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1891.

PARLIAMENT OF TASMANIA.

DIPHTHERIA AT CAMPBELL TOWN.

Presented to both Houses of Parliament by His Excellency's Command.



DIPHTHERIA AT CAMPBELL TOWN.

To the Honourable the President and the Members of the Central Board of Health.

GENTLEMEN,

1. I HAVE the honour to report to you that, in accordance with the instructions of the Honourable the Chief Secretary, I visited Campbell Town on the 24th November, 1890, with the view of making further inquiries into the circumstances attending the outbreak of diphtheria in the town.

2. The attention of this department had been called by Mr. Bennett, Member of the House of Assembly for the district, to the reported prevalence of diphtheria at the Town of Campbell Town, and correspondence had taken place with the Local Board of Health, copies of which are appended hereto.

3. On the occasion of my visit I was met by Mr. Dowling, the Warden of the Municipality, and by Drs. Byrne and Tofft, and I am very much indebted to these gentlemen for their courtesies and assistance.

4. At the end of March a boy named Alfred Parsons, from Stony Creek, was brought into Campbell Town suffering from diphtheria, and his case proved fatal. During April two children of the name of Rice, from the same locality, were admitted into Campbell Town Hospital, and subsequently discharged cured. During June three cases were admitted from Avoca—Ethel Stanley on the 4th, Catherine Rubenach on the 10th, and Emma Spratt on the 17th. At Campbell Town I had no opportunity of inquiring whether or not there was any interconnexion between these cases, as they all apparently originated in the Municipality of Fingal, but Dr. Tofft has been good enough to make inquiries, and he writes—"I find that the Rubenach family was the first attacked, and one of the children died. Stanleys were the next: they lived about half-a-mile from the Rubenachs, and the children went to school together. Mrs. Spratt did not have any communication with either of the above families. One of the school teachers had complained of sore throat previous to any of the above cases, but had no medical attendant." Mrs. Spratt lives about a quarter of a mile from Stanleys. These cases seem to show that Avoca has not improved its sanitary condition.

5. For the first half of the year, and during the time the cases from Stony Creek and Avoca were actually being treated in the Hospital, there appear to have been no local cases of diphtheria at Campbell Town; but on the 9th of August a child named Bridget Haslam, aged 5 years, died of the disease at her parents' house in the town "after about a fortnight's illness," according to her mother's account. On the day of her funeral, the 11th August, three children were admitted to the hospital and treated for diphtheria two named Poole, and one named Wright—this last succumbing to the disease. The next case in order of time seems to have been at Mr. Richardson's, and then the disease seems to have spread rapidly. In all, eight of the Richardson family suffered, but none died, though one of the boys has subsequently died of syncope. The following is as complete a list as I could obtain of the Campbell Town cases, arranged chronologically as far as the first case in each family is concerned, but each family being reported together:—

Bridget Haslam	5 years (died)
Cornelius Haslam	4 "
Amy Poole	3 "
James Poole	2 "
Louisa Wright.....	12 " (died)

Albert Richardson	7	years.
Arthur Richardson	10	"
Harry Richardson	19	"
Isaac Richardson.....	17	"
Ernest Richardson	15	"
Robert Richardson	13	" (died of syncope)
Ada Richardson	5	"
Matilda Richardson	1	"
Thomas Littlechild	12	" (died)
Robert Littlechild	8	"
Nancy Littlechild	11½	"
Thomas MacOrmond	4	"
Edward MacOrmond.....	6	" (died)
John MacOrmond	5	"
Charles MacOrmond	14	" (died)
James MacOrmond.....	15	"
Christina MacOrmond.....	12	" (died)
Sophy MacOrmond.....	10	" (died)
Margaret MacOrmond.....	17	"
Ellen Lockett.....	13	"
William Jones.....	7	"
Rev. T. MacDowall.		
Elizabeth Ashcroft.....	29	"

Up to the present there have thus been 28 cases among the residents in Campbell Town, with seven deaths directly attributable to diphtheria. Such a mortality shows that the disease has been of a virulent type.

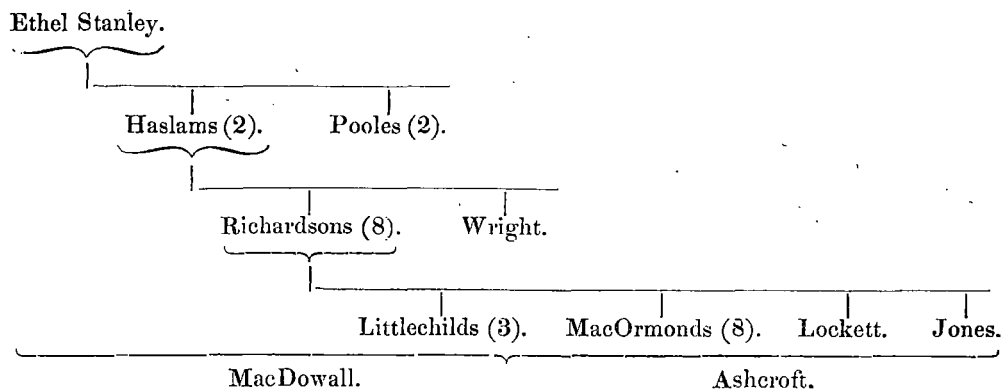
6. In company with the Warden and Dr. Tofft I visited, with one exception, every house in which the disease had occurred. Campbell Town is situated on a basaltic formation. The soil is not retentive, and the surface is slightly undulating, with falls toward the Elizabeth River. The water is supplied by waterworks, but there is no system of sewerage. The Haslams' house and premises were clean, the worst feature being that the back yard was at a higher level than the house floor. The Pooles live in a cottage in this back yard. The Wrights' cottage is clean and isolated. Mr. Richardson keeps about a dozen horses, and the stables are not far removed from the house; the back yard was not very clean; the slops and refuse are thrown on the manure heap in the stable yard; there is a large family. The Littlechilds' house is large and cleanly kept, the most objectionable circumstance being a drain at the back for surface water and overflow from the tanks, which seemed stopped up, so that the moisture soaked under the house. The MacOrmonds live in an isolated two-roomed cottage on the high bank over the river, and the accommodation in it was quite insufficient for so large a family—a father, mother, uncle, and nine children having only the two rooms to live and sleep in. The Locketts' cottage is clean, but the back yard is flush with the floor of the house. The Rev. Mr. MacDowall and Miss Ashcroft, the nurse at the hospital, evidently caught the disease during their attendance on patients. Altogether, though there is much to account for the spread of the disease, especially by overcrowding, when once introduced, I do not think that the condition of things seen at the various houses was such as to point to any local originating cause for this outbreak.

7. The following facts connected with the outbreak show not only the interconnexion of the cases, but I believe point out that the disease was imported into the town, and was therein spread by personal infection. As above mentioned, Ethel Stanley, of Avoca, was admitted into the hospital on the 4th of June, suffering from diphtheria. She was allowed to leave the hospital on the 28th of that month. She went to stay "about a week" with the Pooles, who live behind the Haslams. During her stay she played with the Poole, Haslam, and other children, and early in July she left for home. Towards the end of July, Bridget Haslam, one of the children who had played with Ethel Stanley, sickened with the disease, and died on the 9th August. Dr. Byrne was absent from Campbell Town at the time of Stanley's leaving the hospital, so I could not learn particulars as to her condition then, but was informed by Mrs. Haslam that she still was suffering from a discharge from her nose.* I could not get any precise dates as to her leaving Campbell Town, or as to the first appearance of ailment in Bridget Haslam, but it is probable that more than a fortnight intervened. Dr. Tofft has been good enough to write to me:—"In reference to the question of the incubation period of diphtheria the statements are very variously given as being from two days to three or four weeks, but the majority of the best authorities place it at from two to eight days; and further, the period is said to be of shorter duration during the prevalence of an epidemic." If, therefore, the time intervening between the departure of one child and the sickening of the other be too long to allow of the infection having been communicated by personal contact, perhaps the

* Dr. Tofft has subsequently written:—"Ethel Stanley was under Dr. Jackson's care, and he writes to say that she was perfectly well when she was dismissed from the hospital as far as regards discharge from the nostrils and the state of her throat, and that he kept her in the hospital a week longer than was necessary to see if there would be any improvement in the condition of the soft palate, which was perforated, and caused the nourishment to come through the nose."

infection was left behind in soiled handkerchiefs or some such articles. However this may be, the history of the subsequent course of the outbreak is clear enough. Dr. Byrne saw Bridget Haslam after death, and noticing the discharge from mouth and nose ordered them to be covered with cloths saturated in carbolic acid. But the precaution was vain, for Louisa Wright was allowed to kiss the lips of the dead child, and paid for her loving indiscretion with her life. I do not care to characterize the indiscretion of those who permitted the act. The children of the Richardsons, who lived a few doors off, played with the Haslams and Pooles. Young Littlechild, very fond of music, used to go to the Richardsons and tried to learn to play the cornet there, using probably the same instrument as his comrades. The uncle of the MacOrmonds works at the Richardsons', but sleeps with his relatives, some of whom had also other opportunities of seeing the other infected children. Ellen Lockett played with the Richardsons, and her mother occasionally obtained presents of milk from them.

8. The following diagram will, therefore, represent the probable interconnection of all these cases genealogically:—



9. It had been locally suggested that the spread of the infection had been caused by the drainage from the hospital. I do not think there is any likelihood that this was the case; but, apart from this consideration, I regretted to find that the suggestion relative to the hospital drainage made in my report of the 6th November, 1889, had not been carried out. I beg to repeat it:—"It would be desirable to immediately remove the outlet further from the main road. If practicable, it would be best to arrange for the absorption and purification of the sewage by irrigation over the cultivated land alongside which the outlet ditch runs."

10. In conclusion, I would strongly urge upon the local authorities the desirability of securing further powers by bye-laws to cope with outbreaks of infectious disease, and, in the meantime, to rigidly exercise the powers they already have, especially those conferred by the 102nd Section of "The Public Health Act, 1885," the 16th Section of "The Public Health Act, 1887," and the 35th Section of "The Public Health Act, 1889."

11. I regret to learn that cases of diphtheria are still occurring in the neighbourhood of Campbell Town. In connection with the etiology of the disease, Dr. Thursfield, at the recent Sanitary Congress of Brighton, in considering the introduction and spread of the disease by animals, was disposed to limit the infection to cats and cows; to which animals other medical men added poultry. In notifying a recent case in the neighbourhood of Campbell Town, Dr. Tofft remarks: "I learnt, however, that many horses were suffering from an infectious sore throat."

I have the honour to remain,
Gentlemen,
Your faithful Servant,

A. MAULT, *Engineering Inspector.*

Hobart, 3rd December, 1890.

APPENDIX.

Central Board of Health—Public Health Acts.

E. DOWLING, *Esq.*, Warden, Campbell Town.

DEAR SIR,

It has been reported to the Central Board that diphtheria has become so prevalent at Campbell Town that it is a matter for serious consideration. Will you be good enough to inform the Board whether there is any cause for anxiety, and whether the Local Board are taking any steps in the matter?

I may state that there were no cases reported to this Board during last month, and only two cases this month.

Yours, &c.

A. MAULT, *Secretary.*

Hobart, 14th October, 1890.

Campbell Town, 18th October, 1890.

DEAR SIR,

In reply to yours of 14th instant, which absence from home has delayed, I beg to say that the outbreak of diphtheria in this town has entirely arisen, so far as I can judge, from infection, and not from any local cause. In June last some children from Avoca were admitted to the hospital suffering from the disease, and upon their discharge were taken in by a neighbour, and one of them actually placed in bed with her child; this child subsequently died, and after death was kissed by a girl named Wright, who also died. Two other deaths have occurred (the last one—yesterday—will be reported in due course), both of which can be clearly traced to infection caused by visiting the friends of those suffering from the disease. A number of other cases have recovered. The Inspector of Nuisances has consulted with Dr. Byrne, and has obeyed all his directions as to fumigation and other sanitary precautions; and I trust that a lesson has been taught the inhabitants to be more cautious in their visiting for the future.

Yours, &c.

E. DOWLING, *Chairman Board of Health.*

A. MAULT, *Esq.*

Central Board of Health—Public Health Acts.

E. DOWLING, *Esq.*, Warden, Campbell Town.

DEAR SIR,

I HAVE to thank you very much for your letter of the 18th instant replying to mine of the 14th instant, in regard to a reported outbreak of diphtheria at Campbell Town.

It is satisfactory to know that nearly all the cases have recovered, and that the disease has arisen from infection, and not from any local cause.

I should be obliged if I could be furnished with the names and ages of the cases, and a statement showing, where traceable, the cause of infection in each case. Possibly Dr. Byrne and the Inspector to the Local Board might be able to arrange this, as it would be very interesting and useful.

I have, &c.

A. MAULT, *Secretary.*

Hobart, 20th October, 1890.

ON the 4th June last, Ethel Stanley, from Avoca, aged 12 years, was admitted to the hospital suffering from diphtheria, and recovered; but before admission was placed in the same bed with a child of a relative named Poole, residing on the same premises with a Mrs. Haslam. Two of Poole's children took the disease, and recovered; Haslam's child, Bridget, aged 5 years, was infected and died. Whilst lying dead, Harriet Louisa Wright, aged 12 years, also related to Poole's, kissed her, was admitted to hospital on 11th August, and died within a week.

A family named Richardson reside within 80 yards of Haslam's and Poole's. Several members took the disease, and recovered.

Thomas Littlechild, aged 12 years, living on premises adjoining Richardson's, and who played with Richardson's children, caught the disease and died in a few days.

John MacOrmond, aged 5 years, whose uncle resides with Richardson's, and with whose children he also played, caught the infection, and died in about a week. His brothers, aged respectively 7 and 15 years, were also infected, and recovered.

T. H. P.

Campbell Town, 27th October, 1890.