

parts, in naval administration amongst others, than he has been generally credited with. Cromwell's achievements, on the contrary, have been greatly exaggerated, according to the author.

This diversity of view adds interest to a book that is thoroughly attractive from its clear and concise account of the events of this period, as well as for the clever psychologic sketches of the leading actors. We can confidently recommend it as worthy of attentive reading, and of a prominent place on the historic bookshelf. The pleasure of reading is enhanced by the excellence of the type.

Part III.—Epitome of Current Literature.

1. Physiological Psychology.

The Psychology of Dreams. (*Amer. Journ. Psychol.*, Jan., 1905.)
Jewell, J. R.

This study is founded on a *questionnaire* sent out chiefly to Normal schools; more than 2000 dreams were received from some 800 people. The author believes that his results are based on a larger mass of data than any previous study of dreams. Puberty is found to work a considerable change in dreaming; before that epoch the events of daily life tend to be immediately reflected in dreams; afterwards the interval becomes much longer. Over 90 *per cent.* individuals have at some time walked or talked in their sleep, and 15 *per cent.* (all young women) frequently laugh or cry. Motor activity during sleep is, however, distinctively a childish characteristic, though it frequently persists into later life. Suggestion is very often efficacious in preventing undesired dreams. The confusion of dreams with real life is almost universal in childhood, and not uncommon in late life. So-called premonitory dreams are usually susceptible of a rational explanation. The influence of dreams upon real life is vastly greater than is usually supposed. Every mode in which the mind functions in the waking state may also occur in the sleeping state. The above and other conclusions are discussed and illustrated.

HAVELOCK ELLIS.

Nyctophobia [*La Nyctophobie chez les Enfants*]. (*Arch. de Psychol.*, Feb.—March, 1905.) Sanet, R.

The author of this paper, who is a professor in the Normal School of Dolores in the Argentine Republic, has studied "night terrors" in 519 children. Between the ages of 7 and 9, all children, boys and girls, were found to be afraid of night or of the dark; even the most courageous children were thus affected. The percentage of children with nyctophobia gradually diminishes after this age. For the whole school period (ages of 7 to 14) 140 out of 160 boys, and 340 out of 359 girls, experienced nyctophobia, sometimes associated with various other nocturnal phobias, but very rarely with any of a diurnal character. Sanet recognises a *crescendo* of phenomena in a child who is liable to the fear

of darkness : (1) A sensation of depression ; (2) increased auditory acuteness and generalised hyperæsthesia ; (3) endoptic phenomena externally projected ; (4) true hallucinations ; (5) terror. He considers that nyctophobia is a phenomenon of intellectual rather than of emotional origin, and therefore secondary to some other fear, such as of robbers. He makes no reference to the plausible atavistic theory of Stanley Hall, who had previously discussed this fear.

HAVELOCK ELLIS.

The Pathology of the Smile [*Pathologie du Sourire*]. (Rev. *Phil.*, June, 1905.) Dumas, G.

In a previous study of the smile, based on analysis and experiment, Dumas has shown that it is susceptible of a purely mechanical explanation, as the necessary result of slight excitation of the facial nerve. He now proceeds to apply this explanation to morbid conditions. All morbid conditions which diminish or suppress the tonus of the facial muscles should, if this explanation is sound, abolish the smile and produce the opposite expression of depression, while morbid causes which increase the tonus of the facial muscles should increase the smile. Dumas proceeds to show that this is actually the case. Thus in passive melancholia, the muscular tonus is diminished throughout the whole body, the arms fall, the head and knees are bent, the thighs are flaccid, and in the face this hypotonus, acting on the zygomatics and the elevator of the lips, relaxes the muscles that cause the smile and produces an expression of dejection. So in facial paralysis, wherever the seat of the lesion may be. In maniacal excitement, on the other hand, there is hypertonus of the whole body. Arms and legs and thighs are firm and elastic, and in harmony with this general muscular contraction the facial muscles assume a smile even apart from associated sensations of an agreeable character. It is the same also in the hypertonus of the expansive forms of general paralysis. The hysterical hemispasm is explained in the same way, hysteria producing without anatomical lesion the same smile as hemiplegia with descending pyramidal degeneration. It is essential, for the production of the smile, that the spasm should be slight, more pronounced excitation of the facial nerve producing a grimace. The smile is thus defined as "the easiest motor reaction of the facial muscles to every slight stimulation of the facial nerve, whether that stimulation is sensory, electric, circulatory, traumatic, or inflammatory." Such an explanation, Dumas believes, renders unnecessary the "extravagant theories" of Darwin and Wundt. The article is well illustrated.

HAVELOCK ELLIS.

A Biological Theory of Sleep [*Esquisse d'une Théorie Biologique du Sommeil*]. (*Arch. de Psychol.*, Feb.-March, 1905.) Claparède, Ed.

The chief current theories of sleep are the circulatory, the neurodynamic, the bio-chemical, and the toxic, with Dubois's recent theory of carbonic auto-narcosis. Claparède criticises these explanations, and then sets forth a biological theory of his own. Sleep, he argues, is not, as the current theories presuppose, a merely negative and passive state. It must, on the contrary, be considered as active and positive, as a function. Cabanis, Myers, De Sanctis, and others have already so

regarded sleep, but they have not put forward any satisfactory theory on that basis. This Claparède attempts to do. He regards sleep, not as the result of exhaustion (which is more likely to prevent sleep), but as a method of preventing exhaustion. He draws an elaborate parallel between the act of sleep and that of micturition, which also is not a passive result of distension but an active manifestation. Sleep, thus considered, is an act of reflex order, an instinct. Physiologically, the author regards the mechanism of sleep as a process of active inhibition, resulting from a stimulation; he also recognises a specific reparatory action (beyond mere repose) in sleep. A discussion on sleep in relation to hysteria follows, and the views of Janet and more especially those of Sollin are acutely criticised. The whole argument of this lengthy study is conducted in the clear and orderly manner, with full knowledge of the existing literature, to which the author has accustomed us in his previous works, notably that on "association." HAVELOCK ELLIS.

A Case of Vision acquired in Adult Life. (Psychol. Rev. Monograph Supplement, University of Iowa Studies in Psychology, 1905, No. 5.)
Miner, J. B.

Observations on the first visual experiences of persons who obtain their sight at an adult age are not very uncommon, but the author believes that this is the first case of the kind in which the modern laboratory equipment has been used to investigate systematically and quantitatively the new visual sense and the learning process. The patient, a young woman, æt. 22, when operated upon, had complete cataract of both eyes from birth, with only the very dim vision usual in such cases. She came under observation some months later, when still very ignorant of common visual processes, though having unusual natural ability, an excellent High School training, and very keen powers of introspection. The eyes had fully recovered from the operation, so that she could carry out extended tests without fatigue, and she was able to read print with some facility, though unable to recognise persons by sight.

In testing the other senses it was found that, as regards hearing, she had a very wide range of tone sensations, but no unusually keen tone discrimination. In localising sounds the most noticeable point was the tendency to move the head. With the æsthesiometer passive touch showed no peculiar sensitivity, but action touch was found to be very acute. Both hearing and touch seem thus to have been improved by training. Her vision, considering that she has no lenses in her eyes, may now be regarded as excellent; her reading glasses have lenses of + 13 dioptries, and with these she can read even very small type when held close to the eyes. In colour vision the subject is decidedly above the average; she can detect colour solutions which were perfectly transparent to the workers in the laboratory, and in the spectrum she can apparently see ultra-violet, which is beyond the usual field of view. With the Lovibond tintometer her colour vision was also found decidedly superior to the normal. It is suggested that the absence of the lens may possibly give a clearer colour vision, or that the powers of the retina may have been preserved or heightened, rather than deteriorated, by disuse. Another remarkable fact is that, reversing the usual

illusion of irradiation, black objects are seen as larger than white objects of the same size. The author believes that this anomaly is of central origin, and suggests that it might be of interest to measure the illusion in persons suffering from melancholia, by whom darker colours are said to be preferred. The subject reacted normally to most visual illusions. Many other interesting observations are brought forward, and the author proposes to publish a more elaborate record of his experiments.

HAVELOCK ELLIS.

Confabulation [*Zur Psychologie der Confabulation*]. (*Neurolog. Ctbl.*, June 1st, 1905.) *Pick, A.*

Professor Pick, who has already dealt with various allied conditions of morbid mentality, here discusses a condition which he defines as "the filling out of lacunæ in the memory by falsifications of recollection," and proposes to term "confabulation." He attempts to investigate the psychological foundation of this phenomenon, pointing out its importance, especially for criminal psychology.

Memory defect in hysteria, traumatic amnesia, and allied conditions does not necessarily involve confabulation; and Wernicke, who first gave special attention to the condition, is inclined to connect it with the dream-life, but Pick objects to this that confabulation can usually be voluntarily turned in a desired direction; he agrees with Bonhoeffer that the patient, having discovered a lacuna in memory, is seeking voluntarily to conceal it. Suggestibility also plays a part. The patient is, further, led to confabulation by the need of filling a defect in the localisation of his memories, normal memories requiring to take their part in a panorama of impressions. This is an unconscious need.

HAVELOCK ELLIS.

The Intelligence of the Sparrow. (*Amer. Journ. of Psychology*, July, 1904.) *Porter, J.*

Mr. James Porter, in a paper of thirty-three pages, details experiments which have been applied in the Psychological Laboratory of the Indiana University to test the intelligence of this cosmopolitan little bird, which he always calls the English sparrow. Forty years ago it was introduced into North America, where it has multiplied greatly and spread into the Western territories, much to the grief of the farmers. Passing over what has been done in the study of the brain of the sparrow, Mr. Porter gives us a study of its psychology. His methods of experimentation are described in detail. These treat mainly of the intelligence of sparrows kept in captivity in obtaining food under various conditions. In time they learned to raise the latch of a food-box, to recognise the forms of vessels, and to get in or out of passages. Attempts were made to test their sense of colour and their estimation of groups and quantities. Across the Atlantic, the sparrow sustained its character for shrewdness and readiness. It was found quite as intelligent as monkeys, if its ability to profit by experience is taken as a criterion, and its method of learning is empirical, "one of trial and error," but it profits by imitation. It seems unable to profit by any result which does not closely follow its directed effort. The English sparrow never ceases in his efforts to get through or out of the maze. He seldom stops to

preen his feathers, or to sit down and rest. He also returns again and again to get into the food-box—"He is persistency itself." Kept in the laboratory for months, the birds still remained wary and did not become tamed. Sparrows were found to have a nice sense of position, but none of number. A female sparrow distinguishes the standard colours, red, blue, green, and yellow, almost if not equally as readily as a female monkey.

WILLIAM W. IRELAND.

Experimental Studies in Mental Deficiency. (Amer. Journ. of Psychology, July, 1904.) Kuhlmann.

Mr. Kuhlmann comments upon the want of an accurate terminology in the description of mental deficiencies. He observes that the division into idiots, imbeciles, and feeble-minded, according to the degree of general development, is perhaps the most common, yet any one of these terms is applied as descriptive of all degrees. This is scarcely the case in Britain, and certainly not by the same writers. Mr. Kuhlmann hopes to remedy the confusion by proposing further divisions. He is not convinced that an accurate classification based upon the degree of general development is not possible, and believes that the experienced hand can make a further division into low, middle, and high-grade idiots, imbeciles, and feeble-minded, without any serious blunders in the classification of cases. Mr. Kuhlmann, however, need not expect to escape the common difficulties of getting other observers to agree to his nine subdivisions.

Dr. Sommer has constructed a general Frage-Bogen for use in diagnoses of different forms of insanity and arrested development, and Möller has constructed a scale for the latter cases. Mr. Kuhlmann's paper occupies fifty-six pages of the Journal. He gives a natural preference to the experimental methods over the general method of observation, though he admits that any preconceived plan which has been the result of the experimenters' training in a psycho-physics laboratory is doomed to fail. He strangely overlooks the consideration that most of the studies of idiocy and imbecility presented by previous writers have been made from the observations of teachers who have been associated with them for years, and have with marvellous patience laboured to overcome their deficiencies and to exercise and improve their weaknesses. Indeed, he has the hardihood to say that psychological studies made by superintendents and teachers in training schools on idiots are based upon general observations only. The results have been expressed in general terms, but in what other form could they be put, acceptable even to the medical public? In fact, Mr. Kuhlmann uses the same generalisations in his summary, and his conclusions do not differ from those already published by previous writers who have closely studied the subject; if they did, we should scarcely give him the preference. Like them, he has repeated what has been often noted. Surely it is nothing new to learn that imbeciles lack attention, are lazy, and are easily distracted by external stimuli, and soon lose interest in prescribed exercises, and that the memory-span of the feeble-minded falls below that of a normal child, and that they remember some things better than others. We object to any one deficiency, such as want of attention and will power, being used as a criterion. Mr. Kuhlmann might well have given us some observations on the musical capacity, which is sometimes surpris-

ingly great even in idiots of low grade. Most of his observations have been made upon imbeciles, not upon idiots of a low class, who often present interesting features, but naturally are not easily experimented upon with his reaction keys, kymographs, pendulums, metronomes, and other bewildering apparatus from a psychological laboratory. He has given us a detailed description of the mental history and attainments of nine cases of idiocy, some of them too carefully posed to be characteristic. The author has used praiseworthy diligence in compiling his results and computing his averages. He presents at the end a very full collection of the recent literature of the subject, which will be most useful to those who seek to follow in his footsteps.

WILLIAM W. IRELAND.

Studies on the Defects of Perception [*Studien über Merksdefekte*].
(*Monatss. f. Psychiat.*, Feb., 1905.) *Boldt*.

In making these investigations, Boldt has availed himself of the methods used by Ransburgh, described in the ninth volume of the *Monatsschrift*. He has arranged his inquiries under seven heads: first he applied tests to the memory of heard words, in the second to the recollection of persons, in the third to that of colours, in the fourth to the position of figures, in the fifth to the memory of isolated words, in the sixth to that of names, and in the last to the recollection of numbers. Dr. Boldt experimented with forty persons, thirty-five of whom were insane patients, comprising general paralytics, senile dementers, cases of brain disease, alcoholic and epileptic dementia and imbecility. Dr. Boldt observes that the faculty of memory depends on perception and reproduction. The first step is to ascertain if the patient is able or willing for the necessary attention, and then if he has reached the correct apprehension of what is to be remembered. In normal persons the exercise of memory seemed to improve the answers received. Next day, with the patients contrary results were obtained. Where the mental capacity was but little impaired the greatest defects of memory were found in cases of insanity following drunkenness. One patient had the form of insanity described by Korsakoff, in which aberrations of memory is the most prominent symptom. Instances in which the loss of memory surpasses other mental symptoms are not common. The deepest impairments of memory were found in general paralysis, senile insanity, and arterio-sclerotic degeneration. In the single imbecile examined, a lad æt. 15, the memory was good, though there was a grave deficiency in the intellectual capacity. Dr. Boldt finishes his paper by presenting, in a tabular form, the outcome of his thirty-five patients as to their capacity for recollecting and keeping in memory the exercises used under his seven heads.

WILLIAM W. IRELAND.

2. Etiology of Insanity.

The Relation of Tertiary Syphilis to Tabes and General Paralysis [*Ueber die Beziehungen der tertiären Syphilis zur Tabes Dorsalis und Paralysis Progressiva*]. (*Neurol. Cbl.*, Feb. 1st, 1905.) *Hudovernig und Guszman*.

Although most physicians who have studied the question are satis-