notice, because were the stomach free from dark-coloured matter there is no other sign by which the dead body of a yellow fever patient could be distinguished from those of persons cut off by various acute diseases.

The following case will serve as an illustration. It is that of a child seven years of age, who died in the Naval Hospital. The symptoms had not been observed during life.

Body examined 22 hours after Death.

Body moderately fat; skin of a deep yellow colour all over; muscles not very stiff.

Head.—Traces of infiltration underneath the arachnoid; pia mater slightly injected; cortical substance of the brain of a lake-rose colour; medullary substance moderately injected; half a spoonful of serum in each of the lateral ventricles. Cerebellum and spinal marrow normal.

Chest.—Pericardium and heart healthy; no effusion in the cavity of the pleura; lungs of a rose colour, somewhat congested inferiorly, but otherwise healthy.

Abdomen.—No effusion in the cavity of the peritoneum. Stomach somewhat voluminous, and presenting a number of folds; the mucous membrane of a healthy consistence and colour, except near the cardiac orifice, where there were several red spots; duodenum normal. The small intestines contained a quantity of mucus; the internal membrane of the intestine apparently healthy. The *cohesion and consistence* of the liver were augmented; it was of a light yellow colour, and the middle lobe was paler than the great lobe; the latter presented several patches of a light rose colour, which passed into a still lighter tint in different points.

Gall-bladder and biliary ducts perfectly healthy.

The *urinary bladder* contained a large quantity of urine, and ascended above the pubis four inches.

Kidneys, spleen, and pancreas normal.

Of what disease did the patient die? We were compelled to attribute his death to the epidemic fever which prevailed, first, because the body presented no trace of any other disease; and, secondly, because two of the chief lesions which exist in yellow fever, viz., the peculiar colour of the liver, and the yellow tint of the skin were here present.

State of the Gall-bladder.

Having explained the changes which take place in the colour and appearance of the liver, we have now to examine the condition of the biliary canal and bile in yellow fever. From the anemic state of the secreting organ we would naturally conclude that the bile is deficient in quantity. This was apparently the case; there was but a very small quantity in the stomach and duodenum, while the gall-bladder contained much

less bile than is usually found after acute disorders, especially typhus fever, in which disease that fluid is commonly abundant, and of a pale colour. In all cases the biliary canals were healthy, and their lining membrane in a normal state. Hence it appears that, in yellow fever, as in acute diseases of our own climate, a general jaundice may prevail, without the existence of any obstacle to the free flow of bile through the hepatic canals.

If I wished to *demonstrate* that the alterations of the liver which I have just described were peculiar to yellow fever, I should complete my task by giving a detailed account of all the other organs in the thirty subjects examined by me. But this would extend my present communication much further than I had intended. Let it suffice to say that the pathological changes discovered in the other organs were analogous to what we find in patients cut off by other acute diseases; that such morbid appearances were rare; and that even during the prevalence of the epidemic all diseases of a different nature preserved their differential anatomical characters. Thus, for example, in two cases of typhoid fever, mistaken for yellow fever, the ulceration of Peyer's glands, and the absence of the peculiar state of the liver now described, removed all doubt which had been entertained during life respecting the nature of the disease.—*Arch. de Med.*, September, 1839.

ON THE
COMPARATIVE NUMBER
OF THE

INSANE IN THE SOCIETY OF
FRIENDS.

To the Editor of THE LANCET.

SIR:—In Dr. Prichard's work on Insanity, published in 1835, when treating of the moral causes of insanity, he adverts to the number of insane in the Society of Friends, as compared with the numbers in the other classes of society, we find the following statement:—

"It seems, then, that religious insanity, so termed, is a disorder from which the Society of Friends are in a great measure exempt. With respect to the more general question, whether insanity of any kind prevails among the Quakers to a great or to a comparatively small extent, those writers who have touched upon the subject have been divided in opinion. Dr. Haslam says, 'that it is very rare among the members of that Society.' Dr. Burrows thinks it very frequent among them, and he accounts for the fact by another supposition, viz., 'that their marriages are confined to the families

of their own Society, and therefore within a very limited circle.'

"With respect to the first point, which only is relevant to my present purpose, Mr. Tuke has furnished me with some data which are highly interesting. He says that 'the number of inmates of the Retreat, who are members of the Religious Society of Friends, has of late years been usually about sixty-four. The total number of Friends in England and Scotland does not, as he believes, exceed 22 or 23,000.' The mean of these sums, divided by the number of patients actually in the Retreat, gives 238.45ths, or somewhat less than 3 in 1000, which is a very high proportion, and considerably above that which is supposed to obtain in the general population of this and other countries.

"But there are circumstances which render it difficult to believe that such a comparative result is correct, and which seem to lead us almost inevitably to an opposite conclusion, or at least to show that some other considerations must be introduced in order to explain facts which turn out so contrary to all expectation from the known circumstances of the case. We have seen that the cases of 'religious madness,' so termed, are so few in the Retreat, that the community to which that asylum belongs, may be considered as exempted, in a great measure, from that modification of insanity. But the same observation may be made with reference to several of the most prevalent causes of mental derangement. Mr. Tuke informs me that 'not more than two cases of disease, apparently connected with intemperance in drinking, have occurred in the Retreat among the members of the Society since the year 1811.' This is well known to be in many asylums a very productive cause. Extreme poverty, and distress from actual want, form a large article in the tables of cases given by M. Esquirol and others; and from this cause of madness the Quakers are likewise protected by their habits and institutions. Mr. Tuke says, 'We have had a few cases attributed to disappointment of the affections, and several to domestic affliction and disappointment in business;' even these are scarcely as numerous as those referred to the same articles in other establishments. From all these considerations we are brought inevitably to the conclusion which Mr. Tuke has drawn. He says, 'unless, then, we have a larger proportion of imperfect structures amongst us than obtains in the world at large, we ought to have fewer cases of insanity in proportion to our numbers than is found in the general population.'

"But how is this conclusion to be reconciled with the fact, that the proportional number of cases is actually greater than what is calculated to obtain in the general population. Mr. Tuke observes, 'If I were

to enter into this subject I should demur to the data upon which the estimate of the proportion of lunatics in England rests; I believe the parliamentary returns to be so *incorrect* as to afford no fair ground for the estimate which is made; whilst the knowledge of each other which prevails in our Society, and the character of the Retreat, bring nearly all the cases which occur among us into the calculation; I have no hesitation in saying that the standard of sanity is, in some respects, higher amongst us than in the general population. Moral improprieties connected with mental peculiarities are more easily and more frequently stamped as insanity amongst us than in the world at large; while the care taken of our poor prevents any individuals of that class from being allowed to roam at large, or remain at home, on account of the expense of maintaining him in our asylum.' The truth of these observations cannot be illustrated by any remarks of mine. The more the subject is reflected upon the more correct and well founded will they appear."

A number of the *Zeitschrift für die Beuertheilung und Heilung der Krankhaften Seelenzustände* has recently come to my hands, where the subject of the ratio of the insane of our Society is again handled by Dr. Jacobi, when giving an account of a visit he had recently paid to a number of asylums in this country. He speaks of the subject much in the manner of the preceding author, with, however, some additional remarks, which arose in conversation on the subject with my friend Samuel Tuke, the Treasurer of our Institution, during his stay at York. Jacobi says that "the following reasons were assigned for these striking phenomena:—

"First. Great liveliness of conscience, with the constant straining after the maintenance of unspotted purity of morals, to further which the entire education of the Quakers tends, and which, when serious backslidings occur, gives rise to an uneasiness, which seizing hold of the mind with so much the stronger grasp, easily leads it to despair, and, lastly, plunges the person into insanity; whilst, from the circumstance of the Society leading in some degree the life of but one family, the conduct of every individual therein is under a far more immediate control than is the case in other societies, and renders the situation of offending individuals far more distressing.

Secondly. "The almost exclusive limitation of most of the members of the Society, as regards earning their livelihood, to trade and commerce, agriculture being nearly excluded, as well as all scientific emulation, so far as this is required for the prosecution of political objects, because Quakers, on account of their religious principles, are excluded from the Government, from all political and ecclesiastical offices, as well as

from military service, and therefore find less frequent occasion to concern themselves with the studies and discipline thereto pertaining. In a scientific point of view, therefore, they find themselves, for the most part, restricted to the study of the departments of natural history, with medicine as a branch of it, and only devote themselves to philosophy, theology, and history, according to the smaller need they find among themselves for such sciences; the consequence, however, of the restriction of the great bulk of the Society, in its external activity, to trade and commerce is, that the spirit of trade and commerce is far more dominant among the Quakers than on other grounds one would suppose, and that, therefore, this spirit occasionally brings forth among them its pernicious fruits, though to a more limited extent, and occasions mental derangement so much the sooner, in proportion as it is easier for an inward feeling of discrepancy to be engendered under such circumstances among men brought up to so much fidelity of conscience.

“But there springs from this a third reason; for a great number of the members of the Society, in their universally prevalent struggling to procure for themselves a secure and independent livelihood, when so many never attain it at all, or at least only late in life, remain unmarried; the injurious consequences of this, in regard to the integrity of the organism, in both sexes, especially in the female, and in facilitating the appearance of insanity arising from structural unsoundness, are indisputable. Closely allied to this there exists also a fourth, arising from the fact, that in consequence of the limited number of the members of the Society, marriages, when they do occur, so very often take place between persons related by blood, that the offspring often in a physical as well as a psychical point of view, experience disadvantages well known and often previously noticed.”

I have nothing to object to these statements, still there is one circumstance which has a very important bearing on the question, and which appears to be entirely lost sight of by all parties; and as the subject has been brought before the public by Dr. Prichard, and is still kept alive by the more recent work of Dr. Jacobi, that the whole case may be before the public, I am induced to pen the present statement. The circumstance, then, to which I allude is the increased duration of life in our institution, beyond that which obtains in other similar public establishments of the country. About four years ago a cause was tried at our summer assizes, in which an action was brought against an insurance office, to recover a sum of money insured on the life of a person deceased; the payment was resisted on the ground that the deceased was a lunatic at the time the insurance was effected, that his

lunacy was concealed from the office, and that insanity was a disease tending to shorten life. On the trial a physician stated in evidence, that in the institution over which he presided, and which he stated to be one of the best managed in the kingdom, the ratio of mortality was $7\frac{1}{2}$ per cent. per annum; but that in another institution which he mentioned, it was double that number. I was myself applied to by the agents of both parties, to ascertain what evidence I could give, if placed in the witness-box; but my *opinions* did not suit one party, nor my *facts* the other; for in making a careful calculation of the ratio of deaths in our institution, I found the yearly average to be exactly $4\frac{1}{2}$ per cent. This average was based on a quarterly report of the number of patients, from the time the institution was first opened in the summer of 1796. From the reports of other institutions, I believe that a mortality of 10 per cent. per annum, is not at all above the average of the public asylums of the country taken collectively, and for the same period of years; and if I am right in this supposition, it evidently follows that with a mortality of less than half, we must have a large accumulation of old cases, which necessarily has a very unfavourable bearing, when we are taking into consideration the proportion of the insane of our society at the present day.

I think I cannot more fully illustrate my views than by sending a table of the ages of all the deaths that have occurred in our institution for sixteen years past; a table which, as I apprehend, will exhibit a result quite unparalleled in the experience of any similar public institution, showing, as it does, that out of 84 deaths 41, or very nearly one half, were upwards of 60 years of age; that 24, or more than a fourth, were upwards of 70; and 12, or exactly a seventh part, were above 80. My reason for restricting the table to the period mentioned is, that it is now something more than sixteen years since I entered on my present office; a new burial-ground was opened shortly before I came. This table comprises all the deaths that have occurred since the ground was opened. The register of these cases has been kept by myself, and it contains all the deaths I have had to register.

I have no doubt but that the experience of the institution, as to the number of deaths, was quite as favourable during the superintendence of my predecessors as it has been during my own. Since I made the calculation before alluded to, we have had three years of unusual mortality; on two succeeding years we lost several of our more feeble and aged patients by epidemic influenza, which was very prevalent and fatal in our neighbourhood on both occasions; and last year we lost a greater number of patients than in any former year, without any epidemic; these three years of unusual mortality,

so close together, will have raised our ratio to above $4\frac{1}{2}$, though it will still be below $4\frac{1}{2}$, per cent. per annum.

While on the subject of average mortality I would remark that I think the only correct way of taking it is to count the average number of patients in the house during the year, and not to count all those who have died, and those who have been removed during the year, and add them to the number in the house at the end of it; such a mode of calculation, however correct it may be when applied only to numbers, is anything but correct when time is taken into account. It is evident that in many cases, the average must be taken only in weeks, and in some it may be days, instead of a year.

From the last report of the Glasgow Asylum, which we have recently received, it appears that the latter is the Scotch mode of taking averages; the report says, "The number of deaths is 11 this year, or about 6 per cent. (our total treated being about one hundred and ninety-seven), while the number last year was only 8, or about 5 per cent." At the close of the year the number in the house was only 148, and it does not appear that there ever was a greater number at one time; had I calculated our per centage in the same manner it would have been reduced from $4\frac{1}{2}$ to below 3 per cent.; at least, there is not much to be learned from the deaths of a single year, for on several occasions we have not lost a single patient in the course of the year. I remain, Mr. Editor, thy very respectful friend,

THOMAS ALLIS,

Superintendent of the Retreat.

Retreat, 9th month, 23rd, 1839.

TABLE of the Ages of all the Patients in connection with the Society of Friends interred in the Burial-Ground of the Friends' Retreat, since the present ground was opened in the year 1822.

From 20 to 30 years old.....	6
30 — 40	6
40 — 50	12
50 — 60	12
60 — 70	18
70 — 80	9
80 — 90	11
Above 90	1

75

TABLE * of the Ages of Patients unconnected with the Society of Friends, who have died within the same period, and whose

remains were removed by their Friends for interment.

From 20 to 30 years old	1
30 — 40	3
40 — 50	2
50 — 60	1
60 — 70	2
	<hr/>
	9
	75
	<hr/>
	84

CONTRIBUTIONS

TO THE

PATHOLOGY OF CHILDREN.

BY P. HENNIS GREEN, M.B.

(Continued from Vol. II., 1838-39, p. 924.)

ACUTE HYDROCEPHALUS.

CASE III.

Headach, constipation, and vomiting at the commencement of the disease; coma on the seventh day, which persists to the termination in death; infiltration of green-coloured serum at the base of the brain.

LEONORE BEREILLE, seven years of age, was brought to the Hospital of Sick Children on the 2nd of April, 1834. The child appears to have been endowed with a strong constitution; father and mother both healthy; she has been in Paris for six months only, and enjoyed during that time perfect health. Six days ago was suddenly seized with headach and vomiting; the latter symptom ceased on the following day, but the headach continued extremely severe; the sight now became feeble, and was even lost at moments. The child, however, was not compelled to remain in bed, but was able to ascend to the fourth story on the 1st of April. On the morning of the 2nd she was seized with alternations of agitation and somnolence, and her answers were somewhat incoherent.

April 3. The child lies in a state of somnolence; the face flushed in spots; returns no answer when spoken to; eyelids closed; pupils dilated, and slightly sensible to the light; abdomen retracted, and free from pain on pressure; no stool since the commencement of the disease; no paralysis or convulsive movements of the limbs, or muscles of face; sensibility of the integuments natural; deglutition not affected; from time to time she emits a slow and inarticulate cry.—Four leeches behind each ear; purgative lavement of senna and mercury; sinapisms to the legs; abstinence from all food.

4. Alternations of flushing and paleness; pupils dilated and motionless; the child cannot see; since this morning she grinds

* Of the class to which this table refers, at least four had been free livers, or the average age would have been greater.