terminated, yet rational policy, is under way. Results may not appear at once, but, in my belief, some of us may live long enough to see established a practically complete control of venereal disease.

MENTAL HYGIENE.

BY WALTER E. FERNALD, M.D., WAVERLEY, MASS.

MENTAL health is as important to the individual and to society as is physical health, and it is fitting that mental hygiene should have a place in a symposium on general hygiene and on other phases of special hygiene.

The aim and purpose of mental hygiene, as defined by the Massachusetts Society for Mental Hygiene, is to work for the conservation of mental health; to help in raising the standards of care for those suffering from or in danger of developing mental disease; to promote the study of mental disease in its various forms and varieties; and to disseminate knowledge concerning its causes, treatment and prevention.

In other words, mental hygiene means the correlation and application of all available knowledge concerning the causes, prevention, treatment and care of all forms of mental disease and defect.

The vastness of the field for mental hygiene is partially indicated by the existence of the twelve great state hospitals for the insane in Massachusetts, with 15,000 patients under treatment, the majority of these patients representing those whose insanity began when they were young. Over 3,000 new patients are admitted annually. One person in 259 of the inhabitants of the State are patients in these hospitals. The cost of these hospitals for 1919 was over \$6,000,000, representing one-half of the State tax, and more than one-fourth of the State expenditures.

Massachusetts also has two schools for the feeble-minded, with 2,500 patients, and hundreds applying for admission. There are over 12,000 persons in the state known to be feeble-minded, with the probability that the actual number is at least twice that number.

There is one hospital for epileptics with 1145 patients. The State is also called upon to support hundreds of inebriates and mentally defective delinquents in its penal and pauper institutions.

The patients in the hospitals named do not

include the many cases of mild insanity cared for at home, perhaps masquerading under the friendly diagnosis of nervous prostration or neurasthenia, or coming under the head of the minor psychoses or of the psychoneuroses.

Massachusetts has always been generous in its treatment of the mentally sick, and the writer believes that the present standards of hospital care in this state compare favorably with the best in the world.

It is a striking fact that the average patient who is committed to a state hospital or a school for the feeble-minded has not consulted a physician for his mental malady until the physician is called upon to sign the commitment papers. In other words, the physician is seldom called upon to treat incipient stages of mental diseases, although such diseases are often amenable to treatment before they are fully developed. In fact, the prognosis as to cure is usually in inverse ratio to the duration of the disease.

The reasons for this delay are many and complex. Personal and family pride is largely responsible. Mental disease to many people still connotes personal and family inferiority, perhaps a persistence of the medieval idea of demoniac possession.

A mistaken interpretation of the ideas of heredity as applied to mental disease develops a sort of fatalism and of horror at the appearance of mental trouble, whereas an intelligent understanding of the exact family liability is often sufficient to prevent the dreaded event.

Some forms of mental trouble may be hereditary and other forms are never hereditary. Even with hereditary tendencies as a predisposing cause, a definite exciting cause or causes must usually be added. The vast majority of the ancestors of every individual were normal and sane. Heredity tends more strongly towards health than towards disease. A person with mental trouble in the family may usually escape mental disease by proper surroundings, healthful and temperate activities, and proper mental and physical habits. Indeed, most forms of insanity do not appear suddenly, but develop gradually and might have been seen earlier by close observation.

Certain forms of insanity are probably incurable from the beginning, but nearly one-fourth of the patients admitted to the hospitals are sent home recovered. Many forms of mental disease are due to known and preventa-

ble causes. Many of the 15,000 persons now in our hospitals might have remained sane and lived useful and happy lives if they or their friends had known certain facts and acted accordingly.

The art of mental hygiene largely devolves upon the general practitioner—who alone has access to these patients in their pre-psychotic or highly curable period. Even the best of our medical schools pay very little attention to the teaching of psychiatry compared to its importance and the size of the field. The average physician has received very little instruction as to the signs and symptoms of the pre-psychotic stage, as shown by minor failure of adjustment and adaptation, a distaste for former work and interests, change of habits and feelings and emotional reactions.

The psychiatrists themselves know far too little of the juvenile and adolescent danger signals of future mental disease. The high school period often shows signs of mental or social distress, which, if recognized and acted upon, would prevent future mental breakdown. And the disciplinary problems of any college include many students who need the physician or the psychiatrist rather than the pedagogue or the disciplinarian or the moralist.

White has aptly said that "childhood is the golden period of mental hygiene," and yet in public and private schools very little application has been made of the science and art of mental hygiene. The child is expected to adjust himself to the work of the school. Little attention is paid to his heredity, his inferior or superior intelligence, or to innate personality traits like emotional instability, egocentric tendencies, feelings of inferiority, special aversions, special disabilities and his keen desire for adequate self-expression. In reviewing the school history of psychotic patients, it is often found that even in school life marked deviations of behavior and emotions and feelings occurred. We shall eventually prevent many cases of potential mental disease by proper recognition and understanding and management of these forerunners of mental instability in the school period. No field in preventive medicine offers a more promising opportunity than this teamwork of the psychologist, the psychiatrist, the teacher and the family physician.

Many juvenile and adolescent problems are caused or intensified by poor parental manage-

ment. Often too much has been expected in the way of school achievement, social success, in earning capacity, or they have had congenial work, too little recreation, limited interests, lack of proper sex knowledge and understanding, etc. These cases often clear up at once when the proper readjustment has been made by taking off the load, perhaps by a new school, different studies, a new job, new interests, a good talk with a trusted physician, and perhaps an entirely new environment.

Untreated, such cases often become permanently warped and disabled, if not actually insane. There is a great need for an authoritative manual on "Mental Hygiene for Parents," comparable with Dr. Richard Smith's book, "Baby's First Two Years." Parenthood *per se* does not always imply inspiration in fitting boys and girls to meet the complex problems of our modern civilization.

The employment and personnel managers of our great industrial interests are keenly alive to the significance of the mental factors in problems of individual and group unrest and turmoil in their organizations. A man with a paranoid personality of wordy type, with capacity for leadership, finds a fertile field in the many unstable and suggestible mentally inferiors to be found in any large group of men. Some such combinations help to explain "mob psychology," as expressed in rioting and violence.

Within a few years the State Department of Mental Diseases has established out-patient clinics in many cities of the State, conducted at regular times by the staffs of the various state hospitals and schools for the feeble-minded. Such clinics are now available all over the state. They are being used freely by many patients who would not go to state hospitals, and many of whom are going through the incipient or most curable stages of mental disease. The Psychopathic Hospital in Boston also receives presumably mental patients for thorough examination and advice, and also conducts a daily out-patient mental clinic. There is an increasing tendency for physicians to refer mental problems to these out-patient clinics. Of course, there is no money charge for the advice given at these clinics.

The last legislature passed laws requiring a mental examination of all school children found three or more years retarded in school performance, and requiring cities or towns having ten or more mentally defective children to give

these retarded pupils suitable training and education in special school classes.

This is a flank movement for the benefit of the feeble-minded of the state. In a few years all such people will be recognized, for all children come under the control of school authorities between the ages of 6 and 14. This will eventually mean that every feeble-minded child may receive proper education, habit training and industrial training during the formative period of youth. The idiots and imbeciles not cared for at home, and the highly potential hereditary defectives with sex tendencies, and those with criminal tendencies, will gradually be drafted into the institutions. We know now that some mental defectives are inherently bad and vicious, and that others are tractable and may be made industrious and harmless. We no longer believe that all mentally defective persons need to be permanently confined in an institution.

The army tests revealed thousands of technically mentally defective drafted men whose mental defect had not prevented self-support and practically blameless lives. Much of the rough and disagreeable manual labor of the mines and fields and forests is performed by persons who could not pass the modern intelligence tests. The lack of 100% efficiency alone does not call for institutional care, or for the taking away of the "right to liberty and the pursuit of happiness."

Original Articles.

A CASE OF MULTIPLE SCLEROSIS*.

BY FLORENCE L. MEREDITH, M.D., NEW YORK.

THE following case has been under observation, although not directly under the writer's care, for nine years. The main portion of this history was written four years after the onset, and the appendix today:

Male, 43 years old, lawyer. Family history: Father died at the age of 60 of chronic nephritis. Mother living and well, now 75. One brother living and well, although he had neurasthenia five years ago. Patient is married and has two children, one perfectly normal, the other of highly nervous temperament, having been obliged to miss a whole year out of school at the age of 16 on this account. There

is no history in the family of any organic nervous diseases, tuberculosis, syphilis, or cancer. Neither were there any mental troubles. Patient's mother is said to be almost pathologically awkward in gait and all motions.

Past History: Patient had most of the children's diseases, but was otherwise considered well. Never had convulsions. Was of athletic type in school days. Had a peculiar habit of lying down flat on his back on the floor instead of sitting in a chair, whenever opportunity offered, all through his youth. The first neurological symptom appeared at the age of 19, when he had a unilateral strabismus of sudden onset, lasting a few months and disappearing as quickly as it came. He was always a heavy smoker, consuming sometimes a dozen strong cigars a day. Very moderate use of alcohol, tea, and coffee. At the age of 20, had a severe attack of malaria. No history of venereal disease or even exposure. At the age of 33 had serious business trouble, causing much worry and anxiety for several years after. At the age of 35 had a fall backward on the ice. Hit on the back of his head and was unconscious for about an hour. No results were observed and recovery was apparently complete in a few days. The following winter he had an exactly similar fall with unconsciousness for a shorter period, and prompt recovery.

Present Illness: Four years ago patient first noticed that his legs were getting weak, especially the left. No pain. Family also noticed that his speech was slow and exact. This gave the impression of increased dignity, which, however, was in contrast to sudden bursts of almost uncontrollable laughter at slight provocation. At the same time he began to walk unsteadily. None of these symptoms were sufficiently marked to be noticed by anyone except his family. He frequently said jokingly that he was a sick man, but no one took him seriously at that time.

About six months later he had a tooth drawn under nitrous oxide anesthesia, and was peculiarly affected by it. He became cyanotic and remained so for some time after recovering consciousness, and was so weak muscularly that he was unable to walk home, nor was he able to walk alone for a week or more, and then only with a cane. He has never gone out without a cane since. From this time on, he became progressively worse for several months. Frequently fell down, always either forward or back, but never hurt himself. A labyrinth test revealed nothing pathological. Strabismus reappeared, this time of the left eye only. He was then taken to a neurologist, who made the diagnosis of multiple sclerosis and offered him no encouragement. At the advice of friends he took up massage treatment, and after two weeks was so greatly improved that he was able to run for a car on one occasion. The masseur was then obliged to go away for two weeks, and

* The first part of this paper was read at a meeting of an association of women doctors in Boston (Hotel Victoria), in 1915.