they are, in many places, covered with small knotty out-growths, indicative of that association of a tendency to osseous growth on the exterior, with atrophy of the interior, which is not uncommonly observed in the bones of old people, and under some other circumstances, and which has, I believe, been before observed in this disease.

The particulars of this case correspond with those given by Naegelé and others, the disease having taken place in the intervals between confinements, so as to render delivery impossible in a woman who had previously had easy labours.

The analysis of a portion of one of the vertebrae, kindly made by Mr. Liveing of St. John's College, shows it to contain 47.8 per cent. of earthy matter, instead of about 65, which is the usual proportion. This agrees with the analysis of bones, in similar cases, by various chemists, given in Simon's *Chemistry*, all of which confirm the generally received opinion, that the bones in mollities are not only subject to interstitial absorption and fatty degeneration, but that they undergo also an alteration in their composition, the chief feature of which consists in a deficiency of earthy matter. An account of the histological changes that sometimes occur may be found in Wedl's *Rudiments of Pathological Histology*, translated for the Sydenham Society by George Busk, F.R.S. (p. 237).

ON ECZEMA INFANTILE.

By ERASMUS WILSON, Esq., F.R.S.

[Read before the Annual Meeting of the British Medical Association, July 31st, 1856.]

[Concluded from page 762.]

I HAVE remarked, that the symptoms of internal disorder are but trifling at the commencement of the disease, and far from being severe during its course; they attract little of the attention of the mother of the child, or of the medical man. The great, the urgent symptom of the whole, is the teasing, the intense, the violent itching; sometimes the itching is constant with frequent exacerbations, sometimes there are intervals of repose, which are apt to be disturbed by any change of temperature, and then a violent attack of pruritus recommences; but the crowning suffering of all occurs at night; the child is often frantic with itching, it scratches with all its force, digging its little nails into the flesh, while the blood and ichor run down in streams. At last, worn out with suffering and exhaustion the child sleeps, probably to be awaked again several times in the night, by a repetition of the same agony. This constant suffering naturally wears upon the child's powers, and, added to the malassimilation, brings about that state of atrophy which I have previously described. But it is nevertheless remarkable how little the strength and spirits of the child are affected by these desperate paroxysms of suffering. In the morning, after a night of distress, the little thing is fresh and lively, eager for its food, and ready for the battle of the day; while the nurse or mother is languid and powerless from watching and anxiety.

Not unfrequently in eczema infantile, the mucous membrane of the mouth and nose, of the air-tubes and lungs, and of the alimentary canal, participates in the disease, and is either affected simultaneously with the skin, or takes a vicarious part. The affection of the alimentary canal gives rise to diarrhoea, and the production of mucus in large quantities, and sometimes of coagulated lymph. The affection of the mucous membrane of the mouth and nose is shown by redness, sometimes aphthae and augmented secretion; and the eczematous congestion of the mucous membrane of the air-tubes produces bronchitis in various degrees, accompanied with hoarseness from the thickening of the mucous lining of the larynx, and an excessive accumulation of phlegm throughout the lungs. This latter symptom is one which is calculated to give us some anxiety, and requires dexterous management; but it is less severe than common bronchitis, and is often as sudden in getting well,

as in its attack. When the mucous membrane of the mouth and air passages is affected, hoarseness is a conspicuous and striking feature of the complaint; the hoarse cry is unmistakable, and is sometimes the first and only sign of the congestion of the mucous membrane. It is a sign diagnostic of the congestion of the respiratory mucous membrane, as is whiteness of the eye of general anæmia.

In the treatment of eczema infantile, the three great principles which I have on every occasion advocated as the law of treatment of cutaneous disease, namely, *elimination*, *restoration of power*, and *alleviation of local distress*, are to be put in force, but with a change in their order. Elimination must always go first: in eczema infantile I would place alleviation of local distress, second; and restoration of power, third. The principle of treatment, the indication for treatment, being thus settled, let us consider the means.

For *elimination*, the remedy is calomel or grey powder. I prefer the former. One grain of calomel rubbed down with one grain of white sugar, or sugar of milk, is the dose for the youngest infant; for a child a year old, a grain and a half; for a child two years old, two grains. Of course this dose is modified according to the apparent strength of the child in the first instance, and in accordance with the action of the medicine in the second; the object to be attained being such a dose as will produce an efficient relief to the alimentary canal, and moreover such an amount of relief as shall act as a diversion to the morbid secreting action taking place in the skin—in other words, as shall divert the morbid secretions of the skin into their more natural and proper channel, the alimentary canal. For this purpose, calomel excels every other medicine; and from its small bulk it is convenient for exhibition, merely requiring to be dropped into the child's mouth. It stimulates the liver to an increased flow of bile, and in children it always acts most kindly on the alimentary canal. Again, a free action of the alimentary canal being secured, all probability of *repulsion* of the eruption by the remedies required for the second indication is at an end, and the mother's and nurse's alarm lest the disease should be *driven in* are set at rest. A free clearance of the stomach and bowels is therefore a primary, a necessary step, at the very commencement of the treatment. After the first dose, the calomel may be repeated according to circumstances; once a week, twice a week, every other night for a few times, even every night for two or three nights if it be absolutely necessary. In my own practice, I usually find once a week sufficient; and I am guided to the repetition of the dose by the state of the little patient. If there be any feverishness, fractiousness, irritability of temper, any increase of pruritus, inaction of the bowels, morbid secretion of the bowels, or threatened congestion of the mucous membrane of the air-tubes, then the calomel powder is to be administered at once without hesitation and without delay. The mother or nurse soon learns the moment for a powder, and, whatever prejudices they may have to the name of calomel, they are always ready to resort to it after they have once seen its action in this disease. As I have already said, I have no objection to the mercury with chalk, beyond the fact of its being more bulky and less agreeable to swallow, while it certainly possesses no recommendation which can render it superior to calomel. Sometimes I find one or two grains of nitrate of potash an useful addition to the calomel and sugar.

Having disposed of the first indication, and cleared out of the system any acrid matters that might be rebellious and capable of exciting irritation and feverishness; having moreover unloaded the blood-vessels of some of their watery and solvent elements by the same remedy; we may now have recourse to our means of *alleviating the local distress*, in other words, of soothing and healing the eruption, subduing the pruritus, and arresting the morbid discharge. We can do all this by the benzoated oxyde of zinc ointment* rubbed down with spirits of wine, in the proportion

* For the formula for preparing this ointment, see the "Pharmaceutical Journal", No. 5, for November, 1854.

of a drachm to the ounce. This ointment should be applied abundantly, and gently distributed upon the surface, until every part of the eruption has a complete coating. The ointment should be applied morning and night, and if accidentally rubbed off, or used upon parts exposed to the air and friction, it may be repeated more frequently. When once applied, the ointment should be considered as a permanent dressing to the inflamed skin, and never removed until the skin is healed, unless special conditions arise which render such a process necessary. To ensure undisturbed possession to the ointment, a piece of linen rag should be laid over it and maintained in position in any convenient manner. Thus, when the eruption covers more or less of the entire body, I have a little shirt made of old linen, with sleeves for the arms and legs, and with means of being fastened closely around the legs, and, if necessary, closed over the hands and feet. This little dress is to be worn constantly, night and day, and for a week together, if necessary. It is intended as a mere envelope or dressing to the inflamed and irritated skin; and its saturation with ointment, which necessarily ensues, only contributes to its greater utility in that capacity. Where the eruption is chiefly confined to the arms or legs, linen sleeves will be sufficient for the purpose. On the face, no other covering than the ointment is necessary, but the latter should therefore be used the more largely.

Where the oxide of zinc ointment is employed in the manner now described, the formation of crusts on the eruption is prevented, in consequence of the exclusion of the atmosphere and the consequent absence of desiccation. And when crusts are already formed, the object to be attained is to soften the crusts by saturating them thoroughly with the ointment, and then by gentle friction to displace them and substitute a thin stratum of the ointment in their place. When the eruption passes from the acute into the chronic state, and the process of exfoliation of the cuticle is active, gentle friction of the skin with the ointment is even more desirable than in the acute stage of the disease, and, at the same time very grateful to the little patient. On the scalp, the ointment should be applied in the direction of the hair to avoid matting; and as soon as the oozing of ichorous discharge has somewhat subsided, the hair should be gently brushed. I am rigorous in enforcing the non-disturbance of the ointment; but sometimes my aides carry their instructions beyond the proper point, and accumulate the ointment too thickly over a given part, retaining thereby the secretions, and interfering with the cure. In this case, if the finger be pressed upon such an accumulated plate of the ointment, the morbid fluids will be seen to ooze up between its chinks or around its edges, and the source of evil is detected. When such an occurrence takes place, the whole of the ointment should be carefully washed off the part with the yolk of egg, and after drying the skin, fresh ointment should be applied. This excessive accumulation of the ointment takes place the most frequently on the scalp, and is encouraged by the matting of the hair: a reason for keeping the hair brushed whenever the nature of the eruption permits.

Another of my instructions is to avoid washing the inflamed skin; it may be wiped with a soft napkin to remove exudations or secretions; but washing is unnecessary, indeed injurious, as tending to irritate the skin, and to increase the pruritus and inflammation afterwards. While the washing lasts and the irritated skin is softened by the water, the part is relieved and comforted, but the drying which follows more than avenges the temporary solace of the ablution. On the same principle, I never order or recommend lotions in this eruption.

In cases of *chronic eczema infantile*, that is, pityriasis capitis and psoriasis partium aliarum, the stimulant properties of the nitric oxide and nitrate of mercury ointments may be brought into operation. The former is specific for pityriasis capitis, in the proportion of one part to three of lard; and the latter, variously diluted, from one part in eight, to equal parts, may be used for the chronic eczema or psoriasis of other parts, particularly of the eyelids.

But even in the chronic state of the disease, the benzoated zinc ointment will be found to be an invaluable and indispensable remedy. In the parched state of the skin left by the chronic disease, glycerine may be found of use, as an emollient; but when any inflammation exists, it generally proves irritant, as compared with the zinc ointment.

We now come to the remaining indication in the treatment of eczema infantile, namely *restoration of power*; in other words, to correct malassimilation and restore the blood to its normal and healthy condition. For this purpose, the great remedy is that admirable alterative tonic, *arsenic*. It is remarkable how well infants of the earliest age bear this medicine, and how rapidly in them it exerts its tonic and assimilative effects. As an effective harmless tonic, arsenic stands alone and without its peer in this vexatious disease. Indeed, in eczema infantile it is specific; it cures rapidly, perfectly, unfailingly. It would be difficult to say as much for any other medicine in relation to any other disease; and I pronounce this elogium on arsenic after a large experience. The preparation of arsenic which I select is Fowler's solution, the dose two minims to an infant from a month to a year old, repeated three times in the day with, or directly after meals; and as malassimilation is always attended with anæmia in a greater or less degree, I conjoin with the two minims of Fowler's solution fifteen of vinum ferri, my formula being as follows:—

R Vini ferri, syrupi tolutani, aa ʒss; liquoris potassæ arsenitis mxxxij; aquæ anethi ʒj. M. Fiat mistura.

The dose of this medicine is one drachm, with or directly after meals three times a day.

With these three remedies, namely, the calomel powder, the benzoated oxide of zinc ointment, and the ferro-arsenical mixture, representing as they do the three indications for treatment of eczema infantile, I regard the cure as certain and rapid, and failure impossible; and if success were not complete, I should seek for the cause, not in the remedies, but in the mode of administering them. So confident am I of success, that I have often undertaken the treatment of this disease, without seeing the patient, and at hundreds of miles distance; being satisfied for my only *aide*, with the vigilance of an intelligent mother or nurse. I have never known any evil effects, present or future, result from this treatment; but I never fail to give strict injunctions that *if the medicine appear to disagree with the child it should be given less frequently*, say twice instead of three times a day, or *suspended instantly* if the child appear ill; moreover, that, in the event of such an occurrence, the calomel powder should be immediately resorted to. The period of continuance of the remedies must be left to the judgment of the medical man; the treatment sometimes occupies three weeks and sometimes more; and if a recurrence of the eruption should take place, the treatment should be recommenced, and conducted on the same principle and with the like precautions.

The *diet* of the child, while under this treatment, must be carefully inquired into; it should be good, wholesome, and nutritious. The leading constitutional indication is to nourish properly, and this idea should be carried out in the food as well as in the medicine. I find the juice of meat of great value in these cases, and it may be given either alone, as beef or mutton tea, or mixed with the other food.

The consideration of diet and food brings me to an important dietetic medicine, which is of great value in this disease, when the latter is attended with emaciation, and in the chronic stage; in acute cases it is less applicable. I mean the *cod-liver oil*. The child will often take the oil greedily in its natural state, and its good effects on nutrition are speedily made apparent: it may be given with safety to the youngest infant. In children somewhat older, and particularly in chronic cases, the cod-liver oil chocolate becomes an useful ingredient of diet.

When I have wished to avail myself of the excellent properties of the cod-liver oil in conjunction with arsenic, I have often found the following formula a convenient vehicle for its use.—

R Olei jecoris aselli ʒij; vitelli ovi j; liquoris potassæ arsenitis m℥iv; syrupi simplicis ʒij; aquæ fontanæ q. s. ad ʒiv. M. Fiat mistura.

The dose is a drachm three times a day, with or directly after meals.

Where eczema infantile is complicated with diarrhœa, or congestion of the mucous membrane of the air tubes or lungs, the arsenical remedy should be instantly suspended; the calomel powder immediately administered, and the ordinary antiphlogistic remedies adopted, magnesia and aromatic confection for diarrhœa, and ipecacubana for the bronchitic or pulmonary congestion. Where the air-tubes are loaded with phlegm, an emetic is useful; and a poultice to the chest and abdomen will be found an useful adjuvant.

In concluding my observations on eczema infantile and its treatment, I must repeat that I know of no cases in the whole catalogue of diseases of the human frame, in which the disease itself is more unpromising in appearance, and distressing in its effects, and at the same time more amenable and tractable under the treatment now laid down, than this disease.

ON MORAL IDIOCY.

By JAMES GEORGE DAVEY, M.D., Northwoods, Bristol.

[Read before the Annual Meeting of the British Medical Association, July 31st, 1886.]

THE very great and painful interest felt in what is called "the Leeds poisoning case", constitutes my apology for introducing to the attention of this meeting the subjoined remarks on Moral Idiocy. I cannot doubt that it is the duty of every psychologist to do his best to remove the present very general ignorance which invests the question of insanity, whilst, at the same time, he diffuses more correct and humane views relative to the requirements and irresponsibilities of those persons who are the subjects of disordered mind. If attention be kept directed to the newspaper press for a given time, it becomes painful to contemplate, not so much the large number of afflicted and irresponsible persons who, unheeded and uncared for, are left to themselves to scramble through the world as best they may, and to struggle with the difficulties which ever press on them from without as they best can, but the very many persons of decidedly unsound mind, who, rendering themselves amenable to the criminal laws, fall into trouble and disgrace, from which recovery or escape is hardly possible. It cannot be doubted, that to the ignorance which obtains concerning mental disorders, to the general inattention to the subject of insanity, and not less to the large amount of prejudice which is mixed up with the question of the responsibility of the lunatic, must be referred the constant infliction of punishments on the madman. Imprisonment, transportation, and even death, are now-a-days meted out to the lunatic, as the awards for acts consequent on nothing more or less than a depraved function of a portion of nerve-matter—as a fitting means of retaliation for conduct emanating from, and altogether dependent on, a certain amount of disorganisation of the brain, or of its coverings in immediate contact with the same. Did the recipients of such summary modes of official revenge create, of their free will, either the *depraved function* or the *disorganisation*, then might there seem some excuse for the course pursued; but, inasmuch as their disease originated rather in some infringement of the organic laws, probably on the part of progenitors, from whom these persons inherited their disordered conditions, surely there would seem the greater reason why they should command our sympathies, and deserve our protection from further harm, rather than our disgust and the infliction of discomfort, or pain, or even death.

It can hardly be credited that, in the judgment of very many reflecting men, partial insanity is considered no apology for criminal acts; or, what is the same thing, the recommendation to mercy, on the ground of defective intel-

lect, in the case of Dove, is declared by the *Times* to be a "dangerous precedent", "a doctrine which would weaken all the foundations of criminal justice". Now, it cannot be doubted that the death, or murder, if you please, of Mrs. Dove, was attributable not so much to Dove's *defective intellect* as to his *defective moral sense*. Dove's case was doubtless one of *congenital moral idiocy*: he came into the world without the ordinary moral feelings and attributes of man. He was born, as it appears to me, without those gentle sympathies or affections which belong to our nature, and was therefore insensible to those holy and emotional feelings which of themselves afford, under ordinary circumstances, and with the great majority of us, the only safeguards to virtue, the only means of control and right direction of our mere animal wants and desires. Dove, in so far as his moral qualities are concerned, was in much the same position as a native of New Holland or Southern Africa. Of the former, it is said that, knowing nothing of the abstract quality of right or justice, he has no word in his language to convey its sense; and with the state of such an one Dove's moral sense is in perfect harmony. To be satisfied of this, it is alone necessary to refer to the history of his life, through childhood to manhood, and on to this present time. Let us see what this history reveals—a history commencing with his early childhood, and ending with his incarceration within the walls of York Castle. On one occasion, he pursued his sisters with a poker, which he had made red-hot; he set fire to the curtains of his bedroom; he locked up lighted candles in closets; his great delight was tormenting cats and other animals; when twelve years of age, not liking the control attempted to be imposed on him, he bought a pistol, with the object of shooting his father and schoolmaster; he attempted to poison his master's horses; he poured sulphuric acid on his master's cows and calves; and, as a change in his recreations, he affixed ropes to the hinder parts of cattle as they stood in their stalls, and so hoisted them up, enjoying the ludicrous position he caused them thus to assume. He threatened to murder his master; on one occasion, he loaded the musket of a fellow-servant till it burst; he rode and drove in the most desperate manner; he paraded his fields by night with firearms, and performed steeple-chases in the day, "leaping the hedges like a wild creature," to quote the words of the *Leeds Mercury*. If to the above I add his sacrifice of his own property, the maltreatment of his horses, the killing of trees, the cutting of green corn, the attempt to fatten cows in a single night, his incessant playing with guns, pistols, and gunpowder, and threatening the life of every one around him; his alternate quarreling and gamboling with his wife, carrying her on his back, on his shoulders, in his arms, and under his arm, amid the shouts of spectators; his romancing tales about his adventures in America; his dealing with a wizard; his fancied sale of himself to the devil; his mixing up religion with ribaldry and wickedness; and so on,—we can have no difficulty in understanding of what stuff Dove was made—no hesitation in appreciating the character of the mental disorder under which he laboured even from his cradle.

I am not going to state that Dove's case belongs to any special class or description of *unrecognised mental disorders*; I will not claim for myself a deeper penetration into the workings of the morbid mind than I will for other medical writers: on the other hand, I would call attention to the fact that very analogous cases to that of Dove are mentioned by Mayo, Pinel, and Prichard. And if the authority of such men can be cited, though in an indirect manner, in favour of the view I have taken of Dove's case, my observations will be allowed to be not altogether undeserving a fair share of attention.

You will agree with me that a congenital defect of the moral nature of man is not less common than a congenital defect of his intellectual qualifications; that, in point of fact, there is such a thing as *moral idiocy*, as well as one of ordinary, *i. e.*, intellectual idiocy. If you doubt this position, if you hesitate to adopt this fact, it is only necessary