

THE Canadian Journal of Medical Science.

A MONTHLY JOURNAL OF MEDICAL SCIENCE, CRITICISM, AND NEWS.

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SUBSCRIPTION, \$3 PER ANNUM.

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TORONTO, SEPTEMBER, 1882.

Original Communications.

THE CAUSES AND CONSEQUENCES OF DEFECTIVE VISION DURING SCHOOL LIFE.

BY L. L. PALMER, M.D., TORONTO.

(Read before the Ontario Medical Association, June, 1882.)

It was not my intention to take up the time of this Association this year with a paper, until about a week ago, our worthy President suggested to me that I write up the subject of hygiene of schools, which in its importance so commended itself to my judgment, that I have undertaken to consider at least one phase of the question which may form a nucleus for further thought—a phase by no means the least important of all the conditions that affect early life—viz., The Causes and Consequences of Defective Vision during School Life.

It is now admitted by all who study Ophthalmology, that the pressing danger of the eye during early life is myopia, or shortsightedness, the organic cause of which is too great a depth of the crystal, which causes the sharp image of an object to form in front of the retina instead of upon it. It is commonly observed by teachers and parents that school work is often associated with, and even hindered by, impaired vision, but that it is an evil much to be guarded against and a danger, in many instances, truly alarming has not appeared to them.

If an ounce of prevention is worth a pound of cure, and this more valuable prevention in the light of present science and research is more easily possible; if the children of to-day, the men and women of twenty years hence,

then it becomes us to turn our scientific labour and much thought to the well-being of children, and see that their physical, as well as their mental health, be properly guarded against dangers generally unobserved. Delicate as is the eye, it will when emmetropic, and in a state of health, bear any amount of use, but when it has lost its balance, or its normal proportions, its work is done with effort and but imperfectly, and it rarely can be brought back to its original perfection of action, but is prone to lapse into still greater disability of function, or even into actual disease.

It is found from the collected statistics of well-known scientists, such as Enissman, of St. Petersburg; Conrad, of Königsberg; Loring and Darby, of New York; and Cohn and Just, of Germany, and others, that myopia is congenital only in a small proportion of cases, that most children, up to 5 or 6 years of age, have normal vision, and from this age up to 15, or according to Donders, 20 years, is the period of development of myopia; that few are myopic before this period, and fewer still if any become so after; and this is the age when children are pressed into school and are forced to endure all the pains and penalties of the cramming system, in these days too common, which aim at intellectual development at the cost of impaired vision, and sometimes almost of complete loss of sight, if indeed it does not defeat itself in gaining the end it seeks.

While these years from six to twenty—the school life of children—is the period when myopia becomes developed, it is also established by careful and extensive statistics from the examination of over 20,000 school children, that the defect increased numerically as the pupil