fever, 14 from "fever," 12 from measles, and 10 from diarrhoea. These 97 deaths were equal to an annual rate of 4.0 per 1000, which was 1.6 above the mean rate from the same diseases in the large English towns. The rates from these diseases in the Scotch towns ranged last week from 1.4 in Aberdeen, to 5.1 in Edinburgh and 7.2 in Greenock. The 23 deaths from whooping-cough in the eight towns showed an increase of 2 upon the number in the previous week. The 23 fatal cases of diphtheria showed a marked increase upon the numbers in the previous weeks; 7 occurred in Greenock, 6 in Glasgow, and 3 in Edinburgh. The 15 deaths from scarlet fever included 12 in Glasgow and 3 in Edinburgh; and of the 14 deaths referred to "fever," showing a considerable increase upon recent weekly numbers, 7 were returned in Glasgow and 4 in Edinburgh. Six more fatal cases of measles occurred in Edinburgh, making 170 recorded since April last. The deaths attributed to acute diseases of the respiratory organs in the eight towns, which had been 91 and 111 in the two previous weeks, were 109 last week. The causes of 82, or nearly 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 24.5 and 29.7 per 1000 in the two preceding weeks, further rose to 30.0 in the week ending the 9th inst. During the first six weeks of the current quarter the death-rate in the city averaged 27.8 per 1000, whereas it did not exceed 20.3 in London and 20.7 in Edinburgh. The 202 deaths in Dublin last week showed a further increase of 2 upon the numbers returned in the two previous weeks; they included 6 which were referred to "fever" (including typhus, enteric, and simple continued), 4 to scarlet fever, 3 to whooping-cough, 2 to diphtheria, 1 to measles, and not one to small-pox. Thus 17 deaths resulted from these principal zymotic diseases, against 13 and 14 in the two preceding weeks; they were equal to an annual rate of 2.5 per 1000, the rate from the same diseases being 2.4 in London and 5.1 in Edinburgh. The 6 deaths referred to "fever" in Dublin corresponded with the number in the previous week, as did the 2 deaths attributed to diphtheria. The fatal cases of scarlet fever, which had been 5 in each of the three previous weeks, were 4 last week. Seven deaths were referred to different forms of violence, against 10 and 4 in the two previous weeks. The deaths both of infants and of elderly persons showed a further increase upon recent weekly numbers. The causes of 37, or more than 18 per cent., of the deaths registered during the week were not certified.

MORTALITY STATISTICS OF TASMANIA.

The health officer (Dr. Edward O. Gibbin) in a report to the Legislative Council estimates the mean population of Tasmania in the year 1882 at 120,701, and states that the number of recorded deaths was 1906, equal to a rate of 15.7 per 1000 for the whole island, showing a slight excess upon the still lower rate in 1881. In Hobart Town, however, which with its suburban districts had an estimated population of 27,291, the death-rate was equal to 24.4 per 1000. This high death-rate appears to have been mainly due to the large number of deaths in the Invalid Depot situated within the Hobart registration district, but receiving aged and infirm poor from all parts of the island. The death-rate from the principal zymotic diseases was not high, being somewhat less than 2 per 1000. The rate of infant mortality, measured by the proportion of deaths under one year to births, was equal to 141 per 1000, which is excessively high compared with the rate of infant mortality in most of the other Australasian colonies. It is satisfactory to learn that good hospital accommodation for infectious diseases has been provided by the General Hospital, in addition to a small-pox hospital and quarantine station at Lindisferne. The city and suburbs, however, have at present no comprehensive system of drainage, the side channels of the streets in many places doing the duty of sewers, and hundreds of houses having no drains at all. Badly constructed cesspools abound everywhere, the contents of which soak into the surrounding ground, whence emanates an abominable stench. These and other sanitary defects are forcibly pointed out in the report before us, and constitute elements of danger to the health of the town. On the other hand, the health officer congratulates the town on being now supplied with a pure and abundant water supply.

Correspondence.

"Audi alteram partem."

WELLINGTON COLLEGE.

To the Editor of THE LANCET.

SIR,—Mr. Baldwin Latham ignores the difference between soil which has been trenched and drained and that which remains in its natural state charged with water and organic matter, and thus refuses to recognise what is a healthy and what an unhealthy soil, apart from the question whether such soil is malarial or not.

The term "marsh-miasm," which is synonymous with malaria, points to the association between marsh land and malaria, and no one can deny the existence of marsh land on the Wellington College estate, as well as the extensive expanse of marsh which stretches for miles to the south and south-west of the College.

A gentleman who made the survey of the Wellington College estate has volunteered to me the information that both he and his servant suffered from malaria in consequence. One of the worst cases of ague I ever saw was in a boy at Wellington College. Some of the boys have had enlargement of spleen, and in those who have had pneumonia and erysipelas the temperature chart marked the temperature of malarial fever instead of the well-known tracing of pure pneumonia and erysipelas.

Mr. Baldwin Latham admits the necessity for further sewerage on the estate, and he can only raise the question as to who is responsible. This aspect of the question is important. It would be manifestly unfair to impose on the small ratepayers in the district living near, but not on the estate, the burden of a heavy rate to provide sewerage on Wellington College property. While Mr. Baldwin Latham's system of sewerage is but partial, it places the College, like the ostrich with its head in the sand, in a position of self-satisfied security, but still exposed to danger from the district around and houses on the estate. Mr. Baldwin Latham writes in figurative language of my having "planted" myself near one of the marshes. I had no choice, as my duties called me there, but if he would advise the governors to do exactly what I did—namely, trench and drain the ground with a double system of land drains, and then cover over, as I did, the marsh land with six hundred loads to the acre of sweet purifying earth, brought from a distance of four miles for the purpose, he would purify and make Wellington College marshes as healthy as I think I have made mine.

The reference to my son's recovery is incorrect. He met with a grave accident in Cambridge, and was treated there throughout by Mr. Carver with a skill and success for which I cannot be grateful enough. He only returned to Wellington College when all his wounds had healed.

It is also an incorrect statement that diphtheria has only occurred at Wellington College within the last two years. The first case occurred twenty-four years ago. The present head-master's family have had diphtheria, and so did the former's; and it has occurred in a sporadic form, sometimes at long and at others at short intervals, and at last as an epidemic. But during its greater prevalence in the past two years in one term only one case occurred, so that its absence for a time is no indication of the permanent destruction of its cause. Some cases occurred before any of the houses or drains Mr. Baldwin Latham regards as the cause were in existence, and while the College and its sewerage were fresh from the hands of the distinguished architect, now dead, who designed it. I believe there is a close relationship between blood-poisoning, so-called, and diphtheria, and that these have causes apart from defective sewerage, and none more potent than emanations from marsh lands, whether malarial or not, but especially if malarial.

If Mr. Baldwin Latham had witnessed, as I have, the suffering and premature death of boys at Wellington College, which the highest skill from London was powerless to avert, and the grief of their parents, his sympathy would have been touched as mine has been; and he would not lend his distinguished name rather to check than advance the further sanitary improvements he admits to be necessary. Not one improvement would have been effected even now had I not persistently represented the existence of insanitary conditions there.

My acknowledgments are due to those in England, Scotland, and Ireland who have thanked me for having made the matter public, and to you, Sir, for the use of your columns. To have done what I have has cost me some friendships; but a medical man has higher duties than the retention of friendships when human suffering and human life are concerned. I remain, Sir, yours faithfully,
Wokingham, Berks, Feb. 14th, 1884. J. G. BARFORD.

To the Editor of THE LANCET.

SIR,—The controversy upon the endemic diseases at this school having so far exhausted itself, I may perhaps be permitted to add a few words from personal observations made in regard to one fatal case which occurred in a master's house attached to the school. Whether these diseases may have been due to a malarial origin or to more local circumstances of an insanitary nature, it is to be observed that both Mr. Barford and Mr. Baldwin Latham are more or less agreed in being "dissatisfied with most of the sanitary arrangements" and facilities upon the College estate which were in use prior to the recent improvements. Yet one cannot but feel the force of Mr. Baldwin Latham's assertion—presumably indisputable—that out of the twenty-five years the College has been in existence throat ailments have had prevalence only during the past two years. Thus preponderance of argument points to insufficiency in sanitary arrangements and facilities. And certainly this is borne out in that throat ailments are of common occurrence in places similarly situated in regard to sanitary circumstances, without any suspicion of malaria. To whom responsibility may attach that acknowledged sanitary insufficiencies should have prevailed for two years is a question which calls for decision. It is anomalous that a form of sanitary administration should have been perpetuated on the College estate, in the face of manifest (and preventable) urgency, which would scarcely be tolerated in any sanitary district in the kingdom.

In April, 1882, a young friend and connexion (*not* the son of a nobleman) died of pyæmia. To determine the origin of the cause of his death, together with his father I made an inspection of the master's house, in which he had resided; and in my investigations I received much courtesy and some assistance from both Mr. Barford and the head of the house. My report opens by saying, after referring to this particular death, "That a death from a similar cause had occurred within the precincts of the College in June last, and that during the winter term of last year (1881) and the last (or Lent) term of this year, the zymotic diseases, measles and scarlatina, had undue prevalence, together with a series of ulcerated sore-throats, are the further reasons why an inquiry into local circumstances, as a probable cause of this death, was deemed necessary." This somewhat extends the period of endemic infection beyond the given one of two years. The ventilation of the sewer drains was not considered adequate. But what called for particular remark was the system of earth-closets and their scavenging. These closets were situated in the main building (not separated by disconnecting passage) at the foot of a staircase which was in communication with the dormitory. The closets discharged into vaults which were closely sealed up, and which had no opening for ventilation but into the closets, and thus into the building. The soil, on removal from the vaults, was carried into an unprepared and uncovered yard, where other house refuse was shot, there to accumulate for about three months. This yard was situated at about four yards' distance from the house, and on to it opened the dormitory window of the "cubical" occupied by the deceased boy. The water-supply of the house was drawn from a deep well sunk under the house, and situated about twenty yards from the "soil" accumulation, and about five and ten yards from vaults on either side, other drains and soughs being in its vicinity. The result of an analysis of a sample of this water by Dr. Campbell Brown shows "that it contains the oxidised remains of organic matter of animal origin, showing that somewhere about 10 per cent. of the water has at one time been polluted before it percolated through the ground to the well." A brother of the deceased being at the Crowthorne School, an inspection was also made of these premises, where also earth-closets were in use. And here it was particularly noticeable with what scrupulous care and attention the minutest details of scavenging were performed. Distinct and separate

as these two schools are, there was but little or no communication between the boys of the two schools, each school having its own playground and chapel. Thus the influence of infection in spreading diseases, as throat ailments, from one school to the other was minimised.

From the foregoing details, which carry their own comment, the fact that practically the College and Crowthorne are subject to the same atmospheric and tellurial influences; that the College boys have for a long period had diseases of blood-poisoning amongst them, whilst the younger (and more susceptible) boys at Crowthorne have not; that the sanitary circumstances in these two schools so materially differ; from these it is reasonable to infer that the blood-poisonings which had prevalence took origin from, or were due to, the sanitary surroundings of the premises in the College grounds.

I am, Sir, your obedient servant,
Denbigh, Feb. 12th, 1884. J. LLOYD-ROBERTS, M.B.

To the Editor of THE LANCET.

SIR,—Having read Mr. Barford's letters, allow me to say that I agree with every word in them. Indeed, he might have made his case stronger. Those who run may read. Look at the Wellington boys as one meets them in the grounds or on the road. I have said over and over again to persons who have been with me, "Those boys are suffering either from overwork, insufficient food, or bad sanitary surroundings." I am the medical officer of health for the district adjoining that of Wellington College, was for some time medical officer to the Poor-law District in which the College is situated, and have had other work which for about twelve years past has brought me to Crowthorne and the district, at least three or four times a week. Under these circumstances you will, perhaps, kindly find room for this letter. Mr. Armstrong could not have been serious when he questioned Mr. Barford's diagnosis.

Yours faithfully,
Blackwater, Feb. 7th, 1884. C. J. DENNY, L.K.Q.C.P.I., &c.

To the Editor of THE LANCET.

SIR,—As one interested in the welfare of the Wellington College, I hope you will allow me space to suggest that it would greatly alleviate the anxiety of parents who have sons at the College if the authorities would publish for the next twelve months a periodical (say quarterly) report showing the number of sore-throats among the boys which have been treated in the intervals. I am certain that this course would have a good effect in allaying the alarm which has naturally ensued in consequence of the late correspondence in a journal of such high authority on the subject as THE LANCET.

I am, Sir, yours &c.,
February 11th, 1884. COLONEL.

OVERWORK AMONG PUPIL TEACHERS.

To the Editor of THE LANCET.

SIR,—In the interesting annotation entitled "Mr. Muddella in Scotland," which was contained in a recent issue, it is said:—"He recognises, too, that the pupil teachers, and especially the females, are themselves victims of overpressure to an extent even worse than the children." Judging by the number of pupil teachers who break down in health, it is unquestionably quite time that the fact of overpressure was not only recognised in official quarters, but was also followed by some active steps. It is really necessary now to inquire whether the occupation, as at present defined by the code, exerts an unfavourable influence upon health; or whether the army of teachers receives into its ranks individuals whose physique is below the requisite standard of strength. Both of these will probably be found to be the case. To exemplify the unfavourable influence upon health of the work and worry, I may quote the words of a young teacher now under my care for consumption. She says: "I may safely say that I never left school at the close of the day without feeling worn out in body and mind, and quite unfit for the evening work which had to be accomplished if I wished to pass the examination creditably, and fit myself for the retaining of my appointment." Again, as one illustration of the very unsatisfactory results of the present mode of selection of pupil teachers, there occur to me the cases of no less than six young teachers suffering from