disease. The mental symptoms consist in impairment of a peculiar quality, often so slight as to be made out with difficulty. The disease arises most commonly under prolonged strain, particularly when associated with unaccustomed excesses. At least two-thirds of the general paralytics have had syphilis. The relation of the disease with syphilis is too frequent to be accidental. The disease is, however, not a stage of syphilis, and is not benefitted by specific treatment. The prognosis is probably not so hopeless as it is generally considered to be. The common early treatment is hurtful. Foreign travel is injurious. The only hope of at least partial cure or marked amelioration is in entire mental and physical rest.

## Discussion.

Dr. Robert T. Edes, of Washington, reported the case of a man suffering now from pronounced general paralysis, in whom the first symptoms of the disease made their appearance some twenty years ago. If the anatomical view of general paralysis is accepted, he did not consider it strange that mental symptoms might precede the motor, depending upon the seat of the lesions.

Dr. S. Weir Mitchell, of Philadelphia, was sure that certain cases of general paralysis began most markedly with motor trouble, while others began most decisively with mental conditions. In regard to syphilis he agreed with the author, except that he had seen cases due to syphilitic disease in which cure followed specific treatment. He had also seen cure follow in a small number of cases where the treatment was begun in the early stages, but where the motor disturbance and the mental incapacity were sufficiently marked to render the diagnosis reasonably certain. In all of these cases there had been a total abandonment of all previous pursuits with absolute mental and physical rest. He agreed with the author that foreign travel was often injurious.

Dr. James J. Putnam, of Boston, remarked that the fact that syphilis acts in this disease, not by producing a direct lesion, but in an indirect manner, justified us in looking for other causes of degeneration which might act in a similar manner. He asked if the reader had seen any cases in which chronic lead-poisoning was the apparent cause of the general paralysis, and related a case in which the imperfect and slow speech, the imperfect handwriting, and the expression of apathy and indifference, suggested a diagnosis of general paralysis. In this case there was, however, a history of drinking-water contaminated with lead, and there were certain local symptoms indicating lead-poisoning.