or inorganic, or as nearly so as can be obtained. It is requisite to have a full supply of nutriment containing a due proportion of animal food. Stimulants if taken at all should be indulged in with the greatest moderation. Regular and daily exercise should be had in the open air. Bathing must be carried out with regularity, and frequency. The clothing worn is better to be light, of loose texture, and of a non-conducting material.

Those who live in accordance with the principles here laid down are likely to enjoy ordinary good health even in the tropics. They will have fitted themselves to withstand the evil effects of malaria that great drawback to health in many parts of this colony and will be less liable to suffer in the epidemic outbreaks of disease which at intervals visit this as all other countries. But when people live in open disregard of every sanitary obligation, and the day of retribution comes as it most surely will, then let the blame rest where it ought to do, and not be thrown as is too often the case on the "horrid climate."

NARCOTICS AS CAUSES OF INSANITY.

As has been more than once incidentally noticed in the Journal the taste for indulgence in narcotic poisons as a luxury is one widely diffused over the world. That intemperance in their use is a fruitful source of insanity is fully acknowledged by all who have given attention to the subject. The scientific study of insanity has been carried to its present development amongst European nations. As a consequence the narcotics in general use amongst the white races are those whose effects are best known and described in text books. First amongst these and of such importance as to overshadow the rest is alcohol. Alcoholic

intemperance acts as a cause of insanity by predisposing the individual to disease by exciting it, and still more by producing in the drunkard's descendants the hereditary taint of the insane temperament. The last mentioned effect is one which is not taken into consideration in the present paper. In England of narcotics there are only two which are employed to such an extent as to furnish reliable grounds for comparison of the evil effects that follow their abuse. These are alcohol in its different forms and tobacco. In this colony amongst every one of the diverse races which go to form its population, both these articles are consumed in quantities as large if not larger than in England. Reliable statistics on this point are for various causes difficult to be obtained but a full knowledge of the labouring population of both countries leads to the belief now expressed. Amongst women more tobacco is used here than in England, it is a very rare thing to find a black or coolie woman who does not smoke it. In a very large section of the people, those of East Indian extraction, which number nearly 85,000 individuals two other narcotics are in very general use opium and the preparation of Indian hemp known as ganje, whilst stramonium is occasionally smoked. Again there are no statistics available to show the comparative extent to which these are employed but a general knowledge of the people, and experience of their number who come for relief to the Hospital here leads to the belief, that whilst both are very generally consumed opium is if anything more commonly taken than ganje. We have therefore in this colony four different narcotic drugs in constant and regular consumption, and this carried on so extensively and for such a length of time as to yield reliable results with regard to the evil effects which they produce, if there are any. They each and all of them cause marked physiological effects upon the human frame and more especially on the brain functions. What is their comparative influence in producing cerebral changes of the kind which lead to the development of disease requiring Asylum treatment? In short are all of them equally powerful factors of insanity? This is the question to which an indication of the true answer as far as the experience of this Asylum supplies it will now be given. With reference to the two narcotics first mentioned it has already been stated in the Journal that 50 per cent of the whole number of patients received here take alcohol to an intemperate extent so much so as to be noted as a cause for their insanity. Although tobacco is in general use there has not been a

single case admitted for years in which any influence could be traced to it as a cause of disease. Chronic alcoholism is recognized and too often seen in the Asylum, chronic nicotism if it exists has not given a single patient to this institution. Amongst the coolies although as already stated opium is believed to be more generally used than ganje, in those who are sent to the Asylum the same relative position is not maintained. Of the male East Indians admitted 70 per cent of the whole are found to be addicted to ganje smoking, or excluding the cases in which their previous habits cannot be ascertained 85 per cent were given to this vice. On the other hand only about 4 per cent took opium and in the patients here it has in almost all cases been combined with ganje. So the mental disease arising from ganje is well known and common, whilst that from opium if there be one is never seen. The narcotics under notice may therefore as far as the production of insanity is concerned be divided in two classes. One very potent in that respect comprising alcohol and hemp, the other comparatively innocuous formed of opium and tobacco. A glance at them so classed will show that in each pair there is a similarity in the primary symptoms ordinarily produced when they are taken in the usual doses. The first (alcohol and hemp) are nervine excitants the other (opium and tobacco) are sedatives. This is a statement of the effects which it is wished to produce when taken non-medicinally, for it is not forgotten that when given in excessive doses or under special circumstances others may ensue. The insanity consequent on the abuse of alcohol and of hemp are both found to preserve in their symptoms something of the characteristics of the intoxication resulting from their use, and these are so marked that they cannot escape notice and so send the sufferer from them to the Asylum. The disease resulting from the sedative narcotics may be so obscure as not readily to be recognised or so undemonstrative as not to bring the patients within the insane class. Otherwise opium must be held to be much less permanently destructive to the mental faculties than it is usually supposed to be. As for tobacco its good character is now generally undergoing a rehabilitation from which nothing known here detracts. The answer to the question stated above is that in British Guiana the narcotics in general use, have very different effects in producing insanity. Classifying them according to their activity in that respect, ganje, alcohol, opium and tobacco, is the order in which they come, but as has been shown with a marked

distinction between the first two and the last two. The subject is here treated entirely from the physical aspect and no opinion is offered on the moral questions in any phase or variety of the vice of intemperance, nor on the social effects of opium eating. The Chinese who are usually credited with being very greatly addicted to this custom are not sufficiently numerous in the colony to yield reliable statistics on the subject, the small amount of insanity amongst them if it possess any value, goes to support the views on the effects of opium just enunciated. One point is clear Indian hemp is in this colony a most prolific source of lunacy. Some years ago the Lieutenant Governor of Bengal said that 30 per cent of the lunacy of that province arose from its use. Amongst the immigrants sent here, the tendency to this vice continues and the affects on the mind are equally disastrous.

SEWAGE REMOVAL FOR GEORGETOWN.

In a full and able report, "On the collection and dispersal of city refuse and excreta" made to the Town Council of Georgetown by Mr. Hill Town Superintendent, conclusions are reached similar to those come to in an article on the subject in a late number of this Journal. The plan recommended in that report of having the collection made in pails at the cost of the corporation, if it be adopted and its execution well supervised, must lead to a marked improvement in the cleanliness and consequently in the health of the city. Mr. Hill's plan has also the merit of being one of the cheapest that could be adopted, that is if the corporation does what it clearly must do, if the matter is to be effectually dealt with, take it into their own hands. With reference to the secondary question of the disposal of the soil, it should be borne in mind that few if any of the patent processes for converting it into a profitable manure more efficient than guano have proved financial successes and many of them have been tried. The value of excremental matter as a manure is not increased by undergoing any process whatever. It is only rendered more portable. The whole question is one therefore of relative expense of carriage. In China where means of water carriage is abundant the excretal matter is conveyed in its pure state in boats and punts to the fields and then applied to the crops with results, that have stood the test of centuries. The conditions here are something similar to those in China, can the same plan of disposal not be adopted with profit.

Staff.

The difficulty of obtaining steady and efficient attendants is one that has been frequently mentioned in these notes, but not more frequently than its importance deserves. Comparing Asylum work here with that in England, the difference lies in the kind of attendants more than in the patients. Asylum inmates are as manageable in British Guiana as in Europe, Asylum attendants are much less so. The changes amongst their number are in consequence greatly more numerous than is desirable. This fact is fully recognised here and no attendant is ever dismissed who shows even a small amount of aptitude for the duties of the post. When a specific offence is given as the grounds of dismissal it may always be assumed that in addition he has been generally inefficient. The changes during December were not many in number, although more than could have been wished. One first class attendant (male) who had been over six years in the service resigned to go into business on his own account, one of the same class had to be discharged for general inefficiency and two second class attendants one male and one female left at the end of their period of probation being found unfitted for their employment. To fill vacancies C. F. Greenidge, Futtay and W. Phillips were appointed second class attendants on probation.

Religious services.

These were carried on as usual, on two occasions they were conducted by the Revd. J. Rannie, and on two by the Revd. F.W.T. Elliott and on another prayers were read by the Assistant Medical Superintendent. The number of patients present at the services averaged of males 117 and of females 66 a total of 183.

Amusements.

There have been three fortnightly dances during the month which were attended by 160 patients, 103 men and 57 women. The wet weather prevented visitors coming to them from the town in the usual number otherwise they passed off well. On Christmas day the patients had a good dinner of roast beef and plum pudding which was thoroughly enjoyed by all nationalities alike.

Accidents.

The month has passed without the occurrence of any accident.

Improvements.

Towards redecorating the interior of the wards some progress has been made during the month. The whole of Ward No. 1 except the single rooms and gallery is now finished. The dormitories here have now a peculiarly cheerful aspect and this building is newer and in better condition than most of the Asylum. The day room the reflooring of which was noted in last month has been repainted in the usual style with stencilled dado. The painters are now at work on the single rooms in Ward No. 1.

The bath room in the East Block has had its wooden floor which was completely worn out replaced by one of slate. In the kitchen the fixed pots have become worn and broken and have been replaced by two much larger in size set in very substantial brick work.

The carpenters have been employed assisting in the changes now mentioned and the following works have been begun, one of the sills of the large building in the North Block has become completely decayed is being removed and a new one put in. Jalousies are being made ready to replace the iron bars remaining in the single rooms in the West Block and when these are put in their place the last vestige of the old prison style of Asylum will have disappeared from this place. The fitting up of a place to be used as an electrical room and a small pathological laboratory has been begun.

There has been an opportunity lately of pushing on more vigorously than usual with improvements and repairs in the Asylum buildings because at the present time, there are several convalescents amongst the patients who are skilful carpenters and it is wished to take full advantage of the circumstances. In a collection of wooden houses as large as some villages and of which many are very old there is always scope for the employment of carpenters in useful work.

Reports.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st December	230	132	362
Admitted in December	7	0	7
Died in December	3	0	3
Discharged in December	4	3	7
Remaining on the 31st December	230	129	359

The number in the Asylum has decreased three in the month, this decrease has taken place on the female side, three women having been discharged and none admitted, in the male side the admissions are exactly balanced by the discharges and deaths. All the patients admitted came from the county of Demerara. Their place of nativity were as follows:

Natives of India	3
Do " Barbadoes	2 (black)
Do " Africa	1 (black)
Do " Sweden	1 (white)

They were therefore all immigrants. Of the male patients discharged one had been an inmate of the Asylum for 3½ years one for one year and seven months another for 13 months and the fourth for 10 months. One female patient who was discharged had been in the Asylum for one year and 8 months another for a year and the third for two months.

The causes of death were

Bright's disease	2
Phthisis and Bright's disease	1

The health of the Asylum was very good during the month, neither fever nor any other form of zymotic disease showing itself. The deaths were about the average in number.

NUMBER OF PATIENTS EMPLOYED.

Increased difficulty has been experienced during the month in finding employment for those of the patients who sew, in the latter part of the month the female patients in the sewing room were for some days completely idle. With the beginning of the new year a start will be made with the Asylum clothing which will help to keep them at work for a time. The number engaged in the different industrial occupations of the Asylum were about an average namely 174 men and 101 women a total of 275. Of the male patients there were prevented from working by infirmity of body or mind 36 and 18 refused to do anything, 21 women were unable to work and 9 refused. Of the men 84 worked in the farm, 37 at the various trades, 22 at different kinds of unskilled labour and 31 were engaged about the wards. Of the women 37 were in the laundry, 20 in the

sewing room, 31 in the ordinary work room and 13 assisted in the wards.

DAILY AVERAGE NUMBER IN THE ASYLUM AND
PERCENTAGES OF PATIENTS WORKING &c.

	M.	F.	Total
Daily average in Asylum	228.7	130.9	359.6
Percentage employed	76.3	77.6	76.6
Percentage confined to bed	5.1	3.0	4.3
Percentage attending amusements	45.1	44.3	44.7
Percentage attending Church	51.3	50.1	50.8

THE FARM.

The showery weather which has prevailed during the month has allowed the replanting of the provision grounds to be pushed on vigorously. It is now nearly completed. The produce obtained from the farm was of plantains (free of stalk) 2238 lbs., bananas 260 lbs., sweet cassava 247 lbs., sweet potatoes 38 lbs., cocoanuts 36, garden vegetables 563 lbs. From the cattle farm 363 pints of milk were received, 134 eggs, and of cleaned fowls 7¼ lbs. The number of pigs killed was four from which 308 lbs. of pork were obtained. There were slaughtered 15 heads of cattle costing \$322 and yielding 3070 lbs. of beef. This makes the cost of beef to the Asylum a little under ten cents a pound after the value of hides &c. is deducted. The losses by death amongst the live stock have been larger than usual this month comprising one cow and five goats. This is in all likelihood to be ascribed to the changes in their food owing to the growth of fresh grass on the pasture after the rain began to fall. The increase by birth has been one sheep, one calf, one goat, and twelve pigs. The wood-cutter has brought 28 cords of wood to the Asylum.

THE WORK SHOPS.

—
CARPENTER.

There are now eight patients at work under the carpenter attendant and the modes in which they have been mostly engaged has already been mentioned. Besides that work the following articles were made in the shop 18 coffins, 2 bedsteads, 1 set of steps, 5 frames for tables, 9 Oxford picture frames, 4 axe handles, 1 splinter bar for waggon and 127 different repairs of various kinds made to the buildings or furniture.

PAINTER.

There were 1204 square yards of paint work done and 68 lineal yards of stencilling, and the following articles painted 17 coffins, 23 bedsteads, 13 chairs, 39 tubs, 6 tables, 5 benches, and 1 hearse. Nine picture frames with the enclosed texts &c. were varnished. Six panes of glass were put in.

TAILOR.

There were made here 81 patient's jumpers, 120 pairs of trousers, 21 caps. Attendant's trousers 5, attendant's jackets 7, and 405 different articles were repaired.

SHOEMAKER.

One pair of leather boots, 3 pairs shoes, and 20 pairs canvass slippers were made. The repairs numbered 27.

BAKERY.

There was produced 9890 lbs. of bread, 37 barrels of flour were expended, the yield was therefore a little over 267 lbs. per barrel.

PRINTING OFFICE.

In addition to the Journal, 6858 impressions of different forms were struck off. There were 267 tickets printed. Ruled 1140 forms and 163 books stitched.

LAUNDRY.

The number of different articles of clothing washed in the Asylum laundry in December 11,527. There were starched and ironed 1466 pieces.

SEWING ROOM.

As already stated the women employed here were idle for part of the month. There were made here women's jackets 17, skirts 26, bed gowns 58, print dresses 19, men's day shirts 13, drawers 9, and pillow sacks 195 in all 337 articles. The different articles repaired amounted to 397.

WORK ROOM.

In this department, were prepared 148 lbs. of chocolate, 15 gallons of cocoanut oil, and 20 lbs. of coir, with the usual amount of coffee and curry powder.

RECEIVED with thanks. The number of the American Journal of Insanity for October. The Barbadoes Globe &c.

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR DECEMBER, 1881.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	101 16	For purchase of plantains	\$	108 00
Received for sundries sold		124 78	" " flour		95 60
" fines stoppages &c.		19 38	" repairing clocks		2 00
" Hospital account		214 12	" band (one month)		10 00
" Alms House account		180 89	" shoeing mules (one month)		4 00
" Jail account		4 50	" tinsmith's work		1 44
" board of patients		40 00	" bricklayer's work		60 25
			" wheelwright's work		12 00
			" sums paid under one dollar		11 26
			Balance cash in hand		380 28
	\$	684 83		\$	684 83

THE ASYLUM JOURNAL

STATISTICAL SUPPLEMENT FOR THE YEAR 1881.

LUNATIC ASYLUM, FORT CANJE, BERBICE, 16TH JANY,
1881.

NUMBERS IN THE ASYLUM.

	M.	F.	Total
Remaining on the 1st January	212	119	331
Admitted in 1881	65	35	100
Died in 1881	24	13	37
Discharged in 1881	23	12	35
Remaining on the 31st December	230	129	359

The increase in the number of patients in the Asylum was 28 during the year (18 males and 10 females). The daily average number under treatment was 218.6 males, 124.9 females, total 343.5. the total number treated was 431.

ADMISSIONS.

These numbered 65 males 35 females, in all 100.

Of these 2 males (one not insane) and 6 females, a total of eight were readmissions of patients who had been away from the Asylum for the following periods:

	M.	F.	Total
Under one month	1	0	1
Over one year	0	1	1
" three years	0	3	3
" five years	1	0	1
" eight years	0	2	2

Classified as to NATIVE COUNTRY the patients admitted stand as follows:

	M.	F.	Total
Natives of British Guiana	14	13	27
" " India	37	12	49
" " Barbadoes	6	3	9
" " St. Thomas	1	0	1
" " Bermuda	1	0	1
" " Surinam	1	1	2
" " Africa	2	1	3

" " England	1	1	2
" " Sweden	1	0	1
" " Madeira	1	3	4
" " China	0	1	1

Seventy-three per cent of those admitted were immigrants taking the word in its broadest sense.

From the three Counties there were received patients in the following numbers:

	M.	F.	Total
From Demerara	45	22	67
" Berbice	14	8	22
" Essequibo	6	5	11

Their COLOUR was as follows:

	M.	F.	Total
Black	18	11	29
Coloured	5	7	12
White	5	4	9
Brown (East Indians)	37	12	49
Yellow (Chinese)	0	1	1

Their AGE

	M.	F.	Total
Under 15 years	0	1	1
Between 15 and 20 years	2	1	3
" 20 and 30 "	22	8	30
" 30 and 40 "	21	8	29
" 40 and 50 "	12	5	17
" 50 and 60 "	1	4	5
" 60 and 70 "	1	1	2
" 70 and upwards	0	0	0
Unknown	6	7	13

As few people here know their own age these statistics are only approximately true.

Their OCCUPATION

	M.	F.	Total
Agricultural Labourers	48	21	69
Carpenters	3	0	3
Clerks	2	0	2
Porters	1	0	1
Messenger	1	0	1
Actor	1	0	1

Tailor	1	0	1
Cooper	1	0	1
Bricklayer	1	0	1
Sailor	1	0	1
Puntsman	1	0	1
Wood cutter	1	0	1
Printer, pressman	1	0	1
Sail maker	1	0	1
Sempstresses	0	4	4
Cook	0	1	1
Laundresses	0	2	2
House keeper	0	1	1
None or not known	1	6	7

Their RELIGION

CHRISTIANS	M.	F.	Total
Church of England	14	6	20
" " Scotland	1	3	4
Roman Catholic	5	6	11
London Missionary Society	5	2	7
Wesleyan Methodist	1	2	3
Lutheran	1	0	1
HINDU	32	10	42
MUSSULMAN	3	2	5
Not known	3	4	7

DEATHS.

The deaths numbered 37, 24 males and 13 females. This gives a percentage of mortality on the average number resident of 10.7 (males 11.0 females 10.4) and on the whole number treated 8.5. The following table shows the causes of death:

	M.	F.	Total
Epilepsy	1	1	2
" with Phthisis	1	0	1
" " Bright's disease	1	0	1
Apoplexy with Bright's disease	0	1	1
Syphilitic cerebral disease	1	0	1
Cerebral meningitis	1	0	1
Phthisis	1	0	1
Hepatitis	0	2	2
Yellow atrophy of liver	1	0	1
Cirrhosis of liver	1	1	2
Lardaceous disease of spleen	1	1	2
Bright's disease	12	5	17

" with cirrhosis of liver	1	1	2
" " endocarditis	1	0	1
" " hepatitis	1	0	1
" " pulmonary embolism			
and valvular disease of heart	0	1	1
Bright's disease with Phthisis	1	0	1

In every case the cause of death was verified by post mortem examination. The patients who died had been in the Asylum for the following periods:

	M.	F.	Total
Under 3 months	3	3	6
Between 3 and 6 months	4	1	5
" 6 and 12 months	4	1	5
" 1 and 2 years	2	1	3
" 2 and 5 years	6	4	10
" 5 and 10 years	3	2	5
Over 10 years	2	1	3

There was not any inquest required to be held during the year.

DISCHARGES.

The inmates discharged were 35 in number (23 males 12 females). In all cases the patients were discharged well, but in one instance (a man) insanity had been feigned and so the recoveries are less by one than the number stated.

The percentage of recoveries to admissions is 34. The patients who recovered had been in the Asylum for the following periods:

	M.	F.	Total
Under 3 months	1	1	2
Between 3 and 6 months	1	0	1
" 6 and 12 months	6	2	8
" 1 and 2 years	4	4	8
" 2 and 5 years	9	5	14
" 5 and 10 years	1	0	1
Over ten years	0	0	0

Only one of these patients had been previously discharged from the Asylum. None of the patients made good their escape from the Asylum, those who strayed away having been brought back.

USE OF RESTRAINT.

Neither mechanical restraint nor seclusion have been required in any case during the year. Manual restraint further than

interference between patients quarrelling or to prevent injury has not been resorted to.

AMUSEMENTS &C.

The particulars, regarding the amusements and occupations of the patients and the religious services held, have been detailed regularly in the monthly numbers of the Journal, so beyond the percentages for the year given in the subjoined table nothing further is required here.

	M.	F.	Total
Daily average in Asylum	218.6	124.9	343.5
Percentage employed	76.5	71.7	74.7
Percentage confined to bed	2.7	1.9	2.4
Percentage attending amusements	49.8	46.3	48.5
Percentage attending Church	57.4	49.4	54.6

ACCIDENTS.

There have been four accidents, all arising in quarrels between patients and none attended with dangerous consequences. They were two cases of simple fracture of the humerus and two bites one of the ear the other of the lip.

ALTERATIONS AND IMPROVEMENTS.

The structural improvements which have been carried out during the year are, the conversion of two cottages into quarters for the Steward, the erection of a latrine in connection with Ward No. 2, making concrete footpaths to the work shops and brick pillars for the sills, relaying the floor of the day room in the West Block in pitch pine, removing the wooden floor from the bath room of the East Block and relaying it in slate, replacing the boilers in the kitchen by others of larger size and making gutters &c. in connection with the kitchen as well as laying on the water supply to the boilers. There are several other works in progress and the buildings have required and had numerous repairs done to them. The following places have been repainted and the interiors decorated in stencil work, the Steward's quarters, the interior of Ward No. 4, the sewing room, the dining room of the East Block, the interior of Wards Nos. 5 and 6, the exterior of the South Block, the interior of the three dormitories in Ward No. 1, and the day room of the Wes Block. In connection with the farm, a piece of ground adjoining the Canje, has been reclaimed from the river by embankment and is now planted in sweet potatoes.

FARM AND WORK SHOPS.

The amount of produce obtained from the farm and its value is given below. There is no part of the annual vote expended in connection with the farm, all the money required to work it being obtained from the Industrial Fund.

Plantains ground provision &c. 21tons 13 cwt. 44 lbs.	\$ 720. 14
Cocoanuts 520	9. 36
Dried plantain leaves 14,000 lbs.	105. 00
Milk 3944 pints	197. 20
Eggs 1190	23. 80
Cleaned fowls 163½ lbs.	32. 70
Pork 5339½ lbs.	694. 32
	\$1782. 52

One hundred and forty-four heads of cattle were killed, yielding 13 tons 3 cwts. 38 lbs. of beef, of which the cost to the Asylum was eight four-fifth cents per lb.

Numbers and value of live stock belonging to the Industrial Fund of the Asylum on the last day of the year.

One pony	\$150.00
Two mules	120.00
Three donkeys	75.00
One hundred pigs	350.00
Eighteen heads of cattle	450.00
Eighteen goats	54.00
Nineteen sheep	57.90
Ninety heads of feathered stock	45.00
	\$1301.00

The work done in the different shops has been given monthly in detail in the Journal. It cannot be valued except approximately and therefore is not summarised here. It may be stated that the whole of the labour required in making the various alterations and improvements already noted excepting bricklayers (paid out of the Industrial Fund) was obtained from the attendants and patients of the Asylum.

EXPENDITURE FOR 1881.

From the votes	Total	Weekly rate per patient
On salaries	\$ 7140.00	.39
" wages	4653.20	.26
" maintenance	15266.51	.85
	\$27059.71	\$1.50

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR THE YEAR 1881.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	210 81	For purchase of plantains	\$	937 44
Received for sundries sold		1197 09	" " cocoanuts		245 00
" fines stoppages &c.		207 58	" " flour for bakery		3174 33
" Hospital accounts		3246 45	" " implements, furniture &c.		1184 36
" Alms House accounts		1893 93	" " books &c.		32 36
" Jail accounts		18 00	" " a pony		100 00
" Out door poor accounts		112 00	" " a cow		40 00
" board of patients		80 00	" " tiles slates &c.		66 14
" hides sold		139 54	" " stationery		109 54
" coconut oil sold		45 60	" repairing clocks		26 00
" printing done		23 67	" " boats		24 00
			" band and amusements		277 58
			" shoeing mules		41 20
			" hire of hearse		13 00
			" bricklayer's work		156 03
			" cooper's work		42 96
			" blacksmith's work		50 00
			" tinsmith's work		56 85
			" wheelwright's work		12 00
			" saddler's work		3 00
			" playing harmonium		35 28
			" gratuities to patients on discharge		19 48
			" sundry expenses of attdts. &c.		34 84
			" sums under one dollar		113 00
			Balance cash in hand		380 28
	\$	7174 67		\$	7174 67

THE ASYLUM JOURNAL

FOR 1882

CONDUCTED BY THE MEDICAL SUPERINTENDENT

OF

THE PUBLIC LUNATIC ASYLUM

FOR

BRITISH GUIANA

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Asylum Staff

Medical Superintendent
ROBERT GRIEVE M.D.

Assistant Medical Superintendent
GEORGE SNELL, M.R.C.S. England

Steward
C.B. STEVENSON

Clerk
S. HOOTON

Matron
MRS. GEMON

No. 12

THE ASYLUM JOURNAL

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
15TH FEBRUARY, 1882.
—

WHY ARE ASYLUM WARDS DECORATED?

—

The question contained in the title of this paper will meet with a response varying in accordance with the different views held on Asylum administration, or the amount of knowledge on that subject possessed by the individual. It may be conceded, that it is advisable for the suffering inmates of institutions devoted to the care of the insane to possess every comfort and luxury which can judiciously be afforded them; yet the true answer is not contained in this admission. Others less charitably inclined, may hold that the sole motive which induces Asylum authorities to cover the walls of the wards with lively colours and bright patterns and to decorate them with mirrors, pictures, statuary, and flowers, is the desire for display, the wish to hear visitors say how pretty! and how nice! Even if this were so the action would be one not to be reprehended; for it would be some indication of interest taken in the place and pride in its appearance and without these, what is an Asylum likely to become? No one will undergo the trouble necessarily involved in the adornment of rooms, and remain indifferent to those occupying them. There is a more substantial reason, than either just mentioned, for giving a pleasant aspect to the wards of an Asylum. It is contained in the fact that the conditions surrounding the patients have all of them an influence either for good or evil, upon the progress of the disease from which they suffer. That we physically are very much the creatures of our environment

is one of the accepted truths of the modern school of philosophy, and that this is the case with the individual on his mental side has been recognized ever since the subject engaged men's minds; for what otherwise is the meaning of training or the formation of character. In a more limited and immediate way but one bearing directly upon the subject the fact that the circumstances under which a man is placed, influence his feelings and consequently his conduct, is well known. Most people experience a feeling of awe and walk with bowed head and softly falling footsteps in the aides of a noble cathedral. The constrained and subdued behaviour of a clown ushered into a richly furnished drawing room is another familiar instance of a similar effect. In both these cases there is no doubt that much of the feeling produced is the result of strangeness. Repetition may lessen the immediate effect but, on the other hand by association it tends strongly towards the formation of fixed habits appropriate to the position occupied. This is generally and fully recognised and conduct unbecoming a special place is at once noted as an incongruity. Every one would express surprise if in a legislative assembly held in a barn exceptional dignity of manner was found, just as riot is not looked for in a palace. As with the outer world so with the population of an Asylum. Putting to one side the very small proportion amongst them who may be suffering at any one time from attacks of acute excitement, Asylum inmates are guided in their actions by feelings identical in their kind with those that rule the human race generally, although, they may be at times exaggerated in their display and founded on rather an unsubstantial basis. To some influences owing to the great mobility of their nervous system they respond most readily, thus their surroundings impress them in a high degree. Given the rags, the straw, and the chains of Bedlam a hundred years ago and you obtain corresponding conduct, that of wild beasts. This was not entirely caused by direct cruelty but in part arose from the fact that it was believed to be in keeping with everything around them. It is no uncommon thing to hear new comers to this place defend their noisy and disorderly conduct by the argument that they are mad and that is how madmen should behave. As these people are put into a bright clean and well furnished room, they are astonished; but the effect upon their demeanour is often marvellous. At the same time it is

impressed upon them that here mad people are expected to behave as well as others. When they see that they are treated as if this were the case, in many instances attempts at self-control are called forth and recovery is hastened. To obtain the full benefit of this mode of treatment it requires to be continued regularly and perseveringly so as to assist in the formation of permanent habits of a new kind. Convalescence from insanity resembles childhood, and in nothing more so, than in its being a period peculiarly fitted for education. By education is meant not that knowledge only which is composed within the "three Rs" or even more extended boundaries of the same class, but the wider training which tries to produce honest men and industrious, well behaved citizens. But it may be asked how can pictures on a wall or flowers in a room aid in this education. By teaching habits of order as well as developing a taste for innocent luxuries and fostering that desire which is one of the greatest inducements to industry; the wish to possess a comfortable home. A working man's cottage which is well and tastefully furnished is not likely to be inhabited by a sluggard, a drunkard or a thief. But it is the immediate effect produced upon the insane, when wards are kept scrupulously clean well appointed and brightly decorated, which more especially brings these and similar matters within the category of medical treatment. Every one engaged in Asylum practice knows that this is not a purely imaginary or theoretical doctrine. Patients who reduce to rags their ordinary clothing, and by whom even strong dresses are soon destroyed, may at times be cured of their destructive tendencies by decking them in unwonted finery. So a broken pane in a window left unrepaired leads to a wholesale destruction of glass. A dilapidated chair or a crazy table are to be the first articles seized when it is meant to destroy, whilst a nice picture or a pretty vase are passed by and left unharmed. The truth is that ward decoration is but one form of restraint but it is one which is wonderfully free from disadvantages. It rouses no angry feeling either in those who are subjected to it or in those by whom it is administered. It is absolutely void of even the appearance of harshness and it is not liable to be abused. All its tendencies are in the direction of good and this being fully recognised, it is as a curative measure that modern Asylum wards are decorated.

BRIGHT'S DISEASE IN THE ASYLUM.

That in 24 instances out of the deaths which occurred in the Asylum in 1881, advanced disease of the kidneys was found on post mortem examination, is a fact which proves beyond doubt that however rare this disease may be among the insane in Europe, it is common enough in British Guiana. In the latest edition of Bucknill and Tuke's Psychological Medicine, it is said "We have only met with three instances of Bright's disease among the insane, and upon inquiry in other Asylums, we have found that the experience of others has been of a similar nature. Prior to observation, we should have expected Bright's disease and insanity to have been concurrent on account of the common influence of intemperance in the two disorders" and other authorities confirm this view. More than once the prominent part which alcoholic intemperance plays in the production of insanity in this colony has received notice in the Journal, now it is seen that Bright's disease prevails to an exceptionally great extent. As mentioned in the quotation just given the natural assumption is that some connection exists between the two facts. From Asylum experience alone it is difficult to decide this question but a certain amount of proof in support of the truth of the assumption is contained in the statements now brought forward. As to the fact of the existence of the disease, on that point it is thought there cannot be much room for doubt. After death the state of the kidneys is carefully examined with the result noted above. During the last ten months in every case in which the urine of patients when admitted could be obtained for examination, it has been specially tested to ascertain whether albumen was present in it or not. This examination has been made in 71 instances and in 21 cases albumen was unmistakably detected in the urine in various amounts. This gives a proportion of 30 per cent of the patients who suffer from albuminuria on admission. The increased ratio of kidney disease in the deaths over that in the admissions is accounted for to a limited extent by the complaint becoming developed whilst the patient is in the institution; chiefly it is owing to the incurability of the complication. Those who are insane and at the same time suffer from Bright's disease, rarely if ever regain their mental health so far as to authorize their discharge from the Asylum. Having thus shown the extensive prevalence of the disease among the insane

in this place it remains to be seen whether there is any ascertainable link connecting this with alcoholic intemperance. When persons are sent here, with them comes a statement giving amongst other things some information as to their previous habits. This is supplemented by inquiries made in the Asylum and the results are put on record. Out of the 71 cases just mentioned, in 64 the previous habits of the sufferers were ascertained. Dividing these into two classes, temperate and intemperate 30 were found to belong to the former, and 34 to the latter class. Amongst the 30 temperate persons 5 were found to suffer from albuminuria, in the 34 intemperate 14 were so affected. That is of the insane who were reputed to be temperate 16 per cent had albuminuria, whilst among the known intemperate the proportion was 41 per cent. This may be met by the allegation that the same amount of Bright's disease is to be found amongst the sane who are intemperate. Unfortunately the material for the exact determination of this question is not in existence. In the returns of causes of death in the colony generally, published by the Registrar General disease of the kidneys holds a very insignificant place. A reason was given in a former paper for believing that Bright's disease is much more widely prevalent than the returns indicate or what is commonly believed to be the case. It was there stated that when the urine of all the different patients at one time in the Berbice Colonial Hospital was examined, in nearly 90 per cent of the number albumen was detected. The point whether or not the extreme prevalence of this most insidious and fatal disorder is limited to the insane, which as far as positive evidence goes is all that is yet proved, is one worthy of being fully discussed and definitely settled. This can only be done by an examination during life, of the urine, and after death, of the kidneys carried out in a sufficient number of instances and by competent observers and the results afterwards put on record. The Proteus-like forms taken by the various symptoms makes its certain diagnosis in any other way a matter of difficulty, and it is possible that deaths from this disease may sometimes appear on the register as arising from dropsy, anaemia, heart disease, dysentery and similar complaints. The subject is one which well deserves the attention of those members of [the] medical profession in the colony who may have special opportunities of investigating it, and its elucidation might be fitly taken in hand by the British Guiana

Medical Society. Suppose it be proved that disease of the kidneys is of very frequent occurrence in this colony, drunkenness cannot be the sole cause of it. The vice is prevalent enough in England where Bright's disease although not rare cannot be said to be very common. There must therefore exist here some additional factor or factors concerned in the production of the disease. Are these climatic or do they depend upon the form of alcohol in use? This is another problem of which the solution would be both instructive and useful. Notwithstanding that the opinion of such a high authority in Psychological medicine as Griesinger is given in support of the contrary view, it is believed, after some years experience in this Asylum that Bright's disease has some etiological connection with insanity. The symptoms seem to be perceptibly modified by its presence, and it is thought that alcoholism plus Bright's disease can be recognised as differing in character from alcoholism without it. But this is a branch of the subject which at some future time will be more fully considered.

Hyoscyamine has been tried in a few cases. The results so far have not been very encouraging. Three patients (all black men not East Indians) took it, two of whom were suffering from chronic mania and one from mania in the acute form. The preparation used was the crystal and the dose to begin with was one-sixth of a grain twice a day. This produced marked and unmistakable physiological effects, the pupils were widely dilated, there was staggering ending in inability to walk, loss of power of articulation, and dribbling at the mouth giving an appearance of complete imbecility and helplessness. Whilst this condition lasted the patients were necessarily quiet but as soon as it passed off their noisiness and restlessness returned. So quickly was tolerance of the drug established that the dose had in one case to be trebled in three days and then lost its power over the patient after which it was not considered advisable to push the treatment any further. None of the patients have permanently improved in condition by the use of hyoscyamine. As the supply obtainable was soon exhausted the trial of the remedy was not so extended nor so varied as might be advisable but a further opportunity of testing its remedial powers may be found.

The trial of Guiteau for the murder of President Garfield has

terminated in a verdict of "guilty" but whether in the degree which comes with it the punishment of death or not is as yet unknown. Thus ends another *cause celebre* and with it closes a series of scenes which will remain a standing reproach to the mode in which justice is administered in the United States, and of which it was a painful thing even to read the account. The verdict is likely to meet with the approval of most people alienists amongst the others, for even if it be a moot point whether or not Guiteau in his mental antecedents or in his conduct during the trial was altogether of the common order of men, still he showed such a sense of responsibility as to bring him well within the range of punishment either to the full or to a modified extent.

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Lately Mr. Norton Photographer from Demerara was for several days engaged taking photographs of the Asylum, and of a number of the inmates. Although this was a task of no ordinary difficulty owing to the extreme restlessness of many of the sitters, Mr. Norton has succeeded in obtaining not only a capital panoramic view of the Asylum buildings but also a number of groups and single portraits which are very good and characteristic. The latter possess much scientific interest and are likely to prove of value to students of the physiognomy of insanity and of facial expression as shown in the different races.

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With the commencement of the second year of the Journal, the date of issue has been changed from the 1st to the 15th of each month as being a more convenient time.

REPORTS FOR JANUARY, 1882.

Staff.

The changes amongst the attendants during January were happily few in number. The Baker Attendant left the service at the beginning of the month for continued inefficiency and a female second class attendant employed in the laundry was dismissed for a similar cause, one second class attendant who was appointed on probation, only remained in the service for a fortnight as he was found to be totally unsuited for the work. To fill these vacancies and one which remained from the previous month the following appointments have been made on

probation. D. Matthias first class attendant, male, (baker,) Ned Edwards, second class attendant, male, J. Bradshaw and M. Turpin second class attendants, female. There is still a vacancy for a second class attendant accustomed to field labour.

Religious services.

These were held on each Sunday in the month having been conducted on one occasion by the Revd. J. Rannie and on three by the Revd. F.W.T. Elliott. On one Sunday prayers were read by the Assistant Medical Superintendent. The average number of patients who were present at the services was 165, 115 males and 50 females. These with the attendants and officers of the Asylum who are present made up a good sized congregation.

Amusements.

There were not any dances in January as the Dining Hall in which they are held was undergoing repairs and was not in a condition to be danced in with safety. The band played in the grounds on Monday afternoons.

Accidents.

Another month has passed without the occurrence of accident.

Improvements.

The sill of the large North Block which was completely decayed, causing a sinking of the building at one end, has been replaced by one of greenheart timber and the building successfully raised to its proper level. The other works mentioned in last month's Journal are also in progress. The single rooms in the South and West Blocks have been repainted, and the large dormitory in Ward No. 2 is now undergoing the same process. In connection with the laundry a hot plate (for irons) has been erected which will effect a saving in fuel.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st January	230	120	359
Admitted in January	7	2	9
Discharged in January	5	3	8
Died in January	4	1	5
Remaining on the 31st of January	228	127	355

There has been during the month a decrease of four in the numbers in the Asylum. Both the discharges and the deaths were above the average number. The mortality in the month of January is generally high, it is smaller this year than common. The admissions are about the usual number. Of the persons admitted six came from Demerara and three from Essequibo, none from Berbice. Their native countries were as follows:

	M.	F.	Total
Natives of India	5	1	6
" " Africa (black)	1	1	2
" " Barbadoes (colrd.)	1	0	1

All were immigrants.

All the patients discharged were recovered, they had been in the Asylum for the following periods:

	M.	F.	Total
Between 3 and 6 months	2	0	2
" 6 and 12 months	3	0	3
" 1 and 2 years	0	2	2
" 2 and 5 years	0	1	1

The causes of death in those who died

	M.	F.	Total
Malignant tumour of brain	1	0	1
Fatty degeneration of heart	1	0	1
Bright's disease	1	0	1
Phthisis	1	0	1
Acute tuberculosis	0	1	1

The health of the Asylum was good during the month, very little intermittent fever prevailing and no other acute disease present.

NUMBER OF PATIENTS EMPLOYED.

There were usefully employed on the male side 178 patients, and in this department 34 were unable to work from mental or bodily infirmity and 16 were able but unwilling to do so. Amongst the females the corresponding numbers were, employed 99, unable 20, unwilling 10. The number of patients engaged in each form of work will be given in report of the different industries.

DAILY AVERAGE NUMBER IN THE ASYLUM AND
PERCENTAGES &c.

	M.	F.	Total
Daily average in Asylum	228.6	129.3	357.9
Percentage employed	78.1	76.7	77.5
Percentage confined to bed	3.0	3.4	3.1
Percentage attending amusements	00.0	00.0	00.0
Percentage attending Church	50.1	39.0	45.9

FARM.

There has been another month of most favourable weather for farm work, as well as for the progress of vegetation. As a consequence the crops of provisions look well. Plantains are to be seen growing on ground upon which the same crop has been raised for five years in succession, which are strong and healthy looking, the result of manuring with sewage matter. Experience here has shown that the crop, par excellence, for land dressed in that way is cassava, the return obtained when this is planted in soil thus manured is very large, and the produce is of excellent quality. There was reaped in January of plantains (free of stalk) 2077 lbs., bananas 99 lbs., cassava 218 lbs., sweet potatoes 115 lbs., garden vegetables &c. 501 lbs., and of cocoanuts 138. From the cattle farm 454 pints of milk were received, there [were] brought in 84 eggs and 12½ lbs. of cleaned fowls. There were killed three pigs, the yield of pork was 270 lbs. The cattle slaughtered numbered 13 the beef obtained was 2752 lbs. The cattle cost \$291.50 which deducting the value of hides &c. makes the price of beef to the Asylum nine and nine-tenths cents per lb. There was no increase by birth of live stock during the month, one calf died. Patients employed in agriculture and other work in connection with it 82.

WOOD-CUTTER.

Patients employed 4. There were brought to the Asylum 29 cords of firewood.

WORK SHOPS.

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CARPENTER.

Patients employed 8. In addition to repairs to the buildings noted under the heading of improvements there were made in the shop the following articles: step ladders 1, frame for type cases 1, stool 1, jalousie 1, crutches pairs 1, tables 6, benches 3, mirror frames 2,

shelves 3, coffins 34 and 87 different articles were repaired.

PAINTER.

Patients employed 3. In painting the wards 704 square yards were covered in two coats and 46 lineal yards of stencilling done, the following articles were painted tubs 17, buckets 12, window frames 3, bedsteads 6, jalousies 10, chairs 7, and coffins 36. Seven tables and 3 benches were sized and varnished, six capes water proofed and 49 panes of glass put in.

TAILOR.

Patients employed 15. There were made in January 203 articles, namely of patient's trousers 86 pairs, jumpers 26, caps 51, jackets 17, attendant's trousers 6 pairs, jackets 12 and capes 6. The repairs numbered 477.

SHOEMAKER.

Patients employed 2. Made of leather shoes 4 pairs, canvass shoes 22 pairs, repaired 32 different articles.

BAKERY.

Patients employed in bakery and kitchen 7. There were produced 9046 lbs. of bread from 36 barrels of flour a yield of 251½ lbs. per barrel, less than usual, as the flour used was drier. The bread was of good quality.

PRINTING OFFICE.

Patients employed 2. Including extra copies of the Journal and Supplement, there were struck off in January 7700 impressions of different forms, of cards printed there were 118 and books stitched 112.

LAUNDRY.

Patients employed 37. The number of different articles of clothing washed was 15,804, starched and ironed 1350.

SEWING ROOM.

Patients employed 15. Articles to the number of 290 were made in the month, as follows; men's day shirts 28, night shirts 6, cotton singlets 67, women print dresses 3, skirts 16, aprons 2, chemises 28, pillow cases 114. The repairs done numbered 328. More women might be employed in this room if regular work could be had for them.

WORK ROOM.

Patients employed 11. As the supply of cocoa and cocoanuts ran short, there was not so much work as usual done in this room during January. There were made of chocolate 83 lbs., cocoanut oil 3 gallons and coir 11 lbs.

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RECEIVED with thanks. The Journal of Mental Science for January 1882. On Excremental Nuisances in the Leeward Islands by A. Boon. The Barbadoes Globe &c.

ABSTRACT CASH ACCOUNT INDUSTRIAL FUND, FOR JANUARY, 1882.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	380	28	For purchase of plantains	\$ 76 22
Received for sundries sold		164	55	" " flour	711 29
" fines stoppages &c.		18	75	" " cocoanuts	1 40
" Hospital account		227	22	" " newspapers &c.	10 23
" Alms House account		203	24	" repairing clocks	2 00
" Out door poor		9	00	" band (one month)	12 50
" board of patients		10	00	" playing harmonium (one year)	60 00
" hides sold		80	65	" shoeing mules (one month)	4 00
" printing done		4	00	" photographing Asylum & patients	84 40
				" hire of screw jacks	3 20
				" bricklayer's work	29 50
				" cooper's work	5 84
				" blacksmith's work	7 00
				" wheelwright's work	8 00
				" gratuities to patients	4 60
				" sums paid under one dollar	21 80
				Balance cash in hand	55 71
	\$	1097	69		\$ 1097 69

No. 13

THE ASYLUM JOURNAL

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LUNATIC ASYLUM, FORT CANJE, BERBICE,
15TH MARCH, 1882.
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THE GERM THEORY OF DISEASE.

I.

DURING the past ten years many additions to our knowledge, have been made in the various branches of science, which form the foundations of medicine. Of these none are likely to produce grander results in their practical application, than the truths which have been discovered in the past and those which are still coming to light, in connection with the different investigations undertaken with the object either of elucidating the minute pathology of certain diseases, or the connection which exists between the atmosphere and the propagation of low forms of organic life. From these has sprung what is known as the germ theory of disease. Already under the influence of a belief in this theory the art of surgery has been almost revolutionized, and the boundaries for its successful operation widely extended. So far has this extension already been carried that surgical procedures which at one time were condemned by leading practitioners in unmeasured terms, who went even the length of saying that any one undertaking them would be morally guilty of murder, are now carried out daily without the patient incurring greater risks than are incidental to all capital operations. The germ theory in its bearing upon communicable disease seems likely to take a leading place amongst the principles which guide the practice of preventive medicine, even if it does not become the pivot around which all sanitary science will revolve. Until now what has been wanting was the exact

knowledge of the specific cause of each form of contagious complaint. At the present time many observers in all parts of the world are engaged in the study of this subject and gradually a mass of facts are being accumulated, upon which in the future, it will be possible to generalize with safety. In the pursuit of knowledge of this kind the whole circle of organic life is being examined, and upon some of the questions involved, light has been thrown by the study of vegetables as well as of animals, of brutes as well as of man. Nor is the work confined to the medical profession, chemists, physicists, botanists, zoologists, and veterinarians have joined in it, the labours of each class have added materially to the results already reached. This is a striking instance tending to show the close relationship existing between medicine and all the other sciences which deal with the phenomena of life, and demonstrating how much the progress of biological knowledge assists in the advancement of the healing art. Preventive medicine as a science is of modern growth. Only in very late years has due recognition been given to the fact, that the prevention of disease is as important a matter as its cure when developed, and that the health of the community ought to be cared for as much as the health of the individual. Sanitary science has so far been very much one of true empiricism, close observation of the outbreaks of epidemic disease and the local conditions present when illness prevails, with rigid reasoning applied to the results of these observations, have gradually formulated certain recognized laws of health. But the why or wherefore of such laws is in most instances at present unknown. For example it has been shown beyond the possibility of doubt that localities abounding in filth are especially liable to suffer from outbreaks of epidemic disease. Whether the filth *per se* is the active agent in the production of disease or whether it is merely a concomitant or auxiliary of some other matter in which resides the true cause is a question until now widely debated and variously held by authorities on sanitary subjects. The advocates of the germ theory claim to have settled this point beyond the possibility of doubt. If the germ theory does this, and it is alleged to do much more, then its importance in the cause of sanitary progress cannot be overestimated. It carries the knowledge of the causes of communicable diseases, one step but that a long one nearer finality. In thus giving greater exactitude to that knowledge it renders possible corresponding

exactitude in the preventive measures to be adopted. Enough has been said to show of how much importance a correct understanding of all that is comprehended in the germ theory is to every one interested in sanitary progress. All the inhabitants of a tropical country such as this are, or ought to be, included in the number thus designated and therefore it is thought that a short sketch of the theory, noting its present position as well as briefly describing the different steps by which it has been developed may prove useful. Phrases like the "germ theory of disease" are very apt to pass current for knowledge much as bank notes pass for money when taken into general use, as this has been. But to be of value they must represent something real and substantial to the person who hears them as well as to him who uses them. It is hoped that the present series of notes may in some degree assist in the formation of a clear conception of what is meant by the words. What then is the germ theory? It may be shortly stated thus. It is believed that all communicable disease whether in plants, animals, or man, is caused by parasitic organisms, animal or vegetable. It is held that by the diffusion through certain media of such organisms or their germs, diseases of this class are spread from individual to individual. It is also believed that each specific disease is dependent upon its own characteristic parasite and that, at all events in our day, it never originates in any other way but by propagation from some pre-existing organism of the same kind. Thus if a case of scarlet fever or small-pox arise it may at once be assumed as a fact beyond the possibility of doubt that the patient has through some channel or other received into his system the specific germs of the complaint from which he suffers. With respect to the two diseases named the fact of their never arising spontaneously but being always dependent upon pre-existing disease of the same type has long been generally accepted as a truth. One point only is in dispute and that is the nature of the contagious matter. Whether it is as now alleged an organic germ, or a chemical compound. This question is one in respect of which there is no intermediate course, between either accepting the germ theory or denying it *in toto*. But, if there is not at this time much doubt as to the contagious origin of all cases of small-pox and scarlet-fever, there are other diseases such as typhoid, cholera, and yellow fever, about which the question of their origination remains a battle ground for opposing parties. On the one side are ranged the

advocates of a possible spontaneous origin, opposed to them are the contagionists. But here one who believes in spontaneous origin may or may not necessarily hold the germ theory and a contagionist is in the same position. The researches now proceeding in connection with the germ theory may possibly settle these questions. Again from day to day additions are being made to the number of the diseases said to depend upon the presence in the system of micro organisms. That in many kinds of disease organisms are found in the tissues, where until lately their presence was unsuspected, the observation of competent and trustworthy microscopists leaves no room to doubt, but whether the parasites in all the cases mentioned are the cause of the disease or only a product of it is a question not yet set at rest. When that is done the germ theory will be no longer a theory it will have become a natural law. But in addition to specific germs which are only occasionally present, air and perhaps earth and water contain in abundance at all times and in all places, the germs of low forms of life. These when they find a suitable propagating place in organic matter give rise to fermentative and putrefactive changes. It is in relation to this class of germs that the theory affects surgical practice. Listerism, so named after the distinguished surgeon who introduced it, is said by its supporters to depend for its value upon the destruction by chemical agents of the germs in the air which get access to open wounds and sores. There are others again who whilst they admit that Mr. Lister's plan of treatment is very successful ascribe its success to the great cleanliness which it enforces. Dirt they say is the poison which does harm. To this the rejoinder of the germ theorist is, that dirt is undoubtedly injurious, but its noxious character depends entirely upon the organic germs it contains. The foregoing is an outline sketch of what the germ theory of disease is, dealing only with its leading features, and it is hoped that these have been made sufficiently plain for general recognition. In succeeding papers a history of the rise of the theory and notes of the most important of the observations upon which it is founded and by which it has been brought to its present development will be briefly given.

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The publication of the results of the census taken on the 1st April, 1881, enables the exact proportion of the insane to the different classes of the population to be determined.

The number of inmates of the Asylum (the only one in the colony) on that day is taken as the basis of calculation, in the following table:

CLASS OF POPULATION		NO. OF INSANE	PROPORTION OF INSANE PER 10,000 OF POPULATION
Natives of British Guiana except aborigines	141,983	108	7.6
Natives of West India Islands	18,318	40	21.8
Natives of Madeira &c.	6,879	15	20.3
Natives of Europe	1,617	1	6.1
Natives of North America	205	0	0.0
Natives of Africa	5,077	14	27.5
Natives of India	65,161	142	21.7
Natives of China	4,323	11	20.4
Other places or not known	897	1	11.1
Total	244,530	331	13.5

These figures generally confirm conclusions formerly arrived at, as to the different insanity rates in the various nationalities who make up the population of the colony. One very striking fact is brought out, that whilst the proportion per 10,000 of insane amongst natives of the colony is 7.6, amongst others living here but not born in the country it is 21.7 or nearly three times as great. Making every allowance for the conditions which favour the retention in their own homes of the creole insane, it would still seem that immigrants suffer much more from insanity than those who are natives of the country. This excess amongst an immigrant population has also been noticed in new countries which get their inhabitants from the different European nations.

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That opium is not so injurious to health as is usually believed, is an opinion now very vigorously supported by certain medical authorities in England who have had much Indian experience. One of the most eminent of these Sir George Birdwood, maintains in the columns of *The Times* that its consumption in moderation is not only innocuous but even beneficial to East Indians. In a

late number of the Journal an attempt was made to show from the experience of this Asylum, that amongst the East Indian population of the colony who use the two narcotics, ganje and opium, the former was a potent cause of insanity whilst to the latter no influence of the kind could be traced. This so far as it goes, helps the supporters of opium but the opinion it must be borne in mind is strictly limited to the connection of the drug with mental disease. Whatever value may be attached to this view, one thing is claimed for it, that it is solely the result of experience and adopted despite of a previous belief in the injurious effects of opium smoking.

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The preceding paragraph reminds one of a want often felt, namely, that of a vehicle for the interchange of ideas between men practising medicine in the various tropical parts of the Empire. At present the record of Indian and colonial work is too often lost by being buried in papers with only a local circulation.

CLINICAL RECORD.

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Case II. Tumour of Brain. S. an East Indian said to be 36 years of age was admitted to the Asylum on the 18th Novr. 1881. He was certified as insane because he had been incoherent, abnormally restless and irritable in his temper. He was said also to be given to indecent exposure of his person. It was stated that he suffered from pain in the head and that "the muscles of the back and limbs assumed a tonic spasmodic condition which relaxes on diversion of his attention." There was not any history of the access or progress of his illness sent with him, and he was unable to give any information himself. After admission he was rather restless and excited, but remained in the general ward and made no special complaint of illness until the morning of the 28th November when he suddenly fell down in what the attendant thought was a fit. When seen shortly afterwards he was in a semi-unconscious state, though he could be roused to attend to what was said to him he could not answer. He breathed quietly and looked like one in a deep sleep. The pupils were small and equal in size. There were general muscular twitchings but he could move his limbs freely. Pulse 83 Temp. 97. In the afternoon he began to speak and for some days continued in much the

same condition, lying for greater part of the time in a condition resembling deep sleep, from which he could be roused and then answered questions. On the 5th December, it is noted that he had difficulty in swallowing, getting fluids down in a gulp and with an effort. The twitchings were confined to the left side, he also dragged the left foot when with assistance he attempted to walk, the breathing was quiet, the pupils still contracted and the temperature normal. He complained of pain in the head but said it was general and not specially severe in any one part. Next day the 6th December the pupils were unequal, right larger than left, and accommodation to light slow. The temperature was 98 degrees at which it stood for some time. On the 8th December, the distinctly paroxysmal nature of the twitchings was recorded, in other respects there was not much change although his condition seemed somewhat improved. He rolled off the bed in his paroxysms and it was noticed that he always rolled from right to left. He was treated with Iodide of potassium on the supposition that it was a case of tumour, perhaps syphilitic in character. On the 11th of December, he became almost comatose the breathing was stertorous and it was with difficulty that he could be roused even to partial consciousness. Temperature went up to 99.6. The contracted state of the flexors still persisted. On the 16th, it was remarked that the masseters on both sides were firmly contracted and hard. After this diarrhoea supervened from which he suffered until the 25th December when it had nearly disappeared. On that day as deafness was noticed his hearing was carefully tested and it was found that he listened always with his right ear, the paroxysms of twitching had gone off and the hardness of the flexors was less. He appeared to understand what was said to him. After this date he gradually became weaker and died on the 3rd January, 1882.

Post mortem Examination. The autopsy was held 12 hours after death, the body was much emaciated. All the organs with the exception of the brain (to be afterwards more specially noticed) and the kidneys were healthy. The latter organs had on their outer surface several small cysts, and their cortical substance had become granular. The whole brain on removal from the skull weighed 2 lbs. 9 ozs. On division of the brain the right hemisphere of the cerebrum, which was at once seen to contain a large tumour, weighed with this 1 lb. 3 ozs. 2 drams, the left hemisphere weighed 1 lb. 0 oz. 6 drams, the cerebellum weighed 4 ozs. 6

drams and the P. V. and M. O. 12 drams. The tumour when afterwards separated was found to weigh $3\frac{1}{4}$ ozs. On looking at the base of the brain the place usually filled by the temporo-sphenoidal lobe on the right side was occupied by the tumour which implicated the membranes and externally had rather a fungoid appearance. The growth completely filled the temporo-sphenoidal fossa. The bones of the skull were unaffected. On the convexity of the brain, the appearance was as if the anterior half of the three temporo-sphenoidal convolutions had been replaced by the abnormal growth. The sulci over the whole hemisphere were pressed together and the surface of the convolutions flattened. The tumour was easily turned out and the cavity left by its removal looked as if lined with a smooth membrane. The brain tissue in the neighbourhood was not changed in appearance and in replacing the parts after the growth was removed the brain had a fairly normal look. The tumour was firm, nodulated, on section it was not cartilaginous and it had a greyish pink colour. Its macroscopical characters were those of a sarcoma and microscopic examination confirmed this as it was found to be mainly composed of elongated cells with a very rare stroma.

Remarks. This case shows how much the effects of the pressure exercised on the brain in cases of tumour, influences the symptoms and renders them of comparatively little use in elucidating the problems of cerebral localization. Here the leading symptoms, the convulsive twitching, the titanic spasms, and the stupor were evidently dependent upon pressure. One symptom, the deafness, might be ascribed to the locality of the tumour for by it there was complete displacement on the right side, of the part in which Professor Ferrier fixes his auditory centre.

REPORTS FOR FEBRUARY, 1882.

Official visit.

On the 23rd of February, the Asylum was visited by Mr. Hunter of "Pln. Bath," Financial Representative for the County of Berbice, and thus an official visitor of the Asylum. After seeing the whole of the institution he made the following entry in the official visitors' book: "Visited the Asylum this day and cannot help expressing the great satisfaction it has given me to see the cleanly tidy and very orderly state in which it is."

Staff.

On the male side, no attendant left the service during the month. On the female, one first class attendant and one second class, were dismissed for general inefficiency and persistent disobedience of orders. One first class attendant who acted as nurse in the infirmary ward had to be summarily sent away from the Asylum, for direct and open refusal to attend to a coolie patient who had been admitted to the ward. To fill a vacancy which existed on the male side, W. Smart was appointed second class attendant on probation, and R. Hercules was appointed to the same position an additional attendant being required by the increased number of patients needing to be employed in the fields. To fill the vacancies on the female side the following were appointed second class attendants on probation, B. Nurse, I.F. Maloney, C. Williams and R. Williams.

Religious services.

On the four Sundays in the month services were held, conducted on two occasions by the Revd. J. Rannie and on two by the Revd. F.W.T. Elliott, both clergymen to whom the Asylum has been long indebted for this good work. Of patients 119 males and 66 females, in all 185 attended.

Amusements.

The fortnightly dances which had been interrupted by the repairs to the Dining Hall were resumed, one being held on the evening of the 16th. This was attended by 110 men and 64 women in all 174 patients. The Monday evening practices have also been again begun.

Accidents.

Again the record of accidents for the month is a blank.

Improvements.

The chief work in progress during February was the thorough repair and decoration of the large dormitory in the upper floor of Ward No. 2 which has been nearly completed. At the same time work went on in connection with other changes which will be noted when they are finished.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st February	228	127	355
Admitted in February	0	6	6
Discharged in February	1	1	2
Died in February	2	0	2
Remaining on the 28th of February	225	132	357

The numbers in the Asylum increased two during the month. The admissions were a little below the average and were all women. The deaths and discharges were both below the average. Of the women admitted, two came from Demerara three from Essequibo and one from Berbice. Their native country was as follows:

	M.	F.	Total
Natives of India	0	3	2
" " Barbadoes (colrd.)	0	1	1
" " British Guiana (1 white 1 black)	0	2	2

The two patients discharged were both well and had been inmates of the Asylum for

	M.	F.	Total
Between 6 and 12 months	1	0	1
" 2 and 5 years	0	1	1

The cause of death were:

	M.	F.	Total
Cerebral meningitis	1	0	1
Hypertrophy of heart and Bright's disease	1	0	1

The health of the Asylum during the month was good.

NUMBER OF PATIENTS EMPLOYED.

Amongst the men 183 patients were employed, 30 men unable to work and 13 unwilling to do so. On the female side 94 women worked 18 were unable and 17 were unwilling.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES EMPLOYED &c.

	M.	F.	Total
Daily average in Asylum	226.1	129.5	355.6
Percentage employed	80.9	72.0	78.3

Percentage confined to bed	3.0	3.8	3.6
Percentage attending amusements	48.6	49.7	49.0
Percentage attending Church	52.6	51.1	52.1

FARM.

Although February was drier than the preceding month, still occasional showers fell and the season continued to be a most favourable one for the progress of vegetation. The crop on the grounds near the Asylum look well and promise an abundant return. The very high spring tides which occurred caused a small breach in the sea dam of the newly drained land, but very little harm was done, as the land overflowed was planted in sweet potatoes, a crop which salt water does not injure. The produce obtained from the farm was, plantains (free of stalk) 3,337 lbs., bananas 48 lbs., sweet cassava 156 lbs., sweet potatoes 27 lbs., garden vegetables 522 lbs., and coconuts 48. There was also received 346 pints of milk, 48 eggs, and 34½ lbs. of cleaned fowls. Five pigs were killed and 408 lbs. of pork obtained from them. Twelve heads of cattle were slaughtered and the beef got weighed 2,265 lbs. The cattle cost \$235.27 which after deducting the value of hides &c. made the cost of beef to the Asylum ten and two-fifths cents per lb. The increase of live stock by births was of goats 2 and pigs 36 and 1 sheep died. The number of patients employed in agriculture and attending to stock &c. was 87.

WOOD-CUTTER.

Patients employed 5. There were 29 cords of fire-wood brought to the Asylum.

WORKSHOPS.

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CARPENTER.

Patients employed 7. Besides the work done in connection with alterations of the buildings, the following articles were made in this work shop, 1 large rack for paper, 1 table, 4 shelves, 6 brackets, 1 axe handle, 6 notice boards, 2 benches, 1 jalousie and 18 coffins. There were repaired 123 articles.

PAINTER.

Patients employed 3. Work done, 600 square yards of painting, 35 lineal yards of stencilling, besides painting 42 tubs, 19 window

frames, 7 brackets, 2 shelves, 64 jalousies, and 14 coffins. There were sized and varnished 1 table, 1 rack and 13 benches. Six notice boards and 7 ribbons for hats were painted and lettered. There were put in 38 panes of glass.

TAILOR.

Patients employed 18. Articles made, of patient's trousers 42 pairs, jackets 31, jumpers 18, caps 38, attendant's trousers 18 pairs, jackets 8, caps 19. The repairs numbered 572 articles.

SHOEMAKER.

Patients employed 2. There were made of leather boots 3, leather shoes 5, and canvass shoes 32 pairs. The articles repaired were 29.

BAKERY.

Patients employed in bakery and kitchen 6. The quantity of bread made was 8,496 lbs. flour consumed 33 barrels, yield of bread per barrel 260 lbs.

PRINTING OFFICE.

Patients employed 2. Besides the Journal, 4160 impressions of different forms were struck off. The cards printed numbered 220. Forms ruled 786.

LAUNDRY.

Patients employed 38. The clothes washed amounted to 14,390 different articles. There were starched and ironed 1,240.

SEWING ROOM.

Patients employed 14. The articles made numbered 164, as follows, men's jumper 1, day shirts 50, women's bed gowns 55, skirts 29, print dresses 2, chemises 21, and jackets 6. There were hemmed 144 sheets and 590 articles repaired.

WORK ROOM.

There were made 207 lbs. of chocolate, 2 gallons of cocoanut oil and 40½ lbs. of coir, besides preparing all the coffee and curry powder used in the Asylum.

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RECEIVED with thanks The Twenty-sixth Annual Report of the

Trustees of the State Lunatic Hospital Northampton, Mass. U. S.
of America. The Barbadoes Globe &c. &c.

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR FEBRUARY, 1882.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	55 71	For purchase of plantains	\$	83 68
Received for sundries sold		102 46	" repairing clocks		2 00
" fines stoppages &c.		22 63	" band (one month)		13 00
" Jail account		13 50	" shoeing mules (one month)		4 00
" board of patients		10 00	" hire of screw jacks		6 40
" printing done		2 00	" cooper's work		5 44
			" wheelwright's work		11 00
			" gratuities to patients		2 00
			" sums paid under one dollar		7 02
			Balance cash in hand		71 76
	\$	206 30		\$	206 30

THE ASYLUM JOURNAL

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
15TH APRIL, 1882.
—

THE GERM THEORY OF DISEASE.

II.

THE different steps of the process, of which the finished product is rum, are practically familiar to many colonists. It is well known that rum is obtained by distillation from a saccharine liquor after it has become fermented. For thousands of years, and in many and various climes, the manufacture of alcoholic drinks has been carried on in a similar way. Many different substances of vegetable origin have been and are used in their production but one feature in common they all possess, which is that they contain sugar. Amongst the oldest beverages of the kind is beer or as it was formerly called barley wine and the mode of its preparation may be briefly described as it best and most simply illustrates the action of fermentation. The barley from which beer is made is first converted into malt. This is done by causing the grain to germinate, which has the effect of increasing the amount of its saccharine constituents. When germination has sufficiently progressed a stop is put to it by kiln drying the grain which then becomes malt, of the malt a decoction is made, which is ultimately converted into beer. Various articles are added to this liquid for flavouring and other purposes, though the essential requisite to fit it for the fermentative process as already hinted is that it should contain sugar. But the production of this change is not in the case of beer left to chance to induce it there is added to the "wort" a portion of another substance, yeast. If the temperature and other circumstances be favourable soon after this addition

fermentation begins and it afterwards goes on with great activity. It is evident therefore that the yeast is here the exciting cause of the action set up. It is only of very late years that a complete explanation of the way in which the yeast works has been found. This knowledge is chiefly the result of the labour of the eminent French chemist Pasteur. Since the early days of the microscope it has been known that yeast is a fluid containing in large quantities very small globular particles but it was not until 1835 that these particles were proved to be a minute plant, this has been since known as the *torula cerevisiae*. The merit of the discovery is mainly due to Professor Schwann the eminent exponent of the theory of organic growth from cells, whose death was only the other day announced. This observer watched the growth of the plant, saw its budding, and fixed the method of its propagation in the liquid. It is not necessary for the present purpose to minutely describe how the growth of the plant produces alcohol but it may be stated that it is held by Pasteur to act somewhat in the following way. During the progress of growth the *torula* absorbs oxygen and throws off carbonic acid, whilst there is a free supply of atmospheric air the oxygen required is obtained from that source and very little if any alcohol is produced in the liquid. Cut off the supply of air to the fluid and so much of the plant as still continues to grow and which must have oxygen gets what it requires from the sugar which it decomposes, and one of the products of this decomposition is alcohol. According to this theory the process is entirely a vital one depending upon the presence not only of organic matter but of organized forms. If therefore we accept Pasteur's theory there is in the process now sketched an exact counterpart of what takes place in the cultivation of ordinary vegetables when planted by slip or cuttings. Admitting as all do, that the alcoholic fermentation of the "wort, " is the direct result of the presence of the plant introduced in the yeast, and seeing that in the manufacture of wine alcohol is formed without the addition of yeast to the mother liquor, in order to show how this happens two questions have to be answered. First, is vinous fermentation accompanied by the presence of the *torula cerevisiae*? The answer to this is in the affirmative for microscopic examination invariably discovers the plant in fermenting grape juice. The second and in connection with the germ theory the more important question remains and it is this.

How did the growth get there? To the beer it has been seen that it was deliberately added but in wine there is no formal introduction of it. If it has not been spontaneously generated from the organic fluid in which it floats, a belief which was long and generally held and which is not yet completely abandoned, then either the plant itself or its seeds must in some way have found means of access to the liquid. Here again the investigations of Pasteur furnish an explanation of the phenomenon. He found that at the time of the vintage the outer surface of the grapes is covered with a fine microscopic dust, which when added to the juice, developed the familiar yeast plant and gave rise to fermentation. Thus the crushing of the grapes in the wine press not only supplies the fluid nidus for the growth, but at the same time sows in it the appropriate seed. Other organic liquids containing sugar when kept exposed to the air, at times undergo alcoholic fermentation and the *torula* is found to be present in them. It has been seen how the plant was propagated in the beer and wine but in this case only one channel by which the germs could reach the fluid is open, namely the air. Is it therefore to be assumed that this has been the medium through which they were brought? This assumption must be made if their spontaneous generation be not believed in. Here the question widens for alcoholic fermentation is not the only kind of change which takes place in fluids containing organic matter when they are exposed to the air. Some become mouldy, or sour, and all of them sooner or later turn putrid. Examined under the microscope different organised forms show themselves in such liquids each kind seemingly having its own favourite habitat and accompanying or causing changes peculiar to itself. The most important of these from the present point of view are the micro-organisms usually described as *bacteria* for upon their presence, according to the teaching of Pasteur, Lister, Tyndall and others, putrefaction depends. For a long time it was debated whether *bacteria* belonged to the animal or vegetable kingdom. Now they are generally classed amongst the fungi and looked upon as the lowest kind of vegetal existence. The rod like form of the organisms have given them their name of *bacteria*. Under that designation there is no doubt that many different varieties of organisms may have been described for in dealing with bodies of such extreme minuteness as these are (the *bacterium termo* is

20,000th of an inch broad and a trifle longer) classification is no very easy matter. It is this very *bacterium termo* which is held to be the special ferment of ordinary putrefaction. But if the air carry to fluids so many different kinds of germs it must contain enormous quantities of them. So it is believed and to prove it as well as to show that it is from these very minute but solid contents of the atmosphere and not from "spontaneous generation" that the organisms of putrefaction arise many striking experiments have been made which will be glanced at in the next paper. Now it may be asked, what bearing upon disease have facts like these gathered from a study of the beer vat and the wine cask? The answer is easy not only do they possess interest as being the foundation upon which the germ theory has been built, but a thorough comprehension of them is necessary in order to fully understand the possible and likely explanation yielded by that theory of the *modus operandi* of the causes in the class of diseases, named after this very process, zymotic. If to be realized that a small plant such as the *torula* propagating itself in a saccharine organic fluid, there determines the appearance of a new substance like alcohol whose action on the human frame is both potent and undoubted, it is easy to conceive how similar organisms reaching the blood or other tissues and finding there suitable conditions (a most important element in the case) increase in number and if by their presence alone they do not cause disease, still acting as ferments, they may give rise in the system to poisons of the most deadly kind.

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In the United States the experiment is being made of appointing Lady M.D.s. in charge of the female departments of Lunatic Asylums. It will be interesting to watch the results and if obvious difficulties in the way of maintaining a compact and effective system of administration in the institutions be avoided or overcome, then many superintendents will be likely to welcome a change which relieves them of the most trying part of their medical duties, their attendance upon insane women. Whether the patients will gain or not remains to be seen. The experiment is too of interest for another reason. In it one specialty is engrafted upon another. Often when experts in mental disease discover in any one signs of insanity which are not large enough for him who runs to read, an unbelieving world asserts that he does so,

not because his insight of the matter has become by long study and experience of disorders of the kind specially acute but because all mad doctors, it is said, have the mental idiosyncrasy of desiring to discover more or less of insanity in every body. Sceptics hold that the symptoms are often as much subjective as objective. Be this as it may, specialists of any kind and not alienists alone, have naturally a tendency to look keenly after their own subjects of study. There are indications of the kind in the reports of the lady physicians of Asylums for it is found by them that most of the female inmates suffer from diseases the treatment of which is the special province of women doctors.

The Lancet of the 4th of March contains an appreciative review of Dr. Hillis' work on West Indian Leprosy. This disease possesses especial interest for medical practitioners in all parts of the West Indies and it is a matter for congratulation both to Dr. Hillis and to the colony of British Guiana that he has succeeded in producing a work on the subject, which in the words of the reviewer "is an excellent volume with well written and clear descriptions of disease and showing throughout a thorough knowledge of the whole subject" and of which it can be said "that the book as a guide and source of reference cannot fail to be of great service to those who in any part of the world meet with leprosy cases." Dr. Hillis' success is an encouragement to others to labour in a similar way in other parts of the extensive and little wrought field of medical research which lies spread before them in this colony.

In the 14 days ending on the 10th instant there were 16 patients admitted to the Asylum, mostly coolies and from Demerara. This is the largest number that has ever been received here in a similar length of time. On both sides of the Asylum all the beds are occupied and although arrangements are being made to provide additional accommodation this can only be done to a limited extent. The completion of the new Hospital is therefore looked forward to with anxiety. When the present hospital buildings are added to the Asylum there will in all likelihood be sufficient room in the institution to fully and comfortably lodge the insane of the colony for many years to come.

CLINICAL RECORD.

Case III. Tetanus. B. a male East Indian, aged 32, received on the 31st of January, 1882 whilst at work in the fields a small punctured wound, in the inner side of the middle of right foot which did not cause him much pain. It seemed to be healing rapidly when on the 6th of February he became restless and out of sort, this continued for a day or two until on the 10th he was found to suffer from distinct tetanic spasms. He had not had any lock jaw and even on that day could open his mouth freely, although the corners of the mouth were strongly retracted giving rise to well marked *risus sardonicus*. The spasms were induced by touching him or the slightest attempt at motion on his part. He complained of pain in the right hip, the wound looked healthy. The muscles of the trunk and extremities were affected during the convulsion, causing distinct opisthotonos and great abdominal hardness. The spasms retained the same character throughout the progress of the case and only varied in the frequency of their recurrence and in their intensity. There never was any trismus. The treatment followed was the administration of chloral hydrate in doses of 15 grains given every three hours. This when continued produced a marked physiological action shown by a falling of the temperature of the body, and in other ways and this was accompanied by a noticeable mitigation of the tetanic symptoms. It is on this account that the case is reported and in order to show the connection a statement will be given of the daily temperature morning and evening for the month from the 10th of February to the 9th of March when the patient became convalescent. The changes of the symptoms and in the amount of chloral administered will be also briefly noted.

	M.	E.	
Feb. 10	101	99	
" 11	101	100.8	
" 12	99.8	98.8	
" 13	101	100.2	
" 14	99.8	101	
" 15	99	98.8	No spasms for 24 hours chloral reduced to thrice daily
" 16	99.6	100	One spasm in the afternoon
" 17	99.8	100.2	No spasm
" 18	102.2	103.6	No spasms but not so well

"	19	103	102.8	Spasms returned in full intensity chloral every three hours
"	20	101.6	101	
"	21	99.2	100.2	Spasms less frequent
"	22	99.2	100.2	
"	23	97.8	101	No spasms muscles rigid chloral thrice daily
"	24	99.2	99.4	
"	25	98.4	99.4	
"	26	98.3	99.4	
"	27	99	99.2	Spasms returned chloral increased to 4 times a day
"	28	98	98.6	
Mar.	1	97	98.2	
"	2	97	98	Muscles less rigid
"	3	96.4	97.2	
"	4	95.8	97	Spasms gone chloral stopped
"	5	96.2	97.4	
"	6	97	97.4	
"	7	97.6	98	Rigidity & slight spasm chloral twice a day
"	8	98.2	98.4	

On the 23rd of February the amount of chloral taken was reduced mainly on account of the very prostrated condition of the patient which was ascribed to it. After the 8th of March the patient had not any spasms although as is usual rigidity of many of the muscles remained. He convalesced slowly and on the 27th of March there was still contraction of the flexors of the right leg causing him to walk on the ball of the great toe. When laid the leg could be extended freely. All through the case the muscles of the limb which was wounded, were those most strongly affected and the resulting hardness in it has not yet completely disappeared.

Remarks. The influence exerted by the chloral over the disease was in this case unmistakable, as the administration of the drug was pushed so the convulsions decreased both in severity and number. It was noticed that whilst the chloral was given only in the day time the spasms were always more severe in the morning when there had been a long interval without a dose of the medicine and that they were less in the afternoon when two doses had been taken in succession. The chloral seemed also to produce a marked effect on the temperature on the 4th of March when it fell to 95 the other physiological effects of chloral were then well marked. The question thus arises does any connection exist

between these two facts beyond the circumstance that they are both effects of a common cause. Or to put it in another way is the lowering of the temperature, the cause of the amelioration of the symptoms? Some countenance is lent to the belief that this might probably be the case by the peculiarity noticed that every exacerbation of the symptoms was preceded by a rise in temperature, so that the elevation of temperature could not result from muscular irritability as it has been supposed to do in those cases of tetanus in which the temperature has risen to a very abnormal height. Theories founded [on] a single instance can never possess much scientific value, but in a disease which is so fatal as tetanus any hint towards a successful line of treatment is worth taking and the use of the cold bath instead of the warm which has failed, might be worth a trial in addition to any drug such as chloral which it is thought advisable to administer.

REPORTS FOR MARCH, 1882.

Staff.

The only attendant who left the service during the month of March, was one of the second class employed on the male side, who had to be discharged for harsh treatment of the patients. His conduct had not previously been very good and when it was found that he was in the habit of threatening the patients and roughly handling them it was thought best that he should leave the Asylum. To fill the vacancy thus caused and two which existed in the female side the following appointments were made: to be second class attendants on probation, male, W. Scott Blair, female, Louisa Lashley and Elizabeth Thornhill.

Religious services.

These services were held as usual. On two occasions the Revd. J. Rannie, and on one the Revd. F. W. T. Elliott officiated whilst prayers were read on the remaining Sunday by the Assistant Medical Superintendent. The attendance of patients on these occasions averaged 117 males and 65 females in all 182. Several of the male attendants with a few patients now act as a choir. This has made an improvement in the singing in chapel.

Amusements.

The fortnightly dances have been held with their accustomed

regularity, although on account of wet weather, the Monday evening practices have on two occasions been prevented from taking place. The band although not so strong as it was at one time, has regained a fair amount of efficiency and it is hoped, as this is the case, that after Easter the dances will again be favoured by the occasional presence of a few visitors from New Amsterdam. The average attendance of patients at amusements was 116 males 61 female a total of 177.

Accidents.

The only accident (the first for three months) to be reported, was not attended with any consequences. It was the infliction of a scalp wound by one female patient pushing another against a post, during a quarrel. The wound healed in a few days.

Improvements.

The redecoration of the large dormitory in Ward No. 2 has been completed. It has been painted in green of two shades and decorated with yellow stencilling on a black ground, this has proved very effective and the result is to convert this large room which previously was bare and desolate looking, into one of the most cheerful dormitories in the Asylum. The alterations in the single rooms in the West Block have also been finished and so the last trace of the prison cell has been removed from the institution. The place intended for a microscope room and pathological laboratory has also been completed and is ready for occupation. Although small it will be convenient for work of the kind.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st March	225	132	357
Admitted in March	13	3	16
Discharged in March	1	2	3
Died in March	2	1	3
Remaining on the 31st of March	235	132	367

The Asylum population increased by 10 during the month and at the end of it was larger than it had ever been. The increase took place on the male side and was due to the large number of admissions the discharges and deaths were both about the

average. Of the patients admitted, 11 came from Demerara and 2 from Berbice. Their places of nativity were as follows:

	M.	F.	Total
Natives of India	8	0	8
" " China	1	0	1
" " Madeira	1	0	1
" " Barbadoes (1 colrd. 2 black)	2	1	3
" " British Guiana (3 black)	1	2	3

There were therefore 13 immigrants and 3 creoles in their number. The patients discharged were well, they had been in the Asylum

	M.	F.	Total
Between 1 and 2 years	1	1	2
" 2 and 5 years	1	0	1

The cause of death in those who died were

	M.	F.	Total
Phthisis	0	1	1
Congestive mania and fatty heart	1	0	1
Broncho pneumonia and Bright's disease	1	0	1

The woman who died of phthisis had been in the Asylum for one month and was admitted with the disease far advanced. Of the men who died one had been an inmate for four days the other for four years. The health of the Asylum continued to be very good during the month.

NUMBER OF PATIENTS EMPLOYED.

Of the male patients 182 were usefully employed, 31 were unable to work from physical or mental disability and 14 refused to do so. Amongst the women there were employed 100, unable to work 18, unwilling 14.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES EMPLOYED &c.

	M.	F.	Total
Daily average in Asylum	227.5	132.3	359.8
Percentage employed	80.1	75.7	78.5
Percentage confined to bed	3.5	4.5	3.8
Percentage attending amusements	51.1	46.2	47.9
Percentage attending Church	51.1	49.2	50.7

FARM.

The weather continued in March to be most congenial to vegetation. This month falls in the height of the short dry season, but this year instead of being very dry, there were in it several heavy down falls of rain which lasted for a day or two at a time as well as showers in the intervals. As a consequence the growing crops are most luxuriant and promise well for a return. These reaped have been of good quality. They consisted of plantains (free of stalk) 3,232 lbs., bananas 233 lbs., garden vegetables 685 lbs. There were received from the cattle farm 235 pints of milk and 38 eggs 18 lbs. of cleaned fowl were got. The number of pigs killed was nine and the pork obtained 587 lbs. The cattle slaughtered were 13 heads yielding 2,288 lbs. of beef, they cost \$219.25 which deducting the value of hides &c. makes the cost of beef to the Asylum eight and six-tenths cents per lb. The births amongst the stock were three goats and the deaths one pig, five sheep and one calf. The number of patients engaged in agricultural work of all kinds was 78.

WOOD-CUTTER.

Employed 5 patients and brought to the Asylum 32½ cords of fire-wood.

WORK SHOPS.

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CARPENTER.

Patients employed 9. Work done, besides alterations on buildings already mentioned, made 15 jalousies, 4 tables, 4 boxes, 6 commodes, 2 axe handles, 2 shelves, 1 oven peel and 15 coffins. Repaired 103 different articles.

PAINTER.

Patients employed 3. Work done, 352 square yards of painting on walls, 220 lineal yards of stencilling, painted, tubs 23, cots 49, boxes 2, jalousies 15, chairs 1, shelves 2 and coffins 13 sized and varnished, tables 5, benches 1. There were put in 31 panes of glass.

TAILOR.

Patients employed 18. Work done, made patient's jumpers 42, pairs trousers 41, attendant's trousers 22, cap covers 15, in all 133 articles. Repaired 786 articles.

SHOEMAKER.

Patients employed 2. Work done, made 28 pairs of canvass shoes, 1 pair of leather boots and 6 pairs of leather shoes. Repaired 50 articles.

BAKERY.

Patients employed in bakery and kitchen 6. The quantity of bread produced was 9,509 lbs., flour used 36 barrels, the yield of bread per barrel 264 lbs.

PRINTING OFFICE.

Patients employed 3. Work done, printing the Journal, 1,720 cards and 5,340 impressions of different forms, ruling 500 forms and stitching 48 books.

LAUNDRY.

Patients employed 36. The number of articles of clothing washed was 13,792, starched and ironed 1,236.

SEWING ROOM.

Patients employed 18. Work done, of men's day shirts 25, night shirts 29, women bed gowns 14, chemises 2, jackets 32, skirts 62, and sheets hemmed 36, in all 200 articles. Repaired 598 articles.

WORK ROOM.

Patients employed 33. Made chocolate 104½ lbs., cocoanut oil 13 gallons, coir 29 lbs., besides coffee and curry powder ground.

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RECEIVED with thanks. The Chicago Medical Review, The Annual Report of the Inspector of Prisons and Public Charities for the Province of Ontario, 1881, The Annual Reports of the Asylum for the Insane Kingston Ontario, 1880 and '81, The Annual Report of the Danvers Lunatic Hospital (U. S.) 1881, The Annual Report of the State Lunatic Hospital Harrisburg Pa. (U. S.) 1881, The Annual Report of the State Hospital for the Insane Warren Penn'a (U. S.) 1881, The Annual Report of the Maryland Hospital for the Insane, near Catonsville Baltimore (U. S.) 1881, The Villager &c. &c

No. 15

THE ASYLUM JOURNAL

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
15TH MAY, 1882.
—

THE GERM THEORY OF DISEASE.

III.

When a tin of preserved meat is opened and left, in this climate, say for a period of twenty-four hours at the end of that time, the contents which when the tin was cut were perfectly fresh and sweet give out a sour and unpleasant smell. They have advanced far towards putrescence. With one exception there has not been any change in the position of the meat before the opening of the tin and after it. The exception is the admission of air, in all other respects the meat remains the same. It is therefore evident that the resulting putrescence is in some way or other caused by the air. This fact has been long and generally recognized and it is only when the inquiry is carried a step further and an attempt is made to fix upon some particular constituent of the atmosphere as responsible for the action that differences of opinion arise. Until a recent period putrefaction was held to be a purely chemical change, and the gases contained in the air were believed to be the active agents in the decomposition of dead organic matter. As mentioned in a former paper on this subject the late researches of eminent men there named tend to show that it is not in the gaseous elements of the atmosphere that the moving cause of putrefaction is to be found, but that it resides in the impalpable and invisible dust which every where pervades it. Experimental proof of this has now been obtained sufficient to convince the greater number of scientific workers of its truth. There are still a few who believing in the spontaneous generation

of *bacteria* and allied low forms of life hold that in certain kinds of organic fluids these organisms and the accompanying changes make their appearance when the access of air dust has, they say, been rendered impossible. Only a small minority in the scientific world now accept this as proved. On the subject of the origin of life the views of the germ theorists may be taken as the generally received belief. Of what character then is the dust the presence of which in the air is of so much consequence? Although its component particles are so small as to defy separate identification, it can be shown that it is mostly of organic nature for much of it can be destroyed by heat. When fluid holds in suspension solid matter, the latter may be removed either by filtration through some substance which retains the particles or by allowing these [to] gradually subside to the bottom of the containing vessel. Both plans have been followed in the numerous experiments in connection with this subject. Speaking broadly the results of these show that organic matters, which when exposed to the ordinary atmosphere putrefy in a day or two when submitted to the action of air purified in the way mentioned, will remain for years without undergoing any perceptible change. To further show that it is in the organic portion of the dust that the cause of putrefaction is inherent, experiments have been performed in which the putrescible matter has been exposed to the action of air previously passed through red hot tubes and the results have been the same, no putrescence no *bacteria*. It may therefore be assumed as fully proved that in the organic portion of the air dust, resides the cause of putrefaction. The exact form of this cause remains to be fixed. It has yet to [be] finally determined whether it is the organized germ of a *bacterium* or an organic but unorganized ferment. This involves the question – is the organism the cause or merely an accompaniment of the change? The experiments alluded to in the foregoing argument have been so many in number and performed by so large a body of observers as to preclude the possibility of any detailed description of them being given here. But one of the most eminent of English scientists Professor Tyndall has recently published an account of some made by him which are so striking and apparently so conclusive, that they may be briefly sketched as typical of the others. He was led to take part in the investigation of the subject through his curiosity being raised by a difficulty which he experienced

whilst engaged in researches on the decomposition of vapours by light. He wished to obtain air which was "optically empty" that is not containing any particles capable of scattering the light of a powerfully condensed beam, which ordinary atmosphere always does. This he succeeded in doing and in his subsequent experiments on putrefaction he used the transmission of a beam of light as a test of the condition of the air to which he exposed the tubes containing organic matter. The plan he followed was this, he had a box constructed so as to allow a concentrated beam of light to be passed across it and the effects to be watched through a glass door. There was also an arrangement by which test tubes fitted in the box could be filled with liquid without allowing impure air to enter. At the same time air was permitted to pass into the box through two tubes which were more than once bent in the form of an S, a contrivance which whilst allowing the passage of air intercepted any solid particles which it might contain. The box was closed with the exception of the tubes last mentioned and the contained air examined by the passage of a concentrated beam across it. The air was found to be full of floating matter. The box was set aside for three days and again examined and the air was then seen to be "optically empty." Then the test tubes were filled with putrescible liquid, afterwards boiled to destroy any living germs they might contain and left at rest. At the same time a number of test tubes containing exactly the same liquid were also boiled and hung up outside the box fully exposed to the ordinary atmosphere. It is thus seen that an entire similarity of conditions existed between the two sets of tubes with one exception, namely that the test tubes in the box had around them air free from suspended particles whilst these outside were under the influence of air containing dust. But if the conditions varied little the results were very different. In three days the contents of the tubes outside the box had become turbid and putrid and when examined under the microscope were found to be swarming with *bacteria*, whilst inside they were seemingly unchanged and remained bright and clear as long as they were under observation. This experiment was repeated time after time with different kinds of organic infusions and the results were always the same. Whenever the liquids after having undergone a process sufficient to destroy any living element they might contain were afterwards brought in contact only with empty that is "optically empty" air, then neither putrefaction

nor *bacteria* showed themselves. Upon this theory of putrefaction is based the system of surgical practice known as Listerism or antiseptic surgery. Professor Lister holds that many of the ill effects known to be associated with putrescent secretions from wounds or sores, depend upon the putrefactive change which itself is owing to the presence of *bacteria*. Believing that the *bacteria* would not appear if their germs be excluded, he takes measures to prevent their access to the sore. This is done by shutting off from it all air except such as has been filtered through some chemical substance destructive of low forms of life. In the various changes which he has made in the practice since its introduction, several different substances have been used and the mode of their application has been varied, but the object to be attained has always been the same, to prevent the possibility of wound contamination through bacterial germs. As these are contained in water and adhere to instruments and hands as well as float in the air, the care requiring to be exercised by any one following this line of treatment is manifestly great. For its reliable and perfect success every germ must be destroyed wherever it may hide itself. It may be here noted that there are well known surgical facts which bear a marked resemblance to the experiments made on the subject of putrefaction and which can best be explained on the hypothesis of the existence of germs. The striking difference between the danger attending simple and compound fracture of a bone is one, in simple fracture even of a large bone life is seldom imperilled on the other hand in compound fracture it is never safe, at least it was not before the advent of antiseptic surgery. But the essential difference between a simple and a compound fracture lies in the admission of air to the wound. There is necessarily in the latter, tearing of the skin but that *per se* as experience shows is seldom attended with very serious consequences. This fact tends to prove that it is in the air, that the noxious element exists and what takes place in another form of injury carries the argument a step further. The substance of the lung is permeated by air in every part yet a wound of the lung to which it is known that air has gone is not followed by the same results as a wound opening on the outer surface of the body. The explanation given of this is that the air in traversing the passages it has to do before reaching the seat of injury is well filtered and deprived of germs. On examining expired air by the concentrated beam it is found to be free of floating particles.

Such then in its leading feature is the theory of antiseptic surgery, and unless this theory be accepted if it even be but provisionally, any trial of the practice must be incomplete and unsatisfactory. The mere use of carbolic acid, gauze, or any particular form of dressing, is not Listerism. Dress wounds in such a way as to obviate the slightest chance of germ contamination and then say after a comparison of the results so obtained with others, whether the plan be a success or a failure.

How far recovery from insanity is lasting is an interesting question. The common idea, is that patients who leave an Asylum seldom or ever remain well for any length of time. As in this colony there is one Asylum and patients who relapse are more likely to be sent to it than those who suffer from a first attack, the following tabular statement of discharges and readmissions for the six years from 1876 to 1881 inclusive, may possess some value:

YEAR	DISCHARGED RECOVERED		SINCE READMITTED TO THE ASYLUM	
	M	F	M	F
1876	17	10	4	2
1877	20	10	4	4
1878	19	6	3	3
1879	7	4	0	1
1880	11	8	0	1
1881	22	12	0	0
TOTAL	96	50	11	11

One man and one woman appear more than once in the above numbers having each been twice discharged and readmitted but deducting these it will be seen that 86 men and 39 women who have been sent home have not returned. Probably some have left the colony and others died but allowing for both circumstances there must be a good many who remained and are presumably at work. It would appear that the chances of a relapse are here twice as great among women than men. It will also be seen from the table that the recurrence of disease has not been frequent in the recently discharged.

Sir Joseph Fayrer in a course of lectures lately delivered on the Climate and Fevers of India notices the various forms of malarial

cachexia which are seen in that country. He remarks that the presence of albuminuria is, infrequent in affections of the kind. In this colony disease of the kidneys is the most common of complaints and if it be not dependent on the malarial cachexia it is difficult to find any other explanation of its prevalence. It must originate in climatic or other conditions peculiar to the place. The fact that in a malarious climate alcohol in one form or other is the stimulant in general use may have some influence in producing so great an amount of the disease.

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Amongst the various races, representatives of which are comprised in the heterogeneous population of this Asylum marked differences of type may be noticed in the psychical symptoms of brain disease. Here are to be seen many patients of African descent who are maniacal. Examining them even casually one must be struck with the absence of the imaginative phase in their mental manifestations. It might well be asked where are the well known characters of European Asylums. The engineer who has a perfectly plausible and to him a practicable scheme for bridging the Atlantic or setting up telegraphic communication with the moon is not to be found. The political economist or philanthropist with very advanced if hazy views for the improvement of the human race and bringing on the advent of the millennium is only conspicuous by his absence. As for poetry there is not a scintilla of it to be discovered either in feeling or words. People there are who having delusions of grandeur fancy themselves to possess great wealth or even to partake of the Divine nature. But the dignified air, the courteous manners, the kindly even if imaginary dispensation of favours which go to form the Asylum monarch or hero are never displayed. Wealth seems only to be associated in idea, with the power of unlimited eating and drinking, and position with the right to swear at every one around them. Delusions of persecution which too are often met with, commonly it may be said invariably, take the form of a belief of having been obeyed by the person who is the object of distrust. Mania in the case of Africans is characterized more by emotional than intellectual perversion, irrational and over-displayed anger is its most common symptom. This is often based upon some hallucination of the senses. The display of passion if extreme, is not often very

lasting and the cool and determined plotter of mischief is unknown. Depression is not a usual kind of emotional abnormality. It is rarely indeed that the typical melancholic is met with, he who remains sunk in gloom believing himself lost both in time and eternity, and to whom the world is nothing but a dreary waste. At the present time there is only one black patient with marked depression as the leading character of the symptoms and that is a woman, though in the Asylum the men outnumber the women in the proportion of two to one. The greater liability of females to suffer from melancholy is very noticeable here.

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By the last mail intelligence reached the colony of homicidal attacks having been made on medical officers in two different Asylums in the United States. Dr E. A. Adams of the Michigan Insane Asylum had been stabbed with a pocket knife by one of the inmates and died soon afterwards. Dr. John F. Gray the distinguished Superintendent of the Asylum at Utica and editor of *The American Journal of Insanity* was shot in the face by a man who though seemingly insane, neither was nor had been a patient in the Asylum. Dangerous consequences were not apprehended from the wound and it is hoped that his life generally acknowledged, to be valuable alike to the profession and the public, may yet be long spared.

REPORTS FOR APRIL, 1882.

Staff.

Two attendants (male) were guilty of offences for which they were discharged from the service during the month. One the tailor attendant refused to obey instructions given to him and then absented himself from duty without permission. The other who acted as night watch, stood by and allowed a patient to make his escape from the Asylum, although by a little activity he could have prevented it. Such an occurrence has never happened before in the Asylum or not at all events for many years past. The patient was brought back next day. One male attendant on probation left as being unsuited to the work. In the places of those who left the following appointments were made. To be first class attendants on probation D. A. Tom,

second class J. Steward and S. Homer. In spite of local difficulties arising from the nature of the employment necessitating the maintenance of strict discipline which is specially disliked by the working classes of the colony, as well as the unsettled and migratory habits of the people, there are now in the Asylum a considerable number of attendants who may fairly be classed as trained having been at the work for over a year.

Religious services.

On the morning of each Sunday in the month services were held in the Dining Hall which is used as a chapel. On three occasions they were conducted by the Revd. J. Rannie and on one by the Revd. F.W.T. Elliott. On the remaining Sunday prayers were read by the Assistant Medical Superintendent. The average attendance of patients at these services were males 119, females 60 in all 179.

Amusements.

Two of the fortnightly dances were held and afforded the usual amount of enjoyment to the patients, attendants, and attendants' friends who were present. The Monday evening practices which seem to be as much appreciated by the patients as the more pretentious meetings took place regularly in April. The amusements were attended by 124 male and 65 female patients a total of 189.

Accidents.

The month happily passed off without the occurrence of any accident beyond one or two black eyes and even of these it is doubtful whether there were more than would happen amongst a similar number of sane people living together and having as much freedom as is given to the patients here. But the liability to serious accidents always exists in a Lunatic Asylum and is the source of constant anxiety to those in charge. Happily the tendency to suicide amongst the patients although not entirely absent is much less here than in European Asylums.

Improvements.

The carpenter has begun work upon the additional dormitory accommodation rendered necessary by the large increase in the number of the patients. This will be in the form of eight single

rooms and a gallery to contain 9 beds and will be obtained by enclosing the space under one of the small dormitories of Ward No. 3. The work is being pushed on. The whole of the iron bars in the windows of the West Block have been removed and glass windows put in three openings where previously there were only bars. The floor of one of the dormitories in that Block has been thoroughly repaired. One patient who works independently of the carpenter attendant has been engaged fitting up a room for medical purposes and making requisites for the microscope room. The painting done, included the posts of the wire fence round the Asylum grounds and the redecoration of a gallery in the North Block.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st April	235	132	367
Admitted in April	8	3	11
Discharged in April	2	1	3
Died in April	1	1	2
Remaining on the 30th of April	240	133	373

Again an increase in the number of patients in the Asylum has to be reported. At the end of the month the institution contained 373 inmates, the largest population it has ever had. The admissions were above the average, the discharges about the usual number and the deaths below the average. Of the patients admitted 9 came from Demerara, 1 from Essequibo and 1 from Berbice. Their native countries were as follows:

	M.	F.	Total
Natives of India	7	2	9
" " China	1	1	2

There were therefore all immigrants. The disproportion between the number of cases of insanity arising amongst creoles compared with immigrants which has already been noticed more than once, seems likely to be kept up. One woman admitted was a patient in whom the insanity had returned after leaving the Asylum. She had been away for three months. The three patients discharged were well when they left the Asylum. They had resided in it for the following periods:

	M.	F.	Total
Between 3 and 6 months	1	0	1
" 1 and 2 years	0	1	1
" 2 and 5 years	1	0	1

The cause of death in those who died were:

	M.	F.	Total
Apoplexy and Bright's disease	1	0	1
Bright's disease and Leprosy	0	1	1

The patient who died of apoplexy was an old man who had been in the Asylum for a little more than two months. The woman who died had been an inmate for over two years. The general health of the Asylum was good during April and the institution enjoyed a complete immunity from zymotic disease.

NUMBER OF PATIENTS EMPLOYED.

Amongst the male patients there were 189 who were engaged in useful employment 34 who were prevented from doing so from mental or bodily infirmity and 14 who were able to work but refused. Amongst the women the corresponding numbers were, employed 104, unable 15, unwilling 14.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES EMPLOYED &c.

	M.	F.	Total
Daily average in Asylum	273.9	133.0	370.9
Percentage employed	79.7	78.1	79.1
Percentage confined to bed	3.0	3.6	3.1
Percentage attending amusements	52.7	48.8	51.0
Percentage attending Church	50.2	45.1	48.3

FARM.

The weather during April was showery and the crops continue to look well. The repetition of the foregoing account of the weather month after month is becoming monotonous but it is a monotony that may well be excused on account of its pleasant character and the necessity for which it is hoped may long continue. The provisions reaped were plantains (free of stalk) 3177 lbs., bananas 131 lbs., tannias 131 lbs., sweet potatoes 392 lbs., sundry vegetables 806 lbs. There were brought in from the

cattle farm 210 pints of milk, and 17¼ lbs. of cleaned fowls with 30 eggs were received. The pigs killed numbered 6 and produced 402 lbs. of pork. There were slaughtered 13 heads of cattle which gave 2,329 lbs. of beef. The cattle cost \$233 deducting the value of hides &c. this makes the cost of the beef to the Asylum nine and two-tenths cents per lb. There was no increase amongst the live stock this month whilst two sheep and one pig died. The number of patients engaged in agricultural and kindred work was 88.

WOOD-CUTTER.

Patients employed 5. Wood cut and brought to the Asylum 26½ cords.

WORK SHOPS.

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CARPENTER.

Patients employed 9. Besides the work done in the alterations already mentioned, the record of this shop shows that there were made stools 3, cabinets, stands &c. for microscope room 8, axe handles 3 and coffins 27. The small repairs to buildings &c. numbered 84.

PAINTER.

Patients employed 3. Work done 272 square yards of painting on walls, 27 lineal yards of stencilling. Articles painted, posts of fence 225, tubs 46, jalousies 18, commodes 14, windows 6, cots 10, one cart and 25 coffins. Sized and varnished 3 boxes and 3 stools. There were put in 51 panes of glass.

TAILOR.

Patients employed 16. During the month there was a change in the attendant here. Work done, made, patient's jumpers 32, pairs trousers 56, caps 44, jackets 9, bed sacks 45, attendant's jackets 5, pairs trousers 5, in all 196. Articles repaired 510.

SHOEMAKER.

Patients employed 2. Work done, made 2 pairs of leather boots, 2 pairs leather shoes, 29 pairs of canvas shoes and 30 straps for keys. Articles repaired 47.

BAKERY.

Patients employed in bakery and kitchen 6. The quantity of bread

baked was 9,565 lbs. The flour used amounted to 36½ barrels, the yield of bread was thus 262 lbs. per barrel.

PRINTING OFFICE.

Patients employed 3. Work done printing the Journal and 25 copies of a form of return containing 31 pages foolscap. Besides these there were 3,280 impressions of shorter forms taken, 244 cards printed. Ruled 1,500 forms, stitched 4 books.

LAUNDRY.

Patients employed 36. There were 15,640 articles of clothing washed and 1,426 starched and ironed.

SEWING ROOM.

Patients employed 18. Articles made men's day shirts 19, cotton singlets 44, flannel singlets 7, bed sacks 13, pillow cases 39, print dresses 13, chemises 66, skirts 40, bed gowns 37, in all 278, repaired 520.

WORK ROOM.

Patients employed 33. Made chocolate 122 lbs., cocoanut oil 19 gallons, coir 12 lbs., besides coffee roasted and ground, and curry powder prepared.

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RECEIVED with thanks. The Journal of Medical Science for April 1882, The Annual Report for 1881 of the Medical Superintendent of the New York City Lunatic Asylum (for women) Blackwell's Island N. Y., The Annual Report for 1881, of the Nova Scotia Hospital for the Insane, Halifax, The Annual Report for 1881 of the Northampton County Asylum, Berry Wood near Northampton - The Annual Report for 1881 of the Glamorgan County Lunatic Asylum, Bridgend, The Barbadoes Globe, Berbice Gazette, Creole, Villager &c., &c.

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR APRIL 1882.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	416 63	For purchase of plantains	\$	113 48
Received for sundries sold		96 60	" repairing clocks		2 00
" fines stoppages &c.		13 16	" band (one month)		13 00
" Hospital account		214 42	" shoeing mules (one month)		4 00
" Alms House account		186 81	" cooper's work		3 40
" hides sold		56 73	" blacksmith's work		5 00
" printing done		5 00	" bricklayer's work		6 00
" board of patients		10 00	" tinsmith's work		8 08
			" purchase of flour &c.		362 90
			" " implements &c.		20 48
			" " microscope		161 30
			" " cocoanuts		72 00
			" gratuities to patients		5 48
			" sums paid under one dollar		11 94
			Balance cash in hand		210 29
	\$	999 35		\$	999 35

No. 16

THE ASYLUM JOURNAL

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
15TH JUNE, 1882.
—

THE GERM THEORY OF DISEASE.

IV.

The theories which have been successively advanced at different periods of the world's history to account for the origin and spread of epidemics of disease, follow in their development the course common to the evolution of all scientific knowledge. There was a time when everything in connection with visitations of the kind was so dark and mysterious as to be entirely relegated to the realms of the supernatural. Gradually the mystery in which they were shrouded was dispelled until now it is fully recognized that like all other modern mundane events they depend upon and follow natural laws. But even yet there ex[ists] in some minds a tendency whenever disease becomes epidemic to ascribe the outbreak to something incomprehensible and failing the supernatural, the meteorological conditions in that case, become the abode of the mystery. Undoubtedly these conditions may greatly influence the spread of disease but science is not helped by treating them as something mystical instead of attempting to discover their mode of action. It is well ever to bear in mind that the unknown is not always the unknowable. Although our knowledge of the causes of communicable diseases and the conditions under which they spread is yet far from complete still under the impetus given by the recent development of the germ theory additions are made to it almost daily. No more striking instance of this truth could be advanced than the results of the recent researches of Koch which have just been published.

He shows that in tubercular disease, the communicable nature of which has heretofore been a keenly contested and doubtful question a minute organism is present in the affected tissue. He has proved experimentally that these microbes possess the power of producing specific disease in animals inoculated with them, and has thus added to the rapidly increasing family of recognised infective bacteria, another member the tubercle-bacillus. Looking to this and similar work already done in connection with the germ theory it is not too much to expect that in its future extension lies the elucidation of much of the mystery still connected with the rise and progress of epidemics. It is needful here to re-state what the germ theory is in this connection. By its acceptance, it is held that each different form of communicable disease depends upon the presence in the system of a specific organism, and that transference to the individual of this organism or its germs forms the infective process. It may be useful to examine in more detail the demands upon belief which are comprehended under this hypothesis. In the first place it is assumed that all complaints of the kind originate in the reception by the system of some form of matter from without. In this country it is feared that it will be difficult as yet to gain a ready acceptance for this doctrine as many kinds of specific disease ranging from common intermittent to yellow fever are generally and firmly believed to depend solely upon exposure to cold, the undergoing of fatigue, or similar causes. These things do undoubtedly give rise to illnesses but they are the same in character whenever and wherever they occur varying only in intensity in correspondence with like variation in the cause. To prove the popular theory it has to be shown that true intermittent arises without the presence of malaria or specific yellow fever without connection with an antecedent case and the weight of evidence in both these instances is adverse to this opinion. Even if it be agreed that infection comes into the body from without this is not sufficient to satisfy the requirements of the germ theory. It must be believed that the infectious material is of a peculiar kind, that it is not only organic but organized. On this there still exists a difference of opinion amongst scientific men. On the one side are the germ theorists and opposed to them what may be called the physicochemical school. By the latter it is held that the *materies morbi* of communicable disease is organic but not organized and when this enters the body it produces its effects

after the manner that ferments act according to the teaching of Liebig. This question seems likely to be soon decided in favour of the germ theory which at present is making giant strides in advance whilst the opposing belief is being gradually driven from the field. Already the organisms peculiar to various diseases have been identified by trustworthy observers and a large body of experimental proof collected to show that the symptoms produced depend upon their presence, and are not merely a concomitant of it. For the greater part of this progress the world is indebted to continental workers owing to the difficulties thrown in the way of Englishmen from the agitation raised by the antivivisectionists. One instance of this has already been given in noticing the discovery by Koch of the *bacillus* which is presumed to occasion consumptive disease. There are several facts ascertained in recent investigations which possess peculiar interest for the residents in this colony. Amongst these is the identification of the *bacillus malariae* the life history of which is so peculiar and whose presence in the circulation is supposed to determine the occurrence of intermittent fever. Again the *bacillus leprosus* has been found and if its existence in connection with leprosy can be definitely fixed the vexed question of the contagiousness or non-contagiousness of this disease will soon be finally decided. The most important of all to colonists, the organism which may from analogy be fairly expected to exist with yellow fever awaits discovery. If the preceding postulates of the germ theory be admitted, then it is evident that the class of diseases under consideration cannot arise *de novo*, unless indeed the spontaneous generation of living forms be believed in. But at the present time the dictum of *omne vivum ab ovo* represents the common belief both popular and scientific. The difficulties which now surround the doctrines of contagionists will disappear when the conditions under which germs thrive and spread are better understood. It seems as if these conditions vary with each specific disease. The original habitat of the infective germ may in some instances be the soil as in the familiar intermittent of the colony, or it may be one of the lower animals as is the case with the deadly woolsorters disease, or anthrax, of which the cause arises in the sheep and is carried, it may be for thousands of miles lurking in a bundle of wool to find its victims in the men who unpack it. Upon some of these germs the soil has a powerfully

preservative effect. Thus the stories told of the plague breaking out freshly when the graves of its victims buried for years, have been opened, which at one time were looked upon as wholly mythical may in the light of recent investigations be accepted as probable. It has been shown beyond the shadow of doubt that the germs of some diseases such as scarlet fever may remain dormant about rooms or in clothing for very long periods and then when circumstances are favourable develop the disease in individuals coming within their influence. There is reason to believe that the same fact holds good in reference to yellow fever and in this way perhaps may be explained the isolated outbreaks of the disease in ships which are now taking place in the colony. These ships become infected with yellow fever and leave the tropics, the germs then lie dormant until the vessel returns to a place having the required temperature and likely enough with a fresh and very susceptible crew which are soon attacked. This theory which investigation alone can confirm or disprove has a most important practical bearing, for if it be as supposed, thorough disinfection of the vessel at the port where she may discharge after having had yellow fever on board, would prevent its re-appearance on her return to the tropics. Again each disease seems to have its own peculiar way of reaching the system, some germs are breathed in, others swallowed, application to the outside of the skin suffices for this kind whilst that has to be introduced beneath it. The constitutional state of the individual whether hereditary or acquired is another most important element in the consideration of the development of contagious diseases and one too often ignored. Every person does not provide equally congenial soil for the growth of the germs. A man who has been thoroughly revaccinated may treat with contempt the horrors of small-pox and one attack of some fevers fortifies the system against them for the future. It is beyond the scope of these short articles to do more than hint at the many interesting and from a public health point of view important questions, which underlie the germ theory in relation to communicable diseases. The theory is now sufficiently proved to form a working hypothesis for preventive purposes. It has this quality of a good hypothesis that it explains satisfactorily many phenomena which were obscure but only by the rigid verification of deductions made from it can its truth be fully established.

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That a firm belief in obeahism is widely diffused amongst the people of this colony any one who is brought into intimate contact with them is not long in discovering. This belief is not one in obeahism only as a mode of secret poisoning, a materialistic and gross view of the craft, but in it, as a form of enchantment after the style of that of which we read in the Arabian Nights. By its means it is believed that the fortunes of men can be made or marred. When anyone wishes to wreak his vengeance on his enemies without danger to himself it is to the obeah doctor he applies. An incident which took place a few years ago at the Asylum, so strongly illustrates both the belief in obeah and its mode of working as to be worth relating. One morning the senior attendant a fair skinned almost white man and one of fair intelligence made a complaint that an attempt had been made to obeah him. He said that early that morning an obeah bottle had been found upon the doorstep of his cottage and as he was the first person likely to pass it, it must have been intended for him. Although he made the complaint he was as loud as usual in his expression of unbelief in obeah. How could he a Christian believe in such a thing? At the same time he showed great reluctance to bring the bottle and only did so after a good deal of pressure had been put upon him. He treated it much after the manner one can suppose an infernal machine is handled when its character is known. It was afterwards found out that he had before leaving his cottage that morning looked out of the window and saw the thing of horror upon his doorstep. At once a hue and cry was raised to bring assistance from outside as no one dare pass it. A woman living near came and undertook to exorcise the demon of the bottle which she did by performing the usual rites of invocation and a liberal application of salt and water. When examined the terrible thing was found to be an ordinary eau-de-cologne bottle filled with a heterogeneous collection after the approved style of necromancy. Here were:

Eye of newt and toe of frog
Wool of bat and tongue of dog
Adder's fork and blind worm sting
Lizard's leg and owl's wing.

or their local equivalents. Conspicuously standing above the cork was a hair certainly much like one from the head of the attendant

who complained and its presence was said to act as a guide to direct the mischief towards him. The bottle was afterwards used as a test of the belief in obeahism amongst the attendants and its effects were very marked. The application of the test was in this manner. First came the question. Have you had anything to do with this obeah business? Do you believe in it? Oh sir! How could I believe in such a thing!! It is a good thing you don't believe in it for then you will be able to tell me what you think of this? On which the bottle suddenly appears. The abrupt start, the tremor and change of complexion, in one instance a bolt made for the door, showed that the heart did not confirm the denial made by the tongue. The bottle is still in existence but its contents have dried up so it is feared that the virtue may have departed from it.

CLINICAL RECORD.

Case IV- Tumour of Brain (tubercle). - J. G. a black creole woman aged about 30 was admitted to the Asylum on the 30th March 1882. There was not any history of her case sent with her and she was never in a condition after her admission to give one. She was certified as insane owing to her incoherence, violent conduct and tendency to indecent exposure of her person. It was also stated that she had been sleepless. She bore on her wrists and ankles marks caused from having been forcibly restrained by the use of ropes or fetters. She was much emaciated, weighed only 77 lbs., and was 5 ft 2½ in. in height. On admission she had a most miserable appearance. The expression was one of great depression but was at the same time vacuous. The left eye was fixed staring and prominent, the cornea of that side was opaque and the power of seeing had been lost in the eye. The sight of the right eye was also weakened and there was conjunctivitis of both. There was flattening under the right clavicle with slight dullness absence of respiratory murmur and pectoriloquy. The temperature was 100 degrees and pulse 105. The appetite was fair. The urine was slightly albuminous. As far as could be ascertained the pupils acted naturally. No paralysis either of motion or sensation was discernable. She was deaf and the deafness was extreme in the right ear. She was in a most restless and irritable condition, constantly moving up and down the room and frequently throwing herself on the floor crying out "oh my God". She tried to strip herself and there was a distinct

erotic tendency in her excitement. Between the attacks of excitement she had fits of crying. It was with difficulty that she could be made to understand what was said to her and her replies except to the simplest questions were very incoherent. It could be made out that she had a belief that she had been obeahed (delusions of persecution) and evidently had hallucinations of hearing as she held imaginary conversation with people outside, and gave answers to remarks made by them. She slept fairly well and was quite cleanly in her habits. The case was diagnosed as one of phthisical insanity and was treated by cod-liver oil and small doses of morphia. Her condition remained much the same during her residence in the Asylum except that there was a diminution of the restlessness. It was reported by the attendant in charge that J. G. suffered occasionally from attacks resembling fits that in them the eyes were fixed that there was convulsive action of the hands, foaming of the mouth and loss of consciousness. Unfortunately there was not an opportunity for the Medical Officers to see her in any of these attacks. After having been about six weeks resident one morning she suddenly became unconscious and died in a few minutes. Her death happened on the 7th May.

Necropsy. This was made 9 hours after death. The skull was symmetrical and the bones of the skull-cap seemed to be somewhat thickened. There was nothing abnormal in the appearance of the blood vessels or membranes in the removal of the calvarium. On removing the brain the periosteum of the bones forming the left central fossa was seen to be roughened and easily detached, the bones were not softened. On examining the brain, the membranes covering the corresponding temporo-sphenoidal lobe (the left) were thickened. There was found in the substance of the lobe two tumours each about the size of a small marble and the brain substance around them was reduced to a semi-fluid and gelatinous condition. The area of softening comprehended the anterior two thirds of the three temporo-sphenoidal convolutions so that the grey matter of the external and inferior portion of the lobe to that extent had disappeared. Internally the softening ceased before reaching the basal ganglia. The tumour presented both microscopically and to the naked eye the character of tubercle. The brain weighed 2 lbs. 11¼ ozs. the right lung was partly solidified and the cortical substance of the kidneys had undergone granular degeneration.

Remarks. In this case there was extensive destruction of the cortical layer of the temporo-sphenoidal lobe and the deafness of the right ear and hallucinations of hearing might be expected to arise from this if the centre for hearing be situated as Ferrier places it. It is to be regretted that the convulsive attacks could not be more particularly described as to the manner of their beginning and progress, in the absence of this they are of no assistance in attempting to localize function. Of the intellectual derangements the delusions of suspicion were most likely dependent upon the hallucinations of hearing which in their turn may have determined the melancholic form of the delirium. But in this case as in others of a similar kind it is difficult to feel certain that the brain affection was limited to the visible seat of disease and so the value of them as indicating localized functions is comparatively small.

REPORTS FOR MAY, 1882.

Official visit.

On the 18th of the month Sir Henry T. Irving the Governor visited the Asylum. After inspecting the different wards and seeing all the patients except those at work in the fields, he made before leaving the following entry in the Official Visitors Book "Visited the Asylum this day. My first impression of the institution is a highly favourable one. From my experience I am of opinion that it takes first rank amongst the Asylums in the West Indies."

HENRY T. IRVING.

Staff.

At the beginning of the month two second class attendants (male) left after having given the usual notice. One second class attendant (female) on probation left at the end of the period having been found to be unsuited for her place. The following were appointed to fill the vacancies thus caused, first class attendant (female) on probation Mrs. Knight, second class (male) D. Nelson and W. LaRose. The changes were few in number and arose from causes which present no peculiarity requiring notice.

Religious services.

These were held on the four Sundays of the month having been conducted on two occasions by the Revd. J. Rannie and on one

by the Revd. F.W.T. Elliott. The Assistant Medical Superintendent read prayers on the other Sunday. The services were attended by 122 male patients and 61 female 183 in all. In this connection it may be mentioned that ministers of religion of every denomination are allowed freely to visit the inmates of the Asylum at any time. The friendly visits of clergymen and others afford much pleasure to the patients and must it is thought possess interest for the visitors, especially if they are repeated with sufficient frequency to make them well acquainted with the people.

Amusements.

The wet weather which prevailed during the month interfered with the amusements. In consequence of this only one dance was held but it passed off successfully and at it there were present 126 patients from the male side and 53 from the female, together 179. To those unacquainted with the form of the Asylum it may be necessary to explain the reason of this dependence upon the weather. The Asylum is not one building but a series of separate blocks some of which are several hundreds of yards distant from the room in which the dances are held. Heavy rains therefore completely debar the women from leaving the houses in which they live and from attending any meetings.

Accidents.

Again it is pleasant to be able to put on record the fact, that there has not been any accident deserving notice during the month.

Improvements.

The chief work in which the carpenter's men were engaged during the month was the erection of additional accommodation as mentioned last month. Considerable progress has been made with this and the heavier part of the work being now accomplished it is hoped it may shortly be finished. The painting of the outside of the large building in the North Block has been carried on as well as the weather would permit. Adjoining the microscope room a small place has been fitted for the medical examination of patients, use of electrical and other appliances &c.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st May	240	133	373

Admitted in May	3	2	5
Discharged in May	3	0	3
Died in May	0	2	2
Remaining on the 31st of May	240	133	373

The number of patients in the Asylum was the same at the beginning of the month. The changes amongst the population were not numerous. The admissions and deaths were below the usual number. The number of discharges was about the average. Of the patients admitted 4 were resident of Demerara and one of Berbice. Their places of nativity were as follows:

	M.	F.	Total
Natives of India	1	1	2
" British Guiana (2 male colrd. 1 female black)	2	1	3

Three creoles to two immigrants. Of the East Indian immigrants the male had been in the colony for 10 months the female for 8 years. All the patients who were discharged left the Asylum well and able to work. Their periods of residence had been

	M.	F.	Total
Between 3 and 6 months	1	0	1
" 6 and 12 months	1	0	1
" 1 and 2 years	1	0	1

In both the women who died the cause of death was

	M.	F.	Total
Tumour of the brain (1 tubercle 1 sarcoma)	0	2	2

One had been in the Asylum for about 6 weeks the other for a year. In the clinical record in this Journal an account of the first case is given, the other will appear in next month's paper. The general health of the Asylum continued to be extremely good, very few of the inmates suffering from acute disease and that of the mildest form.

NUMBER OF PATIENTS EMPLOYED.

Of the male patients 195 took part in useful work, by bodily or mental infirmity 32 were prevented from doing so, and 12 refused. Amongst the women the corresponding numbers were 106 employed, 12 prevented, 16 refused.

DAILY AVERAGE NUMBER IN THE ASYLUM AND
PERCENTAGES EMPLOYED &c.

	M	F	TOTAL
Daily average in Asylum	239.4	133.1	372.5
Percentage employed	82.0	79.6	80.8
Percentage confined to bed	2.9	3.7	3.2
Percentage attending amusements	52.7	39.8	48.1
Percentage attending Church	51.0	45.8	49.1

FARM.

The weather which had been showery for some months, in May became very wet. As the grounds of the Asylum are well drained the provision crops have not suffered from the rains and continue to look well. There were reaped, of plantains (free of stalk) 2,367 lbs., bananas 155 lbs., sweet potatoes 811 lbs., taniais 241 lbs., sweet cassava 393 lbs., cocoanuts 36, sundry vegetables 806 lbs. There were received from the cattle farm 212 pints of milk, 14½ lbs. of cleaned fowl and 63 eggs. Seven pigs were killed, producing 445 lbs. of pork. The cattle slaughtered numbered 13 heads, 2,419 lbs. of beef were obtained. The cost of the cattle was \$269 making the usual deductions, the net price of the beef to the Asylum was ten three-tenths cents per lb. The live stock was increased by the births of 4 pigs and 1 sheep. The loss by death was 3 pigs. The number of patients employed in agricultural labour of a similar kind was 93.

WOOD-CUTTER.

Patients employed 5. There were 31¼ cords of wood cut and brought to the Asylum.

WORK SHOPS.

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CARPENTER.

Patients employed 6. In addition to the work on the new dormitory and medical examination room already mentioned, the following were made in the shop, one 30 feet ladder, 2 benches, 2 lamp brackets, 6 axe handles and 20 coffins. The small repairs numbered 50.

PAINTER.

Patients employed 3. Work done 240 square yards of painting,

24 lineal yards of stencilling, window frames painted 9, tubs 5, jalousies 115, barrels 5 and 22 coffins. There were sized and varnished 2 lamp brackets, and 5 benches. There were put in 24 panes of glass.

TAILOR.

Patients employed 20. Work done, articles made, patient's jumpers 86, pairs of trousers 53, caps 17, jackets 11, aprons 2, attendant's jackets 11, pairs of trousers 13, cap 7, in all 200. There were repaired 532 articles.

SHOEMAKER.

Patients employed 2. Work done, made leather boots 6 pairs, leather shoes 1 pair, canvass shoes 25 pairs, straps 5. Repaired 39 articles.

BAKERY

Patients employed in Bakery and kitchen 6. The quantity of bread made was 13,003 lbs., flour used 38 barrels, yield of bread 263 lbs.

PRINTING OFFICE.

Patients employed 3. Work done, the Journal printed, besides this there were 210 copies of a pamphlet of 24 pages struck off as well as 2,600 impressions of different forms and 425 tickets. Ruled 100 forms. Stitched 11 books.

LAUNDRY.

Patients employed 36. There were washed 15,074 articles and 1,412 washed and ironed.

SEWING ROOM.

Patients employed 20. Work done, articles made, men's flannel singlets 58, cap covers 29, day shirts 37, night shirts 57, women's skirts 34 print dresses 17, jackets 44, bed gowns 56, head kerchiefs 17, aprons 7, towels 12, in all 361. Articles repaired 742.

WORK ROOM.

Patients employed 34. Work done chocolate made 146 lbs., cocoanut oil 14½ gallons, coir 32 lbs., besides coffee and curry powder prepared.

RECEIVED with thanks. The American Journal of Insanity

double number for June and April 1882. "Is Insanity increasing?" a pamphlet by Frederick Norton Manning M .D. Inspector General of the Insane, New South Wales, The Annual Report of the Three Counties Asylum, Carmarthen for 1880, The Annual Report 1881 of The West Riding Asylum, Wakefield, Yorkshire, The Annual Report for 1881, of the Asylum for the Insane Kingston Ontario, The Berbice Gazette, The Barbadoes Globe, The Creole &c. &c.

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR MAY 1882.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	210 29	For purchase of plantains	\$	75 64
Received for sundries sold		97 49	" repairing clocks		2 00
" fines stoppages &c.		24 99	" band (one month)		11 84
" Hospital account		278 92	" shoeing mules (one month)		4 00
" Alms House account		166 19	" cooper's work		6 24
" Out Door Poor		6 00	" blacksmith's work		1 44
" board of patients		10 00	" purchase of flour &c.		418 95
			" photographs		42 44
			" purchase of sheep		18 00
			" gratuities to patients		2 48
			" sums paid under one dollar		15 31
			Balance cash in hand		195 54
	\$	793 88		\$	793 88

No. 17

THE ASYLUM JOURNAL

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LUNATIC ASYLUM, FORT CANJE, BERBICE,
15TH JULY, 1882.
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THE GERM THEORY OF DISEASE.

V.

THE energy with which the investigation of the relationship existing between micro-organisms and disease has been carried on, has already been productive of something more than theory. The application of the germ theory to the practice of surgery as made by Professor Lister has received attention in these papers. In this, the last of them, the brilliant and practical experiments of Pasteur on the preventive inoculation amongst animals of chicken cholera and splenic fever may fittingly be noticed. For whether or not the immediate results of these experiments be as successful as at first hoped for, undoubtedly they form a new departure in preventive medicine. The lines upon which they proceed are those familiarized to every one by the practice of vaccination for the prevention of small-pox. That full vaccination preserves from small-pox to the same extent as a previous attack of the disease itself, when taken in the natural way, has been known as an empirical fact since the time of Jenner. To account for this, it has been assumed that cow pox the disease communicated in vaccination is nothing more or less than small-pox as it affects the cow. This hypothesis seems now in a fair way of being verified. If it be so then, we have in this case the poison of an infectious disease so modified by its passage through the system of one of the lower animals as to excite in man, a form of complaint outwardly unlike the original, but yet retaining some at least of its essential characteristics. Happily it

is the dangerous qualities that are lost whilst the beneficial one is retained. Acting on the hint given by this behaviour of the small-pox virus, after the discovery had been made of the poison of chicken cholera and anthrax, diseases affecting fowls and cattle, respectively, Pasteur tried to deal with them in such a way as to obtain similar results. Before noticing Pasteur's experiments, it may be right to mention that the identification of the specific organisms of the two diseases named, was not his work. The micro-organism of chicken cholera was discovered by Toussaint, a distinguished French veterinarian, that of splenic fever by Koch the scientific German physician who the other day demonstrated the existence of the tubercle bacillus. It was with chicken cholera that Pasteur began his investigations on inoculation. This disease has not any resemblance to the cholera of human beings but received its name, because in France it happened to ravage the hen roosts at the same time that Asiatic cholera prevailed. Chicken cholera is an extremely contagious disease and it was found that when the smallest drop of the blood of a fowl suffering from it is introduced under the skin of a healthy animal, the latter takes the complaint and in its full virulence. So far this differs from the action of small-pox in man for as a rule inoculated small-pox is less dangerous than the disease contracted in the usual manner. To show in the first place that the disease depended upon the presence of the micro-organisms in the system an effort was made to propagate, or as the phrase is, cultivate these in some neutral menstrum external to the body and to watch the effects of the *bacteria* produced in this manner when injected under the skin. Various decoctions were tried by Pasteur and ultimately he found that chicken tea was the most favourable medium for their growth. The plan he followed was this, having well boiled the chicken soup so as to destroy any germs it might contain, and taken every precaution to prevent the introduction of any other germs besides these which were put in intentionally, he added to the fluid a minute drop of blood taken from a fowl affected with the disease. In a short time the soup thus infected was found to be swarming with *bacteria* and a drop of it, if put under the skin of a healthy fowl gave rise in it, to the disease in its most acute form. Added to fresh soup it caused *bacteria* to appear which in their turn could produce others and so the cultivation of these organisms could be carried on almost *ad infinitum*. After performing many experiments of the kind but under varying circumstances he found that infected

soup, which had been exposed for a considerable time to the action of the oxygen of the air possessed a power of causing the disease differing in intensity in correspondence with the length of the exposure. Thus experimenting with liquids possessing various degrees of virulence, at length he produced one which when an animal was inoculated with it, caused local swelling at the seat of the puncture that was not accompanied by much constitutional disturbance. It was found that fowls which had been thus operated upon resisted to a great degree the influence of subsequent inoculation with infected fluid and were not liable to take fowl cholera when exposed to its influence in the hen roosts. It will be seen that this closely resembles the symptoms and effects of vaccination and small-pox, and so the name of vaccination has been applied, more popularly than scientifically appropriate though it be, to this mode of protection against the disease. Amongst the cattle and sheep of France there prevails at times a disease, anthrax or splenic fever, which is of a most fatal character. It is highly contagious and the loss caused by it annually to the agriculturists of that country is very considerable. To this disease Pasteur's attention was next directed. Although in this case he met with special difficulties in the culture of the specific organisms at length he succeeded in obtaining them, of such a virulence, as to produce in animals inoculated with them slight symptoms, without danger to life. It was found with splenic fever as with chicken cholera that inoculated animals subsequently exposed to the ordinary contagion of the disease did not contract the complaint. Since the date of these experiments a large number of sheep and cattle have in France been treated in this way and although in its practical application certain disadvantages have attended the plan, still on the whole the results have been satisfactory. From work in this direction a great deal may be expected in the future. As the recognition of the special organisms of different diseases extends, and this extension is rapidly taking place, so will the possibility of their prevention by inoculation increase. It may be that for some time the lower animals alone will share the benefits of this progress, for upon them only are experiments upon the subject possible. Even in such a case the gain to man is great. But if in the end this kind of "vaccination" is found to be good for the brute creation, no doubt means will be found to bring mankind within the range of its beneficial action. It is not only for the prevention of

transmissible disease that the germ theory is likely to add to the available means at command. The knowledge gained in its study can be readily utilized in framing a scientific basis for the treatment of the different disorders of that class. In its practical application to treatment there is ample scope for work to be done and good work too if it be undertaken in the true scientific spirit.

This series of fragmentary notes on the "Germ theory of disease" may be fittingly closed as it was begun by the observation that much of the theory is still in the hypothetical stage. But out of this it is passing rapidly, for even in the five months during which they have appeared marked advances towards certainty have been made. The importance of the subject it is impossible to over estimate, nor can boundaries be set to its application, at the present time. Everything indicates that not in medicine only but in the general economy of nature *bacteria* and their germs play greater part than were dreamt of in any philosophy.

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Experience amongst the insane of this colony compels the belief that amidst the various causes of mental disease, by far the most potent and frequent is indulgence in certain vices. The moral causes which hold such a prominent place in English statistics can scarcely ever in this country be traced as producing a similar effect. It may be that this difference arises from the racial characters of the diverse peoples from which the patients are drawn, or is peculiar to the classes of the population to which they mostly belong. Whether it be so or not the fact remains, that in the etiology of insanity in British Guiana, mental anxiety, worry, domestic trouble, religious excitement, even love affairs are of very little importance. These if they are felt at all, and it is difficult to imagine that any portion of the human race is wholly exempt from their influence, produce a very transient effect. It looks as if in the tropics nature is as ready to repair the mischief done by the storms of passion as it is to efface the effect of the hurricane. It might not be expected that the causes of insanity peculiar to a very advanced civilization would be powerful here, but as little was it to be looked for that they would be wanting to the extent they are. Judging from what is seen in this Asylum the idea is apt to creep in that in England more is made [of] moral causes than they deserve. Naturally the notion of disgrace connected with insanity is minimized when the mind is supposed to have given way under the pressure of anxiety or of over work. There is therefore more

readiness on the part of relations to ascribe the attacks to such causes, than to others which they may think are not so creditable. Here there is not much reticence shown as to the habits of the people and the truth may thus be more easily arrived at with respect to their failings. Making every allowance for vicious habits as an inheritance from insane progenitors one thing is certain that here the leading factor of insanity is amongst the East Indians, ganje, in all other classes of the people drink.

CLINICAL RECORD.

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Case V. Tumour of the Brain. (Sarcoma).— C. F. a woman of Portuguese extraction, a native of Madeira apparently about 55 years of age was admitted to the Asylum on the 2nd May 1881. There was not any history of her case sent with her, and after her admission she was never in a condition to give an account of the origin or progress of the disease from which she suffered. When admitted her condition mentally was characterized by marked absence of intellectual power. There was loss of memory and inability to answer questions except by a yes or no. The patient chattered to herself in an incoherent manner, and had a fixed absent and rather depressed expression. There did not seem to be hallucinations of any of the senses. There was not at any time excitement. Physically she was feeble. She weighed 94 lbs. Careful examination failed to detect at that time loss of the power either of motion or sensation in any part of her body. The pupils were equal and acted normally. The heart's sounds were feeble, and the respiration was weak. She suffered from incontinence of urine, which was itself albuminous. Her temperature was 99.1 degrees. On the 24th of May there was noticed slight loss of power in the right limbs both upper and lower with diminished temperature on that side, which passed off within twenty-four hours leaving the patient much in the same condition as before. On the 22nd of June she was seized with right hemiplegia both upper and lower limbs were paralyzed, face dragged to the left. No ptosis, tongue protruded without deviation. Pupils were equal and acted freely. Temperature on paralyzed side 100.2 degrees on left 100 degrees. The paresis increased in intensity for about a month at the end of that time, a gradual improvement took place which went on progressively, until towards the end of September the patient was able to walk about the ward though still dragging her foot. On

the 10th of October there was a return of all the symptoms but in a day or two amelioration again took place and on the 13th she was able once more to get about and to use her right arm. In the beginning of November twitching of the muscles of the right side was noticed and on the 16th of that month the hemiplegia returned in full severity. The right limbs both upper and lower were completely powerless and there was marked edema both of the limbs and of the right side of the face. At [the] same time the patient complained much of pain in the affected side. The temperature was equal on both sides of the body, the thermometer standing at 99.8 degrees in each axilla. The pupils were contracted but equal. Articulation was somewhat impeded. From this date although the patient varied in condition almost from day to day, she never again rallied sufficiently to be able to sit up. It was noticed that whilst the dementia became more marked, the patient also manifested a greater emotional tendency than at first. She was never cross or irritable but cried frequently when spoken to. In the latter months of her life she could only articulate a few words, such as "good morning &c. &c." Death took place on the 20th of May, 1882.

Autopsy. This was made 8 hours after death. On dividing the skull, there was found in the left frontal eminence an enlargement of the bone. The enlargement consisted of dense osseous matter, it was about 1½ inches in diameter and an inch in its greatest thickness, its inner surface was covered with numerous sharp spicula which pressed into the dura-mater thus causing the membrane to adhere firmly to it. On removing the skull cap the place usually filled by the left frontal convolutions was seen to be occupied by a firm hard tumour which presented itself on the surface of the brain. All three frontal convolutions on that side had disappeared to the greater part of their extent, but the ascending frontal was untouched. The tumour was easily enucleated and surrounding it was a zone of softened cerebral substance which evidently reached the medullary matter on the surface of the lenticular nucleus of the left corpus striatum. The brain including the tumour weighed 2 lbs. 9½ ozs. After removal the tumour which in size and shape resembled an orange was found to weigh four ounces. It presented both to the eye and under the microscope the characteristics of a spindle-celled sarcomatous growth. Beyond granular degeneration of the kidneys nothing abnormal was found in any organ except the brain.

Remarks. In this case there were two distinct sets of functional derangements, one mental, the other physical. The mental, a gradually increasing but never complete dementia, preceded the physical, hemiplegia, by a considerable interval. Both the character and sequence of the phenomena can be best explained by assuming as true, the common belief that the frontal lobes of the cerebrum are the special seat of the intellectual functions. It might then be expected that a disease involving in the first instance only the frontal convolutions but afterwards extending so far as to implicate the corpus striatum would be followed by the symptoms seen in this case. That the disease originated from the bone is most probable but it is to be regretted that the history of the case from the beginning could not be obtained as only thus could the facts be definitely ascertained.

REPORTS FOR JUNE, 1882.

Staff.

The changes amongst the attendants in the month of June, were about the average number and for the usual reasons. One (male) second class attendant on probation had to leave the service for treating a patient roughly. Two first class attendants (printer and wood-cutter) left after giving notice, one (male) second class and one (female) were discharged after receiving notice for general inefficiency. The places of those leaving were at once filled by the appointment on probation as first class attendants (male) J. B. Chisholm, and George Williams, as (male) second class attendants H. Jarvis, and P. Rose, and as second class attendant (female) A. Walters. The increase on the numbers of the patients having rendered an additional attendant necessary, C. McBean, (male) was appointed on that account second class attendant on probation.

Religious services.

The usual Sunday services were conducted on two occasions by the Revd. F.W.T. Elliott, on another by the Revd. T. Slater, of Georgetown, who kindly officiated in place of Mr. Rannie, and on the fourth Sunday prayers were read by the Assistant Medical Superintendent. On the 6th of the month the Revd. Father Lund, said Mass at the Asylum to such of the Roman Catholic patients as were able to be present.

The Revd. J. Rannie, who for six years has so kindly acted as an honorary chaplain to the institution left for England by the mail of the 25th June, to enjoy a few months holiday. His absence will be felt at the Asylum. The average attendance at chapel was of patients 188 (124 males 64 females).

Amusements.

The dances both fortnightly and weekly were held regularly during the month and were enjoyed as usual by the patients who attended. These numbered 180, 118 men and 62 women. The playing of the band in the grounds on Monday afternoons continues to attract visitors from New Amsterdam.

Accidents.

One accident happened in June which arose from the usual cause, an unexpected quarrel between patients. In this case two women who had slept for a long time in the same dormitory began suddenly to quarrel during the night and before they could be separated one of them bit one of the ears of the other removing the greater part of it. An attempt to bite is commonly made whenever there is a quarrel, more especially is this the case amongst the women.

Improvements.

The building of the new dormitory and single rooms is still in progress. It is hoped that some of the rooms will be ready for occupation early in July. The painting of the outside of the large building in the North Block has also been continued during the month and has been nearly completed. This work has been hindered by the showery weather and by the painter attendant's sickness.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st June	240	133	373
Admitted in June	4	5	9
Discharged in June	2	4	6
Died in June	1	2	3
Remaining on the 30th of June	241	132	373

The number of patients in the Asylum was the same at the end of the month as at the beginning, this was owing to the number

discharged being more than usual, for the admissions and deaths were each about an average. Of the patients admitted seven came from the County of Demerara and two from Berbice. One man was a readmission having been absent from the Asylum for six months. Their native countries were as follows:

	M.	F.	Total
Natives of India	2	0	2
" " Africa	1	0	1
" " British Guiana	1	3	4
" " Barbadoes	0	1	1
" " Madeira	0	1	1

Being 5 immigrants to 4 Creoles. Of the East Indian immigrants one had been nine, the other two years in the colony. With one exception the six patients discharged were well and able to resume their places in the outer world. The exception was in the case of a European who was sent away unimproved in order to return to his native country. The five discharged had been in the Asylum for the following periods:

	M.	F.	Total
Between 6 and 12 months	1	0	1
" 1 and 2 years	0	3	3
" 2 and 5 years	0	1	1

The deaths arose from the following causes:

	M.	F.	Total
Acute Peritonitis and Bright's disease	0	1	1
Epilepsy	1	0	1
Apoplexy and Bright's disease	1	0	1

The patients who died had been in the Asylum

	M.	F.	Total
Between 1 and 2 years	1	0	1
" 2 and 5 years	1	0	1
Over ten years	0	1	1

Towards the end of the month there was an outbreak of intermittent amongst both patients and attendants. For a week there were daily several fresh cases but it was of a very mild type and was not in any case followed by serious consequences. In other respects the general health of the institution was good.

NUMBER OF PATIENTS EMPLOYED.

Amongst the male patients there were engaged in useful work 193 persons, whilst 34 were prevented by mental or bodily infirmity and 14 refused. The corresponding numbers amongst the women were employed 105, unable 14 unwilling 15.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES EMPLOYED &c.

	M	F	TOTAL
Daily average in Asylum	241.0	134.6	375.6
Percentage employed	80.0	78.3	79.0
Percentage confined to bed	3.7	3.6	3.7
Percentage attending amusements	48.9	46.2	48.0
Percentage attending Church	51.4	47.7	50.1

FARM.

The early part of the month was very wet, but towards the close the rainfall was less and the weather could fairly be described as showery. As will be seen from the following report a good quantity of provisions were reaped in June, at the same time replanting was carried on vigorously. The returns obtained were plantains (free of stalk) 5,210 lbs., sweet cassava 4,622 lbs., pumpkins 801 lbs., and sundry vegetables 181 lbs. There were brought in from the Old Fort farm 191 pints of milk and 20½ lbs. of cleaned fowl and 42 eggs were got. Seven pigs were killed yielding 504 lbs. of pork. There were slaughtered 13 heads of cattle, the beef obtained amounted to 2,459 lbs. The cattle cost \$272.50 which deducting the value of hides &c. makes the net cost of the beef ten and two-fifths cents per lb. The increase of live stock by birth was only one goat whilst three sheep and five pigs died, this loss was heavier than usual and was caused by the wet weather which prevailed. A young cow born on the farm disappeared from the pasture ground under circumstances which leaves little doubt, that it had been stolen. Search was made for it and information of the loss given to the police but as yet no trace of the animal has been found. The number of patients engaged in agricultural and similar work was 89.

WOOD-CUTTER.

Owing to the change in the wood-cutter attendant, this party only worked for about half of the month. The number of patients employed was 6 and 25 cords of wood were brought to the Asylum.

WORK SHOPS.

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CARPENTER.

Patients employed 5. Besides the work on the new dormitory which engaged most of the men, the following articles were made, axe handles 5, coffins 20, whilst 61 different repairs were made to the buildings or furniture.

PAINTER.

Patients employed 3. Owing to the various causes, the painter attendant was not at work for a good part of the month. Work done, 16 square yards of wall painting, and the following articles painted 24 jalousies, 57 tubs, and 18 coffins. One table sized and varnished and 17 panes of glass put in.

TAILOR.

Patients employed 15. Work done, articles made, patient's trousers 84 pairs, jumpers 81, caps 11, bed sacks 5, 11 attendant's trousers, 7 pairs, jackets 4, in all 192. Articles repaired 539.

SHOEMAKER.

The following is the record for the month of June. Patients employed 2. Work done made boots 2 pairs, shoes 6 pairs, canvass slippers 17 pairs. Repairs 51.

BAKERY.

Patients employed in the bakery and kitchen 7. The quantity of bread produced was 9,591½ lbs. flour used 36 barrels, yield of bread per barrel 266 lbs.

PRINTING OFFICE.

Patients employed 3. In the office the work had been rather hindered by change of attendants. Besides the Journal there were struck off 1,250 impressions of different forms and 430 cards were printed.

LAUNDRY.

Patients employed 37. The articles washed numbered 1,357 whilst there were starched and ironed 1,450 articles.

SEWING ROOM.

Patients employed 18. Work done, articles made, men's cap covers

28, drawers 3 pairs, cotton singlets 55, night shirts 40, day shirts 13, women's chemises 61, skirts 75, bed gowns 11, print dresses 27, jackets 11, in all 269. There were repaired 334 articles.

WORK ROOM.

Patients employed 39. Work done, chocolate made 209½ lbs., cocoanut oil 18½ gallons, coir 40 lbs., rope from rice bags 13 ½ lbs., besides the usual amount of coffee and curry powder prepared.

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RECEIVED with thanks. The Morningside Mirror, The Berbice Gazette, The Barbadoes Globe, The Creole, The Villager, &c. &c.

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR JUNE 1882.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	195 54	For purchase of plantains	\$	44 04
Received for sundries sold		101 28	" repairing clocks		2 00
" fines stoppages &c.		11 43	" band (one month)		13 30
" printing done		17 50	" shoeing mules (one month)		4 00
" Hospital account		239 80	" cooper's work		3 64
" Alms House account		188 15	" purchase of flour &c.		498 48
" Out Door Poor		18 00	" repairing cutlery		2 40
" Cocoanut oil sold		15 12	" expenses of patient and attendant to Georgetown		8 00
			" sums paid under one dollar		16 49
			Balance cash in hand		194 47
	\$	786 82		\$	786 82

No. 18

THE ASYLUM JOURNAL

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LUNATIC ASYLUM, FORT CANJE, BERBICE,
15TH AUGUST, 1882.
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WHAT IS INSANITY?

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WHEN a man is seen to behave in a way outrageously different from other men an off hand diagnosis is made and he is pronounced to be either drunk or mad. This diagnosis is founded upon the notion of insanity as consisting of aberrant behaviour. And to a certain extent this is correct for it is this question of behaviour which for all practical purposes divides mankind into two classes, sane and insane. But every one knows that a person's actions or words are dependent upon the opinions he holds, so that the element of perverted thought is thus brought into the idea of insanity. In the popular diagnosis given above there is stated an alternative, mad or drunk, excluding rightly from the class of madmen all in whom irregularity of thought or conduct is the immediate effect of alcohol or a similar drug. And when the circumstances of the case are known the delirium of fever or acute disease would be similarly excluded. The scientific notion of insanity adds to the popular another element and that a most essential one the idea of disease. Insanity is now usually defined as a disease with such and such symptoms, or a particular organ is indicated and it is said to be a disease of the brain. It is not necessary in this place to enter into a metaphysical discussion as to the nature of thought or its organic seat. For medical purposes this question is practically settled. When a person suffers from insanity or what are called mental symptoms, the physician who sees him as naturally gives his first attention to

the state of the brain, as he would to that of the liver if there were jaundice. Assuming then that the organ affected be the brain, is insanity a disease of that organ? If by disease is meant a collocation of symptoms and that alone, then insanity is not one disease but various diseases of the brain. But a definition of disease limited by its symptomatology is daily becoming more and more unsatisfactory. No one now accepts cough as a disease and dropsy does not appear with a good grace in a scientific list of causes of death. Symptoms are taken as the outward indication of some inner change and although important are not the essential parts of the idea of any disorder. There enters into the true idea of disease an efficient cause, be this pathological change in organ, zymotic chemical or other poison or even some element for the time unknown. At the present time the knowledge of the pathological changes which take place in the brain is not sufficiently complete to allow of the determination in every case of the efficient cause. But even a naked eye inspection after death of the brain in those who have been insane, shows in a majority of instance, marked changes in that organ. At all events such is the case in this country. When the minute changes invisible to the eye except with the aid of the microscope are included, the proportion of affected brains is largely increased. As the scientific and practical study of the subject extends progress in this direction may be looked for. It is possible nay even probable that the particular morbid alteration in the cerebral tissues which is associated with each form of diseased thought will be discovered. But this stage of knowledge has not yet been even approximately reached. All that can be asserted of insanity as yet is, that it is a class of groups of symptoms of certain nervous affection. The leading symptom in all these groups being irregularity of thought and consequently of action. The position which insanity is thus said to hold may perhaps be more readily understood if illustrated by a simple analogy. If on the street a person is seen whose gait is markedly different from that of the generality of people, he is at once pronounced to be lame. And if lame it is at once assumed that he suffers from some disease or deformity of the organs used in walking. But how many and how varied are the affections of which lameness is a symptom. It may arise from causes which are either congenital or acquired. The deficiency or lesion may be in the bones, the joints, the muscles of the legs, or in the nerves which regulate their action, or it may be in the spine itself. It may result from injury or depend upon

constitutional disease and if slight it may require the closest examination of an experienced expert to discover whether there be disease at all, for the limp may depend [on] the acquisition of a bad way of walking which has become a habit. Is not this very similar to what is seen in moral lameness which may have for its cause defect or active disease, may be born with the sufferers or come on them as a consequence of injury or constitutional taint. The records of courts of law of every civilized country bear evidence of the difficulty which exists in these cases in separating disease from vice, and so narrow is the line dividing them that often it is invisible to all but experts, whilst even they differ at times in their estimate of its position. Many attempts have been made to make this line clear and prominent but these attempts whether made by doctors or as sometimes must be in the case by lawyers are characterized in their results by a great preponderance of failures over successes. The same may be said of the endeavours to formulate a comprehensive definition of insanity. Definitions of madness in a single phase or a particular relationship may be more easily and successfully attempted and occasion often arises for them. To succeed even in partial definitions a clear idea of the nature of the subject is necessary and in the hope that they may assist in the formation of such an idea, these hints are given. A point upon which it is peculiarly wished to insist is that properly considered insanity is disease not vice. An Asylum is a hospital for the treatment of nervous disease and none the less is it so, because it receives only those in whom a certain class of symptoms are developed. Visitors to such an institution as well as the workers in it should always bear in mind that although primarily every one residing there does so on account of peculiarity of behaviour, that this peculiarity is consequent on illness, and that all are patients as well as inmates.

THE CAUSE OF CONSUMPTION.

In the catalogue of fatal diseases from which men suffer tubercular consumption holds a prominent place. Lately the area over which it prevails has been gradually extending. At one time it was looked upon as peculiarly a European complaint and many parts of the world, amongst others this colony, were exempt from its ravages. Although still it is more severely felt in some places than others there is now no part of the civilized world where it is unknown.

Nor is race a protection against it for when once introduced amongst them, all peoples seem liable to its attacks. It is not therefore to be wondered at that the recent discovery of the tubercle bacillus by Koch has been received with great interest by medical men, and that it is at present a prominent topic of discussion in the professional press. The presence of the bacillus of tubercle has been verified by many observers and experiments made on animals show that when the germs of the micro-organism are breathed tubercle appears in the lungs. Further experiments are being carried on to obtain if possible some explanation of the marked difference that exists in susceptibility to their influence. For an inherited constitutional liability to consumption seem to be a fact demonstrated by long and close observation. This determination of the exciting cause of tubercular consumption, is one of the most important additions to medical knowledge yet made by the germ theory. In practical importance it has not been surpassed by previous work of the kind and it augurs well for progress in the future. Knowing the cause, the preventive measures necessary to guard against the access of the disease are rendered more definite and reliable. At the same time and this is a matter which will possess interest for many, the treatment of the complaint is simplified and furnished with a secure basis. That consumption is a communicable disease has been long believed by a section of the medical profession. This section was however a minority, now the minority has been converted, almost as it were instantaneously, into a majority. Consumption will now be placed nearly without question in the ranks of contagious maladies. This recent knowledge throws considerable light on facts, connected with the diffusion of consumption already ascertained but not completely understood. It will now be easily seen how breathing a vitiated atmosphere favours the spread of phthisis. Vitiating air in a sleeping room means the want, of a current through it, and by air in motion the germs of the disease are carried away or diluted to such an extent to be comparatively harmless. Sleeping apartments especially if used by more than one person ought everywhere to be freely ventilated. It is now a question how far it is safe, even with the freest ventilation, to place a consumptive patient in any general ward or dormitory occupied by others most certainly no one would be justified in doing this where there is anything like

overcrowding. Upon the treatment of consumption the discovery of the bacillus is destined to have a most powerful influence. The local application of agents inimical to low forms of organized life has become a necessary portion of it. In the case of the lungs this application can be only made in the way of inhalation. Such a mode of treatment which until now has scarcely been looked upon as more than tentative has become firmly rooted and must be recognized as thoroughly scientific in character. The results obtained to the present time are encouraging and still better may be expected in the future owing to the greater attention now directed to the subject. It ought always to be borne in mind, that whatever benefits mankind may derive from these discoveries they are indebted for them to experiments upon the lower animals and that to continental observers the credit of making them is due. People may then be inclined to ask if there ought to be anything, which banishes to foreign countries the prosecution of original researches of such practical importance, and they will be chary of giving any support to agitation carried on by antivivisectionists.

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It may be of interest to note one way in which the belief in obeahism so general in the colony directly affects the discipline of the Asylum. Amongst the patients are several men, well known obeah doctors, two more particularly who by the way are alike in another respect, being both one legged. The dread the attendants have of these men is easily noticeable and it is with the greatest difficulty that they can be got to exercise authority over them. As a consequence they are left to do very much as they like, and the result of such a state of affairs in an Asylum is similar to what arises in a nursery under like conditions. Some of those who using the popular phrase practice on the cruelty of the people do not seem to be guilty of doing this to the extent that might be supposed as they are themselves firm believers in obeah. A patient of this class who does not deny that he belonged to the fraternity, attended their meetings, and took part in their doings, firmly holds that his present sickness is on him in consequence of his having been obeahed. Who the person is that did it he does not say but he evidently thinks that he is not quite safe even in the Asylum.

CLINICAL RECORD.

Case VI. Deficiency of cortical matter of cerebrum. - L. an East Indian woman aged 40, who died on the 21st June 1882, had been an inmate of the Asylum since the 10th of March 1869. There has not been any account of her case kept but her condition for the last few years can be described. She was epileptic, the fits which came on singly, occurred at intervals varying from a week to a month during the whole of that period. The epileptic attacks began in the left hand, which became convulsively contracted, then the spasm extended to the arms and legs, drawing her body together until the chin touched the knee. Between the fits there was a permanent affection of the left side of the body. Her left forearm was bent at a right angle with the arm, the hand was drawn together, the fingers irregularly extended but not bent on the palm. The left knee was kept slightly bent, the foot uncontracted. The left corner of the mouth was drawn downwards and the same side of the chin depressed on the shoulder. Her sight and hearing were good and there was not any anesthesia although deformed in this way she was active in her habits and used her limbs freely. All the contractions could be overcome with the slightest force. Mentally she was weak, inclined to make complaints and crying without occasion. She was cross and irritable before the fits but never violent during or after them. She suffered from Bright's disease but the immediate cause of death was peritonitis found to be most intense in the neighbourhood of the uterus.

Post Mortem examination. The skull cap was thickened and very adherent to the dura-mater but it was symmetrical in shape. The dura-mater was thick and opaque. The brain weighed 2 lbs. 1 oz 12 drams, when divided, the right half of cerebrum weighed 12 ozs. 6 drams, and the left 15 ozs. and 6 drams. An inspection of the outer surface of the right cerebrum at once showed the cause of this difference of weight. There was a deficiency on that side of a considerable extent of the cortical portion. The surface of the convolutions over a space occupying the lower two thirds of the ascending frontal in its whole width, with the adjoining part of the middle and inferior frontal extending over about one fourth of their length. The deficiency passed over the fissure of Rolando and included the anterior third of the ascending parietal convolution in its lower two thirds. It also

went over the fissure of Sylvius, a portion of the superior temporo-sphenoidal convolution having disappeared. The membranes were thickened over this space and lay on a smooth surface of white matter, the edges of the gap were sharp and clearly defined. The insular convolutions were not destroyed. The rest of the brain did not show to the naked eye any abnormality. The marks of recent peritonitis were found, and both kidneys showed signs of degeneration from chronic tubular nephritis.

Remarks. It is to be regretted that the history of this case is so fragmentary. The present accounts given to complete the series of cases which have lately occurred in the Asylum having some bearing on the localization of function in different parts of the brain. From the want of the early history, the value of the indications here given is lessened. The compensatory action of the corresponding parts of the normal hemisphere having had ample time to come into play. Still the connection between the lesion which in this case affected a large portion of the motor region of Ferrier and the symptoms shown, is both marked and characteristic.

REPORTS FOR JULY, 1882.

Staff.

Only one attendant who had been permanently appointed to the work left the service during the month. This was the baker attendant who gave up his place because as he said he wanted a change and intended to resume for a time his reserve occupation that of a fisherman. There are few of the artisans of the colony who concentrate their energies on the acquisition and prosecution of one trade only, most of them in this respect possess a second string to their bow, some more than one. Shoemakers who are bricklayers, and tailors who can pass at a pinch for carpenters or blacksmiths are often to be met with. In this case as in others of a similar kind it is feared that too often versatility is practiced at the expense of efficiency. Three attendants who were on probation (one female two male second class) left from being unsuited to the work. To fill the vacancies J. McKenzie, was appointed first class, A. Rose, and H. T. Adams, second class attendants on the male side. On the female side J. McCoy, was appointed second class attendant.

Religious services.

The Sunday morning services were held regularly. On three occasions they were conducted by the Revd. F. W. T. Elliott. In the absence of Mr. Rannie, his colleagues the Revd. J. Huskie, and the Revd. P. Galbraith, kindly officiated each taking one service. The attendance of patients was of men 127 and women 61, 188 in all.

Amusements.

Two of the fortnightly dances were held during the month. At the first of these which took place on the 6th, in addition to the usual guests there were present several who had come from Georgetown. The evening entertainment was thoroughly enjoyed by all in the Asylum and it is hoped that the visitors had no reason to regret their presence at it. Nothing relieves the monotony of Asylum life more than the occasional advent of sympathetic and intelligent visitors. The Monday evening and afternoon band practices were also continued regularly and as usual. The number of patients taking part in the amusements were of men 125, women 61, total 186.

Accidents.

The month of July passed without the occurrence of any accident requiring notice.

Improvements.

Four of the set of single rooms in course of construction have been completed, and already occupied. The others are being built. The repainting of the outside of the large building in the North Block has been finished as well as the outside of the sitting and mess rooms in connection with it. During the month it was found to be necessary to undertake a general repair of the buildings at the Old Fort branch. It was also found to be necessary to take immediate steps to prevent some of them being destroyed owing to the washing away of the land which is there constantly going on. This has been done by making a new bank protected by a line of paling for part of the frontage, and this will be extended as far as necessary. One of the erections which was in danger, is a brick tank built of colony-made bricks a substantial and useful relic of the Old Fort of St. Andrew. This is it is hoped is now protected at all events for some years. On the road leading to Old Fort a bridge ten feet wide has been made.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st July	240	133	373
Admitted in July	1	6	7
Discharged in July	2	0	2
Died in July	3	0	3
Remaining on the 31st of July	236	139	375

The numbers entered as remaining on 30th June in last months Journal, although correct in the total are mistakenly given between males and females, which are stated to be 241 and 132 respectively instead of 240 and 133. The deaths in June should also have been stated as 2 males and 1 female instead of 1 male and 2 females.

The number in the Asylum was increased by 2 in July.

Four of the patients admitted came from Demerara two from Berbice and one from Essequibo. Their native countries were:

	M.	F.	Total
Natives of India	1	4	5
" " Barbadoes	0	1	1
" " British Guiana	0	1	1

There were thus 6 immigrants and one creole. Both the patients discharged were quite recovered and able to resume work. Their length of residence in the Asylum was:

	M.	F.	Total
Between 6 and 12 months	1	0	1
" 1 and 2 years	1	0	1

The causes of death in those who died were:

	M.	F.	Total
Pleuro-pneumonia	1	0	1
Hepatitis and Bright's disease	1	0	1
Phthisis	1	0	1

The time they had been in the Asylum was:

	M.	F.	Total
Between 3 and 6 months	2	0	2
" 2 and 3 years	1	0	1

The men who died after a residence of a few months in the Asylum were suffering from the diseases (phthisis and Bright's disease) causing their death when admitted. Beyond a few cases of very mild intermittent mostly on the female side, there was

not any zymotic disease in the institution and the general health of the inmates was good.

NUMBER OF PATIENTS EMPLOYED.

Of the male patients there were engaged in useful occupations 190 whilst 35 were prevented from working by mental or bodily infirmity and 14 refused. The corresponding numbers amongst the women were employed 103, unable 14, and unwilling 18.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES EMPLOYED &c.

	M	F	TOTAL
Daily average in Asylum	237.5	136.1	373.6
Percentage employed	80.1	75.7	78.5
Percentage confined to bed	3.5	4.8	3.6
Percentage attending amusements	52.7	44.8	49.8
Percentage attending Church	53.5	44.8	50.4

FARM.

Nothing could have been more propitious for farming purposes than the weather of July. Showers and sunshine alternated in proportions, favourable alike to the growth of vegetation and the work of the farmer. As the ground provisions are reaped, replanting can be carried out at once and this work has been done at the Asylum steadily during the month. There were obtained from the Asylum grounds the following amount of produce. Of plantains (free of stalk) 4,564 lbs., sweet cassava 2,047 lbs., pumpkins 434 lbs., bananas 148 lbs., sundry garden vegetables 59 lbs., and cocoanuts 229. The cattle farm at Old Fort sent in 218 pints of milk and 19 lbs. of clean fowl and 43 eggs were got. Seven pigs were killed, the pork obtained was 530 lbs. The cattle slaughtered numbered 14, the beef got was 2,392 lbs., the price paid for cattle was \$262.50, this deducting the value of hides makes the net cost of the beef a small fraction over 10 cents a pound. The live stock was increased by the birth of one calf, one lamb and 7 pigs. The loss by death was one pig. The number of the patients engaged in agricultural work and kindred employments was 95.

WOOD-CUTTER.

Patients employed 5. The quantity of wood cut and brought to the Asylum was 32½ cords.

WORK SHOPS.

CARPENTER.

Patients employed 6. The different work mentioned under the head of improvements occupied the carpenter and most of [his] men. Besides these there were made the following articles 1 table, 2 commodes, 5 axe-handles and 16 coffins. The different repairs made numbered 36.

PAINTER.

Patients employed 2. The patient who does the finer work in this shop has been laid up and unable to do anything for the month. Work done 130 square yards of painting besides 30 jalousies, 23 tubs, 15 windows, 5 doors, 2 chairs and 21 coffins painted. Sized and varnished one table. Panes of glass put in 11.

TAILOR.

Patients employed 15. Work done, made patient's trousers 52 pairs, jackets 30, jumpers 46, caps 8, bed sacks 2, attendant's jackets 8, trousers 12 pairs, caps 15, aprons 1 in all 174. Repaired 488 articles.

SHOEMAKER.

Patients employed 2. Work done, made 18 pairs of shoes, repaired 27 articles.

BAKERY.

Patients employed in kitchen and bakery 7. The quantity of bread made was 10,001 lbs. The quantity of flour used was 38 barrels, the yield of bread per barrel was 263 lbs.

PRINTING OFFICE.

Patients employed 3. In addition to the Journal, and 150 copies of a pamphlet of 8 pages 3350 impressions of different forms were struck off and 360 cards printed.

LAUNDRY.

Patients employed 35. Articles of clothing washed 17451, starched and ironed 1563. By a printer's error the number of articles washed in June was given in the last month's Journal as 1,357 instead of 13,057.

SEWING ROOM.

Patients employed 21. Work done, made, men's cap covers 19,

drawers 14 pairs, cotton singlets 68, day shirts 40, night shirts 11, women's bed gowns 12, apron 7, jackets 64, petticoats 12, attendant's dresses 8, print dresses 1, chemises 29, pillow cases 62, and bed sacks 17, total 362 articles, repaired 342 articles.

WORK ROOM.

Patients employed 35. Work done, chocolate 127½ lbs., coconut oil 9 gallons, coir 30 lbs., and rope 57 lbs. made, the usual amount of coffee and curry powder prepared. The work in this room has been kept back by a deficiency in the supply of cocoanuts.

RECEIVED with thanks. The Journal of Mental Science for July 1882, Timehri, The Journal of the Royal Agricultural and Commercial Society of British Guiana. The Annual Report for 1881 of the Kent County Lunatic Asylum Chartham Downs, Canterbury. The Morningside Mirror, The Barbadoes Globe. The Berbice Gazette. The Creole, The Villager, &c. &c.

ABSTRACT CASH ACCOUNT INDUSTRIAL FUND, FOR JULY 1882.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	194 47	For purchase of plantains	\$	65 86
Received for sundries sold		98 37	" " sheep		8 65
" fines stoppages &c.		4 97	" " implements &c.		22 40
" printing done		10 00	" " cocoanuts &c.		58 31
" Hospital account		237 66	" repairing clocks		4 00
" Alms House account		162 52	" band (one month)		13 50
" Out Door Poor		13 50	" shoeing mules (one month)		4 00
" Coconut oil sold		3 78	" cooper's work		5 72
" board of patients		20 00	" gratuities to patients		5 48
			" sums paid under one dollar		22 99
			Balance cash in hand		534 36
	\$	745 27		\$	745 27

No. 19

THE ASYLUM JOURNAL

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
15TH SEPTEMBER, 1882.
—

INFANT MORTALITY.

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A death rate and a birth rate which exactly neutralize each other, from whatever causes this may result is a fact which is especially to be deplored in countries, the prosperity and development of which are dependent upon the number of their people, where land is plentiful and inhabitants are few. Such is the case in British Guiana and no one who has the true interest of the colony at heart can view this state of things with indifference. The questions involved in the matter deserve therefore the most careful attention from all who desire to see the country progress. It is evident that here there are either too few births or too many deaths or it may be that both hypotheses have a basis of truth. A glance at the Registrar General's Reports supplies conclusive evidence on the point. The births registered in 1881 were at the rate of 32.29 per thousand of the population. This rate although below the normal standard is not excessively so and the deficiency is no doubt to be accounted for, by the inequality in number of the sexes and the consequent paucity of mothers amongst certain large classes of the immigrant population. On account of this as well as for other reasons, an increase on the number of female immigrants is much to be desired. Turning now to the death rate it is found to have stood last year at the abnormally high figure of 38.10 per thousand. That at least one third of the deaths shown by these figures could have been prevented, is a fact which cannot be too prominently or frequently insisted upon. There are here no climatic or other

unavoidable causes making of necessity a death rate of over 20 per thousand. The hope of seeing it reduced to this is not quite Utopian, it is realizable and well within the range of practical politics. The reduction of the death rate to 20 per thousand would give a natural annual increment of the population of about 3000 souls in place of the utterly insignificant number gained in this way last year (49), and in other years the balance has been on the wrong side. Such is the result which would be attained if the birth rate were to remain as at present. But a diminished death rate must in the course of a few years lead to a considerably increased birth rate and as a consequence to a more rapid augmentation in the numbers of the people. Placed as this colony is under the necessity of keeping up its supply of labour by a heavy expenditure on immigration, money spent in improving the sanitary condition of the place, and so prolonging the lives of the people is, even taking the lowest view of the matter, a much better investment, than similar outlay in more populous lands. But the immediate subject of this paper is not the general hygienic condition of the colony however much that may deserve notice, but one special item in the bill of mortality, the place held by infants on the death roll. Of 8,095 deaths registered throughout the colony in 1881, 3117 or more than a third of them, were of children under ten years of age. Well may the Registrar General when making the statement say "this seems out of all proportion." Taking as is usually done in England five years as the limit of infancy in this connection, the figures are still more striking for 2735 deaths of children under five years of age were registered. As nearly as possible a third of the total deaths occurred in children under five. Again of the 8,144 children born in the year, 1,858 perished before they were twelve months old. To state this in the usual way the ratio to births of deaths of this class was 203 per thousand. This is double the proportion of deaths at a like age taken for the whole of England, and very considerably more than is the case in the large towns of that country. It may be repeated that there is nothing peculiar to the climate or the necessary conditions of life here to give rise to this great mortality amongst infants. With an equable temperature, high enough to render at all events the infants independent of clothing, chest affections the dread of English mothers are not much to be feared. Diseases of a zymotic class affecting children are not very prevalent in this isolated community, as is evident

from the entire absence last year, from the list of causes of death of scarlet fever, small-pox or measles. Diphtheria is credited with causing three deaths, croup 15, and whooping cough which for a time was epidemic 124, these numbers are for all ages. Turning then from the diseases which do not prevail, let these which are fatal to the infants of the colony be looked for. Here it is significant that debility and marasmus occasioned 707 deaths, convulsions 620, thrush 224, and no doubt there was a good proportion of children amongst the 753 persons who died of diarrhoea. Now these are all pre-eminently preventable diseases, depending for their causation upon filth, want of pure air, and improper food. More especially to the two latter is the high rate of infant mortality due. Connected with the question is that of the proportion of illegitimate to legitimate births. It is found in England that the chances of a child living to the end of its first year are considerably reduced when it is born out of wedlock. In this colony seventy per cent of the births are registered as illegitimate. This is partly due to the fact that in a population largely heathen all children who are born of parents not united by Christian rites of marriage are classed as illegitimate. Making full allowance for this it still remains true that amongst the general population a majority of the children born are illegitimate. Although this does not much for the morals of the people, the very frequency of these births gives the children a better chance of life. The union between the parents of the illegitimate is often quite as openly recognized and as permanently maintained as is that of people who have been married. The disabilities attending illegitimacy are not very burdensome. As might be expected from such a condition of affairs the ratio of deaths under one year, to births is very much alike in the two classes. There is it is true a difference of 5 per thousand in favour of children registered as legitimate but this can be explained by the healthier offspring of the better classes falling under this category. There is another instance here of a high infantile death rate being coincident with the very general employment of women. The duty of labouring for the support of the family frequently devolves upon the woman as much as upon the man. Consequently the children are neglected and a larger proportion of them die. Seeing then that amongst infants there is excessive loss of life the question which naturally forces itself upon attention is, can anything be done towards stopping it? Happily an answer

in the affirmative can be given, for as already stated a majority of the children who die, do so from causes which are entirely preventable. In this direction, wise legislation on sanitary matters may do something, the judicious and firm administration of laws when made will do more, but after all if the work is to be effectually carried on it must be taken in hand not only by legislators and officials but by every intelligent member of the community, be his position what it may. It is the duty of all capable of understanding the subject to make themselves acquainted, as far as possible with the means necessary for the preservation of health and life, and having acquired this knowledge to diffuse it around them both by example and precept. To help towards this it was intended in the present article to give some hints on the special hygienic management of infants and children but it has extended to such a length as to make it necessary to defer them until next month. One fact may be noted here namely that the terrible constitutional disease connected with one form of vice, unhappily too prevalent in this place is answerable for some portion of the mortality amongst infants, as it undoubtedly is for an immense amount of suffering to young and old. Surely it is time for the public to open their eyes to this fact and to make strenuous effort to lessen the crying evil.

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The bacillus of leprosy like the corresponding organism of tubercle has lately been identified. The conditions necessary for its growth and propagation, are at present the object of much investigation. So far as experiments upon the point have gone, they show that successful inoculation with the bacillus is not easily obtained. The bearing which these are likely to have on the question of the contagiousness of leprosy make them of great interest to the people of countries in which this complaint prevails. If the disease depends upon the presence of the bacillus, then in all likelihood it is capable of transference from one person to another, just as is the case with tubercular consumption. It must always however be borne in mind that in all disease of the kind the parasite although an important factor in their production is not the only one and that the constitutional state of the patient, hereditary or acquired has a very great influence in determining the development of the disorder. There is no known contagious disease which attacks under all circumstances every one exposed

to the influence of its germs. All the different specific organisms have their own peculiar habits and these habits appear to be accountable for some of the characteristics of the diseases with which they are connected. In this way can be explained the variability in contagious power just noted.

CLINICAL RECORD.

(*Case VII. Syphilitic insanity.*) J. C. aged 41, a coloured man, born in Barbadoes was admitted on the 19th September 1881. He was certified as being insane on account of being very noisy restless and incoherent and of suffering from loss of memory. There was not any history of his case sent with him and he could not give any particulars of it himself. It was elicited from him, that he had been drinking freely for some time and he rather proudly declared that he could take a bottle of strong rum without staggering. It was subsequently found out that he had suffered from primary syphilis. There were on admission sores on his legs and shoulders evidently caused by his having been roughly bound. When examined he answered the questions put to him in a jerky and excited manner. At times he was much excited and was always very restless, by turns shouting and singing incoherently, or crying. When admitted he understood what was said to him and recollected events which occurred before his illness although of what happened to him lately he knew nothing. There were hallucinations of seeing and hearing and he fancied himself possessed of great wealth. There was also sleeplessness. His expression was dull stolid and absent. The eyes were prominent and injected, the pupils were equal and their accommodation normal. He was well developed and fairly nourished and the thoracic and abdominal organs seemed to be free from organic disease. There was a temperature of 99 degrees and pulse of 100. His appetite was good. As far as could be ascertained sensation was normal and he had the free use of all his limbs. The day after his admission there was prescribed for the excitement and insomnia, a draught containing Chloral Hydrate and Bromide of Potassium 20 grains of each, after taking this he slept but the restlessness in the day time still continued. On the 4th of October it was reported that the patient had suffered from a convulsive attack in which his hands were clenched and there was foaming at the mouth. After the fit he looked very

dull and stupid. He was subsequently quieter and less restless so that on the 8th of October the draught was stopped. After this he seemed for a time to improve, the hallucinations were less marked and the restlessness and excitement disappeared to a great extent. He did not however become intellectually brighter and in December it was noted that he was more vacant and weak minded scarcely understanding what was said to him and that he wandered about in an aimless way. On the 31st of that month he had an outbreak of excitement, followed in a day or two by complete loss of sight. This rendered the diagnosis, until then doubtful, certain and he was at once put on Iodide of Potass in 10 grain doses. On the 5th January, his condition was noted thus. The pupils are widely dilated and insensible to light. Eyeballs prominent. He can barely discern light from darkness. All the limbs are moved freely, he protrudes his tongue rapidly and in a straight direction. The knee jerk is found to be diminished in intensity. The temperature in the axilla is 100.4 degrees and the pulse 95. No cephalic pain. No excitement but marked incoherence and mental enfeeblement. There had not been as far as could be ascertained any attack similar to the fit reported in October. Ophthalmoscopic examination of the eyes showed in both, the blurred and irregular disc characteristic of optic neuritis. From this time improvement although at first slow went on steadily. On the 7th January, there was less protrusion of the eyeballs. Pupils contracted under strong light. The patient was still very incoherent. On the 10th he could walk about the ward avoiding the obstacles which came in his way. Although noisy and excited especially at night he was decidedly brighter and more intelligent. On the 14 he could count the fingers held up before him but he did this slowly and with difficulty. After this his progress was rapid so that by the middle of March it could be said, that his sight was good, that he was quite coherent and fairly intelligent and he was able to help in the work of his ward. He continued to take the Iodide of potass until the end of April, when he seemed pretty well, he was bright and active both intellectually and physically, at least as much so as seemed to be natural to him. His sight was good and he made no complaint. Three weeks after stopping the medicine it was noticed that he was decidedly duller in intelligence and more sluggish in his movements. At the same time he had an attack of sore throat. The administration of the Iodide of potass was at once resumed

and under its use, the progress of the patient towards complete recovery was so steady and continued as to allow of his being discharged well on the 28th of July 1882. His weight on his admission was 126 lb. on his discharge 155½ lbs.

Remarks. In the latter part of its course the symptoms in this case were such as characterize insanity depending upon intracranial syphilitic disease. The probability is that this existed in the form of a gummy or other growth. The hallucinations from which the patient suffered on admission, and for some time afterwards were no doubt dependent upon the alcoholism under which he then laboured, and which at first masked the syphilitic symptoms. After these passed off the patient was completely demented and his gradual emergence from this condition whilst being treated for the specific disease, was most interesting to watch.

REPORTS FOR AUGUST, 1882.

Staff.

During this month one permanent attendant was dismissed from his employment. This was the man in charge of the Old Fort farm who was found on a surprise visit being made, to have left his work without permission. His conduct had for some time been generally unsatisfactory. One attendant on probation (the wood cutter) left having been found thoroughly incompetent. To fill the vacancies thus arising J. Ivory, was appointed first class attendant and P. Barclay, second class attendant, both on probation.

Religious services.

As usual, a service was held in the large Dining Hall on each Sunday morning of the month. The Revd. F.W.T. Elliott, officiated on one occasion. On two others the Revd. W. Barnhill and the Revd. J. Huskie, of the Church of Scotland conducted the services and on the remaining Sunday prayers were read by the Assistant Medical Superintendent. The average number of patients present was of males 135 females 58 in all 193. These with the attendants and others who join it, make up a congregation of more than two hundred people.

Amusements.

In August, three of the fortnight dances were held and were

attended as usual, with seeming enjoyment both to patients and visitors. Nothing occurred to interrupt the practice of the band in the Asylum grounds on Monday afternoons or the dances on the evenings of that day. The patients taking part in the amusements numbered men 125, women 59, a total of 184.

Accidents.

A casualty took place in August which is characteristic of an Asylum and had its origin in the usual cause, deficient supervision of the patients by the attendants. In direct disobedience of the rules of the Asylum and the instructions given to the attendants two patients, neither of them very trustworthy were left alone together for a few minutes in the bath room of one of the wards. One of them was heard to call out and he was then found to have a nail driven into the top of his head which the other was trying to draw out but without success. How it got there could not be explained by them. The nail, which was of the common kind known as eight penny, was removed with difficulty as it had perforated the skull. The man did not seem anything the worse for his accident at the time nor has he suffered from it since and as three weeks have now elapsed it is hoped that he is out of danger.

Improvements.

The construction of the new dormitory has been carried on but from accidental causes the progress made has not been as rapid as could be wished for. There has also been some work carried on at Old Fort, a shed erected and additional paling done. The floor of the stores having become worn out it has been relayed in pitch pine, and the patient employed here has also put up a set of shelves as well as replaced several windows by jalousies. He will continue the fitting of the store which was left incomplete some time ago when increase of sleeping accommodation became so necessary and pressing as to engage all the work of the carpenter and his men. The repainting of the outside of the East Block has been begun and considerable progress made with it. As usual the very numerous repairs continually required in wooden buildings so extensive as those of the Asylum now are, took up a good deal of the time of the carpenter's men.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st August	236	139	375
Admitted in August	2	1	3
Discharged in August	2	0	2
Died in August	3	2	5
Remaining on the 31st of August	233	138	371

This shows a decrease of four in the Asylum population during August. The admissions were under the average in number, whilst the deaths were above it. Of the patients admitted one came from Demerara one from Essequibo and one from Berbice. They were as follows:

	M.	F.	Total
Natives of India	1	0	1
" " Barbadoes	1	0	1
" " Martinique	0	1	1

It is thus seen that they were all immigrants. The patients discharged were both well and able to work. The period of their residence in the Asylum was as follows:

	M.	F.	Total
Under 6 months	1	0	1
Between 1 and 2 years	1	0	1

The causes of death in the patients who died were:

	M.	F.	Total
Bright's disease	3	0	3
Apoplexy and Bright's disease	0	1	1
Phthisis	0	1	1

The number of deaths was higher in August than it has been since January, but as they were all caused by disease of long standing, the increase was not indicative of the general health of the Asylum having deteriorated. In fact there was less intermittent than in the two preceding months and the inmates of the institution were very free from acute disease arising after their admission. No doubt the season which is usually considered the most trying time of the year in this colony, may have some influence in hastening the death of those who were suffering from a fatal disorder.

NUMBER OF PATIENTS EMPLOYED.

The efforts to get as many of the patients as are able, to take part in one or other of the different industrial occupations carried on at the Asylum, have not been relaxed. The result of these efforts is that of the men 184 are employed, whilst 33 are debarred from working by bodily or mental infirmity and 13 who are able but refuse. The corresponding numbers on the female side are employed 105 unable 16 unwilling 18.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES EMPLOYED &c.

	M	F	TOTAL
Daily average in Asylum	233.9	138.9	372.8
Percentage employed	78.6	75.5	77.6
Percentage confined to bed	3.8	3.6	3.7
Percentage attending amusements	53.4	42.8	49.4
Percentage attending Church	57.6	42.0	51.8

FARM.

The season of 1882 following a course which may fairly be deemed erratic, has happily varied from the usual in such a way as to be extremely favourable to vegetation and cultivation. There has not been any dry season as yet this year, and although at one period rain fell rather heavily it fortunately stopped before there was much damage done to the crops except where the land was badly drained. Throughout August up to the very end of the month the weather was showery, but never wet enough to hinder work much. The following amount of produce was reaped on the Asylum grounds. Of plantains (free from stalk) 3989 lbs., sweet cassava 4239 lbs., sweet potatoes 244 lbs., pumpkins 162 lbs., bananas 179 lbs. and sundry garden vegetables 405 lbs. The cattle farm at Old Fort supplied 427 pints of milk, 17½ lbs. of cleaned fowl and 64 eggs came from the poultry yard. Eight pigs were killed giving 674 lbs. of pork. The cattle slaughtered were 14 in number the beef obtained weighed 2495 lbs., the price paid for the cattle was \$283, deducting the value of hides &c. the net cost of the beef was 10½ cents per lb. The increase of stock on the cattle farm by births was calves 3, goats 3, pigs 18. There were not any deaths. The number of patients who took part in the agricultural work of various kinds was 93.

WOOD-CUTTER.

Patients employed 5. The quantity of wood cut and brought to the Asylum was 40 cords.

WORK SHOPS.

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CARPENTER.

Patients employed 7. The greater part of the work done by the carpenters has already been noticed under the head of improvements, besides that there were made, tables 2, window frames 1, bedsteads 1, jalousies 13, trays 2, axe-handles 4 and coffins 29. There were 76 small repairs done to the buildings and furniture.

PAINTER.

Patients employed 2. Work done, 608 square yards of painting and 15 tubs, 1 commode, 8 windows, 21 jalousies, 1 cart and 25 coffins painted. There were sized and varnished 2 tables, and 9 panes of glass put in.

TAILOR.

Patients employed 18. In this shop the work has not been pushed, as an ample supply of clothing can be prepared for the Asylum without keeping the people here constantly employed. Before that can be done more work must be obtained from outside (already the clothing required for the Colonial Hospital Berbice is made here) and it is difficult to arrange for this. Work done, made patient's trousers 102 pairs, jumpers 48, attendant's uniform jackets 5, trousers 8 pairs, in all 163 articles. There were repaired 589 articles.

SHOEMAKER.

Patients employed 2. Work done, made 12 pairs of shoes and 20 leather straps and repaired 42 articles.

BAKERY.

Patients employed in kitchen and bakery 8. The quantity of bread produced was 10,443 lbs. The quantity of flour used was 40 barrels, the yield of bread was thus 261¼ lbs. per barrel.

PRINTING OFFICE.

Patients employed 3. Besides the Journal, there were 5270 impressions of 17 different forms struck off. Of cards 635 were printed. There were ruled 800 forms and stitched 69 books.

LAUNDRY.

Patients employed 34. Work done, washed 15,872 articles, and 1415 starched and ironed.

SEWING ROOM.

Patients employed 22. Work done, made men's day shirts 25, nightshirts 23, jumpers 1, coolie laps 1, cap covers 19, women's aprons 9, attendant's dresses 2, jackets 35, bed gowns 38, chemises 43, and pillow cases 26, in all 222 articles. There were repaired 287 articles.

WORK ROOM.

Patients employed 35. Work done, of chocolate 166 lbs. and 12½ gallons of cocoanut oil made. Coir cleaned 44 lbs. and 31 lbs. rope made, with the usual amount of coffee and curry powder ground.

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RECEIVED with thanks. The Annual Report for 1881, of the State Lunatic Asylum, Utica, New York United States of America. The Barbadoes Globe. The Berbice Gazette. The Creole. The Villager &c. &c.

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR AUGUST 1882.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	534 36	For purchase of plantains	\$	61 84
Received for sundries sold		97 29	" " sheep		12 00
" fines stoppages &c.		7 29	" " printing materials		283 82
" printing done		16 00	" " cocoanuts &c.		2 88
" Hospital account		256 89	" " flour and com		693 64
" Alms House account		172 31	" repairing docks		2 00
" Out Door Poor		9 00	" band (one month)		15 50
" Cocoanut oil sold		5 04	" shoeing mules (one month)		4 00
" hides sold		80 25	" cooper's work		7 27
			" gratuities to patients		2 94
			" sums paid under one dollar		15 58
			Balance cash in hand		77 59
	\$	1179 06		\$	1179 06

No. 20

THE ASYLUM JOURNAL

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
15TH OCTOBER, 1882.
—

INFANT HYGIENE.

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When commenting in last month's Journal upon the excessive mortality amongst infants in this colony, it was stated that this was due not to unavoidable causes but depended upon sanitary conditions which were preventable, and that it mainly arose from the want of pure air and the use of improper kinds of food. These then are the two hygienic subjects which in connection with children call for special attention here. Default in respect of either of these matters is attributable to the parents and arises in many cases from ignorance and in some perhaps from carelessness and indifference. If filth be allowed to accumulate around dwellings in the open trenches and drains of the towns and villages, children no doubt bear their full share in the penalties which inevitably follow upon such a breach of the laws of health and to prevent these things is the duty of public authorities. But supposing this be thoroughly done the people cannot be healthy if the houses in which they live are built, so as when closed at night to carefully exclude every breath of air and are then filled with inmates to such an extent that there is scarcely room to turn. Then if their condition be not kept pure by constant cleaning but on the contrary the use of soap and water be carefully eschewed, it can be conceived what under such circumstances is the kind [of] atmosphere inhaled by persons sleeping in them. It must be air plus an unknown and dangerous quantity of the organic poison peculiar to human exhalations. The account here

given is not an exaggerated description of the condition of many of the cottages of the working classes of the colony and those not of the lowest kind. The wattle huts in which many live possess one advantage over the more pretentious wooden houses, in so far that they cannot be closely shut up and so they are to some extent ventilated. It is not from the small cottages only that the fresh air is shut out at night. There exists amongst many an unfortunate prejudice against having open windows in their bedrooms, owing to some fancied deleterious property of the night air. In this country, where the temperature inside of a house and that out of it differs very little, the exposed thermometer very rarely indeed falling below 78 Fahrenheit, only by a cross draught can the air in a room be renewed so as to keep it fit for use. Neither old nor young can enjoy good health unless the apartments in which they sleep are thoroughly ventilated. It is upon infants and young children that the mischievous effects of breathing impure air are more markedly shown as they possess less vital power to resist them. The *malaise* which even the strongest adult feels after having spent a few hours in a close atmosphere takes in their case the more pronounced form of feverish debility. This when continued reduces the child to a state of permanent weakness and is no doubt one of the factors of the marasmus which holds such a prominent place amongst the causes of death in the Registrar General's return. But a still more important agent in the production of this marasmus as well as of convulsions, diarrhoea, thrush, all of which figure prominently in the same returns, is the improper feeding of infants. Here it is difficult to understand how people go as far astray as they do for nature herself is their instructress on the subject. To obtain the very best chance of life an infant must get its nourishment where nature intended, from its mother. And she if desirous of one of the most sacred obligations of her position ought not to refuse it that nourishment. But in this colony the majority of the women of the working classes support themselves by their own labour and this often necessitates their absence from home for twelve hours out of the twenty four. Their infants left for this time must necessarily be fed, and to them is too often given what may be called food but most certainly is not nourishment. For the most part this is a pap which will differ in outward appearance according as it is prepared either from arrowroot, sago, rice, plantains, corn, flour or cassava but in all cases it is

essentially a mixture of starch and water with perhaps a little sugar but nearly destitute of any nitrogenous element. If this be compared with the model food supplied by nature namely milk it will be at once seen how unlike they are. In milk the solid portion is made up in great part of proteid material, that is matter of the nature of flesh, and of fat, in the starchy vegetables there is barely a trace of either. It can scarcely be expected that the organs of the infant adapted to receive and assimilate the one kind of food accommodate themselves to another of such a different kind. In the earlier months of infancy they do so with the greatest difficulty and as a consequence the pap taken is not digested. It passes into the bowels causing irritation which gives rise to diarrhoea and the unnourished infant wastes away and ultimately dies of starvation registered as debility or marasmus, or it is more suddenly cut off by convulsions. What then is the proper food for infants whose mothers can not possibly suckle them. Until the teeth come, they should get nothing but milk. Cow's milk will answer the purpose very well but as it contains more casein and less sugar than the natural food, it should be mixed with water, in the proportion of two thirds milk to one third water and about a teaspoonful of white sugar should be added to each pint of the mixture. Given thus a young infant can take daily from a pint to a pint and a half of milk and as it grows it will require more. When the teeth show themselves pap can be given but the pap ought always to be made with milk, the other ingredient may be bread, biscuit, arrowroot or similar matters according to fancy, and it should be sweetened with sugar. When about a year old the child may begin to take a share in the ordinary food of the family but it ought still to get a good deal of milk. Children at all periods of their growth after they are able to take it, if they are to be kept in robust health should have at least one meal daily consisting chiefly of animal food. Objection may be taken to this plan on account of its alleged cost and it may be the difficulty of obtaining milk at all events in the towns. In this country where the capabilities for the grazing of cattle are very great and cows can be kept at so little expense milk is not generally dear nor scarce and it could be made cheaper and more plentiful than it is if attention were given to the subject. Besides throughout the greater parts of the colony there is scarcely a family situated so that it cannot keep a few goats and their milk is quite as good for the purpose under consideration as that of cows.

Indeed as it is richer in cream, it sometimes answers better for weakly children. Milk by its cost is not out of reach of anyone who is inclined to make a very slight effort to obtain it. It may be repeated that there is nothing which can take the place of milk in the artificial feeding of infants. The patented and other foods so widely advertised are little if anything better than the mixtures already described and condemned. Before leaving the subject one thing may be mentioned and that is the necessity that exists for the most scrupulous cleanliness being observed in connection with the food of young infants. Milk especially in the tropics soon turns sour and milk thus changed is hurtful to the child. The food ought to be given either by the spoon or through the simplest form of bottle without any India rubber tubes. These, besides retaining some of the food which soon changes do not themselves last in this climate for any length of time. The bottle when not in use should be kept in clean water and be well scalded at frequent intervals. Personal cleanliness and the wearing of sufficient clothing are points in connection with infant hygiene which in some countries are of great moment. Under the climatic conditions existing here the question of clothing becomes one of only very secondary importance. In children as far as health is concerned the nearest allowable approach to the primeval fig leaf is the best. Bathing their children is a duty which is not as a rule neglected by the people, the frequency with which in a country journey the process may be seen carried on *al fresco* evidences this. Illness caused by exposure to the sun is of rare occurrence. The great dread which some Europeans have of this stands much in the way of their children getting the amount of exercise in the open air which is requisite to maintain them in health and it is uncalled for. Trivial and beneath the dignity of science subjects of this kind may seem to some, but they will hardly be thought so when it is considered that the question at issue is how to save many hundreds of human lives and to enable as many hundreds more now condemned to years of misery and weakness to grow up strong and healthy a benefit and not a burden to the community.

THE OUTBREAK OF YELLOW FEVER IN ESSEQUIBO.

There has been made public an interesting report on an outbreak of yellow fever extending over May, June and July of this year and in which the disease attacked the crews of certain vessels

loading timber at that time in the Macouria Creek, a tributary of the Essequibo. To Dr. Freeman the author of this report belongs the credit of being the first and so far the only person, who has put on record, facts connected with the late epidemic which are likely to prove of value for scientific purposes. Clearly defined as it was in its access and extension the history of this outbreak will possibly yield hints of some value towards elucidating the epidemiology of yellow fever. The facts of the outbreak may first be briefly recapitulated. On the 25th of May a case of yellow fever was sent to the Essequibo Seaman's Hospital from a ship named the Scotia Queen. Until the arrival of this ship in the river the district was as far as is known free from the disease and had been so for many years. Some of the crew of the Scotia Queen had suffered from the disease and died from it in Georgetown before the ship went to Essequibo. At that time yellow fever was not epidemic in Georgetown, the history of the ship whilst at that port if published, would prove of interest and value. On the 30th of May another man was sent to the Hospital and a third and fourth followed on the 3rd and 10th of June respectively, all from the same ship. On the 16th of June a case was admitted to the Hospital from a new ship the Louise Lubeck which had been moored about 50 yards astern of the Scotia Queen. In the meantime the Scotia Queen had left the place and another vessel the Edward Raoul had taken up her moorings. There were then in all four vessels moored in the stream with a distance of about 50 yards between each of them. In every one of these vessels cases of yellow fever occurred, the disease appearing latest in the Edward Raoul the last arrival which had taken the place of the Scotia Queen. As the different ships were affected they were placed in quarantine but with permission to take in cargo. The value of quarantine to prevent communication when qualified with such a proviso must be very doubtful. More effectual in checking the disease seems to have been the very judicious measures for disinfection taken under Dr. Freeman's direction. No more vessels were allowed to come to the place for some time after the four infected ships had left and the disease has not made its reappearance. It did not spread on shore or in the Hospital to which the sick men were taken. Nothing can seemingly be clearer than the proof that in this case the poison of yellow fever was brought to the locality by the Scotia Queen and that from this vessel it spread to the others near it. This may have taken place either by direct communication through

individuals who went from ship to ship of which there is direct evidence in at least one instance whilst in the absence of evidence for or against the fact it may without any great straining of probabilities be supposed to have occurred more frequently. Or it may have been air borne for the short distance that intervened between the ships. If this thing be repudiated what has to be assumed in its place. Is it to [be] supposed that in a locality previously free from the disease under conditions which as far as is known are identical with these existing in the same place in other years when yellow fever is absent, the disease should suddenly make its appearance and *mirabile dictu* that its first development should be coincident with the arrival of an infected vessel from Georgetown and yet quite independent of its influence. Dr. Freeman submits the first hypothesis that of contagion but does not clearly indicate whether he accepts it as sufficient or not, although in practice he followed the safe course of acting as if he believed it. He also submits an alternative question he asks. "Did it, *i.e.* the germ of the disease, arise spontaneously in the bilges of each ship from a vegetable product deposited in them by the weeping of the moist green timber and which developed by certain atmospheric conditions became the yellow fever germ?" If in this quotation the word germ is used in its strictly scientific sense, as meaning the seed of a specific organism, then any one who believes in the production of disease by such an agency, must give a decided answer in the negative. The germ theorist would say, suppose that yellow fever depends upon the presence of a specific micro-organism, then one might as well assert that under certain circumstances green timber can exude a matter which may take the form of grain and this when sown in a suitable soil would grow and yield rice or wheat, as agree to the alternative given. The germs of different diseases have distinctive characters and can only produce disease each after its own kind, that is if the germ theory be true. But even if the word germ be wed in its popular and wider meaning as signifying the poison of disease not necessarily organized, the supposition does not then at all satisfactorily account for the outbreak of the complaint. Every year ships load timber in the same place and under the same circumstances and Dr. Freeman supplies no hint to show that at that particular time the meteorological or other conditions were in any way peculiar. It should be borne in mind too that there was not at the time a general diffusion of the disease either in

the neighbourhood or in the colony generally. Thus there is to be placed the "certain atmospheric conditions" entirely hypothetical as they are of the one supposition, against the undoubted fact of the arrival of an infected ship previous to the outbreak of the disease - the unknown in place of the known and of their relative value there can be no doubt. That the conditions on board ship favour the development of the complaint when once introduced all the history of yellow fever proves but that is something quite different from believing that under any circumstances it can have its spontaneous origin there. Arguing on the facts so clearly given by Dr. Freeman the conclusion already stated is arrived at; that in this instance at least yellow fever was introduced from without and from the centre thus formed spread by communication.

REPORTS FOR SEPTEMBER 1882.

Staff.

In September one attendant who had been at the work for over eighteen months resigned his appointment in order to return to Holland, his native country. One man left the service at the end of the probationary period being quite unsuited to his situation and a woman was dismissed after notice for persistent carelessness and inattention to duty. The appointments on probation were, second class male, S. Blair, female F. Ramsey. One place remained vacant during the month that of an attendant capable of working on the farm.

Religious services.

An increased number of patients attended the Sunday morning services which were held regularly during the month. The Revd. F.W.T. Elliott, and the Revd. P. Galbraith, each officiated on one occasion and on the other two Sundays, prayers were read by the Assistant Medical Superintendent. The number of patients present averaged 130 men and 77 women, in all 207.

Amusements.

These were of the usual kind. Advantage was taken of the opportunities of enjoyment presented to them by a fair proportion of patients and by an average number of visitors. Of the former there were present at the dances 126 men and 66 women in all 192.

Accidents.

The month of September has been marked by the occurrence of one casualty which although serious was happily not likely to be followed by dangerous consequences. A number of patients got into rather rough play amongst themselves in one of the dayrooms and before the attendant who was present could interfere, one of them either fell or was pushed to the ground. In his fall he met with a simple fracture of the right fore-arm a short distance below the elbow. He is progressing favourably towards recovery. The man who was injured last month by having a nail driven into his head still continues well.

Improvements.

Four more of the single rooms in connection with the new dormitory in course of erection have been finished and most of them occupied. Another month will see the completion of the work here. There has also been considerable progress made with the fitting of the stores as well as with the repainting of the East Block. Both of these will be finished in a short time.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st September	233	138	371
Admitted in September	8	2	10
Discharged in September	3	0	3
Died in September	2	0	2
Remaining on the 30th of September	236	140	376

There was an increase of five in the number of inmates of the Asylum during the month. This was due to the large number of admissions both discharges and deaths being about an average. Of the patients admitted 6 came from Demerara 3 from Berbice and one from Essequibo. Their native countries were as follows:

	M.	F.	Total
Natives of India	5	0	5
" " Madeira	1	0	1
" " Barbadoes	0	1	1
" " British Guiana	2	1	3

Immigrants 7, creoles of the colony 3. The three men discharged were well when they left the Asylum in which they had resided for the following periods:

	M.	F.	Total
Between 1 and 2 years	1	0	1
" 2 and 5 years	1	0	1
" 5 and 10 years	1	0	1

Two patients died from the following causes:

	M.	F.	Total
Bright's disease	1	0	1
Cerebral congestion with Bright's disease	1	0	1

The deaths were under the average and during the whole month the general health of the Asylum was excellent. There was little or no intermittent and no other zymotic complaint.

NUMBER OF PATIENTS EMPLOYED.

This has not varied much from the usual and was as follows. On the male side 184 on the female 102. Of the men 35 and the women 18 were unable to work from bodily or mental infirmity whilst 16 men and 19 women refused to do anything.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES EMPLOYED &c.

	M	F	TOTAL
Daily average in Asylum	235	138.8	373.8
Percentage employed	78.2	73.1	75.3
Percentage confined to bed	2.2	3.7	2.8
Percentage attending amusements	53.4	48.1	51.4
Percentage attending Church	55.3	57.9	55.9

FARM.

The dry weather which prevailed during September although less stimulating to vegetation than that of the preceding month was seasonable and favourable to field work of various kinds. Some labour was expended on the dams in anticipation of the high tides expected in the latter part of the month. When the tides came they did not rise so far as to do any damage, indeed they did not come up to the level of the springs at the vernal equinox. There was obtained from the farm, of plantains (free from stalk) 4,767 lbs., sweet cassava 1,340 lbs., sweet potatoes 244 lbs., bananas 290 lbs., pumpkins 37 lbs., and sundry garden vegetables 494 lbs. From the cattle farm at Old Fort there was brought in of milk 837 pints,

30¼ lbs. of cleaned fowl and 27 eggs came from the poultry yard. Six pigs were killed giving 446 lbs. of pork. The cattle slaughtered were 9 in number and the beef obtained weighed 1,808 lbs. The cattle cost \$198, deducting the value of hides &c. this makes the cost of beef to the Asylum 10 and two fifths cents per lb. The number of cattle brought to the Asylum for sale was not so large as usual. This diminution in the supply was ascribed to the opening of the trade in cattle with Dutch Guiana, from the removal of quarantine restrictions. The increase of stock by births was 10 pigs. One sheep and one pig died whilst one goat disappeared from the pasture under circumstances which left no doubt but that it had been stolen. The number of patients who took part in agricultural work of different kinds was 88.

WOOD-CUTTER.

Patients employed 5. The firewood cut and brought to the Asylum amounted to 37 cords.

WORK SHOPS.

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CARPENTER.

Patients employed 4. Besides the work done which has already been noted under the head of improvements the following came from this shop. Made, window frames 2, axe-handles 3, boxes 2, and coffins 19. Sundry small repairs to building and furniture numbered 98.

PAINTER.

Patients employed 3. Three weeks work. Painted 339 square yards besides tubs 74 windows 26, jalousies 9, boxes 1 and 14 coffins. Sized and varnished 2 tables and 6 panes of glass put in.

TAILOR.

Patients employed 16. Again it has been impossible this month to keep the men here closely employed for the whole month. Work done, made of patient's jackets 12, pairs of trousers 85, jumpers 48, coolie trousers 34, attendant's jackets 4, pairs of trousers 6, in all 189 articles. There were repaired 333 articles.

SHOEMAKER.

Patients employed 3. Owing to the serious illness of the

shoemaker attendant very little work was done in this shop during the month. There were made 1 pair of shoes, and 50 shoe laces. There were repaired 22 articles.

BAKERY.

Patients employed in kitchen and bakery 8. The quantity of bread produced was 10,609 lbs., flour used 41 barrels, yield of bread per barrel 258¾ lbs.

PRINTING OFFICE.

Patients employed 8. In addition to the Journal, there were 10,310 impressions of different forms taken. Of cards 110 were printed. There were ruled 1,460 forms and 6 books were stitched.

LAUNDRY.

Patients employed 36. Work done 15,714 articles washed and 1,568 starched and ironed.

SEWING ROOM.

Patients employed 20. As in the tailor's shop so in the sewing room work is wanted to keep all regularly employed. Work done, made men's jumpers 1, flannel singlets 52, day shirts 27, cotton singlets 12, women's jackets 2, petticoats 12, chemises 49, attendant's dresses 3, tablecloths 10, towels 17, and pillow cases 71, in all 256 articles. There were repaired 449 articles.

WORK ROOM.

Patients employed 36. Work done, made chocolate 178 lbs., cocoanut oil 14 gallons. Coir cleaned 30 lbs., besides the usual amount of coffee and curry powder prepared.

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RECEIVED with thanks. The American Journal of Insanity for July 1882, The Morningside Mirror, The Barbadoes Globe, The Berbice Gazette, The Villager &c. &c.

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR SEPTEMBER 1882.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	77 59	For purchase of plantains	\$	83 68
Received for sundries sold		105 70	" " cocoanuts		65 00
" fines stoppages &c.		3 87	" " flour and com		371 34
" printing done		6 00	" repairing clocks		4 56
" Hospital account		289 60	" band (one month)		16 50
" Alms House account		196 79	" cooper's work		2 24
" Out Door Poor		6 50	" blacksmith's work		5 92
" board of patients		20 00	" gratuities to patients		5 68
			" hire of hearse		8 00
			" sums paid under one dollar		15 76
			Balance cash in hand		127 37
	\$	706 05		\$	706 05

No. 21

THE ASYLUM JOURNAL

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
15TH NOVEMBER, 1882.
—

RESULTS IN INSANITY AS INFLUENCED BY RACE.

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The fact has already been noticed in the Journal that the different nationalities who make up the population of this colony, supply inmates to the Asylum in varying proportion. It is difficult to say positively whether this variation is dependent upon racial peculiarities of constitution or arises from the different conditions under which the people live here. The truth appears to be that both circumstances affect the result. In this paper it is intended to carry the inquiry a step further, and to make an effort to discover whether the fact of belonging to a particular section of the people influences the chances of recovery or death, in the case of patients who are sent to the Asylum. In order to ascertain this in a manner which would be thoroughly satisfactory, the subsequent history of all who were admitted to the Asylum for a lengthened period would have to be traced, following up those who had been discharged so as to find out their present condition. Unfortunately imperfect records prevent the fulfilment of the first requirement whilst it is manifestly out of the power of the Asylum officers to supply the second. That perfection is unattainable is however no more valid reason in this case than in others for doing nothing at all. From the 1st of January 1876, to the 31st December, 1881, there were 600 persons admitted to the Asylum suffering from insanity in some of its various forms and in the subjoined table these have been classified according to their nationality and the results to the present time are there given. Although as explained the

information thus afforded is necessarily imperfect, still an examination of the table will show some interesting peculiarities. Before considering the bearing of these, attention may be drawn to two facts. In the first place it should be observed that these numbers represent individuals not cases or attacks of disease. The same person does not appear more than once as having recovered. In a few instances (6) during the period mentioned, the same patients were discharged twice as recovered, in the numbers given such cases are only included once that is on their second admission. Again it must always be borne in mind in connection with local statistics of this kind, that in accordance with the law of the colony insane persons are with very few exceptions sent to the Asylum through the public hospitals. It is permitted that they may be treated in these institutions for any length of time that the Medical Officer in charge sees fit. The practical result of this is that many of the acute cases, those who under treatment are likely to recover in the course of a few weeks never come to the Asylum at all. Only when the patients are peculiarly troublesome are they sent on at once, the others may be retained until nearly all hope of their recovery is lost and on their arrival here they have too often to be placed in the category of the chronic insane. This practice, which belongs to the period when the Asylum was looked upon merely as a place of detention for unruly and helpless lunatics and not as a hospital for the treatment of insanity, is referred to because as is well known to any one acquainted with lunacy practice, such a preliminary sifting of the patients must have a great influence over the number of recoveries taking place in the Asylum. The figures in the table may now be examined and an attempt made to extract from them any lesson they may teach. Taking at first the whole number dealt with, it is found that of the 600 patients admitted 133 or 22 per cent have left the Asylum as recovered, 6 or 1 per cent, have been removed before recovery was complete, 227 or 38.1 per cent have died, leaving 232 or 38.5 per cent still under treatment in the institution. A noticeable point here is the great difference there is between the recovery and death rates of males and females respectively. Of the males admitted 24.6 per cent have got well, whilst of the females the corresponding percentage is 18. The percentage of deaths among the males has been 32.9 among the females 46.6. There is a much larger proportion of natives of the colony amongst the female, than amongst the male inmates of the Asylum and this it will be

afterwards seen greatly influences both the death and recovery rate. But speaking generally the women brought to the Asylum are in a much worse condition both mentally and bodily than the men. They are seemingly retained in their homes as long as they possibly can be. Turning now to the different nationalities it will be well to notice first the two classes which make up the bulk of our population, black natives of the colony and East Indian immigrants. Of the former 143 have been treated, of the latter 235. The numbers are thus large enough to make it certain that the marked differences between the two classes now to be noted are not the result of chance. Of the black creoles treated 11.2 per cent have recovered and 51.7 per cent have died, of the East Indian immigrants the recoveries amounted to 26.8 per cent the deaths to 25.5 per cent. In the Asylum they live under identical conditions, sleep in the same rooms, eat similar food, and are treated in every way exactly alike. Now it will be evident, how it is that the circumstance of there being a much larger proportion of females amongst the creoles than in any of the other classes coming to the Asylum affects the comparative recovery and death rates of males and females. The question now to be solved is whether race *per se* has any influence in producing the striking diversity of results just noted. Various circumstances which it is thought may bear upon the point will be briefly indicated. To begin with the fact next in prominence to that of race, it is to be observed that the creole blacks are natives of the colony in which their progenitors have lived it may be for one two three or even four generations. On the other hand the East Indians are immigrants who have come here from their native country most of them as adult men and women. That the former live more generally amidst relatives and friends than the latter, and are therefore not sent to the Asylum at so early a stage of their illness, or not at all when they have a mild attack, may have an effect in increasing the deaths and diminishing the recoveries in this class. Against this however, is to be placed the injurious influences if there be any, dependent upon the complete and sudden change in their condition undergone by the immigrants. In this country the two classes are much upon a par with regard to their indulgence in vicious habits and their exposure to the other causes moral and physical, commonly assigned for insanity. One difference in this respect, between them does exist which however is one of kind not of degree, yet it may have something to do with the matter. Whilst in the case of the majority

of creole patients admitted to the Asylum, the production of the disease can be fairly assigned to indulgence in alcohol, amongst the coolies alcohol plays but a secondary part as a cause of insanity. With them Indian hemp is the poison from the effects of which most of the patients suffer. Now the insanity resulting from the abuse of the latter drug is not only more amenable to treatment than is severe alcoholism but it is not accompanied to the same extent by gross structural changes in the brain such as are likely to prove fatal in a short time. Nor does the use of Indian hemp give rise to dangerous disease of the kidneys or liver as is the case with alcohol. Further light is thrown on the point by looking at some of the other classes treated in the Asylum although the numbers dealt with are much smaller. It will be seen that amongst the coloured creoles the percentage of recoveries is 25, of deaths 36, a much higher recovery and a much lower death rate, than prevails amongst their black compatriots. This goes to support the theory that race does influence the result in insanity. Such a theory receives a still larger amount of support from the striking contrast found to exist between two classes of about equal numbers, each comprising people of pure blood in the one case African and the other European. Both are alike in being immigrants and therefore presumably in having undergone the same sudden and complete change of surrounding conditions. Of natives of Africa 41 were admitted, of these 3 or 10 per cent have left the Asylum as recovered whilst 31 or the enormous percentage of 75.6 have already died leaving only 6 still under treatment. Of Portuguese from Madeira 33 have been admitted, 8 or 30 per cent have recovered and 13 or 39.3 per cent have died, a marked difference from the African percentages. One class of African descent shows a high recovery and low death rate, namely the black natives of the other West Indian colonies, but the coloured people coming from the same places with an equal number of recoveries have much fewer deaths. It may be mentioned that amongst the Chinese patients here the death rate is high but this is accounted for by the large proportion of them, (nearly three fourths) who suffer from epilepsy. Dividing the whole 600 patients into two classes, one comprising all of pure African descent (232) the other made up of the remainder (368) of all other races, it will be found that the proportion who have recovered is of the former 16.3 per cent of the latter 25.8. The percentage of deaths is of the blacks 50.8 of the others 30.1. At some future time this subject will

be again considered and an endeavour made to find out the exact forms of disease to which the mortality is due. That insanity is more rife amongst the people of African birth than in any other section of our population is a fact which has already been demonstrated. Bearing this in mind in connection with the evidence now produced, it appears as if in this country at least, not only are Africans peculiarly liable to attacks of insanity but they suffer from it in a very incurable and fatal form. This conclusion rather militates against the popular belief that an unstable cerebral organization is to a great extent the product of very advanced civilization. This much is certain that in this colony, little if any of the prevalent insanity can be justly ascribed to the effects of mental strain or overwork.

	Natives of	British Guiana			West Indian Islands &c.			Africa	China	India	Madeira	Europe	Total
		Blk	Colrd	Wht	Blk	Colrd	Wht						
Admitted	M	64	20	5	28	13	3	30	15	166	21	8	373
	F	78	19	4	20	9	0	11	4	69	12	1	227
	Total	142	39	9	48	22	3	41	19	235	33	9	600
Discharged recovered	M	7	5	0	2	6	0	3	3	46	8	2	92
	F	9	1	2	6	2	0	1	0	17	2	1	41
	Total	16	6	2	8	8	0	4	3	63	10	3	133
Discharged not recovered	M	1	1	0	0	0	0	0	0	1	0	3	6
	F	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1	1	0	0	0	0	0	0	1	0	3	6
Died	M	30	6	3	5	2	2	23	7	35	7	3	123
	F	44	8	1	8	3	0	8	3	25	6	0	106
	Total	74	14	4	13	5	2	31	10	60	13	3	229
Remaining	M	26	8	2	11	5	1	4	5	84	6	0	152
	F	25	10	1	6	4	0	2	1	27	4	0	80
	Total	51	18	3	17	9	1	6	6	111	10	0	232

[NOTE – In this table and in the article on the subject, black means of pure Negro, coloured of mixed, and white of European descent. The

word creole is used in its logical signification indicating all persons born in the colony without reference to race or colour.]

REPORTS FOR OCTOBER, 1882.

Official visit.

ON the 19th of October the Asylum was visited by His Excellency the Governor who after inspecting the institution in all its departments made the following entry in the official visitors book. "Visited the Asylum this day and found the institution in its usual excellent order"

HENRY T. IRVING.
19th October, 1882.

Staff.

Of the attendants who had been confirmed in their appointments two (both men) left the service during October. One the carpenter attendant gave notice and his place remained vacant for the whole month. This is no doubt to be attributed to the fact that work for this class of tradesmen is plentiful in Berbice just now and that men prefer to earn smaller wages and have less restraint than must necessarily be submitted to when engaged in the Asylum. One of the farm attendants was dismissed for continued neglect of duty. The following were appointed second class attendants (male) on probation A. Williams, and R. Bess.

Religious services.

These were held as usual on each Sunday morning. On two occasions the Revd. F.W.T. Elliott, officiated. The Revd. J. Huskie, and the Revd. P. Galbraith, each conducted the service once, and on the fifth Sunday the Revd. J. Rannie who had just returned to the colony resumed the work which he has so regularly carried on at the Asylum for the last six years. The institution is indebted to those clergymen who kindly undertook the duties in his absence. The average attendance of patients at chapel was 145 men and 79 women, in all 224.

Amusements.

The fortnightly dances held in October passed off successfully. The more accustomed the patients get to them, the more they seem to enjoy them. Favoured by the bright weather, the

attendance of visitors to hear the band play on Monday afternoons has kept up. The number of patients present at the dances averages 149 men and 76 women, in all 225.

Accidents.

On the 10th of October an East Indian coolie patient who had resided in the Asylum for about a year and a half committed suicide by hanging himself. He had not either before or after his admission here, shown any suicidal tendencies. He was a good natured and harmless man and being employed to assist in the officer's quarters had a good deal of liberty given him. He was on that day missed for a short time from his usual work and when found was quite dead. This is the first suicide by hanging which has happened in the Asylum, at least for many years, and attempts of the kind are of extremely rare occurrence. An inquest was held.

Improvements.

The new dormitory connected with Ward No. 3 has been completed with the exception of a small amount of shingling. With the eight single rooms it gives accommodation for 22 additional patients. It is hoped that this will suffice for any increase that may take place in the number of male patients before the new hospital is finished and the present building is given over to the Asylum. The internal fittings of the stores have been finished and a new floor has been laid in the Medical Superintendent's office. In the absence of a carpenter attendant these works have been carried out in a satisfactory way under the charge of convalescent patients. The repainting of the outside of the East Block is completed and considerable progress made in the painting of the new dormitory.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st October	236	140	376
Admitted in October	2	4	6
Discharged in October	1	0	1
Died in October	2	0	2
Remaining on the 31st of October	235	144	379

The increase in the number of patients for the month was three.

For the last eighteen months the number of female inmates has been steadily getting larger. During some years previous to that period it was almost stationary standing about 110. As a consequence of the increase the dormitories in the female side are becoming overcrowded and the relief expected from the acquisition of the Hospital buildings is anxiously looked for. The admissions, deaths and discharges for October were all under the average. Of the patients admitted four came from Demerara, one from Essequibo and one from Berbice. Their native countries were as follows :

	M.	F.	Total
Natives of India	0	1	1
" " China	1	0	1
" " Barbadoes	0	1	1
" " British Guiana	1	2	3

Being immigrants and creoles in equal numbers. The man discharged was quite well when he left the Asylum. He had only resided as stated below for a short time. He had been a patient here for a few months in 1876 and appears to have kept well in the interval. His present period of residence was:

	M.	F.	Total
Under 3 months	1	0	1

There were two deaths including the suicide already mentioned. The causes of death were

	M.	F.	Total
Suicidal hanging	1	0	1
Bright's disease	1	0	1

The rate of mortality was very low for the month. The institution during that time was free from any kind of zymotic disease and the general health of the inmates was excellent.

NUMBER OF PATIENTS EMPLOYED.

From month to month this does not undergo much variation, but efforts are being constantly made to increase the proportion of patients who are engaged in interesting active and profitable employment. Amongst the men 183 were employed 37 were disabled by mental or bodily infirmity and 16 refused to work. The corresponding numbers for the women were employed 107, unable 25 and 10 unwilling.

DAILY AVERAGE NUMBER IN THE ASYLUM AND
PERCENTAGES EMPLOYED &c.

	M	F	TOTAL
Daily average in Asylum	235.4	141.4	376.8
Percentage employed	77.8	76.5	77.1
Percentage confined to bed	3.6	4.2	3.8
Percentage attending amusements	63.4	53.9	60.4
Percentage attending Church	61.6	56.0	59.9

FARM.

The dry weather of the previous month continued until the very end of October when there was one day of heavy rain which was timely and acceptable. The men employed in the provision fields have been busy turning over the ground by forking it. The growing crops continue to look well and promise a favourable termination to a most propitious year. The produce obtained from the farm was, of plantains (free of stalk) 4,027 lbs., bananas 381 lbs., sweet potatoes 603 lbs., and of sundry garden vegetables 814 lbs. From the cattle farm at Old Fort came 452 pints of milk and from the poultry yard 3 lbs. of cleaned fowl and 17 eggs. Four pigs were killed giving 276 lbs. of pork. Of cattle there was a plentiful supply of good quality, 13 heads were slaughtered and the beef obtained was 3,162 lbs. The cattle cost \$348, deducting the value of hides &c. this makes the net cost of beef to the Asylum 10S $\frac{1}{2}$ cents per lb. There were not any losses of live stock by death or theft for the month. The increase by births was of pigs 18 and sheep 1. The number of patients engaged in the various forms of agricultural work was 93.

WOOD-CUTTER.

Patients employed 5. There were cut and transported to the Asylum 39 cords of firewood.

WORK SHOPS.

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CARPENTER.

Patients employed 6. As already mentioned there was no carpenter attendant for the month. The work done here in addition to that mentioned under improvements, was 2 axe-handles, 2 commodes, 1 door and 3 windows and 38 coffins made, whilst 88 small repairs were done to buildings and furniture.

PAINTER.

Patients employed 3. Painted 480 square yards of walls &c., and tubs 38, windows 36, doors 23, jalousies 15, benches 1, and coffins 35. Sized and varnished 3 tables. Panes of glass put in 7.

TAILOR.

Patients employed 14. Work has not been pressed here for the want of an outlet for it when finished. Made of patient's jumpers 51, pairs of trousers 90, nightshirts 1, sheets 1, jackets 5, attendant's jackets 5, pairs of trousers 5, in all 158 articles. There were repaired 572 articles.

SHOEMAKER.

Patients employed 2. Owing to the continued serious illness of the attendant in charge of this shop, work was only carried on in it for a few days at the end of the month, when a substitute for the attendant had been procured. The work done was the repairing of 22 articles.

BAKERY.

Patients employed in kitchen and bakery 8. The quantity of bread made was 10,008 lbs. The flour used amounted to 38½ barrels, the yield of bread was thus within a very small fraction of 260 lbs. per barrel.

PRINTING OFFICE.

Patients employed 3. In addition to the Journal, there were printed 10,730 copies of different forms and 30 cards. There were ruled 1,420 forms and 61 books were stitched.

LAUNDRY.

Patients employed 39. There were washed during the month 19,369 articles and 1,842 were starched and ironed.

SEWING ROOM.

Patients employed 22. For part of the month the patients here were nearly idle for the want of work to give them. There were made, flannel singlets 31, cotton singlets 152, pairs drawers 24, bed sacks 11, towels 36, and chemises 10, a total of 264 articles and there were repaired 478 articles.

WORK ROOM.

Patients employed 31. These are patients who are only capable of doing light work of any easy kind. There was made 215½ lbs. of chocolate, 18 gallons of cocoanut oil, 21 lbs. of coir and 8 lbs. of rope besides the coffee and curry powder as usual.

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RECEIVED with thanks. The Journal of Mental Science for October 1882, The Report of the General Board of Commissioners of Lunacy for Scotland for 1881, The Report of the Inspector General of Asylums of New South Wales for 1881, The Report of the Inspector of Asylums of New Zealand for 1881, The Barbadoes Globe, The Berbice Gazette, The Villager, &c. &c,

ABSTRACT CASH ACCOUNT INDUSTRIAL FUND, FOR OCTOBER 1882.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	127 37	For purchase of plantains	\$	69 96
Received for sundries sold		92 65	" flour and corn		414 50
" fines stoppages &c.		17 49	" repairing clocks		2 00
" Hospital account		263 28	" band (one month)		15 75
" Alms House account		185 64	" cooper's work		5 88
" board of patients		20 00	" blacksmith's work		8 20
			" gratuities to patients		1 00
			" stamps and sundries		7 72
			" sums paid under one dollar		13 84
			Balance cash in hand		167 58
	\$	706 43		\$	706 43

No. 22

THE ASYLUM JOURNAL

—
LUNATIC ASYLUM, FORT CANJE, BERBICE,
15TH DECEMBER, 1882.
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ISOLATION IN EPIDEMIC DISEASES.

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In the conflict carried on against disease as in the more distinguished and noisy warfare of nations, the progress of scientific inquiry and the consequent advance of knowledge, render necessary continual changes in the weapons used. In the one the favourite arm of to-day becomes in the course of a few years, or it may be months, but a useless mass of metal. In the other the appliances in which full confidence was at one time placed are from time to time superseded by better and usually simpler methods. In the hygienic division of the field this has been markedly the case with quarantine. At one time looked up to as an effectual safeguard against the introduction of disease, it has now come to be regarded in many quarters as an antiquated device, only practiced by semi-civilized nations. This is the opinion of it generally held in England and it doubtless is the obstacles which quarantine puts in the way of free indulgence in roving habits and the restrictions that it places upon trade, which have rendered it so unpopular. It is true that as a measure to prevent the introduction of disease into any country, quarantine although theoretically it may appear to be valuable is in practice of very little account. Even in the colonies few people submit willingly to the personal inconvenience which the observance of its laws inflicts. Nor are these laws likely to be implicitly obeyed when this causes pecuniary loss. Thus it is that they are openly broken or their directions evaded and as a

consequence the disease against which it is their object to protect, is found too often to have gained a footing in the country at a time when all was considered safe. In fact the existence of quarantine has a tendency to produce such a result. It acts in this way. People who have made themselves liable to a penalty for infringement of the law are the first attacked by the complaint. They, naturally, are not desirous that this should be known and so the fact of their illness is concealed as long as they are able to do so. When concealment is no longer possible the disease has most likely become far advanced and in the meantime many who have been brought in contact with the sufferer may have been infected and a true epidemic ensues. Whilst from these causes quarantine has fallen into disrepute, isolation of patients suffering from communicable diseases has a corresponding advance in the estimation of sanitarians. The position it now holds in preventive medicine is well shown by the stringent regulations for its enforcement, which form part of all the recent local sanitary acts passed by the English Parliament. In these the notification to the sanitary authorities of all cases of infectious diseases as they arise is made compulsory either on the relatives of the persons or the medical men in attendance on them. The sanitary authorities on their part are bound to provide and maintain separate hospitals for the treatment and segregation of the sufferers. The Royal Commissioners who were recently appointed to inquire respecting small-pox and fever Hospitals in London, in their report issued a few weeks ago made the following statement on this point. "Upon one cardinal point not exclusively relating to the particular form of infection, the evidence which we have received is almost absolutely unanimous. On the outbreak of an infectious disease the first imperative necessity is to isolate every case immediately and effectually as it arises." The opinion here expressed embodying as it does the experience of all the most eminent authorities on the subject in England, is entitled to, and no doubt will receive general acquiescence. This colony from its isolated position enjoys a comparative immunity from acute contagious disease. Epidemics of the kind occur only at long intervals, but the very length of interval increases the virulence of the outbreaks when they do occur. The susceptibility to disease is not alike in all, some possess it in a much higher degree than others, whilst some from causes which vary in the different diseases are completely

protected against their attacks. In an epidemic the most susceptible naturally supply the larger number of victims and consequently their own numbers are reduced. For as a rule these complaints are only taken once in a lifetime. If a particular epidemic disease prevails for a long time or recurs at short intervals by eliminating as it does, those most liable to its influence, there is gradually produced a population which is to a great degree proof against its power. When the interval between the outbreaks is as long as it is here then there is time for a new generation of the susceptible to arise and epidemics are in consequence all the more extensive and fatal when they break out. Isolation having been found to be of so great value in England as a protection against infectious diseases, there is every reason to believe that its general adoption here would be quite as beneficial. It may thus be worth while to enquire what is meant by isolation when applied to the prevention of disease and to see if it is capable of being satisfactorily carried out under the conditions here existing. Effectual isolation requires that every one suffering from disease be placed in such a position that direct contact between himself and susceptible people is rendered impossible. It also demands that no article which the patient has touched nor any excrementitious matter from his person be removed from the place unless it has been most thoroughly disinfected. Under this head also falls to be considered the question of the spread of contagion through the air. Although in the case of some of these diseases this has not yet been definitely settled, and the probability is that in all its action is very limited, still to ensure the fullest amount of safety the place where the sick are lodged should not be near any inhabited houses and should be surrounded at a distance from itself by a fence high enough to keep off intruders. It is plain that such precautions against the spread of disease can only in very exceptional instances be carried out in private dwellings, even in those of individuals in a good position in life. Amongst the poor and in crowded localities they are impracticable. Nor do the ordinary hospitals inhabited as they are by all classes of sick meet the requirements of the case. Hence the necessity which exists, for providing special hospitals for the reception of sufferers from infectious diseases and for their early removal to these places. In England buildings of the kind have been erected in connection with most of the larger and many of the smaller centres of population in the country. In this colony circumstances are peculiarly favourable for the adoption of this

means of protection. To begin with the immediate notification to the sanitary authorities of the occurrence of cases of disease. This is not attended with the difficulties which surround it in England. Here nearly the whole of the population is under the medical care of practitioners who are salaried government officers and who therefore can have no objection to supply the information required. Then the question of site is one too, which is easily solved. In the immediate neighbourhood of both towns and villages land suited for this purpose is to be had in plenty, and as happily there is not anywhere a system of sewerage which could be infected there is no danger of unwittingly spreading disease through this medium. The local climatic conditions render it possible to erect cottages which form most convenient and healthy hospitals at a trifling cost, so that the expense need not be a barrier in the way. The requirements for disinfection vary with the particular kind of disease against which it is wished to guard. But enough now is known about the modes of propagation specially affected by each, to intelligently guide the measures to be taken to counteract their action. In all communities are to be found people who from one cause or other are sufficiently unsusceptible to attack, as to make them suitable and safe attendants upon the patients, so that neither should the latter suffer cruel neglect nor is it at all necessary to resort to the barbarous expedients for relief, which have too often been used in times of panic. In this colony the two ports of Georgetown and New Amsterdam are the spots where disease is most likely to be introduced and consequently it is there that the necessity for the provision of buildings in which the first cases could be isolated is urgent. It is too late to wait until the need actually arises, an isolation-hospital to be of full use must be ready to receive the first case. The erection and maintenance of these places is in fact an insurance against disease. And what would be thought of a merchant who did not take this precaution against loss by fire, or who after payment of several premiums for which he received nothing, allowed his policy to lapse just before his warehouse was burnt to the ground? In the judgement of his neighbours he would assuredly be classed amongst the improvident and foolish. A similar reproach may fairly attach itself to any community which does not use all known means for the prevention of disease or which having once provided them fails to maintain them in a state of efficiency.

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Amongst the many peculiarities of character which even a slight acquaintance with the inmates of an Asylum brings to light there is one which is sure to attract observation. Let the visitor enter into conversation with any one who is under the influence of a fixed and persistent delusion and who is surrounded with others in exactly the same condition as himself. The patient it may be is bright and intelligent and he will soon show that he is fully alive to all the foibles of his neighbours. He sees the absurdity of their crazy notions and pities or despises them for putting any trust in such phantasies. Yet his belief in his own pet delusion is unalterable and cannot be shaken by argument even when this is carried to palpable disproof. A cynic might be inclined to say that many who are not safe in an Asylum act in a like way, and that most men have a favourite craze, cherished, to the amusement or the wonder of their neighbours. Burns evidently thought so when he wrote the well known lines.

Oh wad some power the giftie gie us
To see oursel's as others see us!
It wad frae monie a blunder free us
And foolish notion.

Whether the power the poet asked for would be followed by the effect he desired is rather doubtful. Public opinion is a mighty force but individuals do not always guide their conduct by it. A knowledge of what friends and acquaintances think of them might make the timid and diffident shrink themselves in silent misery. Whilst from the same cause the bold self confident man is as likely as not to be more than ever satisfied that he is right whilst every body else is wrong and that safety can only be found by walking along his road.

CLINICAL RECORD.

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(*Case VIII. Insanity in a man in great part of Indian blood.*) A. B. was admitted on the 17th October 1881. He was 43 years of age, and a native of the colony, having been born in the upper Essequibo region. His father was an Aboriginal Indian (Buck) and his mother a cobb, *i.e.* 3 parts Negro 1 part European. The mixture of blood in his case was considerable but in personal appearance the patient strongly favoured his paternal descent, and except that he was a little darker in colour, looked a true Buck. This

was said to be his first attack of insanity and as far as his family history could be traced, there was no evidence of his having inherited any tendency to nervous disease. His occupation was that of a timber squarer, working in the woods, and he was fairly educated for his position being able to read and write. His habits were admittedly intemperate and he had for a time been drinking freely. Before coming to the Asylum, he was said to have been ill for about a fortnight. He had been much excited, and extremely restless, he had refused to speak to any one and when he shouted out in his excitement, he spoke incoherently. When admitted here he was still very restless, constantly in motion, wandering up and down the ward and touching everything but tried to escape notice, and when spoken to he would not answer. It was difficult to discover from his expression, which was very stolid whether he understood what was said to him or not. There was not any evidence that he had either delusions or hallucination of any of the senses. He required to be fed by an attendant for although he swallowed whatever was given to him he made no effort to help himself to food or ever asked for it. He was sleepless but cleanly in his habits. The physical signs of disease were not marked, except that he seemed to be weak and helpless. The eyes were much congested. There was not any rise of the temperature of the body and the several pectoral and abdominal organs performed their functions fairly well. The only noticeable feature here was a certain muffling of the heart's sounds, these were feeble. He was not in very good condition, weighing 113½ lbs. and his height was 5 ft. 3 inches. He was ordered 32 minims of the Liq. Morphiae thrice daily. This treatment was continued until the 2nd of November, when he was found to have improved somewhat, being much less restless. Food was now taken freely. The patient now answered questions and said he felt better. He had gained in weight 6 lbs. From this date there was a steady improvement in many respects, he lost all his restlessness and eat and slept well. But his behaviour showed one marked peculiarity, and that was his abnormal taciturnity. When spoken to he would answer cheerfully enough but if left to himself he would remain seated with a stolid fixed look upon his countenance and never showed the least inclination to get into conversation with anyone. It was thought that active employment might be good for him so he was put to work with the carpenter. This was not however very successful and on the 25th January

1882 he was sent to assist in the stores under the steward. From this date his improvement was marked and rapid, so much so that he was on the 14th of April discharged well. Up to the last he was very silent never speaking except when spoken to, and at all times wore a stolid and indifferent expression as if caring nothing about what was going on around him. During his residence in the Asylum he gained in weight 31½ lbs.

Remarks. This case is published for two reasons first because it is the only instance in which any person of "Buck" extraction has been treated in the Asylum at least for the last seven years and possibly it is the only case of the kind on record. Although in this patient the Indian blood was much mixed still it was the predominant strain and gave the man all his distinctive traits of character. This suggests the second reason for reporting it, namely to emphasize the fact, too often overlooked that in disease the inherited and personal character, the so called idiosyncrasies of the individual put their impress upon the outward manifestations or symptoms of pathological changes of organs, although these may be identical in kind. In disorders of the brain, the nervous energy from the diseased tissue in its outward progress and its conversion into action follows its usual lines choosing the familiar and well worn channels. The patient was a man suffering from hyperemia of the surface of the brain the result of indulgence in alcoholic stimulation, but he was not merely a man he was an Indian. In the whole course of his illness this fact could never be overlooked. Thus it is that systems of nosology founded wholly on symptoms, unsatisfactory as they are in all kinds of disease are more particularly so in brain affections and unfortunately it is in this very class that they are mostly used. The value of classifications based on this ground is necessarily strictly limited both in time and place.

REPORTS FOR NOVEMBER, 1882.

Staff.

In November one male second class attendant had to be dismissed from the service on account of his great carelessness in supervising the patient under his charge. One female attendant left after giving notice and another on probation was not confirmed in her appointment. The shoemaker attendant who had been ill for nearly three months died on the 28th of the month.

The man who acted for him during his illness was appointed to succeed him. The following appointments were made, to be second class attendants on probation, male, A. Frank, R. Rose, P.V. Abrams, and W. Welcome; female, Q.E. Bunbury, and J. Bones.

Religious services.

The Sunday morning services were regularly held, conducted on two occasions by the Revd. J. Rannie, on one by the Revd. F.W.T. Elliott, and on the remaining Sunday prayers were read by the Assistant Medical Superintendent. The patients present at the service averaged in number, males 148, females 79 in all 227.

Amusements.

The fortnightly dances two in number which were held in November passed off much in the usual manner. The second which fell about the time of full moon was especially lively and pleasant. This liveliness was to be ascribed to the lunar influence, not as might be supposed on our own people, but on friends from the outside a good many of whom took advantage of "pale Diana's" light to join the party. There were the usual Monday evening practices and the band played in the grounds in the afternoons. The patients present at the dances were 145 males 76 females a total of 221.

Accidents.

The month of November was not marked by any accident requiring notice.

Improvements.

A new floor has been laid in the Steward's office. This with the making of Bedsteads and the numerous repairs required in the buildings and furniture has occupied the carpenter patients for the month. There was no carpenter attendant. The four boats belonging to the institution have been thoroughly repaired and put into good condition. The gallery at the South Block and the floor of the Infirmary Ward have been repainted. At the end of the month a beginning was made towards banking off an additional section of the flat on the banks of the Canje and so adding to the ground for cultivation and improving the sanitary condition of the institution.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st November	235	144	379
Admitted in November	7	2	9
Discharged in November	2	2	4
Died in November	0	1	1
Remaining on the 30th of November	240	143	283

There was an increase in the number of inmates of four during the month. The admissions and discharges were about the usual number but there was only one death. Of the patients admitted four came from Demerara one from Essequibo and four from Berbice. Their native countries were as follows:

	M.	F.	Total
Natives of India	3	1	4
" " Africa	1	0	1
" " Barbadoes	1	1	2
" " Madeira	1	0	1
" " British Guiana	1	0	1

This shows that there were eight immigrants admitted and only one native of the colony. The patients discharged had all recovered and were sent out able to resume their various occupations. They had resided in the Asylum for the following periods:

	M.	F.	Total
Between 3 and 6 months	0	1	1
" 6 and 12 months	0	1	1
" 1 and 2 years	1	0	1
" 5 and 10 years	1	0	1

The woman who died had not been a month in the Asylum, she was a demented patient admitted from Demerara in a very bad state of health. The cause of death was:

	M.	F.	Total
Apoplexy and Bright's disease	0	1	1

In November the general health of the institution was very good and as just stated the mortality rate was very low.

NUMBER OF PATIENTS EMPLOYED.

There is not much change either in the numbers working or the nature of the occupations followed, to be reported. On the male

side there were an average number of 186 patients engaged in useful work, 36 were unable to do so from infirmity of some kind and 17 refused to do anything. Amongst the women the corresponding numbers were, employed 112, unable 23, unwilling 9.

DAILY AVERAGE NUMBER IN THE ASYLUM AND
PERCENTAGES EMPLOYED &c.

	M	F	TOTAL
Daily average in Asylum	238.1	143.5	381.6
Percentage employed	78.1	78.1	78.1
Percentage confined to bed	2.5	4.1	3.1
Percentage attending amusements	60.9	53.1	58.0
Percentage attending Church	62.1	55.2	59.5

FARM.

The showers which fell during November were very light, the crops would have benefited by a larger amount of moisture. From all accounts the rainfall in other parts of the colony was much greater than that in this neighbourhood. The forking of the grounds has been completed and a considerable amount of cassava planting done. The amount of produce obtained was of plantains (free from stalk) 3,713 lbs., bananas 574 lbs., sweet cassava 1,000 lbs., cocoanuts 197 and of sundry other vegetables 516 lbs. From the cattle farm there came in 377 pints of milk. Nine pigs were killed yielding 641 lbs. of pork. The cattle slaughtered numbered 12, they cost \$254 and the beef obtained from them number to 2,360 lbs. Deducting the value of the hides &c. this makes the cost of the beef used in the Asylum 10 and seven tenths cents per lb. The live stock did not suffer any loss during the month and the increase by births was 19 pigs. The number of patients engaged in the different kinds of agricultural work was 103.

WOOD-CUTTER.

Patients employed 5. There were cut and brought to the Asylum in November 32¼ cords of firewood.

WORK SHOPS.

—

CARPENTER.

Patients employed 6. As already mentioned there was no carpenter attendant in charge and the work done was solely by the patients.

There were made of bedsteads 8, baker's peels 1, benches 1, axe-handles 2, and coffins 25. The small repairs were 112 in number.

PAINTER.

Patients employed 4. The painter attendant was absent from his work for 10 days during the month. Work done, 208 square yards of painting, 7 hat bands lettered, painted 27 tubs, 8 doors, 3 jalousies, 2 boats, 2 benches, 6 commodes, 12 bedsteads, 2 chairs and 24 coffins. Three tables and one desk were sized and varnished. There were 4 panes of glass put in.

TAILOR.

Patients employed 15. They were not kept fully at work in the tailor's shop during the month. Work done, made, patient's nightshirts 1, jumpers 24, pairs of trousers 80, jackets 1, attendant's jackets 9, pairs of trousers 9, in all 124 articles. There were repaired 554 articles.

SHOEMAKER.

Patients employed 3. Work done, made 2 pairs of boots, 6 pairs of shoes, 4 key straps. The articles repaired numbered 28.

BAKERY.

Patients employed in kitchen and bakery 8. The quantity of bread produced was 10,045 lbs. There were 385½ barrels of flour used, this gives a yield of 262 lbs. of bread per barrel.

PRINTING OFFICE.

Patients employed 3. The usual number of copies of the Journal were issued and in addition to this the following work was done. Printed 21,212 copies of different forms, and 190 cards. Ruled 1400 forms. Stitched 37 books.

LAUNDRY.

Patients employed 42. Work done in the month. Clothes washed, 16,547 different articles, starched and ironed 1,546.

SEWING ROOM.

Patients employed 23. For part of the month there was not work sufficient to give employment here. Work done, made men's nightshirts 71, pairs of drawers 6, day shirts 47, women's dresses

9, skirts 1, jackets 58, in all 192 articles. There were repaired 455 articles.

WORK ROOM.

Patients employed 32. Work done, made chocolate 219 lbs., cocoanut oil 9 gallons and 28 pounds of coir. The usual amount of coffee and curry powder prepared.

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RECEIVED with thanks. The Morningside Mirror, The Barbadoes Globe, The Berbice Gazette, The Villager, &c. &c.

ABSTRACT CASH ACCOUNT INDUSTRIAL FUND, FOR NOVEMBER 1882.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	167 58	For purchase of plantains	\$	83 08
Received for sundries sold		101 18	" " flour and corn		310 42
" fines stoppages &c.		12 52	" " printing materials		121 84
" Hospital account		313 98	" " cocoanuts		103 92
" Alms House account		202 47	" " sheep		21 25
			" repairing docks		2 00
			" " boats		34 48
			" band (one month)		16 00
			" cooper's work		3 04
			" blacksmith's work		5 44
			" gratuities to patients		2 00
			" stamps and sundries		2 40
			" sums paid under one dollar		12 55
			Balance cash in hand		79 31
	\$	797 73		\$	797 73

THE ASYLUM JOURNAL

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LUNATIC ASYLUM, FORT CANJE, BERBICE,
15TH JANUARY, 1883.
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1882.
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This number of the Journal is taken up with statistical returns relating to the work done in the Asylum during the year lately ended. The facts are given without comment and they have been selected mainly with the view of enabling readers of the Journal to form some opinion as to the manner in which the Asylum performs its double function, that of hospital for acute diseases of the brain and of home for the incurably affected. One remark may be made which is, that those responsible for the management of the institution, whilst fully appreciating the necessity of economy in the expenditure of public money are at the same time conscious that this economy must at all times be strictly subordinated to the first requirement of the place — comfort for the patients. It is hoped that in this direction some progress was made in 1882. The foregoing explanation is given because necessarily the number of those having personal knowledge of the working of the institution is limited and this phase of it does not hold a prominent place in statistics. It is a matter for regret that the colonial lunatic Asylum should have been established in a part of the colony so far distant from the great centre of population. The patients suffer by the difficulty which it places in the way of their being visited by their friends as frequently as they might otherwise be. Besides institutions like individuals are brightened up by contact with their fellows and it is always dangerous, eminently so in this climate, to be allowed to occupy a quiet corner out of the current of life. In the tropics stagnation needs no special encouragement, it arises only too easily under all circumstances. The difficulty in these latitudes is to avoid it.

SUMMARY OF REPORTS FOR
1882.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st January 1882	230	129	359
Admitted in 1882	55	39	94
Discharged in 1882	27	13	40
Died in 1882	23	9	32
Remaining on the 31st of Decr. 1882	235	146	381

The number of patients in the Asylum was higher by 22 (5 males and 17 females) at the end of the year than at the beginning. The daily average number under treatment was of males 234.9, females 135.9, total 370.8. This is an increase of 27.3 over the number in the previous year. The total number treated was 453.

ADMISSIONS.

There were 55 males and 39 females in all 94 patients admitted to the Asylum in 1882. This number is slightly below the average of the last seven years. Four of the patients (3 males and 1 female) had been previously discharged from the Asylum. They had been away from the institution for the following periods :

	M.	F.	Total
Between 3 and 6 months	0	1	1
" 6 and 12 months	1	0	1
" 1 and 2 years	1	0	1
Over 5 years	1	0	1

Classified as to NATIVE COUNTRY the patients admitted stand thus:

	M.	F.	Total
Natives of British Guiana	8	13	21
" " India	33	17	47
" " Madeira	3	1	4
" " China	3	1	4
" " Africa	3	1	4
" " Barbadoes	5	8	13
" " Martinique	0	1	1

Only about 23 per cent of the patients admitted were natives of the colony.

The three counties of the colony sent patients as follows:

	M.	F.	Total
From Demerara	35	28	63
" Essequibo	8	5	13
" Berbice	12	6	18

Their COLOUR was as follows:

	M.	F.	Total
Black	11	19	30
Coloured	5	3	8
White	3	2	5
Brown (East Indian)	33	14	47
Yellow (Chinese)	3	1	4

Their AGE:

	M.	F.	Total
Under 15 years	0	0	0
Between 15 and 20 years	4	1	5
" 20 and 30 years	21	10	31
" 30 and 40 years	18	13	31
" 40 and 50 years	7	4	11
" 50 and 60 years	4	7	11
" 60 and 70 years	1	3	4
Of 70 and upwards	0	1	1

The ages given are only approximation.

Their OCCUPATION:

	M.	F.	Total
Agricultural Labourers	40	22	62
Blacksmith	1	0	1
Town Constable	1	0	1
Porter	1	0	1
Tailor	1	0	1
Butler	1	0	1
Peddler	1	1	2
Shop man	1	0	1
Painter coach	1	0	1
Pan boiler	1	0	1
Domestic	0	6	6
Sempstresses	0	5	5
Cook	0	1	1
None or not known	6	4	10

Their RELIGION:

	M.	F.	Total
CHRISTIANS			
Church of England	14	9	23
" " Scotland	0	1	1
Roman Catholic	3	4	7
London Missionary Society	1	3	4
Wesleyan Methodist	1	2	3
HINDU	30	12	42
MUSSULMAN	3	2	5
Not known	3	6	9

DEATHS.

These numbered 32, 23 males and 9 females. The rate of mortality was 8.6 per cent on the average number resident (males 9.7 females 6.6), and on the whole number treated it was seven per cent. This death rate is two per cent less than that of 1881 and much lower than any previous year. It is below the average rate of English Asylums of a corresponding class.

The causes of death were:

	M.	F.	Total
Malignant disease of brain	1	1	2
Tuberculosis of brain	0	1	1
Cerebral meningitis	2	0	2
Congestive mania (fatty heart)	1	0	1
Apoplexy	1	2	3
Epilepsy	1	0	1
Grey degeneration of brain	1	0	1
Phthisis	2	3	5
Bright's disease	6	1	7
" with hypertrophy of heart	2	0	2
" with hepatitis	1	0	1
" with bronchopneumonia	1	0	1
Fatty degeneration of heart	1	0	1
Acute peritonitis	0	1	1
Pleuro-pneumonia	1	0	1
Aneurism of aorta	1	0	1
Suicidal hanging	1	0	1

A post-mortem examination was made in every case. One inquest was held, on the case of suicidal hanging. The patients who died had been resident in the Asylum for the following periods:

	M.	F.	Total
Under 3 months	4	4	8
Between 3 and 6 months	3	0	3
" 6 and 12 months	0	0	0
" 1 and 2 years	5	1	6
" 2 and 5 years	6	2	8
" 5 and 10 years	3	1	4
Over 10 years	2	1	3

DISCHARGES.

There were 40 patients (27 males 13 females) discharged during the year. Of these all had recovered except one man a European who was sent to his native country. The percentage of recoveries to admissions was 41, the highest yet reached in this Asylum. The time the patients who recovered had been under treatment was:

	M.	F.	Total
Under 3 months	1	0	1
Between 3 and 6 months	5	1	6
" 6 and 12 months	10	2	12
" 1 and 2 years	6	7	13
" 2 and 5 years	2	3	5
" 5 and 10 years	2	0	2
Over 10 years	0	0	0

Two women who were discharged had been previously sent away from the Asylum well and afterwards re-admitted, all the others were discharged for the first time.

ESCAPES.

There were not any patients who made good their escape from the Asylum in 1882. Those who strayed away or tried to escape were brought back in every instance. Attempts of the kind were fewer than in previous years.

USE OF RESTRAINTS.

Mechanical restraint of any kind or seclusion were neither of them used during the year. This is the seventh year in succession, in which it has not been found necessary to resort to them. During that time there has not been a single accident which could fairly be ascribed to the disuse of restraint.

ACCIDENTS.

The accidents recorded in the year, five in number, were all cases of injury inflicted by one patient on another. None of them were followed by serious consequences, although in one where a nail was driven into the skull this might have been expected. The list includes two simple fractures of the forearm, one severe bite, a scalp wound, and the case of injury to the skull just referred to. There was one suicide by hanging in the case of a man who had never shown any suicidal symptoms and who was allowed a good deal of liberty.

AMUSEMENTS.

These were of the usual kind and were joined by a considerable proportion of the inmates with benefit to themselves.

RELIGIOUS SERVICES.

Services were held on Sunday mornings regularly during the year. For this advantage the Asylum is indebted to the Revd. J Rannie, the Revd. F.W.T. Elliott, and in Mr. Rannie's absence from the colony to the Revd. J. Huskie, the Revd. P. Galbraith and the Revd. W. Barnhill.

NUMBER OF PATIENTS EMPLOYED.

The importance and value of suitable employment as a remedy in a large proportion of the cases of insanity which come under treatment here, becomes from year to year more apparent. During the past year the efforts made to develop this means of treatment have resulted in an increased percentage of the patients being engaged in industrial pursuits. The percentage was 70.5.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES EMPLOYED &c.

	M	F	TOTAL
Daily average in Asylum	234.9	135.9	370.8
Percentage employed	79.7	76.7	78.5
Percentage confined to bed	3.0	3.8	3.3
Percentage attending amusements	54.9	43.8	47.7
Percentage attending Church	55.6	49.7	52.6

STRUCTURAL ALTERATIONS AND IMPROVEMENTS.

These have been numerous and have given full employment to the carpenters and painters of the Asylum. A sill of the large building

on the North Block which was completely decayed was removed and replaced by a new one of greenheart. The large dormitory in the same block underwent a general overhaul and many repairs were made to it. The iron bars in the single rooms in the West Block were removed and jalousies put in the places they occupied, thus destroying their character as cells. A small cottage has been converted into a microscope room and laboratory, and fully fitted for this purpose. The space under one of the buildings in the North Block has been built in and a dormitory for fourteen patients and eight single rooms, added to the Asylum accommodation. The Steward's storeroom was supplied with fittings and a new pitch pine floor laid in it as well as in the Medical Superintendent's office and the Steward's office. At the Old Fort farm a shed was erected and some paling done to protect the land which was being washed away. The painter's work included, the single rooms in the South and West Blocks, the large dormitory in the large building of the North Block, the posts of the wire fence round the grounds, the gallery in South Block, the outside of large building in North Block, the outside of the East Block, the new dormitory and single rooms. A hot plate was built in connection with the laundry for heating irons. There were at the end of the year several necessary works in progress which were being carried out in the usual way without cost to the colony further than for the materials used.

FARM.

	amount			Value	
	tons	cwts.	lbs.	\$	cts.
Plantains (free of stalk)	18.	16.	0	421.	12
Bananas Do	4.	2.	38	37.	53
Sweet potatoes	1.	1.	84	73.	08
Sweet cassava	6.	14.	36	300.	88
Pumpkins	0.	12.	90	14.	34
Tannias	0.	3.	36	11.	16
Sundry vegetables	2.	16.	37	63.	03
Cocoanuts 648				9.	74
Dried plantain leaves 2,000 lbs.				76.	80
Milk 4314 pints				215.	70
Eggs 472				9.	44
Cleaned fowls 188¼ lbs.				37.	65
Pork 5651½ lbs.				791.	21
Mutton 94¼ lbs.				18.	85
Cord wood 392 cords				990.	00
				\$	3160. 53

The year was very favourable for the farm and in consequence the returns obtained were larger than usual. There was got from the Asylum grounds produce of the following amounts and value. One hundred and fifty three heads of cattle were killed in the year. The beef obtained was 29,697 lbs. its net cost to the Asylum 10 cents per lb. At the close of the year there was live stock as follows belonging to the Asylum.

One pony	valued at \$	150.00
Two mules	" "	100.00
Three donkeys	" "	80.00
One hundred and twenty-six pigs	" "	441.00
Twenty-one heads of cattle	" "	520.00
Twenty-two goats	" "	62.00
Sixteen sheep	" "	48.00
Forty-five heads of poultry	" "	22.50
	\$	<u>1323.50</u>

WORK SHOPS.

The work done in the shops has been given in detail from month to month in the Journal, it is therefore scarcely necessary to repeat it here. In addition to the requirements of the Asylum there is some work done for the Hospital in making the clothing needed and in washing it. The bread as well as the firewood used in that institution are also supplied by the Asylum and their funerals are conducted from this place. Still this does not afford a sufficient outlet for the results of the patients' labour especially in the way of sewing.

EXPENDITURE.

The amount expended from the public funds on account of the Asylum was in 1882:

For salaries	\$	7200.
" wages		4910.35
" maintenance, (\$15463.57 less \$502.78 repaid)		14960.79
	\$	<u>27071.14</u>

The weekly rate per patient was

For salaries	\$	0.37
" wages		.27
" maintenance		.77
	\$	<u>1.41</u>

In English money five shillings and 10½ pence per week. This is the amount as it is usually calculated. It is exclusive of medicine which is obtained from the Colonial Hospital. There was expended on the Public works account for materials for repairs &c. \$2381.86. Estimating the medicine at three halfpence per patient per week and adding the building charges it is seen that the total cost to the public of each patient in the Asylum was six shillings and sixpence per week. This is considerably lower than it has ever been.

INDUSTRIAL FUND.

This is made up of the money earned by the patients, but it does not include any part of the value of the work done by them for the Asylum itself. This can only be estimated by the saving which is effected. At the beginning of the year there was a balance to the credit of the fund of \$380.28, there was received in the year \$7,263.58 and expended \$7,543.66 leaving on the 31st December a balance on hand of \$100.20. The expenditure under this head comprises what is required to carry on the industrial pursuits of the patients. In it is also included the cost of all the bread used in the Asylum, and of any vegetables required in addition to those produced in the grounds. In one way or the other about one third of the gross cost of the institution is earned by the labour of the inmates. But for the special advantages possessed here for utilizing this labour, the weekly rate per patient would be ten shillings. The saving effected in this way amounted during the past year to \$16,161.60.

REPORTS FOR DECEMBER, 1882.

Staff.

The changes for the month amongst the attendants, were as follows. On the male side, one first class attendant (painter) left after giving notice, one second class absconded from his employment, and another was sent away at the end of the month having been found to be unsuited to the work. On the female side a first attendant who had been five years in the service resigned her appointment owing to continued ill health, she was an efficient attendant and had done good work for the Asylum. A carpenter attendant worked for the month on probation but left at the end of it. To fill vacancies, H. Mickle was appointed as

second class attendant male, on trial, and E. Sampson to the same grade on the female side.

Religious services.

The Revd. J. Rannie conducted the services on two and the Revd. F.W.T. Elliott on three occasions during the month. The average number of patients present at these was of males 147, females 77, in all 224.

Amusements.

These were of the usual character. Two fortnightly dances were held at which 227 patients (151 males 76 females) were present. They passed off well. On Christmas day the patients had the usual seasonable dinner consisting of roast beef and plum pudding which was thoroughly enjoyed by all, even by the East Indians.

Accidents.

One of the patients received from another inmate a blow on his left forearm causing a simple fracture of one of the bones. The blow was given with a round stick with which they were assisting to carry a piece of timber. The assailant was annoyed at the timber being allowed to fall and struck his fellow patient on this account. An attendant was close at hand but had not time to prevent the blow. The occurrence was seen by the medical officers.

Improvements.

The erection of a new piggery to accommodate the largely increasing numbers of pigs fed at the Asylum was begun in December. The joints of the hard wood flooring in the South Block, the newest building in the Asylum, were so imperfect and so much inconvenience was caused by the water passing through to the work shops when the wards were being washed, that it was found necessary to have them repaired and caulked. This work is now in progress. There were a considerable number of smaller repairs made to the buildings in the month.

NUMBERS IN THE ASYLUM.

	M.	F.	TOTAL
Remaining on the 1st Decr.	240	143	383
Admitted in Decr.	0	3	3
Discharged in Decr.	3	0	3

Died in Decr.	2	0	2
Remaining on the 31st of Decr. 1882	235	146	381

The population of the Asylum was less by two at the end than at the beginning of the month. The admissions were much below the average in number, whilst the discharges and deaths were about as usual, which accounts for the decrease. All the patients admitted came from Demerara. They were of :

	M.	F.	Total
Natives of India	0	1	1
" " Barbadoes	0	1	1
" " British Guiana	0	1	1

The proportion of immigrants amongst those admitted was thus two thirds. The patients discharged had all quite recovered and were in a condition to allow them to resume their respective occupations. They had resided in the Asylum:

	M.	F.	Total
Between 6 and 12 months	3	0	3

The causes of death in the patients who died were:

	M.	F.	Total
Grey degeneration of brain	1	0	1
Aneurism of aorta	1	0	1

In the case of aneurism of the aorta the patient died suddenly after eating breakfast, from rupture of the diseased blood vessel. The general health of the institution continued to be most favourable during December.

NUMBER OF PATIENTS EMPLOYED.

The industrial pursuits of the patients were of the usual kind and carried on to the usual extent. There were on the male side 200 patients engaged in useful work whilst 30 were unable to do so from illness and 9 refused to do anything. On the female side, the corresponding numbers were employed 111, unable 24 and unwilling 9.

DAILY AVERAGE NUMBER IN THE ASYLUM AND PERCENTAGES EMPLOYED &c.

	M	F	TOTAL
Daily average in Asylum	238.8	144.7	383.5

Percentage employed	83.1	76.4	80.8
Percentage confined to bed	1.8	3.4	2.4
Percentage attending amusements	63.2	52.4	59.2
Percentage attending Church	61.7	52.4	58.0

FARM.

Rain fell in December to an amount which was very favourable to the growing crops as well for planting and other farming operations. During the month considerable progress was made in the embankment on the flat by the side of the Canje. The amount of produce obtained was as follows: of plantains (free of stalk) 1,651 lbs., bananas 264. lbs., sweet cassava 1,029 lbs. and of sundry garden vegetables 514 lbs. From Old Fort farm 356 pints of milk were received. There were killed seven pigs, producing 468 ½ lbs. of pork. The cattle slaughtered numbered fourteen and 2,965 lbs. of beef obtained. The cattle cost \$340.50, deducting the value of hides &c. the cost of the beef to the Asylum was ten and seven tenth cents per lb. There was a loss amongst the live stock by death of one cow, and an increase by birth of two goats. The number of patients engaged in agricultural and allied work was 105.

WOOD-CUTTER.

Patients employed 5. There was cut and brought to the Asylum in the month 37¼ cords of firewood.

WORK SHOPS.

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CARPENTER.

Patients employed 6. Besides the work mentioned under the head of improvements the following was done in this shop. Made of tables 2, bedsteads 1, axe-handles 9, and coffins 36. The repairs numbered 73.

PAINTER.

Patients employed 3. There was no painter attendant during the month. There were painted in the month tubs 43, bridge rails one, bedsteads one, chairs one, doors three, and coffins 37. There were sized and varnished 5 tables. A patient who is a coach painter, painted lined and varnished the buggy belonging to the institution. There were put in 8 panes of glass.

TAILOR.

Patients employed 17. Again there was not work to keep the men here fully employed. There were made of patient's strong nightshirts 5, pairs of trousers 25, jackets 9, aprons 2, jumpers 32, strong pillow cases one, attendant's jackets 14, pairs of trousers 14, in all 102. There were repaired 276 articles.

SHOEMAKER.

Patients employed 3. There were made 3 pairs of boots, 8 pairs of shoes, 19 pairs of canvass slippers and one strap. The repairs numbered 22.

BAKERY.

Patients employed in kitchen and bakery 5. There was 10,527 lbs. of bread made. The flour used was 40 barrels. The yield of bread was thus 263 lbs. per barrel.

PRINTING OFFICE.

Patients employed 3. In addition to the usual issue of the Journal, there were struck off 3,710 impressions of different forms. There were printed 800 cards. There were 70 books stitched.

LAUNDRY.

Patients employed 42. In the month the articles of clothing washed amounted in number to 19,299. There were starched and ironed 1,846.

SEWING ROOM.

Patients employed 22. Again for great part of the month there was insufficient work for the patients employed here. There were made of men's day-shirts 29, nightshirts 6, cap covers 12, women's bed-gowns 18, attendant's dresses 2, bed sacks 8, towels 5, and table cloths 2. In all 82 articles. There were repaired 606 articles.

WORK ROOM.

Patients employed 25. Work done, 63 lbs. of chocolate, 19 $\frac{3}{4}$ gallons of cocoanut oil and 22 lbs. of coir made. All the coffee and curry powder used in the institution were prepared here.

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RECEIVED with thanks. The American Journal of Insanity. The

Barbadoes Globe, The Berbice Gazette, The Villager, &c. The receipt is also acknowledged of a large number of Magazines, and other publications kindly sent for the use of the patients by the Revd. T. Farrar, B. D. Rector of St. Paul's.

ABSTRACT CASH ACCOUNT
INDUSTRIAL FUND, FOR DECEMBER, 1882.

RECEIPTS			EXPENDITURE		
Balance cash in hand	\$	79 31	For purchase of plantains	\$	139 08
Received for sundries sold		82 18	" " flour and corn		250 54
" cocoanut oil		10 08	" " sheep		6 00
" fines stoppages &c.		28 93	" " newspapers &c.		7 76
" Hospital account		260 00	" " wheel for wagon		54 80
" Alms House account		186 02	" repairing clocks		2 00
" Out door poor		14 50	" band (one month)		14 80
" Custom House		3 50	" cooper's work		3 84
			" blacksmith's work		4 00
			" bricklayer's work		30 00
			" tinsmith's work		5 00
			" Caulker's work		28 00
			" stamps and sundries		1 20
			" sums paid under one dollar		17 30
			Balance cash in hand		100 20
	\$	664 52		\$	664 52