

a suggestion coming from the environment. This explanation cannot, however, be accepted. The crises involve no loss of consciousness, and no anæsthesia or amnesia or real and complete hallucinations; he can always stop the crises when he wishes, and the entrance of another person often suffices to stop them. The phenomenon is the obsession of a "psychasthenic," to use the term now employed by Janet for a group taken out of the older group of neurasthenia and fully studied in his last book, *Les Obsessions et la Psychasthénie*.

Such psychasthenic obsessions are, in the authors' experience, rare. In this case there was bad heredity; the father died of general paralysis, the mother is neuropathic. The subject himself has been through the fatigues of a Brazilian expedition, in which he displayed considerable ability, and he has had syphilis; his general health is much impaired, and he has lost his aptitude for work. He spends his time in wandering about the streets. He suffers from what has been called "social aboulia." The social system is wrong, he says; he cannot adapt himself to it; he desires the life of nature, the society of primitive people. This social inaptitude, the authors remark, is a chief stigma in all psychasthenics; "Rousseau, the most illustrious of psychasthenics, thus protested against society and worshipped nature." The present subject is very timid, has no friends, and only associates with people below him in the social scale. His thoughts are much turned in a sexual direction; the influence of women is a stimulus that he desires; he gazes in the faces of the women he meets to find, as he expresses it, a kind of morphia for the evils he suffers from. But his timidity, and still more his social inaptitude, stand in the way of any intimate relation with the girls whom he gazes at and follows; the fault, he says, is theirs, because they are so much below his ideal of them; they are even malevolent, and thus it is that he attributes to them the troubles of personality from which he suffers. In this history we have the explanation of the crises.

The case would tend to develop, the authors believe, into delusional insanity, but under treatment the condition is improving and the subject is beginning to show a renewed aptitude for work.

HAVELOCK ELLIS.

The Psychology of Dreaming [*Contribution à la Psychologie du Rêve*].
(*Am. Journ. Psychol.*, July—Oct., 1903.) Beaunis, H.

This issue of the *American Journal of Psychology* is a "commemoration number" of over 400 pages, dedicated to Professor Stanley Hall—as the founder of experimental psychology in America, and a pioneer in the systematic study of children—on the occasion of the twenty-fifth anniversary of his doctorate in philosophy. A large number of the leading American psychologists and some in Europe have contributed to this volume, which includes an excellent portrait of Stanley Hall and a bibliography of his writings. This special number is edited by Professors Sanford and Titchener.

The place of honour is given to a notable paper by Beaunis on dreaming. It is not often that a scientific worker of such eminence is willing to publish so frankly the results of his own auto-vivisection. Possibly he is

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encouraged by the fact that the publication is issued in a remote part of the world. Throughout the greater part of life (he is now 74) Beaunis has taken a scientific interest in his own dreams, recording his observations immediately on waking. He finds three phases in all dreaming—(1) the phase of initial excitation (external or internal sensations, sometimes, perhaps, simple vascular or chemical changes in brain); (2) the mental phase of recollection; (3) the phase of sensori-motor irradiation. Whatever period of his life he dreams about, he always preserves his actual personality. He notes, as others have before, that a *forgotten* memory may reappear in a dream, and gives an instance in which his eye, in glancing through a book, had taken in impressions which only became conscious a few hours later in a dream (the present writer has recorded a precisely similar case). He has never been able to produce dreams, to determine their character, or to put an end to them at will. He believes that he dreams every night, but he is not prepared to assert that no sleep is dreamless. He is a visual of incomplete type; and in the waking state, when recalling images with closed eyes, they appear vague and uncertain, as it were *en grisaille*; his dreams have the same character, but certain objects may present a definition and colour comparable to real objects. The other sensory images present nothing striking. Sounds are deadened; he has never had any dream of smell, and only one of taste. Organic sensations, especially those of the rectum and bladder, play a large and often very grotesque part in his dreams. Motor sensations also play a large part, especially a dream of flying a yard or two above the ground in bounds of ten to twenty yards, in which he has had the delightful sensation of solving the problem of aerial locomotion. This dream entirely ceased after the age of 50. He has never dreamed of writing, drawing, or modelling, all of which he practises in waking life. He cannot confirm the statement of De Sanctis that the dead are not seen in dreams until long after death; he has dreamed of dead friends shortly after their death, and in the dream has sought explanation as to why it is they are still alive. A great deal of mental activity may be displayed in dreams; "in a dream one may analyse, compare, judge, reason; the attention may be voluntarily turned in a particular direction; the most abstract questions may be discussed; for the most part the reasoning is false, the discussions peculiar, the conclusions erroneous, though it is not always so." Emotional experiences in dreams, except in childhood, have never been very intense. Up to the age of 30 or 35 his dreams were chiefly visual and motor; then, as he gave himself more and more to psychological work, and especially after he became Director of the Laboratory of Physiological Psychology in Paris, they became more intellectual. Soon after the age of 60, grotesque dreams disappeared altogether. While his dreams have possibly been affected by his waking avocations, there are two notable exceptions—hypnotism, to which at one time he devoted much attention, never entered into his dreams, and the Franco-German war, which he lived through in an official medical capacity, and which absorbed the whole of his life while it lasted, never once entered into his dreams. At present his dreams are mainly visual, the motor element playing an even smaller part.

Beaunis considers that dreaming has played a very important part in

the history of humanity, that the myths and legends of early civilisation were largely moulded by dreams, that the visions of the mystics often find their key here, and that the religious and philosophical conceptions of the soul has been slowly elaborated from the same source.

HAVELOCK ELLIS.

The Knowledge of Colours among School Children [*Über Farbenkenntnis bei Schulkindern*]. (*Zeitsch. f. Psychol. u. Phys. d. Sinnesorgane.*) Lobsien, Marx.

This investigation was undertaken at Kiel in the hope of throwing light on various interesting questions bearing on the development of colour perception. It deals exclusively with girls, between the ages of 8 and 14, 289 in number, and brought up in an urban environment. The first series of experiments was designed to test the correct recognition of colours by name. Red stood highest; at nearly every age this colour was correctly recognised and named. Blue comes next, only a few of the youngest children failing. Yellow and green follow at a considerable interval, a rather remarkable fact in view of the interest which young children have usually been found to take in yellow; while at every age the children were found to be more or less defective as regards orange and violet and indigo. The cause of the gradual development of colour perception with age is psychological, Lobsien believes, rather than physiological; the colours which the child sees most frequently he knows best. Orange was never called "yellow" but frequently "red," and still more frequently "brown." Violet was by the younger children most usually called "blue," but at a later age often "red."

In the matter of colour preferences the interest of the younger children was at least as keen as that of the older children. Red was always a favourite colour, though to a less marked degree among the elder children. Orange, whether when compared to red or to yellow, was rejected by nearly all. Blue is preferred to indigo and yellow, but by no means to violet. Experiments were also made with the preferences for colour combinations. No colour combination was preferred under all circumstances, and the so-called harmonic combinations, red-green, orange-blue, yellow-violet, were by no means general favourites. It is noteworthy that in many respects the youngest and the oldest children showed an approximation, the intermediate children widely varying. No demonstrable influence was exerted by the appearance of puberty.

HAVELOCK ELLIS.

The Measurement of Fatigue [*Sur les Méthodes de Mensuration de la Fatigue des Ecoliers*]. (*Arch de Psychol.*, Oct., 1903.) Schuyten, M. C.

In experiments on fatigue, especially in school-children, various workers have come to the conclusion that fatigue is greater in the afternoon than in the morning, and consequently that efforts should not be demanded of children in the afternoon. Schuyten, investigating the auditory memory for figures in the primary schools at Antwerp, finds