

at No. 5 Otis Place, Boston. This is "an instance of *completely satisfactory* arrangements for heating and ventilation, working well at all times, and supplying to the school-room, during severe winter weather, an atmosphere like that of June, in which one is warm enough at a temperature of 65° F."

Some of the correspondents urge greater care in the location of school buildings and more attention to the condition of the sewers and privies, and it is time that an alarm be sounded in regard to the latter. Many thousands of deaths are paid yearly to the carelessness of those who select locations for school buildings and arrange the sewers and privies. We have in mind now an institution in this state and several in adjoining states in which fevers have occurred the present year from these causes. Indeed, in one of these not less than two thirds of the students had the fever and several died. So it is in very many boarding-schools, as well as private and public schools of various grades, and private homes all over the land. We are confident that a majority of the cases of fever result from these and similar causes, directly; or indirectly, from the contamination of wells in their vicinity. Would it not be well to have medical inspectors who should inspect every school building in their district at least once per year at a time when they are not expected and report upon the sanitary condition of the school; and if the environment of the pupils is such as to endanger their health, such school should be condemned and closed by authority, till the influences prejudicial to good health be removed. Especially if a State compel children to attend school, it ought at the same time to compel school authorities to erect such buildings and provide such accommodations that the children *need not die* because of this enforced attendance.

It would be both interesting and profitable to quote from the letters of the correspondents upon the several reforms proposed, but space will not permit each of the reforms called for in our analysis to the tenth question is a subject for most careful consideration and should be kept before the people. These various forms are called for after earnest thought, and express the deliberately formed opinions of educators of Massachusetts and others, in carefully chosen and emphatically pronounced words.

I. Papers on Practical Education.

1. EXCESS OF BRAIN DEVELOPMENT IN THE YOUNG.

BY F. C. CLARKE, M.D.

The subject of School Hygiene has, of late, been receiving the attention it has so long demanded, and, very properly, at the hands of the medical faculty. At the last meeting of the Rhode Island Medical Society, in Providence, in December, the committee, previously appointed to make a report in regard to the health of our public schools, and the advantages of the present system of education, reported fully upon the subject. Dr. Newell, chairman of the committee, in connection with the report, drew up the following resolutions, which were unanimously adopted and are to be made the special subject for discussion at the next meeting of the society in March:

WHEREAS, Although the present school system has been brought to a high degree of completeness in intellectual culture, and to an exalted position of which its friends and the community may well be proud; yet, entertaining for its welfare a profound interest, and viewing it as we do from a physical standpoint, and believing that in the haste for intellectual culture the physical is too much neglected; that the nervous system is developed to the omission of other portions of the body, thus giving rise to a long train of ills and producing an unsymmetrical and distorted organization in the young, entirely unfitted for the stern duties of life; therefore

Resolved, First.—That physical culture is of primary importance in our public schools, and that gymnastic exercise should be made a part of our school system.

Second.—That the "Kindergarten system" should be engrafted upon our public School system. (See p. 39 of this Number).

Third.—That the school buildings should not exceed two stories in height.

Fourth.—That three hundred cubic feet of space and twenty-five square feet of floor space should be the minimum for each child in a school-room in connection with good ventilation. (See p. 33).

Fifth.—That proper warmth and pure air are of the first importance, and should be considered before ornamentation.

Sixth.—That scholars should not maintain the same position more than half an hour at a time.

Seventh.—That two short sessions daily, are better than one long one.

Eighth.—That no child should be admitted in our public schools as now conducted, under seven years of age.

Ninth.—That under twelve years of age, three hours a day, and for twelve and over, four hours a day is sufficiently long confinement to mental culture.

Tenth.—That study out of school should not usually be permitted.

Eleventh.—That all incentives to emulation should be used cautiously, especially with girls.

Twelfth.—That the "Half-Time" system should be introduced into our public schools.

Copies of these resolutions have been very widely circulated in newspapers and otherwise, and they seem also to deserve a place in an educational journal. Besides, they so well express the defects of the modern system of education, and the desirable changes to be made, that comment upon them seems hardly necessary.

But yet, one or two considerations in regard to this overcrowding of the young and growing mind it is hoped may not appear out of place here. Indeed, any advantages of the present system of education should be duly considered and rightly estimated. Treasure enough, certainly, has been spent already upon the common schools, and unless the returns in some form to the State, balance the expenditure, the outlay is a dead loss.

And first, let the present system of educating be considered from a physiological point of view. It is a never-varying law of Nature that one faculty alone can be developed only at the expense of another; the mind at the expense of the physical organization; and the contrary.

Generally speaking life may be divided into three periods: the first of youth; the second of maturity, or where the system undergoes changes without loss of tissue; that is—a maintenance of tissue metamorphosis; and lastly, the decline of life, or the period of decay. The first may be characterised as a period of development; the second of activity; and the last of relaxation. Each of these periods may again be sub-divided into three others, of which sleep constitutes a third of life; labour another, and rest another. Nature makes these laws unalterable, and any attempt to disobey them is to force nature beyond its regular course; and thus to overturn the existing state of affairs, which implies a gradual, if not a rapid, extinction of the race.

Hot-house plants thrive in direct ratio of the artificial relations and conditions to the natural. Any attempt to disturb these relations at once becomes detrimental to the growth of the plant.

Many anthropologists tell us that the attempts at European colonization are every day proving to be failures. The average number of children born to a parent is now only three, whereas the average number formerly was from eight to ten. Unless the American stock be maintained by constant renewals from the European, none of the former productiveness can be attained. Emigrants, so soon as they become established in this country, fall into the ways of the American Anglo-Saxon. We soon note in them the same defects as are apparent in those of Puritanic descent. Therefore, unless a stronger physical organization be given to the coming race, the colonization of America will as signally fail as it has done in Australia and in other American colonies.

The growing child, therefore, must have exercise. The child is now in the period of growth, where the mind develops gradually and in proportion to the body. The brain which determines the phenomena of mind must be nourished as much as the rest of the animal economy. A child of tender years, especially, should never have tasks forced upon him which will interfere with this growth. It is only with increasing years that it is necessary to increase the tasks; anxiety about studies should never at this period of life be permitted; else we have a frail physical organization, a precocious and short-lived human being. Not only are the physiological functions impaired, but the mind itself is weakened. If strength is lost by the great intellectuality achieved, how many years are taken from the period of growth, or how much sooner is maturity reached?

History furnishes us with thousands of facts to prove that little or nothing of great importance is done in the first twenty-five years of life. Nature at this time seems to reserve her favours, to bestow only at a time when the just balance between loss and removal of tissue is complete. Whether in science, philosophy or literature, the calm is always obtained by men of mature age. Even men of the greatest genius date the establishment of their fame after the age of thirty. Milton was over fifty when he wrote the "Paradise Lost"; Bacon was in middle age when he published his great work on philosophy. Mr. Darwin was seventy years of age when he wrote the "Descent of Man."

It is not intended to overlook anything in earlier life which may give promise of future excellence. But it is desired to show that the powers of the intellect are never fully established, as a rule, till after the first twenty-five years of life; that is, not until the system has ceased growing.

Therefore, to insist upon studies ill-proportioned to age, circumstances and conditions, is to cripple rather than develop. And these