

the depths and shoals of mental philosophy. To writers of this class in England, it does not seem to occur that other nations have produced distinguished men who have laboured hard in psychology, and have put forth the fruits of their labours. Dr. Jardine's book supplies many instances of this ignorance. One example may suffice here. Having to speak of unconscious mental modifications, he attributes the doctrine to Sir W. Hamilton, seemingly quite ignorant that Leibnitz had treated of it systematically, and that it lies almost at the foundation of Beneke's Psychology; and in the few pages which he devotes to it, he refers to the so-called "unconscious cerebration" as the modern exposition of all that is known about it, seemingly quite unconscious of the exhaustive discussion which the subject has received in Germany from a succession of writers on psychology. Dr. Jardine should set to work to read the two large volumes on the "Philosophy of the Unconscious" (*Die Philosophie des Unbewusstsen*) by Dr. Hartmann, which have gone through several editions in a short time; and after having done that he should go through a course of study of Helmholtz's investigations into the physiology of the senses. We shall be much surprised if he does not then perceive that his book is something like an anachronism in this day and generation. He will hardly fail to realise that the whole aspect of many psychological questions has been changed, and may, perhaps, confess to himself that a book written for the use of students ill fulfils its aim by leaving them in ignorance of the new relations in which old subjects have been placed. We repeat that so far as the treatment of the materials with which Dr. Jardine has supplied himself is concerned, it is lucid and well adapted to the use of students; but the materials are sadly insufficient, and a student who should draw his knowledge of psychology from this book would be far from adequately instructed in the elements thereof.

Report on the Lunatic Asylums of Bengal, India.

The following are extracts from a very complete and interesting Report on the Lunatic Asylums of Bengal, India, by Surgeon K. McLeod, A.M., M.D., formerly a member of the Medico-Psychological Association:—

Population.—The average number of insane under confinement during 1870 was 1734·06 against 1651·7—1,594 and 1472·3 of 1869,

1868, and 1867. The number is thus an increasing one, the increase being more marked in the case of asylums of Bengal than of other provinces. No estimate of any value can be given of the insane population as compared with the general population, because the lunatics confined are probably but a fraction of the lunatics living, and the insane population is unknown, and the total population of provinces far from certain. The asylums show the same tendencies to grow which similar institutions do in other parts of the world. The residual population is relatively smaller than in the United Kingdom—that is, admissions bear a greater proportion to remaining and daily average strength. This fact tends to give more favourable results as regards cures, and less favourable results as regards mortality in Indian than in English asylums, because the basis of comparison is more fluctuating and acute; but as the asylums continue to grow by the accretion of chronic lunatics, the comparison will become a more fair one.

Admissions and Re-Admissions.—The number of admissions, namely, 926, is less than of the two preceding years—1,099 in 1869, and 1,015 in 1868—but greater than in 1867, when they amounted to 908. Re-admissions were, however, more numerous—63 against 37, 57 and 52—constituting also a larger percentage of the total, namely, 6·8 against 3·48, 5·9, and 5·8. The percentage of re-admissions in English Pauper Asylums is larger, namely, 13·6. The admission rate of asylums in 1870 was 53·9 per cent. of average population, against 66·5 of 1869, 60·5 of 1868, and 33·3 of English Pauper Asylums for the ten years 1860-69.

Sex.—Of the number admitted, 719 or 77·6 per cent. were males, and 207 or 22·4 per cent. females. The result in 1869 was 75 and 25 per cent., and in 1868 78 and 22 per cent. These results contrast strangely with the following figures, taken from the Eleventh Report of the Commissioners in Lunacy for Scotland:—

	Average Proportion of Males and Females in 100 Admissions.	
English Asylums, ten years, 1858-1867	. . 49·5 males	50·5 females.
Scotch " " " 1856-1867	. . 46·9	53·1
French " " seven years, 1854-1860	. . 53·0	47·0
27 years—average	. . 49·8	50·2

giving the remarkably small difference of only ·4 between the sexes.

Of the total admissions, 698, or 75·38 per cent., were Hindoos; 210, or 22·68 Mussulmans; 16, or 1·73, Christians; and 3, or ·32, belonged to other castes. These numbers correspond very closely with those of the previous year, whose percentages were 70·30, 28·04 and 1·62. The proportions of the sexes belonging to each class were—Hindoos, 79·7 and 20·2 per cent.; Mahomedans, 71·4 and 28·6; and Christians, 62·5 and 37·5; thus the relative number of Mahomedan and Christian women admitted was larger than of Hindoo.

Discharges—The discharges from all causes (including deaths), and their percentage on average population, are shown on the margin, for the years 1870, 1869, and 1868. The average discharge rate of English Pauper Asylums during the ten years 1860-69 was 29·4, giving a rate of increase of 3·9. The result in the Lower Bengal Asylums for the five years 1865-69 is 56·7, giving a rate of in-

crease of 3·7. These figures show that the asylums of this Presidency are growing at nearly the same rate as English asylums, but that the changes among the population are more frequent.

Recoveries.—The recoveries of the year 1870 amounted to 405, or 23·3 per cent. of average strength; 16·00 per cent. of total treated, and 43·7 per cent. of admissions.

Mortality.—Deaths amounted to 284, or 16·37 per cent. of average strength, as shown in the following Tables:—

	PER CENT. OF	
	TOTAL TREATED.	DAILY AVERAGE STRENGTH.
Moydapore	18·42	33·41
Bareilly	18·73	27·9
Lucknow	16·6	24·5
Dacca	13·39	18·42
Benares	9·69	14·34
Jubbulpore	10·2	14·2
Lahore	9·6	12·7
Dullundah	8·21	12·61
Delhi	6·89	11·6
Patna	6·92	9·83
Nagpore	5·22	7·19
Cuttack	2·9	5·1
Average.....	11·25	16·37

Dysentery and Diarrhœa.—Next in order comes dysentery, which, with diarrhœa, accounted for 27 casualties. These diseases have always contributed a large share of the asylum mortality—about 20

per cent. of that of the six years in question. In 1870 the percentage is greater—25. It is hard to conjecture how much of this is a mere expression or feature of the general wasting and depraved nutrition, and how much a consequence of the specific causes producing these diseases in the same population; but the fact remains that "bowel complaints" rank second in the scale of fatal conditions.

Phthisis contributes 4·8 per cent. to the mortality of 1865-70, and 5·6 to that of 1870. This disease has always been thought to affect insane communities to a greater extent than sane. The average death rate per thousand from this cause on daily average strength in 1865-70 is 12·8. The same ratio among the prison population of this province for the five years 1865-69 is 3·92, and the percentage of phthisis among deaths is 4·95. The significance of the last ratio is disturbed by the number of deaths among the insane occurring from causes which do not affect the same.

Results of 1868-70.—When the results of all the asylums of the Presidency during the year 1868-70 are summarised, dysentery and diarrhœa together take the first place in the scale of mortality, giving an aggregate of 287 out of 1,102, or 26 per cent., each disease contributing almost an equal number. Next comes the cachectic states, asthenia, atrophy, anæmia, debility, dropsy, &c., giving 274, or 24·8 per cent. Brain diseases of all kinds furnish 200 deaths, or 18 per cent.; cholera, 97, or 8·8; phthisis and other scrofulous diseases, 65, or 5·; fevers, 50, or 4·5; lung diseases, 43, or 3·9; ague, 18, or 1·7; and accidents, 14, or 1·3; other diseases amount to 54, or 4·9. Among brain diseases a large number of persons die from epilepsy and epileptic vertigo.

Types of Insanity.—Of the total treated, 39·9 per cent. laboured under acute forms of insanity; 53·7 per cent. under chronic forms; and 6·4 per cent. were subjects of idiocy or imbecility. It will be observed that a greater relative number of females fell under the head of chronic mania, melancholia, acute dementia, and idiocy, while the proportion of males is larger under other heads.

Cause of Insanity.—Causes have been assigned in 44·59 cases treated, against 40·6 of 1869. Of the known causes, about three-fourths come under the head of physical, and one-fourth moral. Of physical causes Bhang and Gunjah are the most prominent, causing about a fifth of all the insanity under treatment in the presidency. Epilepsy and spirit drinking are also prominent as causes. Grief, distress, and loss of property, are the most marked among social or moral causes. In the asylums of Europe and America social and moral causes equal or exceed physical causes of insanity. (This is a mistake.)

Management.—Industry is the principal feature in the general management of Indian Asylums. The proportion per cent. of the inmates employed varies from 88·5 in the Patna Asylum to 17·09 in the Delhi Asylum. The modes of employment are various, but

principally digging, gardening, weaving, water carrying, oil pressing, domestic employment, &c. In most cases work requiring no particular skill is prescribed, but in some asylums handicrafts, such as carpentry, basket making, rope making, &c., are practised. In some asylums an endeavour is made to amuse the inmates, but this is not a general practice.

Classification is not so severely carried out as in the asylums of Europe; but its importance is recognised, and when means permit, it is carefully adopted. Solitary confinement and mechanical restraint are occasionally employed as means of treatment. There are no exact data to show the precise extent to which these methods are resorted to, but the written reports show that they are seldom used.

Dullunda Asylum, Calcutta.

Restraint.—A woollen bag is used to restrain lunatics; regarding it the Superintendent writes:—

“Its use is not confined to preventing a madman from damaging himself or his neighbours; it is constantly found to tranquillise excitement which yields to no other treatment; and this not by any terror that it inspires, or pain that accompanies it, but because it simply restrains mischievous movement, without causing discomfort or alarm. It is more gentle, safe, and strong than the hands of the best tempered attendants, and is thus the best preventive of one principal cause of fatal exhaustion in mania.

“I have never seen the smallest reason to regret its employment; but in the case of the man who died from violence, I have since regretted much that the bag had not been used. The current of opinion, though turning fast, has not yet set strongly in favour of mechanical—that is, passive restraint, as distinguished from the active, and often impatient, exercise of main force; so that even the most humane and successful contrivance of the kind is instinctively avoided as much as possible.”

Dacca Asylum.

The natives are very reluctant to have their relatives taken to a Lunatic Asylum, and, excepting the cases of acute mania, we seldom receive lunatics for treatment in the asylum during the early stages of their diseases, when, as is well known, our efforts are most successful. It is when insanity shows itself in its violent forms, and the lunatic is uncontrollable, or when the disease has so far advanced that he is no longer able to perform some share of the work of the household, or has become incapable of taking care of himself, that his relatives have him sent to the asylum, which as yet they regard rather as a place where troublesome or helpless lunatics are taken care of than as an institution in which the disorders of the intellect may, to some extent, be successfully treated.

Mr. Cutcliffe reiterates his belief that gunjah smoking and spirit

drinking are associated in the causation of insanity, and adduces data to prove his position.

Jubbulpore Asylum.

The lunatics are employed in weaving, rope making, gardening, digging, &c. The manufactured products obtain a ready sale.

Delhi Asylum.

The dietary is liberal, and sweetmeats and fruit are occasionally given as a treat. The lunatics are largely employed, principally in out-door occupations, weeding, oil pressing, water carrying, &c. Some of them were permitted to attend the Ram Lela and Dewallee melas in procession, dressed in their best, and the result is said to have been favourable. Pets—monkeys, pigeons, &c., are also kept for the amusement of the patients.

PART III.—PSYCHOLOGICAL RETROSPECT,

German Retrospect.

BY W. W. IRELAND, M.D., EDIN.

The German Retrospect is taken from the following works which I have received :—

Allgemeine Zeitschrift für Psychiatrie und psychisch-gerichtliche Medicin xxx Band ii, iii, iv, v, vi Heft, and xxxi Band, i Heft.

Verhandlungen der Berliner Medicinischen Gesellschaft aus den Jahren 1871, 1872, 1873. Band iv. Berlin, 1874.

Untersuchungen über das Gehirn Abhandlungen physiologischen und pathologischen Inhalts, von Dr. Eduard Hitzig. Berlin, 1874.

From the great interest and importance of the subject, it has been thought best to give a full report of Dr. Hitzig's book, though, owing to the limited space allowed for the German Retrospect, this must be done somewhat at the expense of other observers.

The first paper in the book was originally published in Reichert's and du Bois Reymond's Archiv, 1870, Heft 3. Hitzig commenced by advancing on behalf of himself and his colleague, Dr. Fritsch, their claim to have been the first to shew that the brain is susceptible to electrical stimulation. Fritsch and he experimented with a weak continuous current, which could barely be felt by the tip of the tongue, upon the brain of dogs and other animals denuded of the cranial covering and membranes. Electric stimulation of parts of the hemispheres produced combined muscular contractions of the opposite side of the body. One part of the convexity of the hemispheres of