were never ill-used. From a kind of superstitious respect, they were treated with kindness and forbearance. He had hoped to accompany Dr. Urquhart to Copenhagen, as he was anxious to see the different institutions for the blind, the deaf, and the imbecile. A friend of his who had also visited France and Germany had said that these classes were better cared for in Denmark than in any other country which he had seen. He would like to know what the percentage of recoveries was, and what was the death-rate.

Dr. TURNBULL said that in a letter he had had from Mr. Sanborn, of Massachussetts, he mentioned that when he was in Holland he saw the same thing which they had been claiming as original in Fife, namely, the male patients under the charge of female nurses, at Meerenberg.

The CHAIRMAN—I understand that that was given up.

Dr. TURNBULL—In Worcester it was done partly. There was an impression that all the admissions in the Fife Asylum were under female nurses, but he never meant to give that impression. It was the cases of bodily sickness which were under the charge of females. New admissions were under the charge of attendants; in that they had made no change.

Dr. URQUHART thought that it was quite clear that Dr. Turnbull had the honour of introducing this system for certain classified patients in the Fife Asylum. It was a most interesting departure, of course greatly depending upon the geography of the asylum. One point of his paper was to give Dr. Turnbull every credit for his instituting this desirable change without knowledge of previous experience in other institutions. This department of the Copenhagen hospital was a clinical establishment such as had obtained for years in various other places. For instance, in Paris there was a clinical block in connection with St. Anne's Asylum, but this was not connected with any asylum, although insane patients passed through it to the Roskilde Asylum. He did not go into the percentage of recoveries, deaths, and so on, because the results would be misleading. If they added to the recovery-rate of Morningside the recoveries in the delirium tremens ward of the Edinburgh Infirmary they would of course get better results than at Morningside alone. They could not compare things which were so entirely different. When one talked of proposing such an arrangement for London it must be done in a most guarded way, because Copenhagen was more like Edinburgh in size, and therefore more easily arranged for.

Dr. YELLOWLEES asked if that was not what was done by the Barony parish in Glasgow, where they had a receiving house for all patients, and those who went to Lenzie were sent there first.

Dr. URQUHART thought that it was at the wrong place. He could not agree that a reception house should be in close association with any Poorhouse.

Dr. Campbell Clark had prepared a paper on "Changes and Complaints in Asylum Service," which, in his unavoidable absence, was read by Dr. TURNBULL.

A long discussion ensued, and was adjourned to the next meeting, on the motion of Dr. KEAY.

On the motion of Dr. TURNBULL a vote of thanks was given to Dr. McDowall for his conduct in the chair, and the meeting separated.

The members afterwards dined together in the Palace Hotel.

BRITISH MEDICAL ASSOCIATION.

(*Concluded from Vol.* XLII., *page* 895).

Morbid Shyness. By HARRY CAMPBELL, M.D., F.R.C.P. London.

Morbid shyness, like some other mental disorders, such as claustrophobia, is an exaggeration of a normal state. When shyness causes such symptoms as faintness, nausea, twitchings, and aphasia, and when it leads the sufferer to shun society, and to develop into a suspicious, self-centred hypochondriac, it constitutes a veritable disease. The morbidly shy come of a stock in which insanity,

epilepsy, migraine, etc., are common. Shyness is a species of fear; often it is the fear of adverse criticism, though praise may be more potent to excite it than disapproval. The morbidly shy are generally self-distrustful, but they may be self-opiniated, and even vain. They may be capable of violent fits of passion, and are apt to become morbidly suspicious. They are often endowed with a fine physique and great animal courage. Dr. Campbell enumerated at length the manifestations of shyness. As regards exciting causes, the being looked at is the chief; hence the possession of a physical peculiarity may predispose to it. The morbidly shy adopt numerous devices to conceal their weakness, and are often misunderstood. Excessive shyness leads to isolation and to the many mental evils which follow in its train—no longer subjected to the corrective influence of social intercourse, the sufferer gradually drifts into eccentricity and hypochondria. Morbid shyness may disappear on the approach of insanity, but, on the other hand, it may constitute one of its symptoms.

Insanity in Children. By W. W. IRELAND, M.D.

Dr. IRELAND explained the differences between the nerve tissues and mental characters of children and adults, and showed how this made a difference in the symptoms of insanity in each. He proceeded to consider the effects of education and civilisation. He had found insanity in children uncomplicated with idiocy to be a very rare occurrence, and therefore difficult to collect a sufficient number of cases from which to generalise. The causes were then discussed, and Dr. Ireland described a case of melancholia in a girl æt. 11. The mental disorder was accompanied by mitral insufficiency, and eventuated in recovery in less than a year.

Mental Overstrain in Education. By G. E. SHUTTLEWORTH, B.A., M.D.

The author urged that there was still evidence in certain departments of education of overpressure resulting in mental overstrain. Briefly referring to true and false views of what education meant, and to the necessity of treating each pupil, not merely as a unit in a scheme, but as an individual possessing inherent—not to say inherited—peculiarities both of mind and body, he pointed out that "overpressure" was not an absolute quantity, but varied in relation to the personal factors in a given case. Adverting to past abuses, he expressed the opinion that the incidence of overpressure did not now fall, as was the case when Sir James Crichton Browne made his report some twelve years ago, especially upon the dull children in our elementary schools. Under the new code it was rather the bright children who were apt to suffer, and precocious children were often the offspring of neurotic parents, and such were apt to break down under any mental strain.

In secondary education, similarly, the incidence of mental overstrain was most felt in preparatory schools, and by young boys of promise, who were unhappily often sacrificed to the Moloch of competitive examination. In public schools and higher grade schools generally for boys, the systematic inclusion of outdoor games in the school routine was a great safeguard against overpressure. In high schools for girls, however, the risk of overstrain was much greater. There was seldom adequate provision for outdoor exercise and recreation, and, too frequently, there was an utter disregard by the school authorities of the physiological conditions of budding womanhood. Girls were expected to learn all that their brothers of corresponding age were taught, music and other feminine accomplishments being superadded. Could it be wondered at that, considering the conscientiousness in preparation and the keen spirit of emulation displayed by girls, an overloaded curriculum too often eventuated in breakdown? There was more elasticity in the women's colleges than in the high schools; but the strain of frequently recurring examinations often proved trying to those whose antecedents were neurotic.

The etiologieal factors conducing to mental overstrain were discussed, special reference being made to the predisposing influence of neurotic or tuberculous heredity, of malnutrition, and of menstrual irregularities, as well as to undue stimulation of brain-cells.

Amongst symptoms denoting overstrain were noted such as the following. In young children a wearied expression, with bagginess of lower eyelids, a want of tonicity and balance in the muscular system, with twitchings, stammerings, jactitations, and chorea. In those approaching puberty further indications of neurasthenia appeared, such as aprosexia (inability to sustain attention), heterophemia (a tendency to answer wrong), neuralgia, sleeplessness or sopor, a general want of "pluck," and the condition which has been described as *anorexia scholastica*.

As regards treatment, prevention was better than cure; and nothing effectual could be done unless the patient were withdrawn from the conditions causing the overstrain. Then good bracing air, judicious exercise (such as tennis, rowing, or bicycling), diverting occupation, and suitable feeding were of importance; and care should be taken that no time was left for morbid introspection, for neurasthenia tended to melancholia. Ferruginous tonics were often very useful; and so were maltine and cod-liver oil, which would promote that comfortable condition of fatness which is, as a rule, closely allied with mental contentment.

Post-Influenza Insanity. By Dr. RUTHERFORD MACPHAIL, Derby.

Dr. RUTHERFORD MACPHAIL read an analysis of 20 cases of post-influenzal insanity admitted into the Derby Borough Asylum in the five years ending December 31st, 1895. This represents 4·8 per cent. of the admissions.

Of the 20 cases nine were men and 11 women. The youngest patient was a lad aged 18, the oldest a man of 71. The average ages were for men, 37·6; for women, 39·2. The largest number of cases (eight) occurred in the fifth decade. Hereditary predisposition to insanity was admitted in six of the 20 cases. In all except two the attack of insanity was an initial one. As to the form of mental disease, melancholia occurred in the cases of three men and seven women, mania in five men and four women, and one man was a general paralytic. Fifty per cent. of the cases were therefore melancholics, a larger proportion of melancholia than usual, for the records of the asylum during the five years in question show only a percentage of 20 melancholics to all admissions. The type of melancholia varied from simple depression to the acute forms, with well-marked delusions. The delusions most common in the maniacal cases were those of suspicion and of poisoning. Four of the cases were actively suicidal, and had made attempts on their lives at home.

The results were as follows:—Among the men four recovered, two were relieved, one died, and two are still under treatment and are chronic. Of the women eight recovered, one died, and two have become chronic. All the melancholics recovered except one woman, who died. The average residence in the asylum of those who recovered was three months for men and four months for women. It was worthy of note that in the cases under review the average percentage of recoveries to the total admissions was higher than usually obtains in public asylums, while the average period of asylum residence was considerably lower.

Endemic Insanity. By P. M. LAFFAN, L.R.C.P. & S. Dubl., Tara, Ireland.

Dr. LAFFAN described an area of some four square miles with a population of 300. He showed that out of the entire number of resident families some 50 per cent. were affected by insanity. The prominent facts were heredity and local alliances; but in addition Dr. Laffan brought under review certain peculiarities of the soil, and stated that cattle fed on some local pastures lose their horns, and horses their hoofs. He concluded that some pernicious endemic influence exercises baneful and subtle effects upon the nutrition of the nervous system of the inhabitants.

A Comparison between the Breaking Strain of the Ribs of the Sane and Insane. By ALFRED W. CAMPBELL, M.D., Pathologist, Rainhill Asylum, Lancashire.

This paper was read at the Annual Meeting held in London in 1895, and forms a sequel to one entitled, "The Breaking Strain of the Ribs of the Insane"

(*Journal of Mental Science*, April, 1895). Dr. Campbell was indebted to Dr. Barendt, of the Royal Southern Hospital, Liverpool, for supplying the 8th pair of ribs of 58 cases dying in Hospital. These ribs were tested in the same way as previously detailed, and the following conclusions were arrived at.

1. Long-established doctrines would lead us to anticipate that the average breaking strain of the ribs of the insane would be considerably lower than that of the ribs of persons free from mental disease, but this is far from being correct. My tables work out as follows:—

	Males.		Females.	
	Against the Convexity.	Against the Concavity.	Against the Convexity.	Against the Concavity.
Insane	41·04lbs.	42·14lbs.	20·68lbs.	20·90lbs.
Sane	42·73lbs.	42·63lbs.	23lbs.	23·3lbs.

This demonstration of the close equality of strength of the ribs of the sane and insane would tend to show that the comparatively frequent occurrence of fractured ribs in the persons of inmates of asylums is not to be attributed so much to an increased frangibility of their bones as to other causes with which we are all familiar—such as self-injury during attacks of excitement in delusive conditions, and when enfeebled by age and chronic dementia; likewise the necessary employment of unavoidably rough methods of restraint in the struggle to overcome resistiveness or to control a maniacal outburst.

2. The result of my examination shows that the average breaking strain of the ribs of those sane cases who died of some chronic wasting disease, such as *chronic pulmonary tuberculosis*, is lower by about 6lbs. than that of cases who suffered from some chronic but not wasting affection, such as *chronic Bright's disease*, and again that the ribs of cases coming in the latter category are weaker by about 6lbs. than those of cases meeting their death by accident or succumbing to an acute and rapidly fatal disease, such as *croupous pneumonia*.

My figures, therefore, indicate that the influence of chronic wasting diseases in the production of bone weakness is probably equivalent to if not greater than that of mental deterioration, but in this connection it must be pointed out that there is one form of mental disease which is unquestionably more potent in the production of bone weakness than any form of chronic wasting bodily disease—viz., *general paralysis of the insane*. Though this malady terminates the existence of persons so afflicted at that period of life when the ribs should have attained their maximum strength, it causes such a weakening of the ribs that at death their breaking strain will be found to have fallen some twenty pounds below the normal standard, and these bones are further peculiar in showing special microscopic alterations—all characteristic of acute degeneration. However, when we search for the actual or immediate cause of this low breaking strain of the ribs in general paralysis, we find that although the nervous and mental disease must act primarily in its production, it must be attributed in no small measure to the marked bodily wasting associated with the disease, and especially with its later stages, and therefore this point really favours the argument that bodily disease acts as powerfully in the production of bone weakness as mental disease. Rogers and Campbell Brown, *Liverpool Medical and Surgical Reports*, 1870, as a result of the chemical examination of some ribs of general paralytics, state that "The ratio of organic constituents to earthy matter is much greater, while the ratio of lime to phosphoric acid is distinctly less in the ribs of general paralytics than in those of healthy adults. There are the same differences between the composition of healthy ribs and those of paralytics as between the composition of adult bones and those of the fœtus, and generally the composition in cases of paralysis approaches that observed in cases of osteomalacia."

3. Just as in the insane one occasionally came across ribs with an extremely low breaking strain, so in those not mentally afflicted a certain small proportion of cases possessed ribs of exceptional weakness. Not only did these ribs on microscopic examination reveal pronounced architectural defects, but also, apparently

owing to a diminution in the density of the osseous elements, they were so softened that they could be readily sliced through with a sharp knife, and they could be bent like a soft metal tube of flattened shape. It would appear that in these cases we have to deal either with a reversion to that osseous condition which obtains in childhood, or with a condition similar to that occasionally found in *tabes dorsalis* and *syphilis*, or even with a change allied to *mollities ossium*. It is more than likely that this is dependent upon some chemical change, the exact nature of which we still remain ignorant of, combined with structural alterations.

The ribs of two women from the Royal Southern Hospital furnish excellent examples of this condition, One, æt. 60, died of senile decay; the other, æt. 50, succumbed to malignant disease of the uterus, and both cases yielded the extraordinary low breaking strain of five pounds. (So far as I have gone in my experiments this is a record for frangible ribs.).

Dr. Wiglesworth, "On Bone Degeneration in the Insane" (*Brit. Med. Journal*, 1883), found in three out of thirty cases in which he carried out a microscopic examination ribs which from his description might well be classed in this category. The subjects from which these ribs were taken were all well on in years, and the structural change was of an osteoporotic nature, and probably akin to the senile osteomalacia of Cornil and Ranvier.

It might also here be noted that this writer was fully alive to the importance of wasting disease and impairment of general health in the production of structural alterations in the ribs.

Cases such as these may be considered to be the Assistant Medical Officer's bugbear, for, as I have previously pointed out, owing to the incompleteness of the disunion in fractures of such ribs, not only does an absence of the three cardinal signs, crepitus, movement at the site of fracture, and displacement, increase the difficulty of detection a hundredfold, but also, so far as I am aware, there are no definite indications upon which a diagnosis of fragile bones may be founded during life. The single guiding line that I can offer is that all the cases I have seen have occurred in persons of advanced or moderately advanced years.

4. The influence of sex, age, and stature all stand in important relation to the breaking strain of the rib in the sane as well as in those mentally afflicted. In both classes the male rib possesses, roughly speaking, double the strength of the female rib. Then after the age of 35 the fragility of the rib in both classes and in both sexes increases progressively with advancing years, and microscopic examination proves that senescence is accompanied by a metamorphosis of the red marrow of the rib and a deposition therein of fat, along with a progressive decalcification and wasting of the bone. In short, a change occurs similar to that which is described as taking place in *mollities ossium*.

It was interesting to note the breaking strain of ribs of cases in which the cartilages had undergone the senile alteration of calcareous degeneration. In some instances calcareous cartilages were associated with ribs of strong resistance, but in others the effect was exactly the contrary, and one assumes that in the former a coincident deposition of lime salts occurs in both cartilage and bone, affording strength to both, whereas in the latter lime salts have been abstracted from the bone to its detriment and deposited in the cartilage.

5. Lastly, the breaking strain of the ribs is more or less proportional to the skeletal and muscular development of the individual. As in my former paper, microscopic examination revealed architectural deficiencies in all those ribs which broke at a low strain. These were alterations from normal in the shape and size of the rib, a diminution in the thickness of the investing rim of compact bone, a dilatation of Haversian spaces, and an absorption of or a simplification of the arrangement of the cancellous trabeculæ.
