the supra-renal bodies exert some important influence on the condition of the blood, and so cause the train of symptoms found in Addison's Disease, in other words that it is a disease of anæmia. Unfortunately for this theory, however, the observers who have examined the blood have hitherto not found any constant departure from the normal state.

There is no evidence to prove any relationship of cause and effect between the physical and mental symptoms in this particular case. Undoubtedly there is an intimate correlation between changes in the skin and changes in the higher nerve centres, and these are frequently of a permanent, as well as of a temporary nature; but as far as our present knowledge goes, we are only justified in considering the occurrence of a maniacal seizure in the course of Addison's Disease as a mere coincidence.

## OCCASIONAL NOTES OF THE QUARTER.

## Over-pressure in Schools.

Although we have no reason to suppose that the storm that has been raised on the subject of over-pressure in Board Schools has altogether subsided, but, on the contrary, think there will be much more said, written, and, above all, done, we nevertheless are disposed to glance at the present aspect and position of the movement, and to endeayour to ascertain whether definite conclusions have been reached, and whether any practical course of action is called for. We put aside as irrelevant to the general question at issue such questions as whether Dr. Crichton Browne assumed a more official position than was ever intended by Mr. Mundella, whether the Report\* branches out into disquisitions not germane to the subject in hand, whether the tone of the Report is altogether befitting a scientific investigation, or whether, as the critics say, its style is open to the charge brought by Lord Beaconsfield against that of his great rival, however unjustly. Nor is it relevant to the main question whether Mr. Mundella acted rightly in occupying the time and thought of a public servant required to devote the whole of his energies to his own department, and already "ab-

<sup>\*</sup> Report of Dr. Crichton Browne to the Education Department upon the alleged over-pressure of work in Public Elementary Schools, July 24, 1884. Also the Memorandum relating to this Report by Mr. Fitch, one of Her Majesty's Inspectors of Schools, August 4, 1884.

sorbed in his own official duties"-duties understood to be very onerous, in spite of the Act of 1882, which, by mitigating in some respects the irksome rigour of certain regulations respecting the visitation of Chancery lunatics, rendered the demand upon the time of the Visitors less open to the charge of "over-pressure." Some may say, indeed, that Mr. Mundella, not content with his inhumane proceedings in his own department, has extended them into another, and sanctioned what is analogous to keeping boys in after school hours and setting them lessons to learn at home. surprising under these circumstances that Dr. Browne apologises for any imperfections there may be in his work by stating that his "observations have been made in such brief intervals of leisure as I have been able to obtain from my official duties, and have been necessarily fragmentary and limited in extent." All these are matters of indifference to those who simply wish to ascertain whether over-pressure in schools is a serious evil at the present time, and who do not intend to be diverted from their object by the critics.

The detention in school of large numbers of children beyond the school hours is the first evidence of over-pressure which is adduced. While in some schools this rarely exceeds a quarter of an hour a day for two months in the year, and only applies to some of the children, in others it has been protracted to an hour and a half, and has been applied to all the standards for six months in the year. It must be admitted that the ordinary school hours, from 9 a.m. till noon and from 2 p.m. to 4.30 p.m., are long enough for children

from seven to fourteen years of age.

Home-lessons constitute the second proof, and the evidence

appears to us conclusive. To this we shall return.

The emphatic testimony of the teachers themselves is the third and very important proof of over-pressure. sixty teachers questioned by Dr. Browne only two denied its It should also be added that since this Report, a very large number of the teachers of Board Schools have met together to consider it, and have strongly endorsed it. Fitch defends the setting of home-lessons, and states that he always looks at the home-exercises and makes inquiries of the teacher in regard to his practice. We are, however, still jealous in regard to the abuse of this custom, nor can we affect to be sorry to learn that recent public discussions have tended to discourage teachers from what Mr. Fitch regards as the "legitimate use of home-exercises."

A fourth source of evidence is derived from the condition of the children themselves as seen by an ordinary observer, who would be able with a little attention to pick out the backward children, those, namely, on whom over-pressure tells most, and to divide these into the dull, the starved, and the delicate. It is strongly urged that if these backward children are expected to do just as much as the bright and clever children, there must be a considerable amount of overpressure. Does not the reputation of the school demand that they shall be forced to meet the requirements of the examination? In reply to these objections of Dr. Browne against the system of forcing backward and clever children alike through the same examination, Mr. Fitch asserts that considerable exemptions are made, and that an inspector "never examines for the standard a child who for any reason is placed by the managers on the exemption list." We are glad to learn that "in practice the rule permitting exceptions and withdrawals has been used by managers and teachers generally, though on the whole very carefully and judiciously; and the inspectors have been instructed in cases of doubt to allow freely all such exemptions which are claimed on the ground of the interests of the scholar; although, of course, they do not permit indiscriminate withdrawal of children on the ground that the teacher fears that they may not pass."

That the effect on half-starved children of cramming their minds with lessons must be injurious seems too obvious to require proof. Mr. Marchant Williams is quoted as having found in one of the Board Schools in London that 36 per cent. of the parents were out of work, that 40 per cent. of the children came to school sometimes without a breakfast, and 28 per cent. to afternoon school without any dinner.

When Dr. Browne has to answer the question whether over-pressure causes insanity, he comes into collision with the Commissioners in Lunacy, who maintain that the increase of insanity in England is apparent and not real, a view which, as is well known, has been ably supported by Dr. Lockhart Robertson in the columns of this Journal. It must be admitted, we think, that even if the proportion of the insane to the population is stationary, there may be fresh causes of insanity, such as over-pressure and worry, which take the place of some of the malign influences which have received a check from the social reforms of the last twenty years. We doubt, however, whether Dr. Browne strengthens his argument by referring to malaria, small-pox, and fevers xxx.

as formerly prolific causes of mental disease. The chief, if not the only, change for the better in the way of lessening the production of insanity would seem to be in the reduction of the amount of alcohol consumed. We are surprised also that Dr. Browne should find any cause for congratulation in the change of the emotional atmosphere of the country, which is now, we are assured, "calm and settled," and "free from those violent storms of political and religious excitement which invariably leave a large quantity of mental wreckage behind them." We should have thought, taking the periods chosen (1862 and 1882), that the former had the advantage of not having been invaded by the excited followers of Messrs. Moody and Sankey and the uproarious proceedings of the Salvation Army, who are surely responsible for a much larger "quantity of mental wreckage" than are any of the religious agitators of twenty years ago.

If, however, we are correct in this view of the relative influence of the various factors of insanity now and at the earlier date, we should still leave an ample margin for the effect of over-pressure in schools in inducing nervous affections and increased liability of the brain to become affected with disease evidenced by insanity. This may be taken as the equivalent of what has been gained by the spread of

temperance.

We next come to the alleged influence of over-pressure in inducing hydrocephalus, in which is included tubercular meningitis, as well as "water on the brain." Dr. Browne meets the objection that in spite of the diffusion of education the death-rate of hydrocephalus has been steadily falling, by showing that this is attributable to the diminished prevalence of hydrocephalus in infants under five, while at all ages above five the death-rate has greatly risen. The former is explained by the influence of sanitary reforms, while in the rise of mortality in later life, Dr. Browne finds a new factor at work, namely, brain excitement and fatigue consequent upon school work. On this point there will be a difference of opinion, for however probable it seems that excessive mental work should cause tubercular meningitis, there is no scientific proof that this really occurs, and those who regard the question from a purely clinical point of view will probably deny that they have ever been able to connect the action of mental processes of any kind with a single case of meningitis. cephalitis, in regard to which Dr. Browne gives a table showing that between 1861 and 1880 the death-rate from this

disease has nearly doubled. One difficulty, moreover, which attaches to this table is the much greater recognition by medical men of brain diseases, in consequence of which more cases would be credited to cephalitis\* now than formerly. With a view of escaping this fallacy, Dr. Browne takes diabetes, about which it is probable there would not be the same difference of opinions at different periods. As this disease is largely due to nervous conditions, and as it has increased in children and young persons, Dr. Browne makes use of the fact in support of his position, although he does not maintain that the increase of diabetes is connected directly with over-pressure.

We pass over the tables showing the increased mortality in nephritis, Bright's Disease, and rheumatism, and pass on to the liability to headache in the elementary schools of Lon-Of 6,580 children examined, 3,334, or 46·1 per cent., professed to suffer habitually from headache. Here again all will not be able to follow Dr. Browne in his conclusions, for in the first place, in spite of the precautions he assures us he took, an uncomfortable impression is left upon the mind that a part at least of the result obtained was due to the familiar pitfalls of Suggestion and the Imagination. Mr. Fitch, who was present on some of the occasions when the children having headache were requested to hold up their hands, appears to have been much struck with the probability of this source of fallacy, + and his well-known intelligence and his long familiarity with the habits of children ought, we feel bound to admit, to count for something. We fail to see how "the promptness, simultaneity, with which a little grove of hands was held up" was any

<sup>\*</sup> The returns under this head must be vague and untrustworthy in the extreme, but this does not affect the argument, as they point to some disease of the nervous system.

<sup>†</sup> In justice to Dr. Browne, we should add that the statement that "Dr. Browne's questions were in all cases clearly suggestive of the kind of answers he desired or expected to receive" of course only applies to those schools in which Mr. Fitch was present and observed, "with some amusement, the peculiar methods by which Dr. Browne sought to verify the conclusions he had already arrived at and publicly set forth." Or, again: "I confess that I witnessed with astonishment the manner in which the data for remarkable statements were got together. When I visited a pupil teacher's centre-class with Dr. Browne, leading and highly suggestive questions were put; hands were held up and counted; impressions and opinions were asked for and apparently accepted as facts; and there seemed to me to be a lack of the most ordinary precautions for distinguishing between what was typical and habitual from what was only occasional." We repeat, Mr. Fitch's criticism only applies to what he himself alleges to have observed.

presumption in favour of a genuine experience. We should have been inclined to draw a contrary conclusion. Again, if there were any who regarded headache as "a moral delinquency, the confession of which would be followed by caning or keeping in," about which we are very sceptical, we should suppose that far more held up their hands in the hope of procuring a holiday on the ground of headache, for which so charming an opportunity presented itself of obtaining a certificate from a medical visitor.

The other objection to these cephalalgic tables arises from the entire absence of a similar enquiry among the same class of children not subjected to school work. Such a table may not in the nature of things be procurable, but none the less is the conclusion arrived at lacking in the conditions of scientific evidence. It is psychologically interesting, apart from the question of over-pressure, that a very able head-master of one of the Board Schools found that the attention which the enquiry had drawn to subjective sensations had largely increased "the number of complaints of headaches, giddiness, faintness, sleepless nights, &c., and these complaints form strong reasons for absence from school. Complaints never before heard are now too frequent, of over-pressure causing these attacks."

We next come to the very important question of whether sleeplessness is of frequent occurrence among Board children. Dr. Browne found it difficult to obtain definite information, but he says: "My statistics and the inquiries made in collecting them, have borne in upon me forcibly two or three general conclusions, viz., that there is really a great deal of sleeplessness amongst the children attending elementary schools in London; that some of this is caused by overpressure; and that some of it, which is attributable to entirely different causes, conduces to over-pressure by keeping the children in a state of nervous exhaustion in which they are particularly liable to be detrimentally affected by their school works." Reduced to figures, the procurable information showed 41.04 per cent. of the boys and 35.09 per cent. of the girls suffered from sleeplessness, and that the lower standards suffered more from it than the upper, which is a fact which at first sight seems opposed to the idea of the influence of over-pressure, but is referred by Dr. Browne to the effect of muscular action and fatigue. Dr. Browne found that talking in sleep and somnambulism are common. Of 381 boys, 129 were sleep-talkers, and 28 were sleepwalkers; of 432 girls, 17 were sleep-walkers, and out of 382 in another school there were 20.

Chorea was sought for, but not found, probably in consequence of cases of this disorder being at once removed from school. However, out of 6,580 children 48 exhibited peculiar movements; at any rate, when agitated. It is found that the death-rate from chorea is almost exactly the same as it was twenty years ago. Our own experience is certainly in favour of a causal relation between over-pressure and

chorea, but it applies to those of older growth.

Stammering appears to be benefited instead of aggravated by schooling, and it is only fair to place this to the credit of the Educational Department. The prevalence of neuralgia and toothache is exhibited in a table giving a percentage of 54.2 per cent. Toothache, however, is not separated from neuralgia, and is so common a trouble with all children, and is so indefinite a malady, that we cannot attach any importance to this element in the count brought against the London Board Schools. Besides, when present, is it not at least as likely to have been caused by sweets as by over-pressure? Dr. Browne's enquiries do not appear to have been directed to this distinction in the etiology of odontalgia. Short-sightedness was found to be present in 5.6 per cent., and exhibits a steady rise from the lowest to the highest standard, in which among the girls there was a percentage of 10.7. Here, however, the value of the table, as of so many, in this report, cannot be secured until a parallel series of observations are made upon children in regard to whom the question of over-pressure does not arise.

Before leaving the evidence collected in regard to school-children in relation to over-pressure, we cannot omit a reference to Dr. Browne's visit to his native county in Scotland, where he made similar inquiries in some of the schools on his way. Here he found a state of almost Arcadian health and happiness, which even his vocabulary fails adequately to depict. Very few suffered from head-aches, only one knew what it was to be sleepless, and just one was short-sighted. Somnambulism was unknown. With very few exceptions "the children were pictures of health, sturdy, rosy, well-nourished. I looked round in vain for the sad, sickly faces to which I had become accustomed in Metropolitan schools, and saw smiles and dimples on every side." This is, no doubt, a charming picture. All, however, that it proves to our minds is the superiority of

Dumfriesshire over Middlesex,—the great inducement which it offers to immigrate rather than to emigrate. does not touch the question of over-pressure, for it is obviously unfair to compare the children in London Board Schools with those in schools "all situated in a purely agricultural district," the children themselves being "well fed on porridge and milk as the staple articles of diet, with broth, potatoes, butter, tea, and occasionally a bit of meat or bacon, warmly clad, and much in the open and uncontaminated air," and having "comfortable homes, where they keep good hours." Where the conditions are so entirely different, how is it possible to enforce by a reference to the Dumfriesshire schools the contention that the aspect and the diseases of the London School Board children are due to over-pressure? A good cause is here injured, for the alleged diseases become explicable by environment.

It is in regard to the pupil teachers in the Board Schools in London that Dr. Browne is more successful in demonstrating the injurious influence of over-pressure. returns refer to 388 persons, and it appears that the average time given to school service by them was nearly four hours overtime per week. A table is given showing the hours at which they leave off study on those nights when they attend "Centres," i.e., schools in which the pupil teachers in certain districts meet for instruction, and from this it appears that 94 cease study at 8.30 p.m.; 26 at 9 p.m.; 81 at 9.30 p.m.; 121 at 10 p.m.; 50 at 11 p.m.; and 16 at 12 p.m. table shows the hours at which pupil teachers leave off study on non-centre nights, and we find as many as 56 working till midnight, 142 till 11 p.m., and 131 till 10 p.m. addition to this, nearly one-half of the pupil teachers professed to devote more than three hours of their Saturday afternoon holiday to further study, and we fear with only too much truth. Of 416 female pupil teachers, the whole number said they were on their feet more than five hours a day, and 87 stated that they were not allowed to sit during school hours.

As might be expected, irregular and hasty meals were found to be very frequent. Out of 424, 257 asserted that this was their constant experience. Dr. Browne asked 526 pupil teachers and ex-pupil teachers to state how many pupil teachers had died, or so broken down as to have to give up their work, and 72 cases were reported to him, in which the result was attributed to the following causes: to con-

sumption in 22 cases, to brain fever in 13, to nervous exhaustion and headaches in 9, to general debility in 9, to loss of eyesight in 4, to epilepsy in 3, to insanity, heart disease, and loss of voice in 2 each, and to neuralgia, St. Vitus' dance, dyspepsia, uterine disease, and spinal curvature in 1 case each.

As to absence of work from sickness—an important point—it was found that out of 456 pupil teachers, 333 had been so absent during the previous twelve months, 62 of whom had been off work for more than a week, and 271 for more than a day. On the other hand, Mr. Fitch made enquiry at certain schools in London, having in all a staff of 220 female teachers, and found that on the day of the visit not a single head teacher, assistant, or pupil teacher was absent, and that only three had been kept away for a week in the year from over-work. It would be fairer, however to say seven, as three were detained by nervous debility and one by neuralgia, which probably arose from over-work.

Headaches were found to prevail more frequently than amongst scholars, viz., in 64.5 per cent. of the pupil teachers. Much is said in detail in regard to these headaches, but as we feel sceptical in regard to the trustworthiness of the replies, in consequence of the inevitable fallacies arising out of suggestion and leading questions, we pass over this portion of the evidence.

It is a noteworthy fact in regard to insomnia that only 24 out of 388 pupil teachers suffered from it. And here again the explanation of this unexpected result is sought in muscular exhaustion. Short-sightedness was found present in 16.7 per cent. We pass over the statistics of toothache as not convincing, although probably more reliable than in the case of children.

On the whole, we are very much inclined to believe with Dr. Browne that "only a radical change in our pupil teachers' system, a change which shall relieve pupil teachers from the excessive burdens under which they now groan, and give them leisure for thought, digestion, and recreation, can ward off so undesirable a state of affairs," namely, the evils to themselves and their children, which must inevitably follow the infraction of the physiological laws of our being.

We are led to this conclusion by what we have seen in taking part in the management of elementary schools, and by what we have observed in hospitals to which teachers have been brought, labouring under affections of the nervous system attributed to over-work.

It might have been well, as Mr. Fitch says, had Dr. Browne referred to the exceptional character of the present system of pupil-teacherism in the London Board Schools, but we are very sure that the evils arising out of the system are, and long have been, in operation, not only in London,

but the provinces.

We have seen too much of "the examination fever" to doubt its existence, although it has been more conspicuous among the head teachers, the assistants, and the pupil teachers than the scholars. Still, it is to some extent reflected upon them. Mr. Fitch is himself one of those admirable inspectors who is not only exceedingly able in the performance of his duties, but who is sympathetic with the staff and the children on examination day, so that all feel encouraged instead of frightened and disheartened by his inspection. But unfortunately all are not like him. We have known an inspector who, although painstaking and accurate, was so utterly destitute of consideration to the teachers, and of sympathy with the children, that the effect was most prejudicial to all concerned.

Objection may fairly be made to the term "over-pressure," and we should prefer that of over-work. "One naturally looks," says Mr. Fitch, "to a scientific expert to give greater exactness to the connotation of an indefinite term, to indicate at what point human effort, whether mental or physical, ceases to be legitimate and healthy, and becomes mischievous; and either to verify or correct by careful induction the loose general statements which pass current in the Press or in public meetings. But Dr. Browne does not do anyone of these things; on the contrary, he accepts anecdotes, rumours, and resolutions of local meetings, pieces them together with remarks and conjectures of his own, and then describes himself as accumulating 'evidence.'" We cannot altogether acquit the writer of this sentence from the charge of the exaggeration and rhetorical statement which he brings against Dr. Browne, for after making a liberal deduction for assertions unsupported by evidence, there remain important facts, obtained from the schools and statistical results, which cannot be disposed of without countervailing facts. can we set at nought resolutions passed by teachers at public meetings, especially when it is considered that their coming forward to make complaints requires, we should suppose, some moral courage. With a good case, it is all the more to be regretted if Dr. Browne has allowed himself to fall into any inaccuracies. The description of an ordinary day's school-work is, according to Mr. Fitch, inaccurate in every particular. "Though in all well-ordered schools the members of the staff are in their places a few minutes before the opening, work does not begin till nine. The school is dismissed at twelve, not at one. The evening class, even under the London School Board, meets only two evenings a week, and three hours of private study on the same evening are, according to Dr. Browne's own calculations, entirely unnecessary."

In conclusion, we would say that we believe that good will be done by the enquiry already instituted. "Superficial" it may have been. The number of children examined is, doubtless, infinitesimal compared with the total number. A dominant idea, to which expression had been previously given in somewhat sensational terms, may have coloured some of the observations. Still, we hold that there is substantial truth in the allegation that over-pressure exists, and to such an extent as to cause a serious evil, especially among pupil teachers, and the masters and mistresses themselves. We trust and believe that greater care will be taken in future not to force children to perform mental work beyond their capacity, that keeping-in will be rarely if ever resorted to, and that home-lessons will be sparingly enforced. We believe one great evil lies in the character of the knowledge which children in elementary schools are expected to master. With regard to payment by results, the evil effects are really not disputed, but the difficulty is to find a substitute. We hope some better means may be discovered, but the taxpayers have a right to demand that £3,000,000 of the public money shall not be paid to schools which are inefficient, and of this efficiency, what are the proper tests? Mr. Fitch has shown that mere book knowledge is not the only thing considered; and, still more, we trust, may be done in this latter direction.

Finally, we consider that service would be rendered to the interests of school children and teachers by the appointment of a Committee empowered to collect evidence on a sufficiently large scale to form a reliable basis for conclusions, and with ample allowance of time. We certainly cannot object to Mr. Fitch's demand that those who undertake such duties shall "have some perception of the true nature of

scientific inference, and will take some pains to understand the system which they propose to criticise," or, rather, to investigate. Calm investigation, conducted in a scientific spirit, with scrupulous accuracy, and with parallel tables of disease in the school and the non-school workers, might then be carried out, and the results would be proportionately trustworthy, and would command the assent of the public.

## Weldon v. Winslow.

We refrain from offering any comment upon this trial, as it is understood that the defendant will appeal against the verdict. It is important, however, to place on record the substance of the summing up of the Judge (Mr Justice Denman) so far as it relates to his laying down of the law, and his instructions to the jury.

QUEEN'S BENCH DIVISION OF THE HIGH COURT OF JUSTICE.

Nov. 28 and 29, 1884.

(Before Mr. Justice Denman and a Special Jury.)

Mr. Justice Denman, in summing up, directed the jury that all the issues raised would for the purpose of the day be ruled by whether the jury believed that the defendant had or not in the course of what he had done been actuated by some improper motive and had not acted honestly and bonâ fide in the performance of a duty. The burden was upon the plaintiff to prove affirmatively that the defendant had been actuated by some improper motive, or, in other words, that there was malice. There were three substantial questions which the jury would have to decide. Was the letter of the 14th of April a libel? That was, was it written in the honest and bonâ fide belief that Mrs. Weldon was a person in whose case proceedings ought to be taken of the character that were taken in reference to her confinement, or to supervision, or restraint of some sort; or was it written regardless of the real merits of the case as to that, and from some bye or sinister motive, such as to get her into an asylum in order to gratify the husband, or for gain or profit? Secondly, as to the letter that was published by the defendant in the "British Medical Journal," was that written in self-defence, or with the intention of further libelling the plaintiff, by calling her an insane person, with the knowledge that she was not that sort of person? And, thirdly, was the assault which was committed with the assent of Dr. Winslow when he sent persons to arrest the plaintiff committed in the bona fide belief that there was good ground for taking her to an asylum, or was it a case in which the