to be localised and defined, while here we find the changes to be diffused, involving the different structures generally, and this, together with the close resemblance to the lesions in the brain, not alone as regards their appearance, but also as regards their apparent pathological sequence, would appear to indicate the occurrence of a general morbid condition taking place concurrently in both centres. The dilatation and subsequent induration and fibrosis of the vessels, the expansion and erosion of the perivascular spaces, the nuclear proliferation, the overgrowth of connective tissue, and the atrophic and degenerative processes in the nerve-elements present throughout, are the conditions almost universally found in the brains of those dying insane, though not peculiar to this class of nervous disease, the pathological sequence being, I believe, as a rule, in the order named; hence it seems probable that the spinal cord may participate simultaneously in the changes occurring in the brain in those thus affected, the degree of involvement of the different structures depending on the stage and persistence of the disease. The number of observations here recorded are, however, far too few in number to give anything like definiteness to this statement. Taken merely as individual examples of general forms of insanity, they simply point to the probability of such being the case. Turning now for a moment to the clinical bearings of the cases under consideration, we find that, although at the outset the forms of mental derangement differed somewhat, yet in all the same mental and physical deterioration finally ensued, death being preceded, at a longer or shorter interval, in each by progressive emaciation, muscular weakness, greater or less disorders of motility and sensibility, with almost entire abeyance of all the mental powers. Correlating these symptoms with the morbid conditions I have described, there would appear to be grounds for associating them in the relation of effect and cause. In addition to the diffused histological change, we find, in the first case, a central sclerosis, visible to the naked eye, affecting the upper dorsal and sacral regions, which displaced the grey columns, without totally destroying them or severing their connections; here there were progressive emaciation and muscular weakness, without any absolute loss of motor power.

In the second case, we meet with a "foyer" of softening confined to the posterior half of the cord in the lower dorsal region, and this was accompanied also with emaciation, tottering gait, a tendency to fall suddenly, and the formation of scattered bed-sores, with constant dribbling from the bladder. In the third case, an atrophic constriction of the cord in the lower dorsal region is met with, and, in this case, there was not that degree of motor impairment which, at first sight, might have been expected. This, however, may probably be explained by the atrophic process being confined to the white columns, the grey matter being only partially affected, many of the cells still retaining their motor function, and being in connection with the nerve-fibres lower down.

In the fourth case, we do not meet with any gross lesion of the cord, and here, although the paresis was far advanced, yet the power of moving the limbs was, to a certain extent, preserved. While, in the fifth case, we find extensive softening in the lumbar and sacral regions, the motor defects being little different from the last. Apart from these coarser changes, which, from their position, could only influence the motor power of the lower limbs, the histological alterations would appear to take some share in the production of the concomitant symptoms. Dr. Leyden, in his work on the *Diseases of the Spinal Cord*, ascribes the muscular weakness, the tremors, and atrophy of old age to pigmentary degeneration of the ganglion-cells of the anterior cornua, together with degenerative atrophy of the white columns and profuse deposits of amyloid bodies.

Referring again to the case of J. C., who, at the time of his admission to the asylum, was over seventy-five years of age, we find with such symptoms conditions quite similar to those mentioned by Leyden. Now, if these degenerative changes are to be accredited with the production of muscular weakness, tremors, etc., in the aged, the occurrence of almost identical lesions with quite similar symptoms in younger subjects, which we find to be the case in the other instances which I have brought forward, appears to afford reasonable grounds for regarding them in the same light; to look, in fact, upon the latter as cases of premature senility. Such cases of progressive wasting and general atrophy taking place in young or middle-aged subjects, without apparent cause, and increasing with greater or less rapidity to a fatal termination, form, in my experience, a considerable item in the death-rate amongst the insane, and the considerations which I have just mentioned would suggest the probable influence which the spinal cord, as well as the brain, may hold in their etiology. Dr. Hammond, in a paper published some time since ("The Brain not the Sole Organ of the Mind": *American Journal of Nervous and Mental Diseases*, January 1876), has advanced, on experimental grounds, the view that

the spinal cord is concerned in the mental functions of perception and volition, and, in the class of cases to which I now allude, these faculties are generally almost completely in abeyance; hence this assertion would appear to derive some support on pathological grounds. The consideration of such speculations is, however, beyond the scope of the present paper.

Returning once more to the cases I have described, we find in the last two examples — unfrequent in Irish asylums — of general paresis. In these, in addition to the lesions common to the others, special conditions exist which are now believed to distinguish this from all other forms of cerebro-mental disease. I allude to the cortical erosions resulting from the localised adhesions of the pia mater in the fronto-parietal regions especially, which can be seen in the specimens on the table preserved in nitric acid solution. These localised cortical lesions, as is now well known, have been recently discussed at length by Dr. Crichton Browne, in the sixth volume of the *West Riding Asylum Reports*, and Dr. Achille Foville, in the *Annales Médico-Psychologiques*, who look upon them as the primary organic alterations in this disease, and ascribe the various symptoms, mental and motor, to their presence. A further point of interest in these two cases is the occurrence of the vascular and degenerative lesions in the bulbar nuclei, which would appear to support the views of M. Voisin regarding the origin of the articulatory defects in this disease. As I have, however, I fear, overstepped the allotted time, and trespassed too far on your patience, I cannot now enter upon these points. My object has been merely to record the appearances I have observed, and, in so doing, I feel that some apology is necessary for the many repetitions which I have had to use in the descriptions of these, and which, I fear, have been wearisome; and I can only conclude with the hope that the specimens and drawings which are exhibited for your inspection may now prove of some little interest.

ON THE TRANSMISSION OF HEREDITARY RESEMBLANCES.

By GEORGE GREGORY, M.D., Great Lever, Bolton.

FOR several years, I have noticed, in hundreds of instances, that the first-born son frequently resembles in facial appearance his mother, or one of her ancestors, most frequently her father. The first-born daughter, in about six out of every seven cases, partakes of her father's likeness, or of his mother's features. When parents have four or five children, the children which follow are most frequently compounds of both parents in personal appearance. A large majority of women have a greater affection for their first-born son than for any other child, sometimes than for all their children. Mothers seldom readily confess this; but, if asked in a confidential sympathetic tone, as though there was nothing improper in having a favourite child, they will generally admit as much as warrants the conclusion to which I have come.

"Can a woman forget the son of her womb", not a son, much less a daughter? Women are influenced more by passion than by principle; they are more partial, and therefore less just, than men.

I was led to make the above comparisons from an observation made, twenty years ago, by one for whom I had great regard, and who had been very unfairly treated by his mother. Whether the frequency of these occurrences, with the proverbial exceptions which attach to, or seem to interrupt, the uniformity of all rules, is sufficient for them to be designated as rules, I am doubtful. I certainly do not claim for them the dignity of a law: which the judicious Hooker defines as "that which doth assign to each thing the kind; that which determineth the force and power; that which doth appoint the form and measure of working: the same we term a law". Hereditary tendency to disease seems to follow, but not with equal frequency, hereditary facial likenesses.

At a meeting of the Achill Dispensary Committee, Newport Union, held on the 23rd ult., Dr. Flannery was appointed medical officer to the Ballycrocy portion of the district, at a salary of £100 per annum, exclusive of registration, vaccination, and sanitary allowances.

At a recent meeting of the guardians of Carrickmacross Union, it was decided to prosecute several parties who had failed either to get their children vaccinated, or, when vaccinated, had neglected to bring them for examination on the eighth day following the operation, as required by law.