

addition to vaso-constriction, there are also profound modifications in the volume of the brain. Since such modifications do not occur in any other form of the other modes of application, and are constant in excitation of the sympathetic region, they must be referred to a special action of electricity on this region. (5) In all applications of the faradaic current the ultimate result is always augmentation of the blood-flow to the brain (hyperæmia).

*Pianetta, C. Contribution to the Study of Puerperal Insanity (Annali di neurologia).*—This is the outcome of 88 observations. In 11 cases the disease had developed during pregnancy, in 35 in the puerperal period proper, in 42 during lactation. The author has ascertained:—(1) That puerperal insanity, especially that developed during pregnancy, is rare. (2) That the disorder cannot be attributed etiologically to a specific condition peculiar to the state of pregnancy, that of the puerperium, or of lactation, but that such states ought rather to be considered as occasional causes of the disorder. (3) That the mental conditions which developed during the puerperal state have no distinct features whereby they may be distinguished from psychoses arising independently of such state—whether as regards clinical course or mode of death; the same symptoms are frequently present in maniacal confusion and stupor. (4) That the prognosis is generally fatal, and in arriving at it the ordinary criteria, which obtain in mental disorders generally, are followed, regard being had to etiological data and the form of mental disorder which is presented by each case.

*Buccelli, N. On Certain Little-Known Alterations of Cutaneous Sensibility in Acute Dementia (Rivista Sper. di Freniatria).*—From a minute and careful examination of cutaneous sensibility in five cases of this disease the author has arrived at the conclusion that in some cases it is altered, especially the sensibility to pain and heat, which is sometimes morbidly exaggerated, sometimes blunted. The alterations are well defined, symmetrical, run a variable course, disappearing either spontaneously or by the action of stimulant measures, often before the general disorder; but sometimes remaining, though in a milder degree, until the patient recovers.

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#### FRENCH RETROSPECT.

*By Dr. Macevoy.*

*Psychical Asthenia and Obsession. Treatment by Suggestion.*

A short account of a clinical lecture on this subject by Professor Raymond, of the Salpêtrière Hospital, is given in the *Revue de l'Hypnotisme* for June, 1896. It concerns a young woman, aged 28 years, formerly telegraph clerk. Her family history is good, and she has had fair health, except that at the age of eight she

had typhoid fever. At the age of 12, the time of her first communion, she began to have numerous religious scruples—fear of unsatisfactory confession to the priest, dread of a “bad communion.” These lasted two years, but became attenuated. Married at the age of 20, she had one child, the death of which, eighteen months ago, gave rise in her mind to the deepest grief. She now became intensely devout, and full of religious ideas. On one occasion she was noticed in an attitude of threat, shouting “No, no, no!” to some imaginary enemy, and refused to explain the meaning of this performance. For about a year it was frequently repeated, and the patient appeared to be dominated by a fixed idea which she kept secret, and sank into a condition of mental and physical apathy.

A fortnight ago she revealed her secret. Since the death of her child she could not resist the tendency to associate the name of God with all kinds of offensive epithets: pig, beast, etc. But, while perpetually awed by this imperative idea urging her to blaspheme, she manifested her resistance to uttering the bad names by crying out “No, no, no!” At the same time she feels that if she ceases to curse Providence, something dreadful will happen, her husband will die, etc.

Here, therefore, is a case where a moral shock determines a condition of psychical asthenia; a fixed idea appears—the resultant of a series of reflections which we ignore and which probably the patient herself ignores. These ideas, which may have been conscious once, and have become little by little sub-conscious, are at times very difficult to trace. Hypnotism may reveal them, or occasionally interviews with patients which inform one of their modes of thought. In this case, an idea of injustice related to the death of her child, seems to manifest itself in reproaches and curses hurled at Providence. Owing to the religious convictions of the patient these are fought against, hence her resistance and protest of “No, no, no!”

It is therefore important to look for the primitive idea in these cases, the cause of the delirium (the feeling of injustice at the death of the child, as in this case). For one's endeavour should be, in addition to general treatment, to substitute, by suggestion, either during hypnotic sleep or in the absence of sleep, a new idea, just and reasonable, for the false idea which determines the psychical troubles.

In conclusion, Professor Raymond says:—“Similar cases to this are very frequent; they are well worth knowing, for they necessitate careful inquiry, with consequent indications for the use of a therapeutic agent of a particularly delicate nature, but which gives the best results (suggestion).”

*Alcoholism in Paris.*

Professor Raymond (*Le Progrès Médical*, July 18th, 1896), comparing his experience of 1887 with that of to-day, is of opinion

that alcoholism is progressing in Paris with giant strides. He has taken statistics of the number of alcoholics applying to be treated at his clinique at the Hôtel Dieu, and he is careful to explain that by an "alcoholic" he means an individual who has become socially a cypher—unable to work, and dependent on society (the hospital, the asylum) for his immediate wants; not simply a "drinker."

In February, 1896, 1,106 general patients applied for treatment, 62 of whom were confirmed alcoholics; 14 of these were phthisical, in whom other causes of phthisis (except alcohol) were excluded.

Among the 1,106 patients were 677 men and 429 women, and the 62 alcoholics were made up of 38 men and 24 women, giving, therefore, a proportion of 5·6 per cent. among the men and 5·5 per cent. among the women. He believes that alcoholism in women is increasing terribly.

Professor Raymond is convinced that these numbers are below the reality, for he has only taken into account (including of course phthisical drunkards, who are, one must admit, the type of these social cyphers) inveterate alcoholics, who, after nights of insomnia or of perturbed sleep by painful dreams, wake up in a broken-down condition, unable to go to work, and in whom loss of appetite, digestive troubles, bring about a rapid dissolution. He has limited himself to those who cannot sleep, who cannot eat, cannot work, cannot resist, and are doomed to die very soon. And these, he adds, at the Hôtel Dieu in February last, numbered 62 out of 1,106 patients examined. Assuming that this is more or less the experience of twelve other hospitals in Paris, we have 10,000 patients in one year rendered useless by alcohol. It is easy to estimate what this state of affairs costs the "Ville de Paris."

The majority are single, and absinthe and "rhum" are the liquors mostly consumed, three francs out of five francs being probably spent on these poisons.

One feature in these cases is the apparent unconsciousness of harm in their habits. To many of them it seems natural to drink daily four, five, or six glasses of spirits, and many in apparent good faith protest that they do not drink immoderately. In conclusion Professor Raymond adds:—"What saddens one especially, in presence of these men and women in comparative early age thus overpowered, is the thought of the future of the Parisian race, and one is almost led to the cruel conclusion that Nature is perhaps right in eliminating them."

#### *On Chemical Demorphinisation.*

Dr. Albrech Erlenmeyer, who is responsible for the introduction of the rapid method of cutting off morphia in the treatment of morphinomaniacs, in *Le Progrès Médical* of August 1st, 1896, draws attention to a further improvement in the treatment of

morphinomania by the use of alkalies, a method which he has used during the last three years at the Bendorf Asylum with much success. The clinical observation of certain symptoms which are prominent when morphia is suppressed in cases of morphinomania reminds one forcibly of the symptoms of dyspepsia from excessive acidity in the stomach.

One finds in both conditions, not only direct gastric symptoms such as intestinal pain and oppression, nausea, vomiting, diarrhoea with frequent evacuations, but also such indirect symptoms as sensation of heat in the back, irritability of the muscles of the trunk and limbs, and painful sensations in the legs.

Moreover, examination of the contents of the stomach of a patient who has ceased to take morphia, or is only taking very small amounts, shows the presence of a large excess of hydrochloric acid. The explanation of this condition is as follows. The constant elimination of morphia through the walls of the stomach in cases of morphinomania leads to a cessation of the function of the gastric glands—they are, so to speak, narcotised; so that there is deficiency of hydrochloric acid. After suppressing morphia, the opposite condition is induced; the denarcotised glands recover their functions, and the stomach becomes flooded with acid, with the result of irritation of gastric nerves, producing the so-called symptoms of suppression: vomiting, abdominal pain, colic, diarrhoea, heat and pains in the back, restlessness of limbs and trunk, insomnia, acceleration of the pulse.

Accepting these data, Hitzig first tried the rational treatment of this condition. In a patient so placed (that is after suppressing morphia) he removed the hydrochloric acid by washing out the stomach, and in addition introduced an alkaline solution (Carlsbad water). "Abstinence symptoms" practically did not appear, and the patient, in whom several attempts at cure had been made at different times, pronounced this treatment as the easiest to bear.

Dr. Erlenmeyer has dispensed with the use of the stomach pump, and simply relies on neutralisation of the hydrochloric acid in the stomach by the use of Fachingen water (containing 35 gr. of bicarbonate of soda in 1,000 gr.), about one litre being given in 24 hours. The effect is most satisfactory; no direct gastric symptoms appear, no vomiting, no colic, and instead of diarrhoea—which in cases treated by the old methods was very troublesome—there is constipation. As regards reflex nervous symptoms, there are none, or they are so slight that the patients do not suffer from them.

In this way 30 patients have been treated during the last three years with the greatest comfort. The craving for morphia, however—the psychopathic symptom—remained, and it was interesting to note that, whereas the stage of suppression of morphia, in the case of morphinomaniacs of ten or twenty years' standing, was

unaccompanied by physical suffering, yet the urgent desire for morphia persisted, and patients clamoured for it.

In carrying out an absolutely systematic treatment of these cases, Dr. Erlenmeyer therefore proposes that hydrochloric acid should be given during the morphinisation period. In this way the anacidity of the stomach will be avoided, and the gastric nerves will be kept subjected to the influence of the acid. The author believes that the chemical treatment of the morphia habit offers much promise of success in the future; and while conscious that we have much to learn about the mode of action of morphia and the character of its products of transformation in the organism, he hopes this work may be a useful contribution to the subject.

*Paraldehyde as a Hypnotic for the Insane.*

Dr. Daman, of Liège (*Bulletin de la Société de Médecine Mentale de Belgique*, June, 1896) thinks that with the plethora of new hypnotics, there is a danger of discarding such a useful drug as paraldehyde for procuring sleep in the insane. The experience of its use, in the clinique of M. Francotte, places it in the first rank, being far safer than chloral, opiates, chloralose, etc. It is safe in cardiac cases; does not upset the digestion (it was given for six weeks with the greatest benefit in a case of generalised eczema with catarrh of the digestive tract), and no dangerous symptoms are produced. With the exception of two cases, Dr. Daman has not known it to fail in procuring refreshing sleep, without any consecutive headache or malaise. Of course it is not an analgesic like opium. Paraldehyde may be given during long periods without losing its effect, and without the necessity of increasing the dose; in one case, a patient took a drachm nightly for a year. The taste of the drug, and the persistence of its odour in the breath for several hours after its ingestion are drawbacks; but very few patients object to it on this account. A combination with tincture of orange peel and sugar practically overcomes these objections. Tincture of cloves may also act well as a corrective, but it is inferior in this respect to tincture of orange. One drachm of paraldehyde at night is almost invariably a suitable dose.

*Observations on Prestidigitators.*

Professor J. Jastrow (Translation from "Science" in *Rev. Scientifique*, 20th June, 1896) resumes some experiments made upon Messrs. Hermann and Kellar, well-known prestidigitators, bearing upon tactile sensibility, visual perception, simple and complex reaction-time. He finds that they differ especially from ordinary subjects in the rapidity of their response to tactile and visual stimuli. This rapidity, which is present also with Mr. Kellar in the case of auditory stimuli, is not evinced in complicated reactions, in which neither subject reaches an average

standard. Rapidity of movements is considerably above the average in both prestidigitators. As regards visual perception, the advantage is only partial and is not striking, taking the whole of the experiments. In the experiments dependent upon tactile and muscular perception, they are rather below the normal.

The experiments, Professor Jastrow says, are not very conclusive; they show nevertheless that it is quite likely that exceptional skill obtained by an exclusive and specialised training may have but very little influence on other faculties. "The question is so little known, and the short series of experiments is so open to accidental errors, that it is wise to defer all hypotheses."

*Psychoses in Old Age.*

Dr. Ant. Ritti introduced a discussion on psychoses in old people at the Congress of Alienists and Neurologists, held at Bordeaux, in August, 1895 (*vide Reports of Congress*, Vol. i., G. Masson, 1896), limiting the subject to psychoses occurring in old people of previous good mental health, and therefore excluding senile dementia, and mental troubles consecutive to brain lesions (softening, hæmorrhage). The frequency of these psychoses is discussed, stress is laid upon certain characteristics which they present, and there are interesting remarks on prognosis.

A few general considerations on the psychology of old age precede the work, and reference is also made to the legal bearing of the psychoses—as regards testamentary capacity, legal responsibility, etc.

The following are the general conclusions of the author:—

1. By psychoses of old age are meant the mental affections which supervene late in life in individuals who have not hitherto shown signs of any psychical trouble.

2. The most frequently observed psychoses in old age are, in order of frequency: melancholia in different forms, especially simple melancholia and anxious melancholia (excited); mental confusion, mania, moral insanity, systematised delusional insanity.

3. The excited melancholia of old age is one of the most clearly defined by the constant agitation, anguish, violent impulsiveness, refusal of food under the delusion that human flesh, rotten food, is administered; by the tendency to obscenity, insomnia, etc.

This form is very curable.

4. The insanity of persecution which begins in old age presents also special characteristics. It follows the same course as in adults, but is more rapid; it presents hallucinations of vision, which are not accidental, but are a part of the disease, and enter to some extent into the constitution of the delusions.

5. Systematised delusional insanity, whether it be insanity of persecution or megalomania, may manifest itself in old age with the same coherence, the same activity, the same bearing as in adult

age. Hence one may conclude that the psychoses appearing in the last phases of life are not necessarily tinged with that intellectual falling off which is described under the name of *senile dementia*.

6. One of the insane manifestations, which is present in nearly all psychoses of old age, is eroticism. Whether we deal with mania, or melancholia, or delusional insanity, one finds in all the patients some over-activity in the domain of the genital sense, as evidenced by words, gestures and acts, often the most obscene.

7. The study of somatic or bodily symptoms is of the greatest importance in the psychoses of old age. Troubles of circulation, cardiac lesions, renal lesions are very frequent. It is probable that the frequency in old people of mental confusion (stupor) is due to some auto-intoxication (? uræmia).

8. The causes of these psychoses must be searched in heredity, in the organic modifications which accompany old age, in the diminished resistance which the senile brain opposes to moral and other shocks.

9. The prognosis of these affections is not absolutely unfavourable. The cure of certain psychoses in old age is almost as frequent as that of the insanities of middle age.

10. The study of psychoses *in* old age is, in a measure, the complement of that of the psychoses *of* old age. The insane, and especially cases of circular insanity, and insanity of persecution, reach the extreme limits of old age without falling into dementia. As a rule, it is only as the result of some cerebral stroke that the first symptoms of loss of the intellectual faculties appear; but we are then in the presence of organic dements and not of "insane" dements (*i.e.*, secondary dementia).

11. As regards the legal relations of the psychoses of old age, they come under the same rules which govern the law of the insane. Cases relating to the question of testamentary capacity probably arise more frequently than those concerning legal responsibility (crime, etc.).

#### *Biological Study of Pain.*

In the *Revue Scientifique*, of August 22nd, 1896, is a publication of Professor Charles Richet's interesting and philosophical communication on pain to the Psychological Congress of Munich. The subject of pain is investigated from the physiological side, and the author shows that pain results from any cause which profoundly modifies the condition of a nerve. As a consequence of any strong stimulus applied to a nerve there is local disorganisation, and at the same time powerful reflexes of a defensive character, accompanied by a special reaction, which is entirely subjective—that is pain. A fundamental character of pain, upon which Professor Richet lays stress, is its duration; so that with a stimulus of very short duration the resultant pain may be indefinitely prolonged

in the memory; with the consequence that we are so constituted that our highest endeavours are to avoid pain. And therefore also, concludes the author, we are so organised that we try to avoid all causes of destruction and perversion of our tissues. Nature, in short, leads us to consider pain as the supreme evil (whatever stoics may say), and it is in this respect that the function pain is useful to life; *i.e.*, a most powerful means of preventive defence.

Incidentally, Richet, in the course of his article, is led to make a confession of faith, namely, that the principle of final cause, which formerly seemed to him ridiculous, strikes him, after mature reflection, as absolutely necessary in physiology; and that each element of our organism, each detail of a physiological function, has an end in view which is always the same—that is an optime and a maximum of life.

Not to fear pain is a grievous error; and we shall conform to the natural law in avoiding pain both on our account and for the sake of others.

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#### RETROSPECT OF PHYSIOLOGICAL PSYCHOLOGY.

*By Havelock Ellis.*

##### *Illusions and Hallucinations in Normal Life.*

Dr. C. E. Seashore has recently carried out at Dr. Scripture's laboratory at Yale University a detailed investigation which is of the greatest interest to psychologists generally, and by no means least to alienists (C. E. Seashore, "Measurements of Illusions and Hallucinations in Normal Life," *Studies from the Yale Psych. Laboratory*, Vol. iii., 1895). Although illusions of weight as conditioned by size, and similar fallacies of perception, have been studied from time to time, our chief knowledge of them has been founded on the abnormal phenomena observed in the insane, and on those more or less reliable anecdotes so carefully collected and sifted by the Psychical Research Society in their great Census of Hallucinations. Dr. Seashore starts from the familiar illusions of weight, but he carries the matter a distinct step beyond the point yet reached. He shows that illusions of all the senses, and even developed hallucinations, occur regularly and normally in trained observers working in the laboratory, and in spite of efforts to guard against them.

The first series of experiments, here fully detailed, was made with two sets of blocks, one set varying in size, but of uniform weight, the other varying in weight, but of uniform size. It was found that there is a uniform, regular, and persistent illusion; "the influence due to size in the determination of weight within a middle range is almost as patent as an absolute difference in weight." The larger bodies of those having the same weight, but