

lesions affecting the greater part of the convexity of the brain. This is confirmed by the experiments of Exner and Paneth cited in the article.

Hitzig's own views are supported by twenty-two observations of experiments on dogs, which are given in detail and illustrated by wood-cuts. He found that the simple exposure of the pia is followed by marked injury to the convolutions lying below, and that there is often implication of those contiguous. The uncovering of the membrane over the motor zone led not only to motor impairments in the extremities, but also, save in one case, to impairment of vision, and in all the cases to impairment of the reflex movement of the eyelids. The uncovering of the pia over the occipital lobe led in all cases to disturbances of vision and of the reflexes of the eyelids, but not to injury to the motor powers. The symptoms following such operations are of the same character as those following extirpations of corresponding areas of the cortex. The alterations in the nerve-tissues found after death explain these symptoms without supposing any accidental injuries or mistakes in the conduction of the experiment. Hitzig observes that surgeons opening the vault of the cranium should be careful to replace the dura over the part. He thinks that he has proved by his numerous experiments that marked impairment of vision may be induced by a lesion to other regions of the cortex than those assigned by Munk as the visual area. Dr. Hitzig promises, in a future paper, to treat about the relations of the other regions of the cortex to the sense of vision.

The articles which we have gone through are of value as showing us not only what we know about the brain functions, but also as indicating on what points we require further knowledge. Here no better guide could be found than Professor Hitzig, who, while he has led the way in investigations of the functions of the cortex, has been ever cautious that his assent should not go beyond his evidence. It is almost comical to read his complaint that Haeckel, in a recent report of our present knowledge of the origin of the human race, gives Goltz and Munk as the founders of our knowledge of the localisation of the brain without alluding to Hitzig.

The Varieties of Religious Experience: a Study in Human Nature.

Being the Gifford Lectures on Natural Religion, delivered at Edinburgh in 1901-2 by WILLIAM JAMES, LL.D., etc. London, 1902: Longmans. Royal octavo, pp. 534.

On the principle that it is more blessed to give than to receive, the professor of philosophy at Harvard shows a pardonable pride in having been called across the Atlantic to give lectures to an audience in the Old World. No Gifford lecturer has hitherto succeeded in attracting so large and so appreciative an audience. Though Dr. James's practice in lecturing, his genial voice, and clear pronunciation contributed to this success, the book under review will no doubt be read with interest both in Europe and America. Deeply versed in the lore of philosophy, but avoiding pedantic terms, and refusing to help his diction through other men's phrases, his sentences are permeated by thought and a rare felicity of expression. He has that quality which the Romans called

disertus. Wary of belief, yet fair in statement, weighing the very dust in the balance, the professor considers the religious faculty in all its manifestations. Avoiding that sort of generalisation which includes too much of the opinions of the author, James seeks to base his remarks upon particular examples of religious experience as exhibited in autobiographies, the letters of devout persons, and the lives of the saints. With a good eye to effect he gives extracts from the sacred literature of the Brahmins and Buddhists, and the Mussulman Sufis, with the same philosophical equanimity as from the confessions of Catholic saints and pious Protestants. This is sure to be distasteful to some people, who will demur to accepting various metals under one religious stamp. Dr. James himself observes that his concrete examples are drawn from extreme expressions of the religious temperament.

There are chapters upon the reality of the unseen, the religion of healthy-mindedness, the sick soul, the divided self and the process of its unification, conversion, saintliness and its value, mysticism, and the philosophy of religion.

We shall confine our criticism mainly to the passages in which the author deals with those manifestations of the religious faculty which are associated with mental derangement. It cannot be said that the professor, like too many of his colleagues, is unwilling to learn what physicians can teach psychologists from the study of abnormal mental action. We should rather say that he is too ready to admit some over-hasty theories, and to found conclusions on unstable premises in these fields of inquiry.

An unwary reader may take up from Dr. James that it is a current belief amongst medical men that genius is a neurosis, as Moreau long ago advanced, though James himself refuses to adopt this view. "There is," he writes, "of course no special affinity between crankiness as such and superior intellect, for most psychopaths have feeble intellects, and superior intellects have more commonly a normal nervous system." He cites Lombroso and Mr. Nisbet, the author of a book which puts "the insanity of genius" in a popular form. Mr. Nisbet was not a medical man, and knew so little of medicine that he imagined that intermittent fever was a nervous disease; and Dr. James might have told his readers that Lombroso's theories have been attacked and, as we think, refuted.

The learned author slides too rapidly past the studies which have been made on the neuropathic symptoms of some leaders of great religious movements. "The medical materialists," he writes, "are effective with their talk of pathological origin only so long as supernatural origin is pleaded by the other side, and nothing but the argument from origin is under discussion." Yet, in spite of all Dr. James can say, with those who believe in a supernatural revelation the question of origin is the key to the position. If the claimant to divine illumination exhibit symptoms frequently associated with insane delusions, most people will think that the credibility of his message is seriously injured. In vain does Dr. James urge that the psychopathic temperament, with its intensity, its fondness for metaphysical speculation, and its mysticism, is favourable to the perception of religious truth. A lunatic may deliver a message correctly, yet his testimony is always subject to suspicion,

especially in matters on which one can have no experience. In reality Dr. James gives away revealed religion. He lays down that a religion is to be judged "from its fruits, and not from its roots;" that is, he considers the efficacy of religious faiths in promoting worldly order and prosperity, and in leading their votaries to follow reason and virtue in their earthly lives. But this is a criterion which the Christian, the Brahmin, and the Mohammedan will all reject. The fruits which they promise have to be gathered in an unseen world.

He observes that each religion at the outset must have satisfied the aspirations and moral wants of its votaries, and when the standard of morality or intelligence had risen above the old faith, that it sunk into discredit. He claims for "our instincts and our common sense the right of disbelieving peremptorily in certain types of deity." "When we cease to admire or approve what the definition of a deity implies, we end by deeming that deity incredible." Yet, if such a deity exist, he needs not our approval. "The monarchical type of sovereignty was," the American author tells us, "so ineradicably planted in the mind of our own forefathers, that a dose of cruelty and arbitrariness in their deity seems positively to have been required by their imagination. . . . But to-day we abhor the very notion of eternal suffering inflicted, and the arbitrary dealing out of salvation and damnation to selected individuals."

Pascal, in his *Pensées*, admits that the conception that unbaptised children should be consigned to eternal torments is contrary to our miserable ideas of justice; but the reason of the great geometrician gave way under the terror of being himself subjected to the same torments if he should disbelieve in the dogma taught by his Church. It was not till historical inquiry loosened men's faith that their minds began to recoil against this article of belief.

In his appreciation of the value of saintliness Dr. James tells us that Stoic, Christian, and Buddhist saints are practically indistinguishable. In estimating the effects of different religions upon the community it ought to be held in mind that religion is but one of many powerful factors, and thus its effects are difficult to isolate. In India we have the Mussulman and the Hindu living together. Some people who have passed many years in the country think that the Mohammedan is better than the Hindu, others the contrary, while many think the native Christians worse than either. Here we have three very distinct religions under much the same conditions.

Dr. James startled his Edinburgh audience by proclaiming his faith in the mind-cure movement in America. "The blind have been made to see, the halt to walk, lifelong invalids have had their health restored, the moral fruits have been no less remarkable." Fatigue, pain, and paralysis have been annulled by impressing on the mind that these do not affect the soul, which, if it chooses, becomes supreme. The instances of cure cited by the author are far from convincing. Going along the road a man sprained his right ankle, when he recollected that "there is nothing but God; all life comes from Him perfectly. I cannot be sprained or hurt." He never felt it any more, and walked two miles that day. We are inclined to believe that this person gave his tendons a painful stretch without any rupture, and the effect naturally passed quickly away. This is a thing which often happens. The next case is

a woman who felt pains, nausea, headache, and faintness, and went to bed believing that she would have influenza. She felt a dominant idea that all would be well, and when she woke in the morning she was well. The other two cases given in the appendix do not seem any more convincing. We learn from medical sources in the States of the vagaries of Mrs. Eddy and her followers, and regret that so distinguished a professor should have given them any countenance by classifying them under the heading of "healthy-mindedness." He defends the mind-cure by the power of suggestion in some cases of disease. This has, of course, been long admitted; from Pechlin to Hack Tuke many books have been written upon the power of imagination and confidence in a cure. These have been successful principally in functional nervous diseases and in rheumatism; but such mental influences are varying and uncertain, and can be rarely utilised in the treatment of disease.

In the course of his speculations Dr. James builds much upon the subliminal consciousness of Myers, a modified form of the unconscious cerebration of Carpenter. There are agents both physical and mental which change our moods, prompt our thoughts, raise and depress our spirits, increase our mental power and render us ready to receive this or that set of ideas, and these influences act insensibly. There does not, however, seem sufficient proof that any process of active thought or exertion can be performed without consciousness. Some writers talk of persons being unconscious in the active states of hypnotism or sleep-walking. So far from this being the case consciousness is intensified and narrowed. In these abnormal conditions consciousness persists more or less separated from memory, and those who are sparing of their mental analysis may, on looking back, easily believe that consciousness had not persisted because it had left no record in the mind. Dr. James seeks to support his subliminal consciousness by the feats of hypnotisers who claim that they can sometimes get their subjects to execute commands a month or so after without their counting the days or taking any note of the lapse of time, and without their knowing wherefore they are performing the prescribed action. This has, on the face of it, a strong air of absurdity. We dare say that Dr. James, in the course of his wide reading, will get writers on hypnotism to support all he wants, and more than he wants; but he might have mentioned that on this point they are not agreed. Bernheim, in his well-known book on *Suggestive Therapeutics*, totally rejects the idea of any unconscious mechanism in suggestion *à longue échéance*, and he is supported in this view by Krafft-Ebing, Delboeuf, and Liegeois, who have all had much practice in hypnotism.

It can scarcely be expected that the reader will find nothing to disagree with in the course of the book, for it must be kept in mind that Dr. James deals with much disputed questions. Nevertheless his book has a pleasing stamp of originality. His great erudition is kept in rule by a mature knowledge of human nature. If he takes up a sceptical attitude, it is not because he prefers it, but because he will not voluntarily eliminate opposing considerations. Sometimes the views in one chapter seem out of accord with those in another, and he has again and again to warn his readers to wait for his conclusions. In the search for truth one does not sail upon a sea

always smooth ; there are currents and eddies. Sometimes he may seem to veer ; but he is willing to take the reader into the harbour, if there be a harbour. Dr. James is decidedly on the spiritualistic side. He is inclined to believe in telepathy and messages from the dead, though not convinced. While admitting the reign of law in the material world, he shows that prayer has its own sphere of action. He is ready to recognise good in most religions, and thinks that men will never agree to have the same creed, considering their various antecedents, circumstances, tastes, and intelligence. One cannot read the book without recognising the enormous force of religious ideas upon the human mind.

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Clinical Psychiatry: a Text-book for Students and Physicians, abstracted and adapted from the sixth German edition of Kraepelin's 'Lehrbuch der Psychiatrie.' By A. ROSS DEFENDORF, M.D., Lecturer in Psychiatry in Yale University. New York and London: Macmillan and Co., 1902. Pp. 413. 16 Illustrations. Price 15s. net.

It is not our intention, in this notice, to attempt any review or criticism of Kraepelin's teachings, however tempting such a task may be. His papers in the various Continental psychiatric journals have, from time to time, been abstracted and criticised in the pages of the *Journal of Mental Science*.

Our object is chiefly to point out that there is now available for English readers an excellent translation conveying clearly, concisely, and in a scientific way the principles of Kraepelin's psychiatry, which supplies a hitherto deplorable gap in English and American psychiatric literature. The work is well illustrated.

It is regrettable that, apart from the short abstracts provided in this and a few other journals, foreign teaching and progress in our branch of medical science is so completely neglected.

No asylum should be without its psychiatric library, and this should contain, among others, works conveying the teachings of the various important schools and clinics which are now scattered throughout the world. This means a series of faithful translations of monographs and text-books similar to the one we now strongly recommend to our readers.

We hope this recent example will be more largely followed in the future, and that, before long, there will appear a number of works which will bring within the reach of English readers the main teaching of the more important psychiatric centres.

J. R. LORD.

L'Art et la Médecine. Par le Dr. PAUL RICHER. One vol. 4to, pp. 562 ; 354 illustrations (reproductions of works of art). Price 30 f. Paris: Gauthier-Magmer et Cie., 1902.

This book certainly contains a wonderful collection of the works of art related to medicine, the majority being very careful reproductions of the original paintings, with some representations of statuary, etc.