

children growing up to constitute the men and women of to-morrow, when we remember that they will be the progenitors of yet another generation of the human race, we cannot but admit the supreme importance of doing everything in our power to make them sound and healthy, and to instil in their minds those momentous principles of hygiene, observation of which can alone insure that our descendants shall not cast upon us the terrible reproach that in the selfishness of our own existence we gave no thought to those who were to follow us.

SOME CONSEQUENCES FURTHER DISCOVERED.

I have now described to you the details of what is, I think, a universal and alarming state of things. I have discussed at some length the causes thereof, and I have indicated some of the consequences. Perhaps a few further remarks in regard to the latter may not be superfluous. Bad teeth in childhood must, of course, determine defective dentition in after years. The state of the teeth in the army in various countries indubitably demonstrates this. In his speech in the House of Commons, on the introduction of the Army Estimates in 1899, the Secretary of State for War said,—

ARMY STATISTICS.

“He was sorry to say that 35 per cent. of those who offered themselves were rejected on medical grounds. A good many of the rejections were due to bad teeth, and a large number to the lack of general development. It occurred to him that in elementary schools supported by public funds, it might not be impossible to teach the children to take elementary precautions for the preservation of their teeth.”

Dr. Jessen, whom I have already quoted to you this evening, supplies some interesting statistics. According to him, Cunningham found in the English army 96 per cent. of men with bad teeth, the average number of carious teeth per head being 7.5. In the German army the percentage of men affected seems to vary from 79 per cent. to 95 per cent., and the number of bad teeth from 6.9 to 9.60.

ABSENCE FROM SCHOOL.

Another consequence of the neglect of the teeth of school-children is the serious economic loss in school time owing to absence on account of toothache. In elementary schools at Home, 17 per cent. of scholars are daily absent. We may rest assured that a very considerable portion of this absence is directly due to teeth trouble or to illness attributable to neglect of the teeth, and that it would be obviated were the teeth properly looked after. The extent of the loss may best be realised by a computation made by Dr. H. L. Ambler, of Cleveland, Ohio, and referred to by him in a paper read before the Fourth International Dental Congress on “The Care of the Teeth of the Poor.” Taking the number of children of school age (five years to twenty years) in the United States at 15,000,000 on the moderate assumption that each child loses one hour in the school year, “at the end of the year there will have been lost,” says Dr. Ambler, “more than 14,000 school years. Is it not reasonable to presume that 3 or 4 per cent. of this time has been lost on account of dental lesions?” No comment seems to me to be required.

EFFECT ON HEALTH.

I have already spoken of the effect upon health, but perhaps it may be well to emphasize this aspect of the question. The age of change of teeth is a very critical time in child-life. “It is the time,” says one authority, “when the child enters the school, and great claims are made upon his body and mind. Only a strong, healthy body is equal to the test, for the healthy mind can only be found together with the former. The mouth especially must be healthy, because that is the entrance to the body.” Healthy teeth are again the first condition of a healthy mouth. Chronic diseases of the stomach and intestines are largely caused by badly masticated food, and Berthou asserts that “many of the illnesses of school-children, such as headache, faintness, loss of appetite, poorness and want of blood, can be traced principally to diseased teeth.” Microbes rapidly breed in an unclean mouth, and, together with other rotten products, are carried by the breath and by the saliva into the lungs and the stomach, and thence by way of the lymphatic glands into the body. The report of the Inter-Departmental Committee on Physical Deterioration in Scotland, set up last year, says that, if not an indication of degeneration, the present condition of things regarding the teeth of the people contributes to the causes producing degeneration by the poison which dental caries introduces into the system and the gastric disorders that arise therefrom.

Before I leave this part of my subject, I should like to quote a passage to you from an article entitled “Bad Teeth and Disease,” which appeared in the *Press* of the 18th January last. In that article, Dr. Louis Henry, assistant physician at the Prince Alfred Hospital, pointed out that the physical development of the race is largely influenced by the condition of the teeth. “The mouth,” says Dr. Henry, “forms a most prolific culture-bed for all kinds of bacteria, and a person suffering from dental decay is constantly swallowing injurious germs of various kinds.” Dr. Henry made observations on six hundred patients in twelve months, the cases comprising various forms of gastric and intestinal disturbances, rheumatism, anæmia, bronchial and pulmonary affections, enlarged glands, adenoids, disturbances of eye and ear, throat-inflammations and neurosis. He found that over 80 per cent. of these were associated with dental decay in advanced stages. Two typical cases are those of a boy and a business man, both of whom had bad teeth. The boy came to the hospital on crutches, but three weeks after his teeth were removed he walked home without crutches. The business man was in a state of rapid decline, but after his teeth had been attended to he became completely convalescent and resumed work. Dr. Henry believes that most infants are born healthy, and that as a rule the decay of teeth and ill health are due to improper feeding. The belief in lime-water as a bone-former is a popular error, because the lime required in food does not come from the water, but from the solid particles of the food