

The most striking facts revealed are that whereas in general paralysis, excluding the effects of old inflammations, spermatogenesis is active, and in many cases very active, and the degenerative changes in the brain the outcome of spirochætal poison, in dementia præcox there is invariably regressive atrophy of the seminiferous tubules, and the changes in the brain are a primary nuclear degeneration.

There is an intimate relationship between the adrenal cortex and the reproductive functions, and Mott found in four male cases of well-marked dementia præcox that the adrenal cortex was narrowed and lipid much less than in cases with other mental diseases. One of the functions of the adrenal cortex is to provide lipid needed to build up myelin, but it also stores lipid, which can be set free to form anti-toxins (Elliot), and it also provides a constant supply of raw material to the testes for formative nuclear activity. It follows that any breakdown in the lipid-supply mechanism, especially in early life, would affect the nucleus of the neuron and create a deficiency in the organic phosphorus in the nerve-cell and a loss of vital resistance to infective diseases.

It is obvious that, as regards dementia præcox, further investigations in this direction may have a profound effect on the nosology of this disease, and Sir Frederick Mott's further communication, as regards the correlation of the morbid biological changes in the testes and those in the central nervous system, will be awaited with considerable interest.

(1) "Normal and Morbid Conditions of the Testes from Birth to Old Age in 100 Asylum and Hospital Cases" (*Brit. Med. Journ.*, November 22nd, 29th, and December 6th, 1919), by Sir F. W. Mott, K.B.E., F.R.S., etc.

Part II.—Reviews.

The Fourth and Fifth Annual Reports of the Board of Control, 1917-1918.

The exigencies of the great war rendered it impossible for us to review the annual reports of the Board of Control for the years 1917 and 1918 at the usual time. The war interfered profoundly with all established practices, and it lies to the credit of the late Dr. Drapes, who with great devotion conducted the *Journal* almost single-handed during the military service of the senior Editor, that the organ of the Association was not even more attenuated—*conquiescat in pace*.

For many years past, those sections of the Board's report dealing with the incidence of insanity, and the recovery and death-rates, have been the matters of outstanding interest, and for this reason the main subjects dealt with in our annual review. It has never been an easy task to criticise the Commissioners' carefully worded conclusions, and thus the specious complaint made in our review of the report of 1916 regarding the cutting-down of the number of tables in

Part II from thirty-eight to fourteen is explainable, if not excusable. Our attitude could well be likened to that of the Israelite when asked to make bricks without straw. In view of the additional important and weighty matters dealt with in the reports for 1917 and 1918, we have no grounds to renew the complaint, and it can be noted, without regret on our part, that the Commissioners are unrepentant in this matter and continue in their course of economy.

Number of notified insane.—The rate of decrease which commenced with the onset of war continued during the years under review, being for 1915, 3,159; 1916, 3,278; 1917, 8,188; 1918, 9,138; total decrease, 23,763, instead of an increase of 32,767 to be expected under ordinary conditions. The total number of notified insane on January 1st, 1919, in England and Wales was 116,703.

Admissions.—The rate of decrease on the previous year of patients admitted to institutions and single care was 5·2 *per cent.* (8·6 *per cent.* men, 2·1 *per cent.* women), and 10·9 *per cent.* (12·1 *per cent.* men, 9·2 *per cent.* women) for 1917 and 1918 respectively, the actual numbers being: 1917, 19,632; 1918, 21,765. During 1918, there was an increase and not a decrease, as in 1917, in the percentage proportion of male and female admissions of 0·5 on the proportion of males obtaining in the previous year.

Discharges.—The recovery-rates for 1917 and 1918, calculated upon the total admissions, were respectively 31·33 *per cent.* (26·82 men, 35·13 women) and 27·14 (22·76 men, 30·91 women). That for 1918 is the lowest ever recorded.

Deaths.—The abnormal increase in the death-rate continues. Calculated on the daily average number resident it was for 1917 16·86 *per cent.*, and for 1918 19·56—respectively 6·11 and 7·89 above the percentage for the decennium.

It has been said it never rains but it pours, and these surprising figures call for careful examination and inquiry as to whether their face value reveals the true state of affairs. Do they really mean that during the war fewer people became insane, that the insanity which occurred was less recoverable and more fatal? The answer to the first question is almost certainly in the negative. It is obvious that if the number of those admitted to certificate is less, and if more die, those remaining in confinement and single care will decrease. Certifiable insanity and mental disease are not synonymous terms. Normal conduct or normal relationship to environment attains a higher standard as progress is made in the social life of the people, with the result that disordered mental states more readily enter the domains of certifiable insanity. A retrograde movement would have just the contrary effect, other conditions being equal. Can it be said that the universal social disintegration, the necessary concomitant of a world-wide contention, has kept up the standard of normal conduct? A mere perusal of the daily newspapers seems to be quite convincing that the contrary has occurred. Heroic efforts undoubtedly have been displayed, but have been accompanied by a degree of social dissolution. We venture to suggest that, apart from the beneficial effects of less unemployment and higher wages, also the restrictions on the consumption of alcohol, the decrease in the admissions does not indicate a decrease in insanity, but

has been due to fewer people having been certified, owing to the public becoming less sensitive to abnormalities and vagaries of conduct, and also to the partial suspension of the scavengery of the population by the lunacy authorities; and that lunacy, moral and sex degeneracy, perversion, etc., are merely dammed back and waiting to be garnered. We suggest a rich harvest sooner or later, and it is to be hoped that, in the meantime, the administrative machinery and the methods of classification, care and treatment will have been reconstructed on the enlightened lines so urgently desired, and that the accumulation will not be packed *a capite ad calcem* in mental hospitals as in the past. The half-baked lunatic and higher-grade imbecile when at large are always a source of grave danger, especially during times when even steady politicians and social workers tend to become infected with anti-social and revolutionary crazes, and the sooner this cleaning up is effected the better in the interests of public tranquillity.

The lessened recovery-rate is due to the cases being admitted at a more advanced stage of their disease, and also no doubt to the same causes which increased the death-rate, such as the diet restrictions and the impairment of nursing facilities. There may also have been a reluctance to discharge patients to conditions unfavourable to complete convalescence.

The Commissioners deal at considerable length in both reports with the increased mortality which has occurred since 1915 among those confined in county and borough asylums. In view of the disquieting state of things revealed by the mortality returns, they very wisely appointed three of their number to make special inquiry into the circumstances which had determined the appallingly increased death-rate. These Commissioners made special visits to twenty-six institutions, and their conclusions and recommendations were embodied in a circular letter dated January 15th, 1919, headed, "Increased Annual Death-rate in Asylums," which was forwarded to all medical superintendents and clerks to visiting committees. Most of our readers will be familiar with the terms of this communication. It is too long to quote *in extenso*. We reproduce here the table showing the comparison between 1913 and the years 1915-17 (adding the figures for 1918) regarding the mortality per 1,000 in respect of each principal cause of death.

	1913.	1915.	1916.	1917.	1918.
Tuberculosis	17	19	23	37	52
Senility	14'3	16	17	24	27
Pneumonia	3'5	14	13	17	17
Dysentery	2'2	4	5	10	9
Enteric fever	3	6	5	1'2	1

An important point brought out is that for each of the assigned causes the male death-rate surpasses the female, and that the excess of the total male death-rate is considerable, even if the deaths from general paralysis in both sexes are excluded.

The Commissioners attribute this alarming state of affairs in part but not wholly to the effect of war conditions, such as the reduced supply and deterioration in quality of food, the impairment of nursing

efficiency, the movement of patients from one asylum to another, the lower physical condition and greater age of the admissions, and to some degree of overcrowding.

Other causes, which are likely to remain after the war, were imperfect segregation of sick and infectious patients, lack of personal cleanliness, and wrong methods of dealing with foul linen.

The recommendations made to meet these conditions appear to us to be in the main eminently sound and practical, and no doubt will receive the earnest attention of medical superintendents and asylum committees throughout the country. Some of the recommendations are already in practice in many institutions. Regarding more open-air life, a relatively small increase in staff would permit of many more open doors and windows, without having to adopt the retrograde mechanical means as suggested. A sanatorium for tubercular mental cases is very necessary in every larger mental hospital, though it might be an advantage if mental hospitals within a reasonable area could make joint use of a separate and specially designed institution for this purpose. To be really serviceable the sanatorium or ward set apart for tuberculosis should be considered, like infectious accommodation and padded rooms, as additional to the ordinary accommodation available for new admissions. The ideal plan the Board recommends regarding the attachment to each institution of a special hospital under general hospital-trained nurses, for the treatment of tuberculosis, dysentery, infectious diseases, and illness generally demands careful consideration. The present mental hospital infirmary seems to be very adequate for dealing with ordinary medical and surgical cases. No doubt it would be an advantage to employ hospital-trained nurses for supervision in the infirmaries and for the training of the staff in sick nursing, for it is essential to mental nursing that the ideals of the former should be reflected in the latter.

The great drawback to the mental hospital infirmary is the necessity for treating there tuberculosis and dysentery. The present infectious hospitals were meant no doubt to isolate odd cases of scarlet fever, diphtheria, smallpox, etc., and have occasionally been useful for this purpose, but they are too small to deal with an epidemic which assumes any magnitude, while they are totally inadequate to deal with the normal incidence tuberculosis and dysentery. The suggestion of light temporary hospital buildings which from time to time could be taken down, cleansed and rebuilt is, we think, an excellent one. Separate buildings could accommodate tuberculosis, dysentery and infective fevers, and when necessary be supplemented by tents. We see no advantage, however, in including the ordinary illnesses in such an arrangement.

A most important recommendation, for long advocated in the pages of this Journal, is that regarding adequate facilities for bacteriological and pathological work.

Adverting for a moment to the question of the responsibility of war diet for the undue mortality, this subject was one of the bones of contention between Sir Robert Armstrong-Jones and the eminently practical superintendent of Bexley Mental Hospital in certain correspondence to the *Times* during September, 1919. The former pleaded for greater regard being had to vitamins and less to calories in the diet

provided for insane patients, while the latter could not agree that war diet at all materially gave rise to the marked increase of mortality reported in the Board's report. Dr. Stansfield pointed out that in his asylum the increase of mortality affected the men and not the women while the quality of diet was the same for both. It seems possible that the lower standard of efficiency of male nursing may account in some measure for this owing to the greater depletion of male nurses.

We fail to find anything in the Board's report which "would emphasise the necessity for a complete revision of the present treatment" of the insane as stated by Sir Robert Armstrong-Jones, and he submits no extracts to justify this sweeping statement, however true it might be. We venture to suggest that it is well to be accurate, especially when the carefully worded expressions of an important public authority like the Board of Control are involved. In reality his letter only touches the Board's report as far as it deals with a specific subject, in this case the recent increase of mortality among the insane confined to county and borough asylums. Otherwise the distinguished late superintendent of Claybury Mental Hospital is both inspiring and illuminating, and there is no question in our opinion that the dieting of the insane is a matter of the greatest importance in their treatment. The primary importance of vitamins is unquestioned, nor should the question of calories be neglected. But mankind cannot live on vitamins or calories, alone or both combined, if due regard is not paid to the appetite, cookery, digestibility, personal diathesis, etc. Mass-feeding and *ad hoc* drastic weekly purging has no regard for the well-recognised tendency to neuro-vascular abdominal disturbances and colitic affections in those suffering from mental diseases and the neuroses. This is one of the matters regarding which we think the Board's control should be strengthened, and their attitude something more than that exemplified in the reports of the Commissioners at the conclusion of their annual visits of inspection, usually to the effect that they saw and perhaps tasted so-and-so served in the dining-hall or wards. It is a subject worthy of careful investigation and experiment, and economic factors such as cost, or the farm account, though important, are secondary matters.

Early in 1917, the Board laid before the Reconstruction Committee an account of its duties in relation to lunatics and mental defectives, together with suggestions for the amendment, in certain directions, of the present Lunacy and Mental Deficiency Acts. In the following year the Commissioners took a still more definite step by framing a Bill embodying their suggestions regarding better provision for the treatment of insanity in its early stages, the establishment of in- and out-patient clinics at general hospitals, the extension of the principle of voluntary boarders, etc.—matters which also have received the earnest attention of the Association, various local lunacy authorities, and others interested in better provision for the insane and the treatment of the neuroses and diseases of the mind. It is unlikely, however, that much advance will be made until Parliament has unburdened itself of some of the colossal tasks it is at present engaged upon!

A matter of importance which has received attention from the Commissioners is the effort of the nursing staff and other employees of asylum authorities to secure better remuneration and conditions of

service. We trust that the good offices of the Commissioners will be chiefly in the direction of securing greater uniformity in the methods adopted by the various local authorities in dealing with staff matters. Some authorities are very active, others very sluggish—a uniform progress would tend more readily to contentment than sporadic action.

In the report for 1917 will be found a *résumé* of the steps taken by the Board which culminated in the creation of a new category of patients known as “service patients,” and a copy of the Board’s “Instructions Relating to the Classification and Treatment of Soldiers and Sailors as Service Patients,” issued on June 27th, 1917, is included. The Commissioners are to be congratulated on the success attained in their prolonged and difficult negotiations with the various public authorities concerned, and their adherence to the principle that sentiment when necessary must make way for utility.

The average weekly cost of maintenance in public asylums, excluding cost of repairs, additions and alterations, as might be expected, rose considerably during 1917 and 1918.

1913-14.	1914-15.	1915-16.	1916-17.	1917-18.
10s. 9 $\frac{1}{2}$ d.	11s. 1 $\frac{3}{8}$ d.	11s. 7 $\frac{7}{8}$ d.	12s. 8 $\frac{5}{8}$ d.	14s. 5 $\frac{1}{2}$ d.

Regarding cost, the public must be prepared to pay heavily for the lunacy service for some years to come. It should be borne in mind, however, that ultimately improved methods of treating insanity, especially in its early stages, the outcome of special medical education and improved status and better working conditions for the staff, will save the public purse by lessening the accumulation of the chronic insane, while there will be a great reduction in many branches of public expenditure when the mentally deficient are segregated and placed in surroundings where they are more likely to assist materially in their own maintenance. It should be remembered, too, that mental deficiency is a prolific breeding-ground of the chronic forms of insanity.

We are always pleased when public attention is drawn to prominent examples of brave conduct among the nursing staff, and the deed performed by charge-attendant Bunner at Salop Asylum receives high commendation from the Commissioners. This occurrence is an illustration of the self-sacrificing spirit of asylum nurses in their relationship to patients, which all of us will bear witness to, and which is only too readily forgotten by the occasional enterprising journalist who has succumbed to the wiles and plausibility of the half-cured lunatic or quasi-paranoiac or the really vicious defective with a bone to pick.

In the report for 1917, the Commissioners again refer to the question of how best to prevent patients from injuring themselves with suicidal intent. Of the twelve cases reported in 1917 and the seven in 1918, five were known to be suicidal and presumably on parchment, and fourteen were not known to be suicidal. Among the latter were several working patients and one convalescent. The five who were known to be suicidal evaded observation; the remainder found means, in some cases of a remarkable kind, to gratify their wish. It would be interesting to know the total annual number on parchment and the number of these who made definite suicidal attempts. By such an inquiry it would be possible to arrive at some idea as to how far it

is possible to ascertain the presence of suicidal characteristics. Of course it is commonly taught that cases with mental depression and the so-called prompting hallucinations are the most suicidal, but such teaching receives but little support from the Board's annual returns. Most of us will agree that all we can do at the moment is to remove objects and means suggesting or permitting of self-injury, and to keep up the respect for the suicidal parchment by only using it in cases known to be actively suicidal. We are of the opinion that more trained nursing staff and greater facilities for individual care are the only real remedies, and if the country desires to be relieved to any considerable extent of the shock of these occurrences it must be prepared to foot the bill. On the whole, it should be well satisfied with the results obtained.

Our review is already of undue length, but by no means exhausts the points of interest and importance dealt with in these two reports. Space will not allow of more than a mere mention of the mental deficiency work of the Commissioners, which is steadily increasing in dimensions. Time alone will show whether ultimately it will overshadow lunacy, but there is no doubt that activity in this direction will lessen lunacy operations, especially as regards the chronic insane. The time may come when lunacy under a more appropriate name will be largely a routine hospital matter like other diseases, the residuum insane being housed in suitable homes, and with the degenerate, mental deficient and criminal ceasing administratively to be primarily of medical concern, though ever the subject of psychological medicine. It is of interest to note that as regards the administration of the Mental Deficiency Act, during 1918 there was some slight relaxation of financial restrictions, and that the total number of all defectives registered had grown from 7,941 in 1917 to 8,686 in 1918.

Thus in many directions does the Board show a virility which would surprise a former generation of Commissioners. Though always possessing a high sense of its duties and responsibilities, only of late years has it appreciated the necessity of leading rather than following all movements having for their objects the better treatment and care of the insane and the advancement of psychiatry in general. The need of a strong central lunacy authority keenly alive to the spirit and needs of the times has been strongly felt in the past, and the Board's bold policy and outspoken utterances of recent years have inspired a feeling of confidence and stimulated a desire for co-operation with them, and have been productive of a unity of effort which is a happy augury for successful achievements in the future.

The Brain in Health and Disease. By JOSEPH SHAW BOLTON, M.D., F.R.C.P. London: Edward Arnold, 1914. Pp. 479, with 99 Illustrations. Price 18s. net.

The keynote of this very useful book is provided by the author's generalisation of "amentia and dementia." We do not find in it any appreciable alteration of his views as previously put forth in miscellaneous papers, and though it contains some new matter, it is essentially a