court of justice, and are condemned to punishment for crimes which are the undoubted result of the disease from which they are suffering, and require not condemnation but appropriate medical treatment.

There are two points of special forensic interest in the catatonic form of the disease.

- (1) The value of such a patient's evidence: In spite of the stupor, immobility, and want of activity, the patient, being conscious, may remember and be able to relate any violence to which he may have been subjected. He also may be able to describe any scenes at which he has been present. So that his evidence, with great reserve, may be worthy of credence.
- (2) In this phase of the malady the patient may develop a state of excitement in which he may commit acts of impulsive violence against himself or others. It being found that consciousness is present, in spite of the patient's inability to understand his own state of excitement, or of being able to control it, it may happen that at the first superficial examination he is believed to be a malingerer.

In the paranoidal form of the disease, characterised by delirious ideas, hallucinations, and delusions of persecution and grandeur, the individual may be guilty of false accusations and violence, but the absurdity of the delusions, while sharply marking off this form of alienation from the true paranoia, demonstrates the mental disorder.

In the first period of dementia præcox the patient from his inertia, apathy, and general behaviour, may be confounded with the common criminal, the idler, or the malingerer. In the later stages the disease may be mistaken for paranoia or certain neuropsychopathic states. When the differential diagnosis oscillates between dementia præcox and certain forms of paranoia, the legal consequences may not be very grave, as in any case one is dealing with a psychopathy of a progressive form. The question is more grave when dementia præcox is confused with psychasthenic or neurasthenic states, for here the decision is especially concerned with civil capacity. In neurasthenia the judgment is not serious, while in dementia præcox the prognosis of probable incurability inclines the specialist to exclude the patient from every civil capacity.

J. BARFIELD ADAMS.

Bergson's Theory of the Dualism of Intelligence and Instinct applied to Criminals, Fools; and Geniuses, and to a New Classification of Mental Diseases. [Il dualismo Bergsoniano dell' intelligenza e dell' istinto applicato ai criminali, ai pazzi, ai genii, e ad una nuova classificazione delle malattie mentali.] (Archivio Antropologia Criminale, Psichiatria, e Medicina Legale. February, 1916.) Lombroso, Dr. Gina.

From its commencement the science of criminal anthropology has been faced with the problem of the intelligence of the criminal, which from many points of view appears to be inferior to the normal, and from others, especially in the cleverness shown in carrying out crimes, and in the satisfying of passions, rises often to the level of genius.

The same contradiction exists in the question of genius. Cæsare Lombroso has demonstrated that geniuses, the gods "before whom a

man may without shame bend the knee," pay for their mental strength with some defect—they cannot manage their private affairs, they have infantile fears, technical incapacities, extravagant loves, etc.

The writer of this article believes that the key to this contradiction is to be found in the doctrine of instinct and intelligence which Bergson

has propounded in his work, Evolution Créatrice.

Instinct and intelligence, according to Bergson, are not the evolution of one faculty, but are two faculties very distinct and different, each of which may be carried separately to the highest grade, without any influence on the evolution of the other.

Instinct has for its domain practical life. Its duty is to satisfy the passions, and the wants of mind and body, to utilise to the utmost and to adapt the instruments, organic at first, afterwards inorganic (machines), which serve for the satisfaction of human needs and passions. It is almost always unconscious, but it may become conscious if some obstacle interferes with the attainment of its aim.

Instinct, according to Bergson, improves and develops with exercise, as intelligence does. To its jurisdiction belongs all our practical life, including the professions, handicrafts, etc.; it is connected with intelligence in so far as the latter must be concerned with the solving of problems. But once solved, the fruit of intelligence passes into the sphere of instinct, which utilises it, fixes it, and makes practical use of it.

Intelligence is the faculty of abstracting, of synthesising, of creating, of reflecting; its duty at first is to solve the problems which instinct places before it, and of aiding it to serve the necessities of life. But from the moment in which it creates language, intelligence is able to pass from the useful material creation to a disinterested creation; from the day on which it perceives that it can work in the abstract, it gives itself up to the creation of ideas. Its essential duty becomes synthesis; it finds out the laws which govern facts, it deduces logical consequences, and it discovers the connection between facts themselves.

This conception of instinct and intelligence throws light on Lombroso's theory of criminal anthropology, and explains its apparent contradictions. If we examine the manifestations of what is generally called the intelligence of the criminal, such as the instruments of crime, the elaborate plots and general craftiness, etc., we find that their object is always the satisfaction of some passion, such as play, debauchery, cheating, or revenge. These all enter into the category which Bergson assigns to instinct. A great development of the faculty of instinct in the criminal perfectly explains how, although endowed with a very weak intelligence, he may be able to treat with success matters of practical life which appear to be very difficult. This would explain the apparent contradiction in the intellectual manifestations of a criminal, who from one point of view appears to be almost a genius, and from another a mental deficient.

If we examine the geniuses described by Lombroso and his disciples, we find that they are always superior to the normal in matters of creating, connecting together series of facts, searching into the secrets of Nature, etc., but that they are inferior in the concerns of everyday life, in family affections, in sexual tastes, in short, in instinct. If intelligence

and instinct are two different faculties of the mind, there is no contradication in the fact that a genius has an intelligence much greater than normal, and at the same time an instinct mediocre, inferior to the normal, or even diseased.

The writer of this article thinks that possibly this dualistic theory of Bergson may aid in the classification of mental diseases. He suggests the following:

(1) Diseases of the instinct.

(2) Diseases of the intelligence.

(3) Mixed diseases of the intelligence and of the instinct.

(1) Diseases of the instinct would include many of those forms of mental aberration which the public will hardly admit to be such, but which are very serious for the patient and dangerous to society.

- (a) Genius (?). In which the intelligence is healthy and even superior, but the instinct is abnormal or deficient. This includes all those cases of clever men, who are stupid in the affairs of practical life, suffer from phobias, lack of natural affection, and have sexual perversions.
- (b) Hysteria. In which the intelligence is normal, but instinct, which presides over the affairs of practical life, and the co-ordination of sensations and affections, is diseased.

(c) Moral insanity. In which the intelligence is healthy, but the instinct is partially but gravely diseased.

- (d) Sexual psychopathia. In which the intelligence is normal, but the instinct is diseased in one direction only, namely, in sexual affairs.
- (e) Obsessions. Here we have patients with healthy intelligence, but instinct is deviated or diseased, though in one direction only.
- (f) Folie circulaire. Here we have patients with healthy intelligence and diseased instinct, but only temporarily and periodically. The disease extends, either for some days or some months, in almost all directions, even to those of vegetative life, but after a certain lapse of time the action of the evil ceases and the patient reacquires his normal instincts.
- (2) Diseases of intelligence. To this class belong the forms of mental disease in which the patients reason badly, connect ideas badly, synthesise badly, but in which instinct, the faculty, that is to say, which co-ordinates the means to the ends of practical life, is healthy.
- (a) Delirium. In which the instinct is normal, or even better than normal, but the intelligence is diseased—it may be in all directions.
- (b) Monomania. Here we have patients in whom instinct is normal, who know how to manage their practical affairs, but in whom intelligence is diseased, but only partially and in one direction.
- (c) Hypochondria. Here we have the same form of mental alienation as in monomania, only the intelligence is diseased in one given, fixed direction, that of melancholic ideas.
- (d) In cretinism, subcretinism, and imbecility we have patients in whom intelligence is inferior and almost absent, and in whom instinct is inferior but not deviated.
- (3) Mixed diseases of the intelligence and of the instinct. To this class belong the most apparent forms of mental diseases: those in

which the patients can neither reason nor connect their ideas, and further, cannot even manage the affairs of practical life.

- (a) Mania. In this disease not only are the faculties of reasoning, of idealising logically, of language, and of the association of ideas, disordered, but all the senses, even those of hunger, of cold, and of sexual instincts, are altered. The passions also are altered, together with the co-ordination of the acts which ought to satisfy them.
- (b) Dementia. Here we have patients in whom both instinct and intelligence are weakened by disease. Hence we have confusion and general uncertainty, incoherence, and want of connection of ideas as much in the field of intelligence as in that of instinct.
- (c) Idiocy. Here we have patients in whom from their birth intelligence has been almost completely suppressed, and in whom instinct is weak and diseased.

The writer does not propose this as a finished scheme, but only as an outline, the details of which can be easily filled in. He thinks that this application of Bergson's theory to mental diseases would have the advantage of reminding alienists how great an interest they have in keeping themselves au courant with philosophical studies. It would also interest philosophers to unite their forces with those of the alienists to search together for the origins of mental diseases.

J. BARFIELD ADAMS.

2. Clinical Neurology and Psychiatry.

A Clinical Study of Epileptic Deterioration. (Psychiatric Bull., April, 1916). MacCurdy.

This elaborate study of the mental symptoms of epilepsy (somewhat on the same lines as the work of Pierce Clark) is presented in the hope that it may prepare the ground for a sound theory which will dispel the present confusion in epileptology. All students of epilepsy, the author remarks, have noted the glaring mental symptoms and yet no progress has been made in defining the specific psychic characteristics as a guide to diagnosis and prognosis. At present, epileptic deterioration cannot be associated with any constant pathological change, nor can it be correlated with the other most obvious symptom, the convulsions. Even the descriptions of epileptic deterioration are unsatisfactory. There has been no effort to establish the epileptic as a specific type of dementia.

The essential process is defined as consisting in a "progressive loss of interest associated with a failure of mentation in respect to normal stimuli in which interest is lost." The general make-up of the character is typical. The key-note is an overweening egoism. This shows itself positively by purely personal desires and ambitions, and negatively by callousness and inability to see things as others see them. This make-up may precede the convulsions, and is not the result of them. A weakness or absence of the social instinct is a specific factor in the formation of epileptic character. The normal development from the egocentric attitude of the infant to the objectivation attained by the adult fails to be completely carried on. Even the religiosity of the