

ness, and do not, either by manœuvre or neglect, obtain his admission into an asylum, there does not appear to be any legal power, except after an inquiry under the writ *de lunatico inquirendo*, by which his money can be made available for his uses,

Communication to the Academy of Sciences of Paris upon the establishment at the Abendberg, and the necessity for European statistics upon Crétinism and Idiocy. By M. LE DOCTEUR GUGGENBUHL. (Report made 2nd half year of 1860, vol. li, No. 24, committing MM. GEOFFREY SAINT HILAIRE, ANDRAL, RAYE,)

You are aware, gentlemen, how much the opinions of men of science have differed hitherto upon the nature of this pest, so widely diffused in all mountainous countries, and even, according to the latest researches, in some plains also. Whilst Ramond de Carbonières has considered cretins to be a distinct race, M. Baillarger has thought it proper to designate them as monsters, and Hufeland has called crétinism a scrofula of the whole of human nature. The observations made during the last twenty years in the establishment of Abendberg have evidently proved that it is a grave affection of the cerebro-spinal system, consisting of various pathological changes, which produce the irregular and tardy development of the body and the obtuseness of the senses and of the intellectual faculties, which characterise this deplorable malady.

1. The autopsy has most frequently demonstrated a cerebral œdema, with anomalies in the lateral ventricles, which are dilated, and either filled or not with serum. In a more advanced period, the softening of the contiguous circumvolutions manifests itself. The microscopic investigation of many cases has not discovered any visible pathological traces, neither in the cortical substance, nor in the nervous substance, nor in the elementary fibres.

2. After this comes the imperfect or retarded development of portions of the cerebral, especially of the anterior and posterior lobes; sometimes general atrophy of the brain; more rarely hypertrophy of this organ is the cause of the cerebral stupor.

3. Induration of the brain, or of some of its parts, in some exceptional cases.

4. Hypertrophy of the bones of the cranium, which comprises the cerebral substance, characterises the rachetic form of cretinism in a more advanced stage.

5. The premature closing of the sutures by inflammation frequently produces a deformity of the cranium among cretins and idiots; but having frequently found the same thing among persons

of perfect intelligence, I believe that it cannot be classed among the pathological causes of cretinism. Thus this word is only a collective name, expressing different pathological states, with a tendency to progressive degeneration and the annihilation of the intellectual faculties.

Observation of our alpine valleys shows that we must distinguish a group of precursory symptoms which afflict a great part of the inhabitants without injury to the intellectual faculties; these are—goître, stunted growth, disproportion between the body and the limbs, and impairment of the senses; above all, deafness and strabismus.

The pathognomonic symptom of cretinism is cerebral stupor; but this does not prevent isolated faculties from being well developed, as an extraordinary memory for learning languages, music, drawing, which we have often had occasion to observe at the Abendberg. Fodéré, in times past, has maintained the exclusive hereditary character of all these maladies; and it appears, in truth, that in the valley of Aosta, where he practised medicine, there are some villages where cretinism propagates itself from generation to generation. But more extended observation shows that it is rather a local phenomena, and that, moreover, its hereditary quality generally plays a very secondary part (at the Abendberg, in only one case in thirty where the parents have shown symptoms of cretinism); but it must be admitted *that the germ of the predisposition* develops itself in the mother, because one meets everywhere with families in which a part of the children become cretins, whilst others preserve their health and intelligence, although surrounded by the same external influences. Moreover, it is certain that the most attentive observation, after birth, cannot always recognise these germs with certainty, because these children differ in nothing from others who are well organized, but weakly. It is then, in the greater number of cases, under pernicious local influences that cretinism develops itself during the first three years of life; most frequently near the time of the first dentition, with symptoms of softening of the bones (the rachetic form), of hydrocephalus (the hydrocephalic form), of scrofula (the scrofulous form), of general atrophy (the atrophic form).

Authors have generally admitted three degrees of cretinism, according as it is more or less completely pronounced, and this division has a practical value; many authors also, especially M. Ferrus, have established, with reason, a distinction between cretinism and idiotism, which agrees with the experience at the Abendberg. Idiotism is much less curable, although idiot children are generally well formed, strong and robust; in this they are distinguished from the cretins, who suffer from muscular weakness and other symptoms of ill health. It is in early age, and especially in the first six years, that we must combat this great evil and arrest

the progress of intellectual, moral, and physical torpor. The documents which I have the honour to transmit to the Academy prove that our efforts are often completely successful in reconstituting the type of humanity, and to restore these people as useful members of society, or at least to obtain for them a marked amelioration.

We will instance one of our young cretins, admitted, the beginning of last year, into a school in France where they train masters (at Glay, department of the Doubs). He studied there with the intention of fulfilling the functions of schoolmaster in his village. At first he was seriously afflicted with cretinism; and his history might serve as an example for the Academy.

F. M—, born in a village in the Oberland, is the youngest of four cretin children, who represent the different degrees of this malady. The parents are of ordinary intelligence; the mother has goitre, the father is addicted to spirituous liquors.

The birth of this boy was effected with difficulty; it was immediately remarked, that he had a large head of hydrocephalia form, with a weak and atrophied body. He was three years old before he could stand upright, and only knew how to pronounce two or three words when he was received at the Abendberg at the age of six years. Besides his large head, and the general atrophy, one also remarked the deformities which exist in all the forms and degrees of cerebral stupor, that is to say the deformity of the hard palate which is excessively arched, and which appears to be one cause of the difficulty of pronunciation among crétins.

The circumference of the head measures twenty inches (Paris); the transverse diameter, eleven and a half, and the longitudinal diameter, from the end of the nose to the *foramen magnum*, sixteen inches; the height of the body, thirty inches; the weight thirty-six pounds. The complexion is pale; the muscles soft; the tongue thick; the skin cold; the temperature low; the respiration four times slower than common; pulse feeble at sixty pulsations per minute, his appetite is voracious, but does not nourish him; the intellectual life null; it took him many months to learn to distinguish between the fingers of the hand; added to this, he was indomitably obstinate.

The fundamental principle in the treatment of crétinism, is to strengthen the physical development, before the development of the faculties of the senses; for experience has proved that every effort is dangerous whilst the physical forces are not established, the nutrition and the functions of the nervous system regulated; for this purpose, warm aromatic baths are used, frictions, remedies such as cod-liver oil, syrup of iodide of iron, electricity, &c.; strengthening diet, and plenty of exercise, and excursions in the bracing mountainous air, which is of itself, one of the most strengthening agents, because it regulates the nutrition and the hematosis. After three years of assiduous treatment, this young boy could read and write; but from

time to time, he relapsed into his former condition; thus, for many days he forgot the letters of the alphabet. Therefore the mechanism of elementary instruction ought to be continually seconded by questions upon the knowledge of objects in natural history, which, by strengthening the memory, and by giving the faculty of distinguishing, develops the judgment. It is by this method, continued for many years, that this young man has been able to speak many languages; the last few years he fulfilled the duties of my secretary, writing a regular autography under dictation, in French, in German, and in English.

Every asylum designed to young crétins, ought to be governed by a method of medical pedagogy; it ought to be both hospital and school, and to possess workshops, where they may learn various trades. Crétins already advanced in age, and incapable of receiving elementary instruction, have shewn a peculiar aptitude for mechanical or agricultural labour. Up to the present time, we have always attained a cure more or less complete among young crétins, that is to say, up to six years old, who were capable of pronouncing some words, and who were exempt from convulsions which is always a very serious complication. One class only has given us satisfactory results at an advanced age; it is that which the Sardinian commission has named cretinoids (crétineaux). The numerous individuals of this class can express in short phrases the commonplace things of life, but low and vicious inclinations are so developed among them, as almost to amount to a kind of insanity, for in the bosom of the family they give themselves up to debauchery and sexual excess. Amongst these our method has produced excellent results, even at the age of twenty or thirty, as many examples have actually shewn at the Abendberg, where they are employed in various household occupations. A large number of medical men, sent by various European governments, have been able from time to time to appreciate the method and its results. M. Le Docteur Nypce, on the part of France, has made an official report, and many other French medical men have published their observations upon the Abendberg, as well as M. M. Morel.* They have willingly recognised that establishments of this nature are a great benefit to the age in which we live. The establishment of the Abendberg is already imitated in Austria, in Bavaria, in Saxony, &c.; and it is with great delight, that I have just learned that S. M., the Emperor Napoleon has ordered the erection of a similar establishment for Savoy, Maurienne and Tarantaise, so terribly afflicted by this malady. Establishments

* (1) 'Annales médico-psychologiques,' 1846. (2) Gausse, "Lettres sur l'Abendberg." Bibliothèque universelle de Genève, Mars, 1819. (3) F. Dufresne, "Du Crétinisme, de ces causes, du traitement et l'éducation des crétins dans l'établissement de l'Abendberg." 'Revue Médicale de Paris,' Juin, 1846. (4) Professor Seux, 'Visite aux enfants Crétins de l'Abendberg,' Marseille, 1852, 8vo. (5) Scoutetten, 'Une Visite à l'Abendberg,' 3me édition, Berne, 1860, 8vo.

of this nature are the first steps to the study and introduction, of perophylactic measures so needful in the many countries where cretinism degeneration is endemic.

An amelioration to this extent was my first idea; but it is needful that science should yet make progress in order to understand the causes which are so multiplied and variable according to the country. Public opinion is already sufficiently fixed upon this work of humanity to encourage, as I hope, an European statistics of cretinism, the first necessary condition for the attainment of this noble end.

For this purpose I have drawn up a series of questions as a uniform basis, which the Academy of Sciences of Vienna and of St. Petersburg have already adopted, in requesting statistical materials from their governments, in order to put them into the hands of a commission, who will endeavour to educe from them the required information, and, by a careful examination of these documents, to arrive at a final conclusion in this complicated and difficult question.

In addressing myself to the illustrious institution of France, I trust that this learned body will, by its eminent initiative, give the impulse to all other societies of natural science which in the civilised world have not yet associated themselves with this humanitarian movement.

The predisposing cause appears to me, as I have already explained in my various writings, to be a specific malaria, which impresses its mark on all the inhabitants of cretinous countries.

Endiometric researches, according to the actual condition of natural sciences, are appealed to, in order to solve the opinions which are so varied on this subject, and to elucidate the following propositions:

1. To seek for the existence of a malaria in the state of the atmosphere—iodine, electricity, humidity, in countries afflicted with cretinism.
2. Is the water surcharged with earthy salts (too hard), or, on the contrary, deprived of the necessary carbonic acid?
3. The geological formation: has it affinity with the frequency and intensity of cretinism? What influence is exercised by the limit of elevation above the sea and above the soil of the valley?
4. What are the precursory symptoms of cretinism in man and in animals?
5. What is the proportion of hereditary or acquired cretinism?
6. The causes which favour its development—(a) mechanical, (b) nutritive, (c) intellectual, (d) other deleterious influences (the abuse of opium, of spirituous liquors, &c.)?
7. Is there a fluctuation in any country as to diseases, and under what influence? (The necessity of including persons with goitre, cretins, and idiots, in the periodical returns.)

8. Questions of race: are there races which are exempt from these maladies, or amongst whom the development of them is favoured by association? Is the admixture of different races a prophylactic means, or are there races which bastardize themselves by association?

"It is to be hoped," said Hirder, that illustrious friend of humanity, "that wherever men exist there will be found intelligent and happy beings—happy not only by their own reason, but by the general reunion of the intellectual lights of the whole human race." And as the history of cretinism shows us many localities where a generation full of life and intelligence has succeeded to the hideous and degraded types which these great evils create, this hope is no longer an illusion. In truth, experience has established that this malady, which ravages so many countries, is capable of being reduced to its sporadic form.

APPOINTMENTS.

JOHN FORSTER, Esq., late Secretary to the Commissioners in Lunacy, has been appointed by the Lord Chancellor the new Commissioner in Lunacy, in the place of W. B. Procter, Esq., who has retired. This appointment gives universal satisfaction. The great prose writer is a fitting successor to the charming poet; but more than this, the intimate knowledge of all matters relating to lunacy, which the late Secretary to the Commissioners possesses, offers an unquestionable assurance that he will be thoroughly acquainted with his new duties. The promotion of the Secretary to the legal Commissioners appears to be establishing itself as a rule, and an excellent one it undoubtedly is.

MR. PROCTER verifies his own line, that—

"Leisure must by toil be bought,"

and takes with him into his well-earned retirement the sincere affection of all who have the happiness to know him personally, and the entire respect of all who know him only officially. All will concur in heartily wishing him the re-establishment of that health which has been much impaired by devotion to his public duties, and in hoping that he may long enjoy the repose of age, and of "all which should accompany" it—

"As honour, love, obedience, troops of friends,"

and which, in his case, does so fully accompany an age warmed by affections won by personal worth, and crowned by the bright chaplet of literary fame.

THE HONORABLE WILLIAM CECIL SPRING RICE has been appointed by the Lord Chancellor to succeed Mr. Forster as Secretary to the Commissioners in Lunacy.