## TRAINING IN HYGIENE AT SCHOOL.

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THE ignorance among the poor of household management and of the principles of hygiene is responsible in no small measure for their high preventable mortality, their inferior physique, their intemperance, and their poverty. When material and moral hygiene are generally and properly taught, the future generation will realise in greater numbers the degradation of unhealthy, underfed, filthy and ragged children, of filthy homes and of alcoholism.

How possible it is to better the conditions of modern life, and thus to improve the health, happiness and physical powers of the people (and thereby their mental vigour and industrial efficiency) is common knowledge to those whose duties take them into the homes of the people and bring them in contact with the occupants. The rate of infantile mortality, swollen in this country by thousands of preventable deaths each year, is a death-toll levied by the lack of wholesome living, and it indicates the extent to which those conditions which are responsible for such a mortality must maim others who are capable of surviving them. This state of things is most expensive to the State; but the very prevalent lack of personal responsibility among the poor would land us in a serious quandary if all the measures of alleviation recommended by superficial thinkers were carried out. The proper cure of all these evils is a suitable hygienic education, moral and material, of the future parents. encourage them to help themselves, but let us beware of doing too much to relieve them of their obligations as parents and citizens.

## THE KNOWLEDGE AND TRAINING OF THE TEACHER.

The usefulness of the teacher depends less on what he knows than upon his powers of imparting his knowledge to children, and upon the spirit in which he sets himself to fulfil his important mission. He must be interested in his subject, fully appreciate its importance, and enter

with enthusiasm upon his task; and he should aim to offer in himself an object-lesson of the complete realisation of the fullest aims of education. Such an one would find no difficulty in awakening and maintaining an intelligent interest among his pupils in such a subject as Hygiene.

If the teacher is properly taught and trained the pupils will be so too, and hence the prime importance of appointing teachers (medical men who are known from their experience and by their natural gifts to be competent individuals for the instruction of the students in the training colleges).

This training of the teacher must be as practical as possible, and the teaching cannot be too fully illustrated by apparatus, experiments, and visits to places where the practical application of hygienic principles may be seen.

The scope of the teacher's training must clearly depend upon the matter which is to be taught and the other co-related duties which are cast upon him. The teaching should only deal with essentials, and a scheme including all the matters of personal and domestic hygiene that are essential to his pupils, and which would (if generally practised) reduce the sum of preventable misery, suffering, and death very considerably, need not fill more than a dozen pages of foolscap.

But the teacher has to do something more than teach hygiene; he must have the knowledge which will fit him for the discharge of other important duties. These may be grouped under two heads:—

- 1. Not only should he be trained to detect the symptoms of defects in mental development and of vision, of commencing bodily deformities, and of signs of ill-health (including communicable diseases), but he should possess a knowledge of the methods of physical training and of their rationale. The knowledge of a few elementary principles of psychology is also essential, and he should be capable of taking a few simple anthropometrical measurements of the scholars, say every six months; for in addition to their value for other purposes these will serve to indicate those children who are being neglected by their parents.
- 2. The supervision of the hygienic environment of the pupils while at school.

If the teacher is to have an intelligent appreciation of the significance of hygienic principles he must be taught the elements of physiology. The two subjects naturally go hand in hand, and must be taught together. A general acquaintanceship with the physiological functions of the respiratory, circulatory, digestive, nervous and integumentary systems is essential to a proper understanding of the laws of health; but the teaching should be strictly confined to the physiological principles upon which these laws are based. There is no sufficient reason, in my opinion, to

teach 50 per cent. of the physiology and histology which is set out in even the very small works upon hygiene, at present in circulation. laws of health are simple and few; they could be incorporated in a dozen commandments; and the physiology necessary to explain them, and to make their importance appreciated, can be adequately set out in a very short space, and in simple non-technical language. As an examiner of some experience, I am heartily sick of examining papers in which those who are supposed to have been taught hygiene, and to have benefitted by the teaching, are crammed full of scientific and technical terms which they rarely properly understand, and often do not spell correctly. So long as this sort of thing masquerades as knowledge, much of our present hygienic teaching stands condemned. Many text books show the same lack of appreciation of the real requirements of the subject; though labelled "elementary" and "practical," they are neither; and useful facts are smothered up in an abundance of other matter, a knowledge of which has no practical value whatever to the class of reader for which the book is designed.

## THE TEACHING AND THE TRAINING OF THE SCHOLARS.

It must always be the aim of the teacher to train children in the habits of observation and reasoning, and thereby they will obtain, with the assistance of object-lessons in the school itself and of models and simple experiments, an intelligent appreciation of the main facts bearing upon health. He must strive to make them realize the importance of the subject, and to arouse in them a living interest in, and a desire to observe, the ideals of healthy moral and physical surroundings. The school regime must afford every opportunity for healthy bodily development, not only by training the scholars in suitable physical exercises and in encouraging them in a good selection of games, but also by continually presenting an object-lesson of the recognised importance of fresh air, cleanliness, etc. The teacher can do much by example, precept, and personal influence to create a sanitary conscience among the rising generation. always foster a strong sense of discipline and duty, and thus prepare a fertile soil for the seeds of sanitary teaching to fall upon. To these ends he should enlist as far as possible the co-operation of parents in the home, and he should bring, if possible, his personal influence to bear upon them in The training in the observation of sanitary precepts certain cases. is a form of moral training, and if the home influences are antagonistic to those of the school the home influence will often prevail. A dirty and neglected child indicates the necessity of attempting to do something to improve the parents. The child will often be the medium for this parental education, but sometimes the local sanitary authority may be advised with advantage, especially if it has a female health visitor in its employ. Not infrequently, however, a personal visit by the teacher will prove of the greatest value. It may be said that teachers have no time for this. The obvious reply to that would be that the personal influence of the teacher upon the parents would only be necessary or valuable in a jew cases, and that the circumstances that prevent it being exercised in these cases is a serious flaw in an educational system the aim of which must be to get the best practical results for its teaching.

The teaching of hygiene in schools must be suitably graduated to the age and capacities of the scholars during compulsory school life. The average infant mind is very intelligent, but it is immature in judgment and reasoning; and just as we cannot give an infant the diet of an adult, but have to select and prepare its food to meet its imperfectly developed digestive powers, so must we deal with its mental food; and the science of mental feeding, or the preparation of the mental food which children of varying ages are asked to assimilate, is a difficult science, requiring much study and practice.

I am disposed to believe that whereas from the very commencement of school life the object-lessons of a sanitary environment should always be presented to the child, and he should be made to pay regard to the uses of sanitary apparatus provided for his health and comfort, it would be a mistake to carry him beyond this until he reaches the age of eight, except it be that certain sanitary precepts might figure in his copy books and reading primers. Having reached the age of eight, he should commence to receive definite instruction in domestic and personal hygiene. The teaching at this age must not be dogmatic, for such teaching often fails to influence habits; but elementary and practical facts of importance, illustrated by the concrete where possible, and by object-lessons, must be so clearly presented that they are understood and carry conviction. The teaching must deal with the most simple, the most easily understood, the cheapest and most practicable means of translating sanitary precepts into practice; not losing sight of the fact that it is the positive rather than the negative which must be presented to the scholar. The conduct demanded of the scholar will constitute the moral training necessary, and the school buildings and fittings should, so far as possible, illustrate all necessary hygienic observances. Subsequent to the age of ten or eleven the scholar may be taught, upon a suitably graduated scheme, some of the more elementary scientific principles involved in hygienic precept and practice; and it will be most valuable if, subsequent to school age at fourteen, those attending higher-grade schools or evening classes continue to have this important subject impressed upon them. But in the whole scheme of teaching hygiene the fact must never be lost sight of, that, from the broadest point of view, it is only the simple and essential laws of health that require to be taught, and that any scheme which aims at more than this will fail to realise the best results. I have found by considerable personal experience that it is most valuable in enabling the teacher to insure that he has been understood by those he is teaching, if, at the end of each of his practical lessons, he questions some of the pupils and invites questions from them.

Compulsory elementary education has conferred a great boon upon the population, and our aim must be to remove any or all of the disadvantages which have hitherto attached to it. It has promoted the spread of infectious disease, and it has been responsible for physical and mental deterioration in some cases. The training of the teachers in hygiene and the teaching of the scholars the laws of health, the improvement (hygienic) in the environment of the scholar, and either the raising of the school age for the commencement of education or a more judicious method of dealing with the babies under five years of age, are all necessary if nothing but good (and that the best) is to result from our educational system in the future.

The school premises must often be improved if these results are to be obtained, and if the premises are to illustrate the sanitary precepts which it is necessary to inculcate. At present many school premises afford better illustrations of how not to do it than of how to do it, and the requirements of the Board of Education are certainly insufficient in some respects, such as floor space, ventilation, warming, and cloak-room accommodation. If the class-rooms must be packed with scholars then they should be adequately ventilated: nothing short of mechanical ventilation will suffice during the winter months when the incoming air must be warmed. No system of physical culture can replace fresh air, and in its absence there can be no effective hygienic training and teaching, for foul air is an offence against the first law of health.

Few things more impress themselves upon the scholar than when one of their number is singled out for some special duty. It would therefore be a most telling means to our end if one scholar in each class-room were constituted the sanitary officer for the week. It would be his duty, during his week of office, to see that the ventilators were open, that the class-

room was well flushed with fresh air upon every available opportunity, that cleanliness obtained, that dust did not accumulate, and that all sanitary requirements were observed in the use of sanitary conveniences provided.

In my opinion every female child should be taught the elementary facts of cooking and infant-rearing, and there should be a kitchen and a work-room in connection with every girls' department. There should also be more supervision and control over scholars in the playground. They should not be allowed to run wild. More in the direction of character formation and moral training can be done by effective supervision and control in the playgrounds than in the class-room.

Provision ought always to be made for a half-yearly medical inspection of the scholars, and no improvement in the training of the teachers, or in the circumstances under which the scholar does his work, will suffice to remove the great necessity for this very important work.

Personally, I am not much in love with the somewhat indefinite term Hygiene, as denoting the range of education indicated above. The average individual does not realise the scope of the term, and I would prefer that the more taking title Domestic Economy and the Laws of Health were chosen.

The possession of citizens of good physical and moral stamina is the most valuable and abiding of all national assets, and for this the nation is almost entirely dependent upon what the educational influences of school life are made to be. Our object is therefore to educate all sections of the community to a conviction of the necessity of cleanliness of mind, body, and surroundings, and to combine this moral training with the knowledge of a few hygienic principles of healthy living and infant-rearing. There will then be no lack of worthy citizens who recognise their civic responsibilities and duties, and who are capable of observing them; and the reduction of disease, mental and physical incapacity, alcoholism and crime, will be the State's ample reward. This great blessing education can and ought to bestow. Why, then, do we lag behind in the dark when truth so clearly lights the way for our advance?