

defects are those which are due to conditions antecedent to school life: Rickets, malnutrition, glandular enlargements, adenoid conditions, tuberculosis lesions, infantile paralysis, congenital deformities, bronchitis, bronchial catarrh, and the sequelæ of diseases. In other words, these defects are in a direct continuity of association with those conditions which lead to a high infant mortality rate, and a high death rate of children prior to school age. These are first revealed by medical inspection, but medical inspection comes too late to remedy in a large number of cases. If a remedy is to be sought, it must be before the children have reached school age. If medical inspection merely means that a larger number of children will receive spectacles or will be relieved of their supra-abundant tonsillar tissue, it will fail of its great opportunity. It must aim at cutting off the source of supply of defects and must go further back: to the homes of the people. In the words of Sir George Newman, M.D., Principal Medical Officer to the Board of Education, to whom in England the organization of medical inspection of school children owes so much: "It is clear that in the age-periods of childhood after infancy we reap a harvest of disease for which we have sown during the infancy period. First, we get many of the actual diseases of infancy continued into the late periods of childhood; secondly, we get the sequelæ of those diseases in the survivors; thirdly, we get a continuance, varying in degree and extent, of those causes and conditions which in infancy yield our high infant mortality rate and in the long run bring about a degeneration of race. If in this way we take a long view of the matter we shall see that an improved physical condition of the children of the nation depends upon our grappling with the problem not only from the beginning, or in other words, with infant mortality at its root, but *grappling with it as one problem.*"\*

In regard to the second group, that of the contagious diseases, their relationship to the general public health service is so clear that we need not dilate upon it. The elementary school is not a clearing house of infectious diseases, as has been supposed. Dr. Kerr has, for example, shown from the Registrar-General's statistics that prior to 1870, when the first Education Act was passed, the incidence of scarlet fever was

greater amongst girls than boys, although a much larger number of them were engaged at home and did not attend school.

Or take measles, which reaps so rich a harvest in the early years of life and sows the seeds of further disease, which swell the death rates of subsequent years and are productive of so much ill-health amongst the children; bronchitis, bronchopneumonia, tuberculosis. In 1907, measles was the direct cause of death in England and Wales of 11,712 children under five years of age, while broncho-pneumonia and bronchitis claimed 30,144 deaths at the same age. It is chiefly through the schools that we may hope to control this disease and attempt to reduce this mortality, for it is only through the schools that we can gain knowledge of the spread of the disease. Close your schools and at once the only knowledge of the incidence which is accessible is that furnished by the death returns. This is surely like locking up the stable when the horse is stolen.

If we turn to tuberculosis, we find the same interdependence. Tuberculosis has been described as a disease of ignorance rather than a disease of poverty. It is not a disease of school. Our English statistics point to about 1 per cent. of children in elementary schools suffering from pulmonary tuberculosis. Under modern conditions of school attendance, with the attention to ventilation and floor space per child, pulmonary tuberculosis cannot be considered a school disease. It is essentially a disease of overcrowding and still more of close personal contact with an actual sufferer from the acute disease. Of 254 children whom I have under my repeated observation as showing suspicious symptoms of pulmonary disease, by far the greater portion come from homes in which there is or has been recently a sufferer from phthisis. If we segregate the adult sufferers we shall practically cease to see pulmonary tuberculosis in our schools. Here, again, we must go down to the home.

These examples will serve to illustrate the nature of the problems met with in medical inspection of school children. School hygiene cannot be regarded as a subject *sui generis* limited to the sphere of school life and school premises, but it is an integral factor in the activities which promote the well being of the nation. The essential unity of the problems revealed calls for a unity of effort to deal with