

third time failure may result from attempts to express himself, and speedily the child makes less effort to speak at all. Inability to enunciate checks natural frankness and candor, and healthy boldness. Gradually such a sufferer shrinks from competitions in games which involve generally a good use of voice as well as of muscle. Soon the conviction grows that he is a defect, an undeveloped creature set apart from his fellows, not entirely of their company, and instead of the bold, vigorous stand for which his mind and limbs amply fit him, he drops into the background more or less. His character and mind are checked in growth; he fails to become what he should, no matter how well he may succeed. Of course there is precedent for stammerers attaining great success, *vide* Demosthenes, but there must burn within that unconquerable fire of genius, admitted by a rare possession.\*

Perhaps the most potent factor among sensorial defects is eye strain. Our distinguished fellow, Dr. George M. Gould, promised me a summary on this subject from his forthcoming book, but is omitted here.

#### SURGICAL CAUSES.

In a personal letter in reply to my queries, Dr. DeForest Willard says:

"In my opinion the chief surgical causes producing mental enfeeblement in children are injuries to the brain during birth by the application of forceps, the traumatism of the brain substance and of the meninges with resultant inflammation, and inflammatory thickening producing changes which are frequently followed by both mental and muscular deficiency. Unfortunately a distinct fracture or definite depression is only occasionally capable of diagnostic demonstration; even localization symptoms in later years are only rarely demonstrable. When the evidences are definite, however, trephining is certainly indicated, and the same is true in regard to traumatism inflicted after birth.

"In respect to reflex irritation from phimosis, while I believe that muscular irregularities frequently result, yet I do not think that they produce a condition of mental deficiency save in rare cases. The same is true, too, of masturbation, although any drain upon the nervous system may assist in producing a low grade of mental as well as of muscular tonicity."

Dr. G. Hudson Makuen, whose experience in treating speech defects is unusually large, in a personal letter, gives me the following:

"We cannot over-estimate the value of speech as a factor in the mental development of children. Some form of expression seems to be necessary to the fullest mental activity and growth. It may be conceded that thought precedes expression, but certain it is that the one not only follows hard upon but actually depends upon the other for its development. Deprive a child of all forms of expression and you remove the greatest incentive to mental action. The chief mode of expression is speech, and if you would make possible the fullest mental activity give great care to the cultivation of easy, natural speech. Look well after any obstruction

\* Stammering troubled Æsop, Virgil, Demosthenes, Alcibiades, Erasmus, Cato of Utica, and Charles V. (Arthur McDonald) abnormal man, p. 151.