forms, its course and transformations. Something over a hundred replies were received, and many are here reproduced. They are often interesting and suggestive, but, as might be expected, sometimes contradictory. Gambara and others consider antipathy fundamental and instinctive. Stepanoff, on the other hand, who regards antipathy as chronic opposition, argues that acute opposition arises earlier than the chronic form, which is not known in young children, and presupposes so considerable a social education that it is not one of the first even of chronic psychic states. Assagioli regards it as a reaction of defence, derived from the instinct of conservation, and not easily distinguished from other states of opposition. Foà, however, believes that the oppositional states are easily determined, and are aversion, hate, repugnance, and antipathy; he regards antipathy as fundamental and primitive. Boncinelli and others believe that antipathy is simply a complex result of many mental states, and that it has no special function, while Vacca regards it as a purely artificial conception, and mainly negative.

The authors of the report discuss the question of justified and unjustified antipathies, and suggest that, while the apparent motives and causes are not always justified, there may be a form of repulsion having its ultimate foundation in inherent physico-chemical differences between individuals, with attractions and repulsions which may have their reflex in consciousness and psychic conduct.

HAVELOCK ELLIS.

A Contribution to the Study of Epilepsia tarda, or Senile Epilepsy, and of Arteriosclerotic Dementia [*Contributo allo studio della epilessia tarda e della demenza arteriosclerotica*]. (*Rivista di Patologia nervosa e mentale, December*, 1914.) *Alberto Ziveri.*

The term, *epilepsia tarda*, is applied to the epileptic phenomena occurring in advanced age. A few authors distinguish between *epilepsia tarda* and senile epilepsy, understanding by the first that form of the disease which is said to appear about the thirtieth year, and by the second that which occurs after 60 years of age.

Epilepsy occurring in later life is almost always due to primary affections of the nervous system, as neoplasms, syphilis, parasites, alcoholism, arteriosclerosis, etc.—arteriosclerosis being the most common cause. Some writers, without absolutely denying the possibility of the late appearance of essential epilepsy, point out that the disease may have been previously present without causing noticeable disturbances, or the symptoms from their slightness, or from occurring at night, may have been overlooked.

The author, Dr. Ziveri, records the following case as illustrating both arteriosclerotic epilepsy and arteriosclerotic dementia.

Teresa, peasant woman, æt. 73, married, four children, three of whom are living, has suffered from much destitution, and appears to have had symptoms of pellagra. No signs of mental disease until two years ago, when she began to have epileptiform convulsions (two a month), which were followed by psychic disturbances. Afterwards patient suffered from deafness, confusion, disorder of ideas, and possibly

from delusions. Later, there were impulses to wandering about, and attempts at suicide. Admitted March 6th, 1914. Physically: Arthritis deformans of fingers; peripheral arteries hard and tortuous; cardiac sounds accentuated, especially the first; blood-pressure (Riva-Rocci) 145 mm.; pupils myotic, react feebly; knee-jerks well marked. Mentally: Is not restless, but only a little irritable and talkative; replies to questions, but does not pay much attention; knows her own name and country, but says that her age is 25 years, and that she has a son who is either 20 or 25 years old.

March 7th: Completely confused; fell out of bed; walks about without any object; when questioned replies with a string of words without any sense.

March 19th: Three attacks of epilepsy. Afterwards very confused.

Patient gradually became mentally weaker, until on April 26th it was noted that dementia was complete. Bed-sores had now appeared.

May 14th: One epileptic attack.

May 29th: Two epileptic attacks.

June 6th: Bed-sores very extensive. State of progressive marasmus. The patient has been unable to swallow for the last two days. Died at 4.45.

Post-mortem examination of body six hours after death. Weight of brain and meninges gr. 1,150. On section of brain, several moderate-sized hæmorrhagic foci were found, one in the second left frontal convolution, another in the left orbital, two others in the right ascending parietal, and one in the left ascending parietal. These were all in the white substance of the convolutions.

Everywhere in the cortex there were punctiform and miliary hæmorrhages, varying in size from the point to the head of a pin.

The basal arteries and the smaller branches of those of the cerebrum showed signs of atheromatous degeneration.

Heart.—Slight hypertrophy of left ventricle. Mitral valve with nodules of retraction. Aorta and aortic valves show slight signs of atheroma. Coronary arteries tortuous.

Liver.—Commencing cirrhosis.

Lungs.—Right, slight pleuritic adhesions of an ancient date. Left, two superficial abscesses at base of inferior lobe.

Kidneys.—Left, small urinary cysts. Right, numerous confluent abscesses occupying two-thirds of kidney substance.

Microscopic examination: Liver.—Slight pigmentary infiltration of hepatic cells. Commencing perivascular cirrhosis.

Kidneys.—Left, slight fatty degeneration in a few of the tubules. Right, intense fatty degeneration of all the tubules around the abscesses. Fatty degeneration of the glomerular epithelium.

Cerebrum.—Degeneration of all the cortical cells (method of Nissl). Around the punctiform hæmorrhages the nerve cells have assumed elongated and curved forms—the concavity being towards the hæmorrhage—evidently due to the pressure of the extravasated blood. At a little distance from the hæmorrhage the cells preserve their normal form. It is observed (method of Bielschowski) that in places the nerve-fibres are in fragments.

The fibrillary alteration of Alzheimer was only found in the pyramidal cells of the *cornu ammonis*, and there very rarely.

There was proliferation of the cells of the neuroglia.

Many of the smaller vessels presented aneurismal dilations.

A few Redlich-Fischer placques (*piastres*), in an initial state, were found in the *cornu ammonis* and in the frontal convolutions.

Summing up the clinical and histological points of the case, the author points out that on admission the patient presented a rather advanced state of dementia—defective orientation, loss of memory and of the power of fixing attention, and a reduction of the mental field. Neither before nor after admission were there any apoplectic symptoms. Both before (but only during two years) and after admission there were epileptiform attacks. These were general, with complete loss of consciousness. They did not last long, but were followed by a marked state of confusion. There was a certain degree of arterial hypertension, the arteries were slightly hardened, but there were no important urinary symptoms (the abscesses in the right kidney and at the base of the left lung were assumed to be due to purulent infection from the bed-sores).

From the age and the progressive mental enfeeblement, the diagnosis, during life, was senile dementia, complicated by cerebral arteriosclerosis, as evidenced by the slight degree of peripheral arteriosclerosis and the epileptiform attacks. The past history negatived the idea of essential epilepsy, and there were no signs of alcoholism, syphilis, or endocranial neoplasms. The absence of apoplectic attacks led to the conclusion that the cerebral arteriosclerosis was slight.

Pure senile dementia, the author points out, is very rare. It is so constantly complicated with cerebral arteriosclerosis that the majority of authors regard them as one and the same disease. Alzheimer and his school, however, distinguish between the two forms. In pure senile dementia there is the presence and the great diffusion of the placques (*piastres*) of Redlich-Fischer, and the fibrillary alteration of the nerve cells described by Alzheimer, while the vascular lesions are either absent or very limited. In arteriosclerotic dementia, on the other hand, the vascular lesions, with all their clinical consequences, are much in evidence, while the formation of the *piastres* of Redlich-Fischer and the fibrillary lesions of Alzheimer are absent or only commencing.

Histological researches, the author says, have urged on the clinical study of these diseases, and to-day we seem to have made some progress in this chapter of mental pathology. Arteriosclerotic dementia may be divided into two principal types. To the first belong those cases with well-marked symptoms of cerebral hæmorrhage; to the second those characterised by small emboli and small but numerous hæmorrhages. Whilst the first type is easy to diagnose, the second presents a picture very analogous to that of pure senile dementia; indeed, it seems impossible in some cases to distinguish between the two forms of disease during life, and only histological examination can give the answer to the question.

Perhaps the most important part of Dr. Ziveri's paper is the report of the microscopical examination of the brain tissues. A very accurate account is given of the technique which has been employed, and the

illustrations, both in black and white and in colour, especially the latter, are clear.

The most interesting point about the case is the absence of apoplectic symptoms, in spite of the *post-mortem* evidence of hæmorrhage into the brain substance. One could have wished that the author had referred to the part played possibly by the numerous punctiform and miliary hæmorrhages in the cortex in the production of the epileptiform symptoms.

J. BARFIELD ADAMS.

Nomadism, or the Wandering Impulse, with Special Reference to Heredity. (*Carnegie Institution of Washington*, 1915.) *Davonport, C. B.*

This is the second of the author's studies on the "feebly inhibited," and in the preface he justifies the use of that term, on the ground that, while the term "mind" could doubtless be stretched to cover the emotional phenomena he is dealing with, it seems best to consider the hereditary basis of the emotions separately. "The chief problem in administering society is that of disordered conduct; conduct is controlled by emotions, and the quality of the emotions is strongly tinged by the hereditary constitution."

There are numerous varieties of the phenomena here dealt with, from racial nomadism, through the professional tramp, to the pathological fugue. The author selects "nomadism" as the best general term, largely because it has a racial connotation, for "from a racial point of view all hereditary characters are racial." That is to say that the author regards a tendency to wander as in some degree a normal tendency of man. In this connection he briefly discusses (1) the wandering instincts of the anthropoid apes; (2) the migratory tendencies of most primitive peoples; (3) the frequency of running away among children; and (4) the "love of adventure" in adolescence.

The study is based, like other studies in the same series, on family histories deposited in the Eugenics Record Office. They are of diverse origin, from some forty contributors, mostly trained workers. In no case was it expected that the pedigrees would be used to investigate nomadism, so that bias may be eliminated. In nearly a third of the cases there is no knowledge of the parents. All the histories, 100 in number, are here reproduced, and the results are also presented in a tabular form.

The most obvious fact revealed by the tables is that nomadism is chiefly found in the male sex; in the principal fraternities there are 168 male nomadics to 15 females. It is therefore argued that nomadism is a sex-linked trait, and that it follows the hereditary conditions prevailing in such cases. By hypothesis, therefore, the tendency should be traced through the maternal side, though the mother may not show the trait somatically, while it is usually shown in her father or her mother's father. Half the sons and none of the daughters of such a mother (if she married a normal man) show the nomadic tendency. If the mother is somatically nomadic, and the father not, all the sons are nomadic. If both parents are nomadic, then all the children of either sex are nomadic. If the father is nomadic, then half the sons and half the daughters are nomadic. When these hypo-