

beciles, also of the insane. The scientific laboratory studies of the blood and excretions will also in the future furnish valuable data, no doubt, in this direction, admitting the large role which biochemical products must play in the pathology of many diseases.

The action of certain alkaloids upon the peripheral circulation needs careful study and experiment.

The proper use of especially directed regulated movements (and imbeciles are notably good and willing imitators) will greatly help these afflicted beings. In uplifting the physique to however slight a degree the mentality will be improved.

We would urge also that overexercise of backward children is to be strenuously avoided as a part of their training. The impression should be made upon the teachers to withhold physical overwork, in view of their preponderating lowered physique and especially of their liability to cardiac disease, as demonstrated in this contribution. We do not wish to interfere at all with the good hygiene of fresh air and proper direction of active employments.

It can be safely affirmed that America leads in the practical application of these scientific truths which are gradually being formulated for the proper care of the dependent classes.

#### SYMPATHY

Ask God to give thee skill  
 In Comfort's art.  
 That thou mayest consecrated be  
 And set apart  
 Unto a life of sympathy;  
 For heavy is the weight of ill  
 In every heart,  
 And Comforters are needed much  
 Of Christ-like touch.

—Anon

## JOURNAL OF PSYCHO-ASTHENICS.

VOL. VII.

SEPTEMBER, 1902.

No. 1

A quarterly journal devoted to the education and care of the Feeble-Minded, and the care and treatment of Epileptics. Published under the auspices of the Association of Officers of American Institutions for Feeble-Minded.

#### F.DITOR-IX-CHIKF:

A. C. ROOF.RS, M. D., - Faribault, Minn.

#### ASSOCIATES:

W. E. FERNALD, M. D., - - - - Waverley, Mass.  
 A. W. WILMARTK, M. I.), - - - - Chippewa Falls, Wis.  
 F. M. POWELL, M. I.), - - - - Glenwood, Iowa.  
 M. W. BARR, M. D., . . . . Elwyn, Penn.  
 ALEXANDER JOHNSON\*, - Ft. Wayne, Ind.

Address: JOURNAL OFPSYCHO-ASTHENICS, Faribault, Minn.

Entered at the Postoffice at Faribault, Rice Co., Minn., as second-class matter.

## EDITORIAL.

**We present in this number** two papers on etiology, both of which merit consideration. Dr. Richardson calls attention to the function of certain glands in the human economy and the possibility of some defect here producing some form of idiocy.

The causes of psycho-asthenia present our most difficult and most interesting problem and we are continually driven back to it from whatever aspect of the subject we are considering. The early investigators worked over the family histories, the material furnished by the application blanks, etc. And although much remains to be done here yet the most important facts to be gained by this method have probably been worked out. And it is now necessary to dig deep in order to extend the boundaries of our knowledge.

Considerable work has been done in pathological anatomy and many gross lesions observed but only a few of the brains examined show gross

lesions sufficient to produce the effect noted. And in the finer anatomy and morphology of the neurone the work of Hammerberg still stands alone.

But the morbid anatomy of the brain is by no means the whole of mental pathology. Morbid anatomy while important and interesting is nevertheless only a minor field of the realm of mental pathology. The opposite view has prevailed and has been in large measure the cause of the slow growth of our knowledge in this line. In fact this view has really stood in its own light for very frequently the lack of mental history has made all examination of the brain of indeterminate value. Psycho-asthenia is a psychic as well as somatic disease and it is only when the psychic field has been well worked over that we can hope for some elucidation of the problems in the somatic field.

Consequently what we now need is a most thorough and detailed study of the mental as well as physical child. We must make elaborate and detailed case histories and strive to gain as near as possible a record of the mental history of the child. By bringing much we will be in less danger of omitting something of value which will be discovered later.

The average child is the normal child, consequently we must seek to discover in what way the psycho-asthenic child differs from the average. And here come studies in height and weight and in the growth curve, in motor control, strength and energy, senses, habit, etc., in stock of ideas, mental field, association, etc., thus working over into the field of case histories again.

It is only when we have determined in a fairly accurate and thorough manner what the psycho-asthenic child is that we will be able to work back and unravel the conditions that give rise to such defect. Here is the field for the best and richest investigation.—A. R. T. W.

## NOTES AND ABSTRACTS

**On the Presence of a Parasite in the Blood of Epileptics.\***—In the blood taken by puncture of the veins of the fore-arm of seventy patients subject to general epilepsy, so-called idiopathic, in the Asylum Clinic of M. Magnan and in the service of M. Maradon de Montyel at the Asylum de Ville-Evrard, we have found, at certain periods of the affection, the constant presence of a micro-organism.

In the long inter-paroxysmal intervals the examination is most often negative, but when at the approach of the attacks, during or immediately after the incomplete crisis, the momentary losses of consciousness, the attacks of vertigo, one examines a drop of fresh blood with a magnification of at least 500 diameters, one finds in the plasma little points feebly refractive of

\*M. Bra Translated from the *Arch. tie Neurologie* July 1902. A. R. T. Wylie, Faribault, Minn.

a micron or less in diameter, singly or in pairs, animated by very active movements, bending upon themselves constantly, then singly or in more or less large numbers some bodies show a worm-like appearance of a length equal or superior to the diameter of the red corpuscles and most often composed of six or eight granules. Some are formed of granules of equal size, other present at their extremities or in their continuity granules which are larger, polymorphous, ovoid, bacilla-like, etc. The most typical form seems so be a chain terminated at each end by a larger particle. These bodies are animated by serpentine undulations, bending upon themselves, alternately in their middle parts and at their ends. They knot themselves up so well that it is necessary to observe them for a long time in order to discover their true form. They frequently adhere to one of the red corpuscles by one of their ends.

It is found according to the individual and the period of the disease that these worm-like forms are not found in the blood and one only meets isolated cocci or diplococci, either mobile and free in the serum or adherent to the red corpuscles or englobed in the phagocytes.

**EXAMINATION BY STAINING.** Preparations of blood dried and fixed in a mixture of alcohol and ether are stained for a long time either in Kiihne's blue or in carbol-thionin. The parasite stains with difficulty and shows nothing more than is seen in the examination of fresh blood.

**SOWING AND CULTURES.** On taking the blood at the approach of the convulsion; during the vertigo and the incomplete attacks among epileptics who show neither bitten tongues nor wounds of the skin, we have been able, in collaboration with H. Chausse, to isolate in sixty per cent of the cases the micro-organism observed in the blood.

The blood is drawn freely from the veins into tubes, of ordinary bouillon, neutral or alkaline. The tubes are placed in an incubator at 34°C. and can be examined at the end of forty-eight hours. The microbe grows best between 34° and 37°C. It is an aerobe. Its growth slackens in vacuum.

**BOUILLON.** After forty-eight hours in an incubator the bouillon is slightly changed and contains little flakes which are hardly visible. Little or no deposit. Reaction acid at the end of some time.

In the cultures examined without staining (Leitz, oc. 3, obj. 1-12) one sees cocci of 0.6-1 micron in diameter and mobile diplococci. Short chains composed most frequently of four, six and eight granules of the same size or less frequently presenting in their continuity or at their ends the polymorphous granules which have been observed in the blood. These chains also show undulations like those observed in the blood.

**GELATINE.** In stab cultures only a slight change which is scarcely visible is noticed along the needle track. Nothing is seen at the orifice. No liquification.

**AGAR AGAR.** Whitish spots, extremely fine are seen by transmitted light.

**POTATOES.** No growth is apparent to the naked eye although the microscope shows an appreciable growth.

The parasite shows in cultures the same staining reactions that it has in the blood. It is stained by hydro-alcoholic and aqueous solutions of the