

cholic. Obsession was an elementary disturbance in the sense of personality, but a very common condition apart from ordinary insanity. Such cases were seen oftener in private practice than in asylums, and although they seemed to be trembling on the verge of melancholia they did not pass it. Obsession, however, sometimes ended in fixed delusion.

2. Dr. R. R. LEEPER read a paper entitled "Notes on the Treatment of Acute Cases" (see page 689).

3. Dr. DAWSON read "Notes on two cases illustrating the difference between Katatonia and Melancholia Attonita" (see page 686).

VOTE OF THANKS.

A vote of thanks was passed to Dr. Drapes for his kind hospitality, and he having responded, the proceedings terminated.

BRITISH MEDICAL ASSOCIATION.

ANNUAL MEETING, SWANSEA, 1903.

SECTION OF PSYCHOLOGICAL MEDICINE.

President: Robert Jones, M.D. Vice-Presidents: J. Glendinning, M.D., Edwin Goodall, M.D. Hon. Secretaries: R. S. Stewart, M.D.; R. H. Cole, M.D.,
The section was well attended, and the papers read were fully discussed.

PRESIDENT'S ADDRESS.

Dr. ROBERT JONES delivered an address on "The Development of Insanity in regard to Civilisation," and demonstrated that with the progress in civilisation mental breakdown became more serious and more frequent, and the varieties of insanity were more chronic and less curable now than when life was simpler and men more content. The care and cure of the insane was hardly known as a subject of serious study 100 years ago. The last century had been the most marked of any of its predecessors in regard to the material, mental, and moral progress of mankind; yet this advance had not been without sacrifices, for in the struggle that civilisation entailed the path of progress had been freely strewn with mental wreckage and physical degeneration.

As to what constituted insanity, delusions or hallucinations alone did not suffice, neither was it exclusively an intellectual disorder. Exaggerations and fluctuations of normal tendencies rendered individuals unstable, untrustworthy, and even dangerous, yet there might be hardly any loss of mind; nevertheless they were fit and proper persons to be detained in asylums; many of these cases were born constitutionally insane.

In primitive states of society insanity was rare, though idiocy and imbecility might be as prevalent, and the tendency to dementia was quite uncommon. The progress of mankind had caused a more or less complete change in the types of insanity during the past half-century. An inherited instability of nervous organisation was more frequent to-day, being responsible for more than one third of all occurring insanity. Amongst the causes of insanity both physical and mental stress had to be reckoned with. Charles Booth, in a recent publication *Life and Labour of the People*, had stated that the anxieties and uncertainties of professional life in the middle and lower classes were responsible for a very large proportion of insanity, which was to some extent due to loss of trade affecting bodily health; that provided wages were regular, although low, and there was no nervous strain, the tendency to insanity was slight. In their efforts to rise to the higher level of work and capacity demanded by modern civilisation, many failed owing to mental, physical, or moral deterioration. Civilised society, in forcing the pace, manufactured its own unfit—its lunatics, paupers, and criminals. London alone, in this respect, was responsible for the production of over seventy insane persons

per week, and this number was apparently destined unrelentingly to increase. The only neutralising agency was the fact that sterilisation followed in the wake of three or four generations of town-bred people—a natural law which ensured that the unfit should cease to encumber the earth. In cities, where the population had to accommodate itself to the pressure of competition, the tension of mind was more continuous; artificial desires multiplied, unhealthy activities were created, and ambition further forced the overwrought brain. Kraepelin had shown that muscular exhaustion weakened brain power in definite curves and ratios. It was not, however, overwork so much as worry and anxiety which caused actual insanity. Civilisation brought to the idle rich sensuous luxuries of all kinds; and to the poor lack of proper food, overcrowding, unsuitable surroundings both moral and hygienic, alcoholic indulgence, poverty, and crime, all of which bore a very intimate relation to insanity. Overcrowding led to physical discomforts and gave rise to facilities for moral contamination. Crowds of the dwellers in slums, stifled by the unattractive nature of their environment, sought to drown their misery in alcohol. One fifth of all the cases of insanity occurring in men, and more than half this proportion in women, were due to alcoholic intemperance. The crowding into towns of the country dweller had contributed to the deterioration of the physique of the nation in spite of the progress of sanitation, and deaths from cancer and nervous diseases had markedly increased. Athleticism must be regarded as a corrective of neurotic heredity, but if carried to excess must be attended with the danger of areterial overstrain, which was harmful to future generations. The present system of education had doubtless raised the general intelligence of the community, but it had a tendency to destroy individuality, and promoted useless cramming. Altruism had lessened and selfishness increased, charity being doled out with less liberality than heretofore. Legal statistics showed that certain offences were increasing; that marital inconstancy was more frequent, and that there was a laxity of morals amongst women, especially of the "smart set;" that commercial morality had declined, as evidenced by the number of crimes of embezzlement and betrayal of trust; and that gambling, especially in women, was becoming more general.

Syphilis was probably more common now than it was a century ago, and the increase of general paralysis of the insane—a result of syphilitic disease of the nervous system—pointed to the increasing ravages of the virus. Fanatics and faddists had raised such "conscientious objections" that there was but little hope of limiting the spread of syphilis by legislative regulation of contagious disease. Dementia præcox—a disease rare at the beginning of last century—was now as common as it was incurable, attacking some of the most promising of our youth who had succumbed to the existing mental overstrain. There was also an increased tendency to melancholia, especially among the educated and private class, with a less favourable prognosis than occurred in mania. The recovery rate therefore, from a combination of causes, had fallen *pari passu* with the alteration in the types of occurring insanity, which had been one feature in the production of the increase in insanity. Spiritual influence and the education of public opinion should be promoted to prevent the extension of lowered mental and physical vigour in our civilised communities.

THE PATHOLOGY OF GENERAL PARALYSIS.

Dr. W. FORD ROBERTSON, pathologist to the Scottish Asylums, opened a discussion on this subject, illustrated by lantern demonstrations. He stated that the pathogenesis of general paralysis was still unknown with anything like accuracy, and that therefore we had no right to conclude that it would always remain incurable. The syphilitic origin of the disease, though held by the majority of neurologists at the present day, was not yet sufficiently proven. Against the essentially specific theory was the fact that many observers had seen or reported cases of general paralysis in which syphilis had not previously occurred, congenitally or otherwise, and that many cases were now known in which the virus was contracted after the onset of the symptoms of general paralysis. Although statistics might show a high percentage of antecedent syphilis in cases of general paralysis, the fact was incontrovertible that only a very small proportion of syphilitised persons ever developed general paralysis or *tabes dorsalis*, and that therefore the doctrine—no

syphilis, no general paralysis—could not be entertained. Similar statistical evidence could be adduced showing that very high percentages of persons affected by tuberculosis had previously had measles, yet they did not believe any direct causal relationship existed. Moreover the syphilitic hypothesis did not explain the established fact that there were other conditions, such as chronic alcoholism, lead-poisoning, and excessive meat diet, which favoured the development of general paralysis. *Post-mortem* examination of the non-nervous organs or tissues of the body in cases of general paralysis showed that an active bacterial toxæmia was present. Dr. Lewis Bruce and Dr. Robertson had directed attention to the gastro-intestinal disorders that occurred in cases of general paralysis, and had published their belief (*Brit. Med. Journ.*, June 29th, 1901) that general paralysis was dependent upon a toxæmia of gastro-intestinal and bacterial origin; but Dr. Bruce had since modified his view so as to regard toxic infection by the *Bacillus coli* as a secondary or terminal infection. More recently Dr. G. D. MacRae, Dr. John Jeffrey, and Dr. Robertson had advanced the hypothesis that general paralysis was the result of a toxæmia dependent upon the excessive growth of bacteria, not only in the alimentary canal, but in the nasal tract and throat; and especially that of a diphtheroid bacillus, which gave the disease its distinctive characters. The recognised causes of general paralysis—syphilis, etc.—appeared to act as stimulants of the leucoblastic tissue of the bone-marrow, or directly damaged this tissue, so that the defences of the body against the invasion of bacteria were diminished or damaged. The protective functions of the body were thus impaired, and in such circumstances the bacteria normally present as saprophytes assumed a pathogenic character by reason of the protective forces of the body being weakened. The view was advanced that the special infective agent was an attenuated form of the Klebs-Löffler bacillus. The symptoms during life and the appearances *post mortem* were all in favour of the hypothesis of bacterial infection. Cultures were made in *post-mortem* examinations of twenty cases of general paralysis, the nasal or intestinal contents being used for this purpose. In seventeen of these cases, in addition to other bacteria, the diphtheroid bacillus was found in the cultures, whilst in the remaining three the bacillus was found by other means of detection. In eight out of the twenty cases this diphtheroid bacillus was found in very great numbers. A recent series of cultures from the secretions of the nose and throat of ten general paralytics in the Edinburgh Royal Asylum showed that the diphtheroid bacillus was present in nine cases. Out of sixteen cases of general paralysis where cultures were made from the brain *post mortem*, four showed the presence of the diphtheroid bacillus. The bacillus in these four cases must have obtained an entry either by the blood or by local infection through the nose. Experiments had been made with the diphtheroid bacillus introduced into the alimentary canal of rats with positive results—showing changes in the nerve-cells of the brain. The whole body of facts therefore supported the view of the specific bacillary origin of general paralysis of the insane.

CAVITIES IN THE SPINAL CORD.

Dr. R. S. Rows, pathologist to the Lancashire County Asylum, Whittingham read a short paper and exhibited lantern slides illustrating three different cases in which cavities in the spinal cord were found. In the first of these the cavity formation was due to atrophy of the nervous tissue and neuralgia, in the second to syringomyelia, and in the third to hæmorrhage into the perivascular spaces and substance of the spinal cord.

ALCOHOL IN ITS RELATION TO MENTAL DISEASES.

Dr. THEO. B. HYSLOP opened the discussion on this subject, and read a paper on the relationship of alcohol to physical and mental processes. He maintained that the rôle of alcohol in the healthy body was more harmful than good, and that its use was abuse. In debilitated and neurotic persons its use was comparable to a loan raised at a heavy rate of interest, which might be employed to cope with immediate and pressing needs, but which constituted a heavy burden on the borrower until repayment was completed. Alcohol produced an illusory sense of well-being and of mental energy and capacity without in any way enhancing mental power. On the contrary, it tended to lower the ability of performing the

more complex actions, both physical and mental. Alcohol caused acceleration and confusion of ideas, and stimulated the subject to restlessness and over-action. The vascular system reacted to the presence of alcohol by vaso-dilatation and by increased exudation of lymph into the perivascular tissues, and in chronic alcoholism characteristic morbid changes were produced in the brain. The increased exudation of lymph from the blood-vessels carried with it an increase in the number of extravasated leucocytes which thereafter underwent dissolution. Alcohol also acted deleteriously by absorbing oxygen from the blood-corpuscles or plasma, depriving the nerve-cells of normal oxidation processes. The effect of alcohol on the renal organs and the action of defective elimination on the cerebral tissues were also referred to. The neuron theory was discussed and the co-ordinate relationship shown between the microscopic changes found in the brain of chronic alcoholic insanity and certain psychological phenomena, more especially amnesia and slowness in reaction-time. He did not consider that alcohol *per se* caused general paralysis of the insane.

HUMAN EVOLUTION WITH ESPECIAL REFERENCE TO ALCOHOL.

Dr. G. ARCHDALE REID, of Southsea, read a paper embodying propositions from which he concluded that alcoholism in the parent did not prejudicially affect offspring. He submitted that human individuals differed in their power of resisting diseases, and that the progeny tended to inherit this parental power or weakness. As races in bygone years had been addicted to excessive use of alcohol and had become temperate by the elimination of the unfit, so in individuals drunkenness in the ancestry might be regarded as the cause of temperance in the descendants. He considered that more definite proof was needed to support the view generally held that alcoholism in the parents produced degenerate offspring.

THE ACTION OF THE BLOOD SERUM FROM CASES OF MENTAL DISEASE UPON THE *Bacillus coli communis*.

Miss ALICE JOHNSON, of Carmarthen Asylum, read this paper (contributed jointly with Dr. E. Goodall), illustrated by charts. The examination of twenty-five cases of insanity showed that in 60 *per cent.* of the cases the blood serum caused agglutination of cultures of the *Bacillus coli*. A leucocytosis count was made in cases of insanity, and it was found that leucocytosis was high in acute mania, or when patients were passing through acute exacerbations, whereas in states of remission and of recovery the leucocytosis tended to fall. The observations showed that the *Bacillus coli communis* was an important source of toxæmia in certain forms of insanity, and that the study of leucocytosis was valuable as an index of exacerbation, remission, or recovery.

THE NATURE OF FRAGILITAS OSSIUM IN THE INSANE.

Dr. W. MAULE SMITH, pathologist to the West Riding Asylum, Wakefield, contributed this paper, in which he stated that undue fragility of the bones in the insane was commonly met with after middle life, the ribs being mostly affected. An analysis of 200 cases from the *post-mortem* records of the Wakefield Asylum was made, the investigation consisting of an estimate of the breaking strain of a rib as tested by hand; and a microscopical examination was made as to the condition of the Haversian spaces. It appeared that dementia, chronic melancholia, chronic mania, and general paralysis showed an undue fragility of bones in 77.7 *per cent.*, 76.4 *per cent.*, 66.6 *per cent.*, and 65.7 *per cent.* respectively. In epilepsy 22 *per cent.* of cases exhibited fragility of bones, whilst in idiocy and imbecility there was practically no fragility at all. He concluded from these observations that fragility of bones in the insane was rare below the age of forty-five, except in cases of general paralysis, and that, associated with this fragility, degenerative changes were to be met with in the posterior root-ganglia of the spinal cord.

SOME SLIGHTER FORMS OF MENTAL DEFECT IN CHILDREN, AND THEIR TREATMENT.

Dr. G. E. SHUTTLEWORTH, in reading this paper, referred especially to his experience of three years as examiner of children for admission to the Special

Instruction Schools of the London School Board. Many of the lighter shades of mental defect were observed, corresponding to the more pronounced types. These included: submicrocephalic cases with head measuring circumferentially not more than 18 or 19 inches (7 *per cent.*), large heads suggesting hydrocephaly (3 or 4 *per cent.*), mongoloid cases of weakmindedness (2 to 3 *per cent.*), scrofulous cases (over 10 *per cent.*), cases with cerebral or spinal paralysis (about 2 *per cent.*), cretinoid cases (2 to 3 *per cent.*), syphilitic cases bearing characteristic stigmata (about 1 *per cent.*), and a few cases of post-febrile or traumatic origin. There was a large group of cases which could only be characterised as "neurotic." Of the epileptic cases 17 *per cent.* were estimated as fit to continue in ordinary elementary schools. Rickety skulls were met with in pauper children, and sometimes in well-to-do families who brought up their children on artificial foods.

THE CLASSIFICATION OF INSANITY.

Dr. MERCIER read a paper on this subject, and drew attention to the distinction between psychological forms and true varieties or types of insanity. The former comprised various symptoms—depression, exaltation, etc.,—whereas the latter were comparable to diseases—general paralysis, alcoholic insanity, etc.—which ran a more or less definite course, in which the former symptoms occurred from time to time. He advocated the classification by types as published in his recent *Text-book on Insanity*.

THE CARE AND TREATMENT OF INCIPIENT INSANITY.

Dr. YELLOWLEES opened the discussion on this subject with a paper in which he regarded the term incipient insanity as the mental condition during the period between the first manifestations of mental disorder and the development into certifiable insanity. He also included cases of insanity where the insanity, although obvious, was of recent origin, and had not become permanently established. The general indications for treatment were removal as far as possible of the cause of the disorder, removal of the patient from existent surroundings, experienced nursing, wise medical treatment, pleasant companionship, good food, sufficient occupation, and suitable amusements, with discrimination and judicious application of the same. Dr. Yellowlees also dealt with the accommodation and size of asylums for recent and acute cases, and with the question of mental wards in general hospitals. He considered that any institutions, whether called "reception houses" or by other names, which received incipient cases of mental disorder for care and early treatment, should be under the jurisdiction of the Commissioners in Lunacy, and the resident physician by whom the cases were to be examined should have had wide experience of insanity in all its phases.

THE USE AND ABUSE OF PSYCHO-THERAPEUTICS.

Dr. A. T. SCHOFIELD, of London, read a paper urging the necessity of greater attention to the subject of psycho-therapeutics, which in the hands of unscrupulous persons brought discredit on the profession, to the detriment of the public in general.

THE RELATIONSHIP OF WAGE, LUNACY, AND CRIME IN SOUTH WALES.

Dr. R. S. STEWART, of Bridgend Asylum, read this paper, which was of marked local interest.

Owing to lack of time the following, among other papers contributed to the section, were taken as read, *vis.*:—"The Premature Dementia of Puberty and Adolescence," by Dr. Andriezen; "The Relation of Hysteria to Insanity," by Dr. Edridge-Green. The meeting concluded with the passing of a resolution that the name of the section should be the Section of Psychological Medicine, the name adopted for it at a meeting of the Council a year previously, and that the attention of the Council should be drawn to this matter.