

Physical deterioration : proceedings at a conference on compulsory medical inspection of schools, and teaching of hygiene in schools : held in the Lord Mayor's Parlour, Town Hall, Manchester, on May 18th, 1906 / including an address by Sir Lauder Brunton.

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PROCEEDINGS AT A CONFERENCE ON
COMPULSORY MEDICAL
INSPECTION OF SCHOOLS,
AND
TEACHING OF HYGIENE
IN SCHOOLS.

Held in the LORD MAYOR'S PARLOUR, TOWN HALL, MANCHESTER,
ON MAY 18th, 1906.

Including an Address by

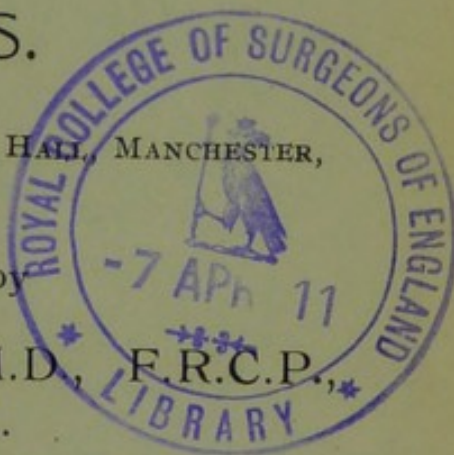
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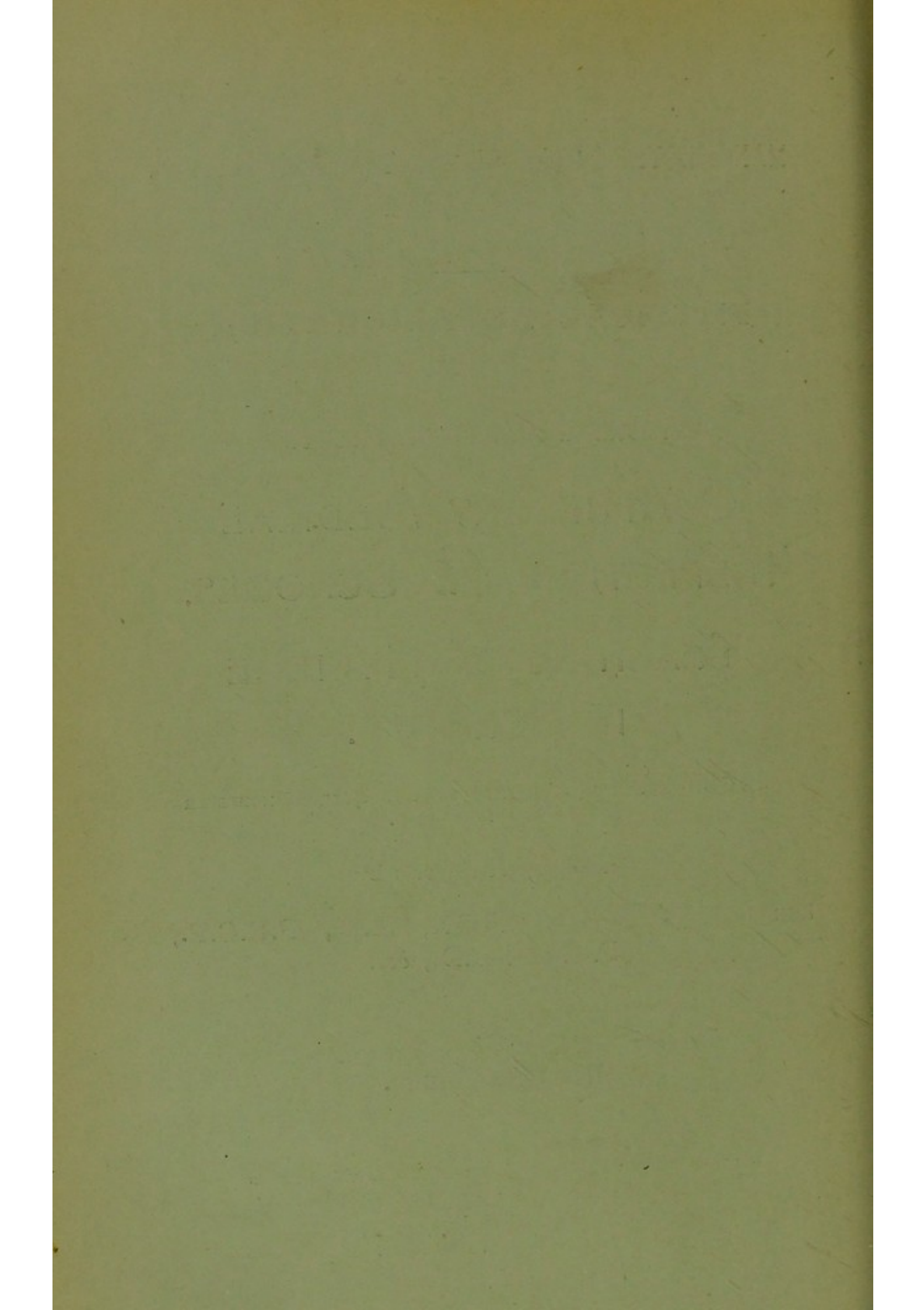
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SHERRATT AND HUGHES,
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THE UNIVERSITY OF CHICAGO
PHYSICAL DEPARTMENT

PHYSICAL DETENTION

BY

COMPTON PHYSICAL

INSTITUTION OF PHYSICS

TEACHING OF PHYSICS

IN PHYSICS

AND PHYSICS

IN PHYSICS

IN PHYSICS

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MANCHESTER AND SALFORD SANITARY ASSOCIATION.

PHYSICAL DETERIORATION.

A Public Meeting under the auspices of the Association was held in the Lord Mayor's Parlour, Town Hall, Manchester, on the evening of May 18th, 1906, in support of the following Memorial which was forwarded to the Minister of Education (Mr. Augustine Birrell, M.P.), on April 6th, 1906.

To the Right Hon. AUGUSTINE BIRRELL, M.P., etc.,
President of H.M. Board of Education.

The Memorial of the Manchester and Salford Sanitary Association Respectfully sheweth

That your Memorialists constitute a Voluntary Society, embracing Medical Men, Clergymen, Engineers, Chemists, and members of other professions and callings, which has existed for fifty-four years for the promotion of Sanitary Reform.

Your Memorialists consider that the period of school life in children affords great opportunities for permanently raising the standard of public health, and have therefore, for many years, earnestly advocated the cause of School Hygiene, including the Sanitation of School Buildings, the Treatment of Infectious Diseases, the Development of Physical Training, the Teaching of Hygiene in Schools, and the appointment of Medical Officers for Schools, a step which had been largely instrumental in effecting the desired reforms in Manchester and Salford.

Your Memorialists are convinced that this policy of directing careful attention to School Hygiene, and of making the laws of health a prominent subject in the scholastic curriculum, is one of the most effective means of securing the best possible educational results, and of materially combating physical deterioration at an early age.

Your Memorialists believe that the Medical Inspection of Schools exercises a profound influence for good on the health of the working classes, and they therefore venture to urge that in the forthcoming Education Bill you will make provision for securing the compulsory appointment by all local Education Authorities of Medical Officers to inspect all schools

in their respective districts, and to supervise the physical condition of children on entering school and during their stay there.

Your Memorialists trust that you will give your favourable consideration to this appeal of a body of experts in various departments of Hygiene, and will accordingly provide in your forthcoming Education Bill for the compulsory appointment of Medical Officers by all local Education Authorities.

And your Memorialists will ever pray, etc.

For the Manchester and Salford Sanitary Association.

J. DIXON MANN, M.D., *Chairman*.

WM. THOMSON, F.I.C., F.R.S. (Edin.), *Treasurer*.

T. C. ABBOTT.

R. W. MARSDEN, M.D. } *Hon. Secs.*

FRED. SCOTT, *Secretary*.

The proceedings were opened by the Lord Mayor of Manchester, who, in the first place, called upon the Secretary, Mr. Fred Scott, to read letters of regret at inability to attend. These included communications from Her Grace the Duchess of Sutherland ; the Lord Bishop of Ripon ; Sir Henry Hibbert, Chairman of the Education Committee of the Lancashire County Council ; Sir W. H. Houldsworth, Bart. ; Mr. F. Cawley, M.P. ; Mr. W. J. Crossley, M.P. ; Mr. Harry Nuttall, M.P. ; Dr. Pollard, M.P., and others.

The Lord Mayor said : " Ladies and Gentlemen, your Lord Mayor has so many opportunities of expressing himself, and saying all that he possibly can say to the Citizens of Manchester, that I am quite sure you will excuse me to-night saying more than this, than I am in absolute and cordial sympathy with the objects that have called this meeting together, and we have before us a list of names, notwithstanding the absence of Mrs. Tennant (which we all very greatly regret), of distinguished ladies and gentlemen, who, I am sure, you will be very glad to hear. I am glad to have the opportunity of just opening the meeting, but I regret that other work will prevent me remaining more than a minute of two. Before calling upon Sir Lauder Brunton to give you his address, I will ask Dr. Dixon Mann to take my place in the Chair.

Professor J. Dixon Mann, M.D., F.R.C.P., Chairman of the Association, then took the Chair.

Chairman : " I will now call upon Sir Lauder Brunton to deliver his address."

ADDRESS
BY
SIR LAUDER BRUNTON,
M.D., F.R.C.P., F.R.S., LL.D., etc.

THE subject of my address to-night is the advisability, I think I may say the necessity, for medical inspection in schools, and for the teaching of the laws of health in schools. This subject was to have been introduced to your notice by Mrs. Tennant. I am sure we all regret her absence greatly, and we sympathise with her in her bereavement. No one, I am sure, regrets her absence more than I do, because I feel that she would have introduced the subject to you much more eloquently and much more forcibly than I can do. But the subject is so great and so good that I feel sure you will sympathise with it, and aid it to the best of your ability, however poorly and imperfectly it may be brought before you. It was only the day before yesterday that I received a card of invitation to this meeting, although I had been previously told I was to address it. If I had seen the card before it was printed I should certainly have entered a disclaimer, because I am noted upon that card as the founder of the National League for Physical Education. Now, Mr. Chairman, and ladies and gentlemen, a league like this has no founder, it grows ; it is founded not by one man, not even by the seven who signed their names as incorporating the league, it is founded by the co-operation of any number of people who feel for the sorrows and weakness of their fellows, and who wish their welfare. Its great object is to secure co-operation—the co-operation of all those who are working together for the good of their fellow creatures. It is by co-operation, by combined action, that great things are to be effected. It is because the Manchester and Salford

Association has for many years back seen and acted upon this principle, that it has done so much already, and that it can now point to a great deal of work already done when it tries to urge upon the legislature, the necessity for the improvements of which I have just spoken. It seems to me there are three classes of workers. There are the foolish workers, who try to do things, and fail, and do not learn from their failures. There are the ordinary workers, who muddle through, who make failures, learn by them, and get on slowly. There are the wise workers, who learn from others, who take advantage of their mistakes, and learn to avoid them, and to imitate their successes. I believe we shall be among the third class of workers. It behoves us, therefore, to look round and see what is being done elsewhere.

Now there is one man upon the Continent upon whom the eyes of all Europe are fixed. Some dislike him greatly, some fear him greatly, some reverence him greatly. That is the Emperor of Germany. But however much he is liked, feared or revered, all acknowledge that he is a man of wondrous ability, and that his one thought is how to advance the interests of the Vaterland. He has said "Wir müssen kräftige Kinder haben," and he hit the nail on the head. Unless we have got strong and healthy children we shall be a feeble folk, unable to hold our own, either in commerce, manufactures, or war. Therefore we must have strong and healthy children. How are they going about this in Berlin? They have had for a number of years, a plan of inspecting the children by doctors when the children enter school, but experience has shown them this plan is insufficient, and that it is necessary the children should be inspected not merely when they enter school, but during the whole of their school life, so that the beginnings of weakness or of disease may be detected, and their operation may be stopped before they have gone too far. Quite recently, the town of Berlin has doubled, more than doubled, the staff of medical officers connected with the schools, so that each medical officer has now six or eight schools under his care, and inspects the the scholars in those schools not only at their entrance, but all during their school life. But you may say, "That is the example of a foreign country, do we need such inspection in this country?" The answer to that is given by the Blue Books which contain the Reports of the

Commission and of the Committees appointed by the late Government in order to give information on this subject. There was a Report of the Royal Commission on Physical Training in Scotland, and of (1) Inter-Departmental Committees on Physical Deterioration (2) on Medical Inspection and Feeding of Children, and (3) on the Model Course of Physical Exercises. These Blue Books, one and all, insist upon the absolute necessity of medical inspection in schools, and unless our legislature is going to stultify itself and after appointing men chosen for their knowledge, to disregard the advice they give, our legislature is bound to appoint medical inspectors of schools, and say we must have compulsory medical inspection. We ought to have it too, not merely as the Germans had formerly, at the beginning of the school curriculum, but all through school life.

In the Blue Book on Physical Deterioration it was shown that although there might be no definite evidence of deterioration of the race, yet the physical condition of our people is far below the proper mark, and that if we are to take our proper position, and hold our proper position, in the world, we must pay attention to the physical condition of the babies, of the small children, of the school children, of the youths and of the adults ; but at present all that I have to speak upon to-night is the condition of school life, although I may have to say something to show the bearing of what may be taught at school upon after life.

In school life then, we require medical examination of the children, first of all, because it has been decided by the country that school children cannot be taught unless they are fed, and in all probability our legislature will insist that school children must be fed. But, ladies and gentlemen, it is not the food that is put before the child that nourishes it. It is not even the food that the child swallows. It is the food that it assimilates, and until it is assimilated it is no good to the child. Very often it happens that not only children but grown up people have no appetites, and food which is placed before them, however nourishing it may be, is rejected, and many of those small children, badly fed, have no real, true, good appetite. They crave for things that are bad for them, and they do not care to take the things that would nourish them. Even if they do, perhaps their digestive systems are so far out of order that they cannot

assimilate them, and so children may starve and pine in the midst of plentiful food, because they either will not take it from lack of appetite or cannot assimilate it from defective digestion. Unless then, we have compulsory medical inspection of schools, all that the legislature is doing for the feeding of children will be imperfect, and may fail to a great extent in effecting the end in view.

The first part of digestion is mastication, but children very often have defective teeth. A child may either reject the food that would nourish it, because it would produce pain when it bit the food, or, on the other hand, it may swallow the food, and thereby, by bolting it, may give rise to indigestion and want of assimilation. It is, therefore, necessary for the good of the child, and for its proper nutrition, that its teeth should be examined. Then there is something more. How is a child with an aching tooth going to attend to its lessons? Look back over your own experience, and think how much attention you could give to anything, even to an amusing novel, if you had a raging toothache. What is the poor child to do if it has got a bad tooth? It cannot attend to anything. We ought not to allow the children to be tortured by bad teeth, if by medical inspection we can prevent it. There is one other point in saving the child from toothache that has got to be considered; not from the point of childhood, but from the point of adult life. Those teeth that are defective in childhood, do not get better as the child grows older. They become more and more defective, and then they tell strongly in after life against the child. They become, in many cases, one of the reasons why young men are rejected when they offer themselves as recruits for the army. But it is not only in recruiting for the army that bad teeth are a disadvantage. Suppose those youths are going into occupations where strength is demanded. Their strength will not be equal to the mark because they cannot masticate their food properly, and upon the proper mastication and assimilation of food the man's strength depends; for food plays in the part of the man's body, the same rôle that coal does in the locomotive—supplying the force which will produce work.

Another cause of pain to children, even more potent perhaps than bad teeth, is deficiency of sight. Perhaps many here suffer from so called nervous or bilious headaches. I do not know whether many of you are

aware that most of those headaches are preventable, that in all probability 90 per cent. of so called nervous headaches depend upon defective sight, and are to be cured by proper glasses. It is not only, however, pain that the child suffers through defective eyesight. It cannot learn. I remember as a boy, seeing a poor fellow caned every day because he did not know his lessons. One day he came to school and said, "Oh, I know my lessons; I shall not get caned to-day." Poor fellow! He got caned all the same, and I believe that that poor fellow was caned because he could not see the figures on the blackboard, and neither he nor the teacher had any idea why it was he could not do the lesson. By attending to the eyes we may save a good deal of pain, we may save a great deal of difficulty in learning, and more than that, we may save a good deal of defective sight in after life, for I believe that a great deal of the defective sight which is so injurious in many occupations, is brought on by want of proper glasses at school, and the strain of the eyes to which this defective vision gives rise.

Another organ that requires attention at school is the ear. If the child does not hear rightly what its master or mistress says to it, it cannot properly show any appreciation of what is being taught to it. But this is not all, because inflammation of the ear is a dangerous thing, dangerous to life, for it leads to abscess in the neighbourhood of the ear, and very often to inflammation of the brain, and to death. Closely allied to the ear is the throat, because there is a regular communication from the ear to the throat by a small tube called the eustachian tube, and inflammation of the throat very often travels up this tube to the ear, and gives rise to ear mischief. Attention to the throat is of the utmost importance in regard to the ear.

But this is not all. Children, and especially weakly children, are liable to enlarged tonsils, and to so-called adenoid growths at the back of the nose. These have a very great effect upon the mental power of the child. This is so marked that I think, with your permission, I will read you an extract from the work on medicine by Professor Osler. He says, "The influence upon the mental development is striking. Mouth breathers are usually dull, stupid and backward. It is impossible for them to fix their attention for a long time. Headaches, forgetfulness, inability to study without discomfort, are frequent symptoms of this condition

in students." Unless this condition is detected by medical examination, the child will be blamed for inattention and stupidity, when, after all, it is suffering from a definite disease which may be moved by appropriate treatment, and the child's mental ability may be restored to it. You can well imagine that with enlarged tonsils blocking up the throat, the quantity of air that enters the lungs is naturally diminished. In consequence of this the chest becomes contracted. The child develops an elongated and narrow chest, what is called a phinoid chest, because it is associated in the minds of medical men with phthisis or consumption. A great deal can be done to modify this condition of chest by suitable respiratory movements, but even those movements are not successful to the proper extent unless the obstacle to the entry of air has been removed.

There is still another disadvantage from this condition of the throat, which is that children with enlarged tonsils are liable to sore throat. The tonsils seem to act as a sort of reservoir for microbes, so that children with enlarged tonsils are liable to colds, and are liable to diphtheria, and from such children, acting as a focus, these diseases may be propagated to the healthy children. It is, therefore, most important not only for the children themselves, but for the others who are attending school at the same time, that the throat should be attended to.

There is another organ which requires close attention, and that is the heart. More especially is this the case if physical exercises are to form part of the curriculum for children. These exercises, when properly used, and properly adapted to the children, are of the utmost value, and ought to form part of the school curriculum. In order that they should not do harm it is essential that medical inspection should precede them. Two years ago I was over in America. In the University of Pennsylvania they have a magnificent gymnasium where compulsory exercises are taken by all the undergraduates, but before they are put through them they are subjected to medical examination, and the exercises are adapted to the particular man who is going to take them. The weak ones are selected and put apart, and less exercise is given to them, while the strong ones are encouraged to put forth their utmost strength, the men who are in charge knowing they can do so without the least risk. Only a couple of days ago I heard someone

say he had been talking to a working man, who expressed himself as being in favour of compulsory medical examination in schools. This man said, "My only boy has had his sight ruined, and I am told that if the defect in sight had been ascertained in time, his sight would have been good now." The same thing may occur with the heart. You may have such a case as this. If we have no compulsory medical examination in schools you might have some poor widow coming up and saying, "You have ruined the health of my only boy, who ought to have been the support of my old age; you have put him through exercises for which he was unfit." If there had been medical inspection that boy's health would not have been ruined. The exercise would have been adapted so as to restore him to health and strength. It is, therefore, most important that we should have medical inspection in all those conditions.

But I have been talking only of school life. No doubt the greater health and strength which can be ensured by medical inspection during school life will give children a better start in life, but unless they know how to guard themselves to a certain extent against the deteriorating influences which will come upon them in after life, they will not be properly prepared. We must teach them the laws of health while they are at school. They must know something about the air we breathe, the water we drink, the food we eat, and the raiment we put on. These things must be taught to them not by word of mouth only, but by demonstration. Children learn a great deal more by imitation than they do by precept, and what good is it to tell children that fresh air is good for them, while we keep them shut up in a small room, with the air breathed over and over again until it becomes simply poisonous. Last night I was talking to a gentleman whom you all know; a gentleman who is not only known in Manchester, but is known all over the world for his high scientific attainments, Sir Henry Roscoe. He expressed his opinion that it ought to be compulsory to examine the purity of the air in schoolrooms, and that if more than nine parts of carbonic acid in 10,000 of air were present, it ought to be a penal offence for those who had charge of the room. He told me that experiments had been made on the capacity of children for learning in well ventilated and in close schoolrooms. It has been found that the carbonic acid is a nerve poison, which prevents the child from developing its proper ability. I

quite agree with him as to the necessity of ventilation, but I do not know that I quite agree with him in regard to the examination of the air in schoolrooms; because it seems to me that the better plan is to insist upon such free ventilation that it would be impossible for the minimum of carbonic acid ever to be reached, and so there would be no chance of ever having to inflict any penalty for the accumulation of carbonic acid in the schoolroom. Two or three years ago, I went to Switzerland where they pay a great deal of attention to education. I believe that in Switzerland the national bill for military service is smaller per head than in any other country in Europe, but the national bill for education is higher than in any other country in Europe. In Switzerland during the summer the schools are held out of doors. In winter when it is very cold, there is an interval between the lessons. During that interval the children are turned out of the schoolrooms into the corridors or somewhere else to shout and play and warm themselves by running about, and the windows are thrown open, so that the air, although very cold, is very fresh, and the children come back again warm with their play, into the well ventilated schoolroom. Ventilation then is of the utmost importance.

A little while ago I heard that in the Japanese Army the number of cases of typhoid fever was extremely small, and the reason that was given to me was that the Japanese were so careful about their water supply. But, said a man to me, "these Japanese soldiers were so careful about their water, but our Tommies would not have stood it, they drink anything and everything." Why? Because they are not taught in their childhood how important is the purity of water. If they were taught how necessary it is to avoid impure water, then, if we should unfortunately ever have a war again, the men who had been taught as boys the necessity of pure water, would probably escape the typhoid fever which has been such a terrible scourge in the Transvaal. In regard to the food we eat, it seems to me that we should also follow the example of the Swiss. In one of the rooms at Berne I saw a large diagram upon the wall, showing the different proportions of the necessary ingredients contained in different kinds of food, and the way in which the selection could be made from different kinds of food, so as to get the maximum of nutriment with the minimum of expense.

Here again, it is not the food of high nutritive value only that is placed before the child, or even before the adult, that is going to be useful. It must be pleasant, and the tastiness of food is not a thing to be despised. It has been found by Professor Pavelot, who gained the Nobel prize one or two years ago, for his discoveries in physiology, that the tastiness of food is one of the most important points in the food, because tasty food is much more readily digested than that which is not tasty. Therefore, we want to make the food both for children and for grown up people tasty as well as nutritious, and this must be done by teaching the girls cooking. It seems to me that they must not only be shown how to cook, but they must have an opportunity of eating what they have cooked, and thus learning if it is up to the mark. In a very short time you will get a sort of public opinion established among the girls, making it necessary they should know how to cook, otherwise they will be scorned by their fellows, and the scorn of one's fellows is one of the most potent agents for good or evil in this world.

Another thing that must be taught is the danger of infection. There is one disease in this country which is the dread of most people; perhaps not on their own account, but on account of their families. That is consumption. Consumption is the disease which seems to pick out the flower of the flock. It picks out some of the best athletes. It picks out some of the most brilliant and cultivated. It picks out the flower of the family. If there is a girl who is noted for her beauty, for her wit, for her kindly disposition, that is the one that consumption seems to fix upon. Yet, ladies and gentlemen, consumption is a disease which it is within our power to stop, and if we were only agreed one and all to prevent it, in one generation, or less, it would become as rare in this country as leprosy is now. This can be done by teaching the children. It is very hard to get grown up people to do anything, but if you catch the children young, and teach them, they will grow up in the proper way. It is the old story. Teach the child, bring him up in the way he should go, and when he is old he will not depart from it. By teaching children not to spit, and teaching them to avoid the risk of infection, we shall stamp out tuberculosis in this country.

But there is something more in regard to these infective diseases. There is the power of resistance. In some of the hospitals where consumptive patients are taken in the nurses

do not contract tuberculosis. They do not take consumption, although there are consumptives all round. The reason is that they are strong and well. They can resist tuberculosis.

There is a point in regard to resistance which I think I ought to mention. There is a disease called anthrax, which was examined by Professor Pasteur. Fowls do not take anthrax. Fowls have a natural temperature several degrees above that of the human body. Men take anthrax, fowls do not. But if you take a fowl, and stand it with its feet in cold water until it is chilled down, that fowl will take anthrax readily enough. There is a disease which is very terrible sometimes, because it takes a man, apparently in his full health and strength, and kills him off in a few days. That is inflammation of the lungs, or pneumonia. This used to be looked upon as emphatically a result of cold, and yet we know now that it is an infective disease due to micrococi, but the reason why it is so closely associated with cold is that a healthy man may carry about in his throat the micrococi which cause pneumonia, yet he does not contract it till he becomes chilled, and then these micrococi take advantage and may kill him off in a few days.

There are other things which lessen the ability to resist disease. One of these is alcohol. Alcohol not only lessens the power of resistance to disease, but it is apt to bring on disease, and children should be instructed in regard to the bad effects of alcohol. I do not know that tobacco if used in moderation, by adults, is a bad thing. I believe it is sometimes a good thing, but it depends upon the use and not the abuse of it. I think that the use ceases and the abuse begins when tobacco smoking is taken up by children. I do not know that the legislature has a right to step in and make it a penal offence, but I do think that a great deal of good may be done by getting Bands of Hope to keep the children from smoking tobacco just as we have them now to prevent children from taking alcohol too soon.

There is one point more, and then I shall have finished. The girls at school now will in a few years become the mothers of the next generation, and by teaching them how babies ought to be tended, how they ought to be fed, how they ought to be cared for, we may lessen the frightful mortality which at present exists. All this medical inspection of schools, and teaching of the laws of health will require money, but consider what a return may be got from it.

You lessen the amount of pain and suffering and the amount of death in the country, and more than that, by increasing the health of the country you will increase its riches. You will increase the power of production. You will lessen the loss which every year occurs from illness, from the bread winner being struck down by disease, and you will also increase the wealth of the country by teaching habits of saving, by instructing the girls who will become wives and mothers as to how they can get best value for money, how they can feed their husbands well and pleasantly. I believe that a great deal of drinking in this country depends upon the want of not only nourishing but of appetising food. If you feed a man well, and with appetising food, he does not have the craving for drink to the same extent, and I believe in this way we shall lessen the drinking customs perhaps even more than by compulsory legislation against them.

More than this, we shall probably prevent a great number of men from becoming paupers so soon. We shall increase their working power. We shall enable them during their working days to lay up a provision for their old age. It is better that this should be done by the State providing them with health and strength, than with old age pensions. We will find, I think, that although it is an expensive thing to have compulsory teaching on hygiene in schools, it is a very much cheaper thing in the end to spend pence upon children than pounds upon paupers. Therefore, Mr. Chairman, and ladies and gentlemen, I have very great pleasure in supporting the memorial presented by the Manchester and Salford Sanitary Association to the Right Honourable the President of the Board of Education.

A letter from Mrs. H. J. Tennant, late H.M. Superintending Inspector of Factories, explaining her inability to attend owing to a severe family bereavement was read. The Chairman then called upon Miss Burstall who had consented to take Mrs. Tennant's place.

ADDRESS BY MISS S. A. BURSTALL, B.A.,

Head Mistress, Manchester High School for Girls:—

We must, I am sure, all regret Mrs. Tennant's absence this evening, but there is no one who can regret that absence

more than myself, inasmuch as the fact she is not here has obliged me to take her place in following Sir Lauder Brunton, for which I feel my professional experience has hardly qualified me. I cannot pretend, especially in the presence of so many distinguished medical men, to be a health expert, but I am glad to be allowed to speak here to-night, for I yield to no one in my interest in this matter, and my firm conviction in the need for national effort. For, ladies and gentlemen, this is indeed a national question. (Hear, hear). It may be that this generation is no worse than our forefathers; it may be that these defects of sight and hearing and so forth were as prevalent in the past as they are to-day. But there is a much greater demand to-day for efficiency, owing to the very progress of science itself. All of us have a great deal more to do than was required, say, 40 years ago. I think some Manchester men will support the statement that one has to work three times as hard to-day to make less money than our forefathers. (Laughter.) This need for efficiency goes right through our national life. It is, therefore, a most urgent question that all our people should be really capable. We cannot go on under modern conditions, supporting the very terrible burden of the inefficient to which Sir Lauder Brunton referred at the end of his address. We must do something. What can be done? To-day, more than ever, men say, "Go to the schools." The grown up people we can do very little with, but we may begin with the children. In Manchester I think we may flatter ourselves that something in this direction has already been done. Those who have followed the work of the Industrial Schools know what a remarkable development and improvement is shown by these unfortunate children, beginning with a very serious handicap in the race, how they improve in health and vigour and efficiency under the wholesome conditions of Industrial School life. We know also, at least some of us who have the honour to be on the Manchester Education Committee, what has been done, and I wish every citizen of Manchester to know it, in the way of medical inspection by our officials, and what is done for the care of feeble minded and defective children, and of cripples, in the schools managed by the Education Committee. So that really, I think, we may say something has been attempted, and on the whole, human frailty set apart, is successful; we have even lectures on the care of babies, which are given to the older girls in the standards of the

Manchester Public Elementary Schools. As a teacher I would like to say that I myself have found the help of the medical men or medical women extremely valuable in dealing with difficult cases. There is a great deal of disciplinary and intellectual difficulty in schools which is really physical in its origin, and the best friend of the teacher in these cases of difficulty is the medical inspector or the medical authority. But, as we know very well, it is just those places where, perhaps, there is most need of care, that there is less likelihood of voluntary inspection being undertaken. It is not every Education Committee that is as enlightened as ours. (Hear, hear), and if I may say so in the presence of our Chairman, the smaller authorities would be all the better for being kept up to the mark by a measure of compulsion such as this memorial recommends. In regard to the teaching of hygiene, I need add very little to what has been put before you, but, as a teacher, I would say that in this matter, example is better than precept. There are certain practical difficulties in teaching hygiene, more especially to young children, which would have been perhaps, more fittingly dealt with by my colleague in the University, Professor Findlay. For my own part, I am inclined to think from practical experience, that hygiene should be taught as a moral obligation rather than as a science lesson, that it should be taught as part of the moral instruction which is given in various ways in different schools. As we know, it was taught thus in Old Testament times. The form-mistress in the secondary school, the head teacher, or some other person in authority in the ordinary elementary school, should give those instructions in an authoritative way. Of course, experiments may be used to illustrate the teaching. It is far more important that the life of the school itself should bring about habits that lead to health. The ventilation, which has been spoken of, the physical exercises, the good personal habits, all these should be included in the school life, in very close relation with the teaching of hygiene. Again, in this connection, I should like to allude to what has been done in Manchester with the City Swimming Baths, which have been thrown open on very easy terms to school children, so that practically hygiene can be taught in that way. Of course, all this means smaller classes. The very teaching of cookery is really an expensive thing. It is not possible to teach cookery to 45 or 60 children at once, and

it requires, as we all know, a very fair provision of apparatus, and these demands do mean greater cost and greater care. But we must do it. It is not a matter of theory, it is not a matter of some extra luxury which we should wish to have, like, for instance, the beautiful decoration in this room. As I said in the beginning of my remarks, it is a matter vital to our national existence. The nation must have healthy, vigorous children if the country is to go on taking the place in the world it has taken hitherto.

THE CHAIRMAN : I will now ask Sir James Hoy to propose the first resolution.

ALDERMAN SIR JAMES HOY, LL.D., Chairman of the Manchester Education Committee.

I have here a resolution which one or two good gentlemen have told me they do not entirely agree with. I do not know their point of view, and I dare say they could show adequate reason. The form of words might be changed, supposing that this meeting is of opinion that they show a sufficient reason for it. But if I give you the resolution, I think I may say what I have to say upon the merits of the resolution, and leave the question of any possible amendment for later consideration. The resolution says :—

“ That this meeting strongly supports the proposals of the Manchester and Salford Sanitary Association, and the National League for Physical Training and Improvement, to make provision in the Education Bill now before Parliament for the compulsory medical supervision of all public elementary schools, and the teaching of the laws of health.”

It seems to me a little unfortunate in its language, but the point there is, that we are asked to-night to support an appeal to those in power to make compulsory medical supervision in all public elementary schools, and also to make compulsory provision for the teaching of the laws of health. There are a good many aspects of this question which require to be considered. Miss Burstall has been so good as to speak in a commendatory way of the Manchester Committee. I am free to say, that when one hears, as one has to-night, from Sir Lauder Brunton, that in Berlin, six or eight schools are not considered to be adequately equipped unless they have one medical man in charge, that here in Manchester we must not boast in any way of what we are doing. We have one medical officer for over 100

schools, or more than 100,000 children. Well, perhaps it may be said that we do something more than is done elsewhere. I do not think that any person could stand up and say that, considering the extent of the difficulties, the enormous importance to the health of those who are well, as well as those who are ill, we are at this moment supplying adequately, the needs of the rising generation. We are not—that is the plain English of the matter. We are considering an extension of that kind of work on our Committee, and I doubt not that the Committee will give permission for the more extended use of medical aid in our schools.

The compulsory attendance at schools has brought in its train a great many things. It has brought the necessity for the dealing, from a medical point of view, with the condition of those who attend the schools. That is to say, having once forced children into school, you are bound to take care that none of those who go to those schools shall contaminate any of the others, the healthy ones. That is the bounden duty that lies upon those who have insisted upon compulsory attendance. You are bound also, in self interest, to take precautions. The self interest of the community would lead you to strengthen yourself against the possibility to epidemics, and enable you to treat epidemics as they arise, and not when they have become epidemic, and enable you to take in hand at the earliest stage, and in the incipient stages, any of those many infantile diseases which work at times such havoc in particular schools and in particular districts.

Well, beyond that, my own view of what should be done in regard to public elementary schools would lead me to say that I think children should be cared for in a wider sense, namely, that they be treated as if they were human creatures in need of careful attention, medical on the one hand, and, beyond that, of needing proper food and proper clothing. I believe public opinion is rising in regard to the feeling that if you are to have your children brought together for the teaching of ordinary knowledge, you are bound at the same time, to see they are in a position to receive that knowledge. This is a pretty large order, but it has come. I believe that that method of dealing with children is to be placed upon us. I believe we have worked up a certain strength of feeling in regard to the proper dealing with children by school authorities, but we have got something

to do beyond that. We have not only to work up a sentiment in regard to the proper dealing with children, in all the phases of health, on the part of a public authority, but we have to make the adult portion of the community aware that it is their duty to see that funds are provided for that purpose. To-day you have the growth of a strong feeling in favour of medical examination. You have a strong feeling growing in favour of proper clothing. You have a strong feeling growing in favour of proper food judiciously given. Yet you have on the other hand, a feeling which is strong and potent, and which affects the community very directly, through its representatives in the councils of the various authorities. You have the feeling which at the same time is setting itself very strongly against further expenditure in regard to education. People cannot have these things, which are so necessary, provided for them by the Education Authority, unless they are prepared, in one form or another, to pay for them.

Therefore, one would say that while we indulge in philanthropic hopes and desires, we should also keep a lively eye upon the general public, and try and persuade that general public, that these things are well worth doing, and well worth paying for. It is a very difficult thing to prove to the general public that things are inherently good, and that the nation will, in the long run, be saved this, that and the other. That is a fine sentiment to throw down at a meeting, or to express in advocacy, but it does not go very far when it comes to the requirement for cash down. I have a strong desire for the development of many phases of educational work which will demand large sums of money, including, I may say, that of the teaching of cookery in its various forms. While I have these things before me, and have a strong desire for them, I feel there is something holding one back. That to come forward with propositions which would involve such dealings with the children that are placed under the care of the authority, would simply, if it were done without discretion, end in trouble. I do hope that the feelings which will be aroused by these associations will stimulate the public interest in the carrying out of judicious and proper methods of dealing with the childhood and youth of the community. I cannot help thinking myself that compulsory powers ought really to be given. There is so much we should be saved from, if there was a proper, regular and methodical medical control

over our schools. I do not as a rule favour compulsion, although in many things I am bound to say that for the good of the community, compulsion must be applied before you could have the whole of the country properly controlled and directed, in regard to the future of its children. I do most sincerely wish that public opinion could be aroused upon this matter to such an extent that the broad body of citizens would be led to see that one of the most important things men can do, is to help their fellows to live a decent, healthy life. I have great pleasure in proposing this resolution.

ALDERMAN SIR BOSDIN LEECH.

I have no hesitation in giving this resolution my most hearty support. I think every one here, after hearing the lecture from Sir Lauder Brunton, must feel that it is of the highest importance that the different functions of the body should receive proper cultivation in our schools, and that there should be a proper inspection of the scholars. Sir James Hoy, the Chairman of the Education Committee, fears some opposition to this resolution, and I can imagine that there may be many who will rebel at what they call compulsion. There are others who rather fear the cost. But, ladies and gentlemen, I think that ignorance is extravagance, and that it would be a great economy if proper attention were paid to the children in our schools, to see that the eyes, the ears, the throat and the other organs of the body are properly looked after. I must confess that on different occasions, when I have had to go round the city on functions of some importance, Royal visits for instance, I have been almost dismayed to see the number of poor children who seemed not to have sufficient food, and not to understand what good air meant. It has been really very painful to me. Compare this with what you see in Germany. For instance, compare the English soldier with the German soldier. Look at the robust young fellows there are in Germany. One must feel there is something wanting in England. One must feel that our children, especially in the large towns, want closer attention. I quite believe it is to the interest of the scholar. A child not enjoying good health must feel school work a great labour, and a teacher having in hand scholars whose sensibilities are blunted by ill health, must feel the danger and difficulty of teaching such children.

I am quite convinced that parents ought to welcome such

inspection of schools, because it will help them very materially in the comfort of their homes. Their children will be properly attended to, and instead of being physically deteriorated, they are rendered capable of the teaching they ought to have. I feel very warmly on the subject, and I do hope the people of Manchester will take this subject into consideration, and not fear a little extra cost if they can make our people more healthy and more happy, and to attain this end we must begin with our children.

I look back over a long life, at the lives of so many children and even of young fellows, wasted and lost, through want of knowledge. Miss Burstall was speaking about swimming. I have known large public schools where exercises have been gone through which have been positively detrimental to the health of the lads. I know an instance of a school, where, instead of young fellows being properly examined, and only allowed to take what exercise they were capable of, the contrary was the case. It is not very long since, (in one of our baths) a child with a weak heart went into the water and did not come up alive. Such children should not be allowed to go through exercises unfitted for them. I believe myself, a great benefit will accrue to Society, and to this City especially, where we want such benefits almost more than any other place. I do not know what we in Manchester should do if the City was not recruited from the healthy young fellows who come from the country. I believe the other inhabitants are rapidly deteriorating. We want to do something in our schools. We want to make our boys and girls better fitted for the teaching they are to receive, and I commend, very heartily, this subject to your notice. I have great pleasure in seconding the resolution.

J. L. PATON, M.A. High Master, Manchester Grammar School.

I am afraid I am not able to support the resolution in the form which it now has. I wrote my opinion on the point to the Secretary yesterday, when I received his letter. I thought it would certainly be unwise on our part to suggest that the Education Bill as present before Parliament should carry more than it is already freighted with. Moreover, it seems to me that what this Memorial desires is possible without the express sanction of Parliament, because it may be done by the Board of Education, as things stand, by an administrative order.

But on these points of difference I do not wish to lay stress, because I am so heartily in sympathy with the object which we all of us in this room have at heart. I suppose it is a question whether we are nationally physically degenerating or not, but at any rate, the fact that we are paying attention to this question, shows how pitifully and disastrously we have fallen short of that physical standard of manhood and womanhood which a great nation ought to set itself. The argument you are always met with is you are interfering with parental authority. I know of no part of the country, Mr. Chairman, where you are so likely to meet with that argument as Lancashire. Sir William Anson, last year in Parliament admitted in reply to Mr. Keir Hardie that there was in the children of the industrial schools, a marked physical and intellectual superiority over the children in the poorer schools, the ordinary elementary schools in the poorer districts. At the Commission of Physical Degeneration in Scotland, Mr. Wilson Bruce went further. He said, that comparing the ill-fed children of respectable parents with the well fed and well clad children of the Industrial Schools, there was a startling superiority. He said if we could do for the poorer children of a City like Edinburgh or Dundee what is done for children in Industrial Schools, we should make a new race of men. It seems to me that our present arrangement is the arrangement which more than any other we could possibly devise to work adversely to the sense of parental responsibility.

When I first went to London as a day master, I found that every boy who came with a junior scholarship under the London County Council, had to pass a medical examination. It was a very searching medical examination, and some of the best doctors in London undertook it. I took a good deal of interest in the matter. Since then, I have always put certain questions to a boy on entering school. We have, as the Rev. Mr. Edwards Rees knows, a very complete record at the Grammer School, of the weight and physical measurements of every boy who passes through our hands. That record is kept up-to-date every year. I have often found that if a boy has been backward and troublesome in his classes, the real reason has been a physical reason, and for that reason, as a secondary schoolmaster, I am willing to welcome the co-operation of medical officers in secondary schools. The better the instrument, the better

the work you can get out of it, and a medical officer in the school will enable us to have better and fitter instruments for work.

I have only one caution to suggest, and that is that in the rage for physical development we should guard against excess. I think it is time we should take to heart the warning which Herbert Spencer gave us in one of the last articles he wrote in his lifetime, namely, that large muscular development frequently goes along with weak constitutional power of endurance, and that the fact that the energies of the body have been diverted into the cultivation of muscle, is itself responsible for the weakness of the internal organs, which make for constitutional strength. What we want is not so much an outward result as an inward result. The more our birth rate sinks, it has gone down in the last 30 years from 35 per 1000 to something under 29 per 1000, the more we need to husband the life that is given to us.

I am glad to see, according to the list published in yesterday's papers of infant mortality, Salford at any rate, figured no more upon the black list of towns notorious for their massacre of innocents. What we want to aim at is a purely practical result, not showy muscles. We want to develop that confidence, doggedness and pluck which depend upon physical health. We want to counteract the excessive cerebral stimulation of City life, and intellectual wear and tear generally, by stimulating the other functions of the body, and helping them to find their legitimate scope and development. We believe that in this way we shall add to the wealth of the country, for I suppose all of us here this evening take the view of John Ruskin, that the wealth of a country consists in the well-being of the people, physically, spiritually, morally. (The Resolution was then put to the Meeting and carried unanimously).

MR. T. C. HORSFALL, M.A., President of the Manchester Art Museum and University Settlement, proposed the following resolution :—

“That the National League for Physical Education and Improvement be requested to arrange for a joint deputation to convey to the Minister of Education, the views of this representative meeting.”

MR. HORSFALL, said the subject was of such immense importance that the attention of the whole Government should be drawn to it. We are doing much less for the health of children than many other countries. In Frankfort, for

instance, there was one doctor appointed for every thousand children, and similar conditions obtained in other towns in Germany. And England was in a worse position, in regard to a knowledge of the state of its people, than any other country in the world, except the United States. All other countries had a system of compulsory military service. They all had their young men examined, with the result that they knew what proportion of the young men in various parts of the country were unfitted for military service. In Silesia, for instance, there are two adjoining districts. In the case of one, the conditions of life were very much like those existing in Manchester, and only one-fifth of the number of young men who were legally liable for service, were actually fit for it. In the adjoining district, which was mainly an agricultural one, over sixty per cent. of the young men were physically fit. It was known that only a very small proportion of the young men in this country who offer to enlist were fit to serve in the army, yet everyone found all sorts of comfortable reasons for believing those young men did not represent the mass of the population, as they mostly belonged to the unemployed class, and the half fed class. In fact their physical condition is as good as that of a large proportion of the regularly employed.

The REV. W. G. EDWARDS REES, M.A. Member of the Salford Education Committee, and Vice President of the National League for Physical Education and Improvement, seconded the resolution. He said, in Salford they had one medical officer to 40,000 children, and there was a Committee, whose function it was to attend to the matter under consideration by the meeting that evening. Mr. Horsfall had told them that in Germany they went forty times better, and there they had one medical officer to every 1000 children. In Germany, however, the medical officer carried on a general practice in addition to the inspection of schools. Probably fifteen or sixteen medical officers would be required in order to efficiently inspect the schools of Manchester, and perhaps five or six medical officers would be required in Salford. The economy that would be effected, even the economy of finance, would far exceed, in a very short time, the halfpenny rate expended. If they believed with Ruskin, that the only real wealth was life, then, the sooner medical inspection of schools was established the better. He would beg to impress upon Sir James Hoy and the other gentlemen in charge

of this matter, that what was actually being done was but filming the ulcerous place. In recent years the death rate of Salford had fallen from about 25 to 17. That remarkable improvement had been effected by the vigilance of the Health Committee. That there was room for equally great improvement in the matter of physique, would be seen when it was considered that the average of the elementary school boys taken from the centre of Salford, would be five inches shorter, and 18 or 20 pounds lighter than boys of the same age attending schools at the outskirts. The need of inspections was a crying one.

MISS DENDY, Hon. Sec. of the Incorporated Lancashire and Cheshire Society for the Permanent Care of the Feeble Minded, supported the resolution. There was one very important aspect of the work that had not been mentioned. In Manchester, the training of the teachers in the laws of health had been regularly undertaken by the medical officer, Dr. Ritchie. Another very important fact was that in Manchester they had really two medical helpers, because Dr. Ashby relieved Dr. Ritchie of the care of the mentally defective, the epileptic and the cripples. She did not suppose that anybody who had not seen that work in progress could realise what an amount of direct instruction found its way from Dr. Ashby to the mothers of the children.

Speaking for herself, she had not that supreme confidence in all that was being done in Germany. She had a great deal of confidence in the English. Manchester was not doing all that it should do, but at any rate, they had made a beginning in the right direction. They had appointed a Committee to deal with the feeding and training of infants. There was generally a laugh raised when that matter was mentioned, but if people could see the work done in the classes they would not laugh. She had attended those classes, and had enquired of the girls how many of them had to tend infants at home. 90 per cent. of the children had to tend infants at home. The mothers constantly sent questions by the daughters as to the course which should be taken in such and such events. They realised the teacher had really got hold of the girls. They wanted more medical assistance, and they wanted more instruction and enlightenment of every kind. She hoped there would not be too great a readiness to decry the efforts which were being made. After all, a little self confidence, and a little conceit went a long way

in keeping up the standard of excellence. She always thought a little conceit was like salt. It kept everything sweeter.

MR. J. HERBERT SKINNER. Representative of the Manchester and Salford Trades Council on the Manchester Education Committee also supported the resolution. He had listened with very great interest to all that had been said that evening, and perhaps with some slight feeling of amusement. The interests of the children were being very largely talked about just at present in various directions. He did not think, however, their interests could be more carefully looked after than in the direction the meeting had discussed. He was proud to find so many eminent men and women at the head of the movement, and to know that the interests of the children of himself and his fellow workmen in the City of Manchester and Borough of Salford were being so well looked after by people who had an earnest desire to promote the moral, physical, and intellectual development of children.

THE RIGHT REV. DR. CASARTELLI, Bishop of Salford.

I do not know whether the preceding speakers have carried the assent of everybody in the room with them, but I am quite sure I am going to do so in the resolution I have to propose to you. I feel quite confident even before I put it to you, that I shall have the warmest support of everybody here present. It is :—

“That the best thanks of this meeting be given to Sir Lauder Brunton for his admirable address, and also to Miss Burstall for the interesting address delivered by her as substitute for Mrs. Tennant.”

I think it is twice, within little more than twelve months, that it has been my privilege to propose a similar vote to Sir Lauder Brunton.

Some may remember a year or two ago, when he came down and gave us an address at the Children's Hospital in Pendlebury. It was an address of the most admirable, most instructive, and most informing character, and one we all listened to with delight. It produced a very great impression upon all who heard it. To-night we are again indebted to him for coming in a most generous manner, as has already been said, and giving us of his time, and the treasures of his great experience, and speaking to us with that authority which his eminent name carries throughout the country.

I came here as one to be instructed. I will not say I was altogether convinced about the propositions that were going to be put before the meeting. I am always a little doubtful about introducing fresh compulsions, fresh inspections, and fresh examinations into our educational system. But if I had any doubts before I came into the room, I can frankly say I have been entirely convinced by what has dropped from the lips of Sir Lauder Brunton. There are many remarks of his which apply not only to primary schools, but which, I am sure I agree with Mr. Paton in saying, apply equally, and perhaps in some respects, more to our secondary schools. For instance, I was extremely glad to hear him make one remark. It has often been in my mind that there is a great danger, especially in our secondary school system, in our public schools, connected with what we have been accustomed to look upon as a great factor in the development of our race. I mean that gymnastics and physical exercise may become a positive danger when they are not adapted and measured according to the physical condition of children. I often think myself that an irreparable harm is sometimes done to those with weak hearts, and with various other physical affections, because they are allowed to take part indiscriminately in various physical tests, and engage in games and exercises which prove very injurious to them in after life. That is a point we should all carry with us, and I think it may apply very well to our secondary schools. There are many other points which there is no time to deal with now. I would like to say a word with reference to what Sir Lauder Brunton said concerning eyesight. That again, I think, applies very much indeed to our secondary schools. I remember as a child myself, not being able to see what was on the blackboard. I had no idea that I was short sighted, or that anything was the matter with my eyes, but I remember what a trouble it was to find one could not follow the lessons. I think our school teachers ought to be instructed to watch carefully the eyes of the children under their care, and see how they are able to observe at a distance, and to take interest of that kind in the physical capacities of their children, which would help them very much in their teaching. Then there is the great question of ventilation. I believe, in this town, one of the greatest causes of unhealthiness and disease in our crowded districts, is the fact that people will never open the windows and never ventilate their houses, even in times of disease. Then again, there

is the question of tobacco smoking among our young boys. I am afraid that is a growing evil. I am afraid the cigarette is becoming almost a national institution among our young lads. It is difficult to see how this can be stamped out, but perhaps something can be done by instruction and wise counsel while they are at school.

MR. JOHN ANGELL, F.I.C. F.C.S., late Science Master, Manchester Grammar School, said he had great pleasure in seconding the resolution. He had the greater pleasure in doing so having some nearly fifty years ago, when preparing a Text-book on Physiology for schools, had the advantage of consulting and studying Sir Lauder's master works on this subject.

THE REV. CANON KELLY, M.A. I have much pleasure in proposing :—

“That the best thanks of this meeting be given to the Lord Mayor for the use of his parlour for this meeting, and for opening the same; and also to Dr. Dixon Mann for conducting the subsequent proceedings.”

He had heard that evening, from divers speakers, of the work that was being done by Education Committees. He thought they must come to the conclusion that very much further work required to be done. They were quite willing to learn from Germany and Switzerland, and any other country which could teach them how to improve the physical condition of the people. In past years the death rate had been a disgrace to both Manchester and Salford. He would like to add that he had constantly noticed the benefits that were being derived by the proper use of gymnasia. The work that was being accomplished through the medium of the Proctor Gymnasium and the Hugh Oldham Lads' Club was of a very high order. There was also a good work being done on behalf of the girls, who usually lived sedentary lives, by similar institutions.

MR. WILLIAM THOMSON, F.I.C., F.R.S., Ed. seconded the resolution, which was carried with acclamation.

SIR LAUDER BRUNTON and DR. DIXON MANN briefly thanked the meeting for their Votes of Thanks, and the proceedings terminated.

