

patient lives, that the removal to hospital of one actively infectious case is very likely to be valuable in respect of his own particular household, notwithstanding that in the same town another hundred cases are left at home. Indeed, every such case removed is in its own measure, whether that measure be large or small, a diminution of opportunity for spread of infection. I venture to hope, therefore, that the Local Government Board's circular will not meet with too timid a reception by local authorities, but that, while having due regard to economy, they will face, in some practical fashion, at least the partial solution of the greatest public health problem of the present day.

It is impossible in the time at my disposal to do more than mention the question of the part played by milk in the spread of tuberculosis. That is a subject of great importance, which would easily occupy a whole course of lectures.

These are all the points on which I wish to address you to-night. Retrospect in any field of work may be useful or the opposite according as we read its lessons. If dipping into the past only convinces the modern student of his own superiority and of the ignorance and incompetence of those who have gone before, it does far more harm than good. If, on the other hand, it teaches humility and avoidance of errors by observing what has been the experience of men of previous generations quite as competent as those of to-day, then the retrospect will be useful. I trust that our little excursion backwards into the nineteenth century will make us thankful for the good work that has been done, rather than critical of the mistakes that were committed in the doing of it.

PRESIDENTIAL ADDRESS.

THE STATE AND THE INDIVIDUAL IN EUGENICS.

By Dr. CHARLES TEMPLEMAN, Medical Officer of Health,
Dundee.

In opening this Congress I feel that the first note I should strike must be one of apology. Most of you doubtless are aware that Councillor W. F. Anderson, of Glasgow, who, as President-elect, should have occupied the chair on this occasion, has just passed through a long and serious illness, and is on this account unable to perform this duty. We are delighted to know that he has now reached the stage of convalescence, and trust he will soon be able to resume his useful public career. To his misfortune I owe my elevation to this honourable position, but, as it is only a few weeks since I was informed that it would be my duty to preside at this Congress, I have neither had the time nor the opportunity to prepare an address worthy of the occasion, and so must crave your indulgence if I fail to reach the high standard which has been set by my predecessors in office.

I have selected as the subject to which I invite your attention for a little "The State and the Individual in Eugenics." Mr. Galton has defined eugenics as "the study of agencies under social control that may improve or impair the racial qualities of future generations either physically or mentally." The subject, you

observe, is a wide one. It embraces all those agencies—mental, moral, and physical—which influence the evolution of the race. Indeed, it would be impossible in an address such as this to do more than merely indicate these, as many of the problems involved appeal to the sociologist more than to the sanitarian, and, even though I confine my remarks to the consideration of a few of the factors involved in the production of a healthy race, which more immediately concern us who are interested in the advance of sanitation and preventive medicine, I feel that I can do little more on this occasion than touch the fringe of the subject, and suggest some of the problems regarding the individual which yet await solution.

If we take a general survey of the progress of preventive medicine, we find that in the course of its evolution it has widened out into many channels, some of these undreamt of a decade or two ago, but it has throughout preserved one feature, viz., that our public health administration has till recently concerned itself less with the individual than with his environment. Housing, lighting, water supply, drainage, &c., have all affected the individual indirectly, but in recent times there has been a tendency to come to closer quarters with the individual himself, and it is to this that I invite your attention, as it appears to me to involve principles of the first importance and to be fraught with great consequences.

It is always well in making a new departure to inquire whither it is to lead, and how far it may be justified.

Our modern civilisation has undoubtedly tended to complicate and hinder the development of a healthy race by the fact that so many are compelled to live under conditions of environment which render a healthy existence almost impossible, so that many of

our most serious problems in sanitation and eugenics generally are those which are associated with the concentration of a large population on a comparatively limited area.

Attracted by the greater likelihood of getting employment, by the allurements of better pay, greater facilities for the enjoyment of leisure, or by other attractions, people are flocking to our larger cities, while our rural districts are being gradually depopulated.

As Professor Galton says, "Civilisation has built up a series of artificial conditions in the way of environment which have had their effect on the resisting power of the race."

In ancient times the only condition which necessitated such a segregation of persons was the necessity for defence against their common enemies—human and wild beasts. The modern city, however, is the product mainly of industrial conditions. Its site is not determined by hygienic considerations, but by such industrial factors as its proximity to a navigable river or to the sea, or to other means of facilitating exchange, such as railways, or in some cases it grows up in association with some particular industry relating, it may be, to some mineral found in the soil in its vicinity.

This crowding together of persons, in addition to other and more serious disadvantages, entails a loss of individual liberty.

It means that one is more or less at the mercy of his neighbour, through whose act or default, from ignorance, carelessness, or apathy regarding sanitary matters, he may suffer loss or injury. It means, too, the fouling of the atmosphere and the soil, with its consequences—an increased risk of the dissemination of disease by infection from person to person—the

interdependence of one on the other for the ordinary amenities of life, and the powerlessness of the individual to procure for himself many of those things which are necessary for a healthy existence.

We can, of course, imagine a state of matters in which each individual of a community was possessed of such altruism as to regulate his own conduct and that of his household in such a way as to ensure that his neighbour does not run any risk from him; but, while human nature remains as it is, I fear such a condition of things is not to be expected.

There is always in a community a certain proportion of persons so selfish or so apathetic as to be quite regardless of their own interests as well as those of others. Such will not voluntarily co-operate with their neighbours in carrying out measures for the common weal, and some power of compulsion is necessary if such protective powers are to be enforced.

This, of course, forms the basis of communal life and the justification for taxation. The State or the municipality undertakes to perform certain duties and to provide certain commodities which the individual is incapable of obtaining for himself, or, at all events, of obtaining so well and without detriment to his neighbour. For such services, for instance, as the protection of the individual from violence, or from the predatory proclivities of his unscrupulous neighbour, he has to pay in the form of a police tax. The provision of such commodities as water, gas, &c., which the individual is unable to obtain so well for himself, means of conveyance from place to place by means of tramways and other similar services, come into the category of communal services, and year by year the tendency grows to increase the scope of these and limit the sphere of activity left to individual effort. Municipalities are obtaining more extended powers to saddle

themselves with enterprises with which up to recent times they would never have dreamt of concerning themselves.

The question is, can you draw a clear line of demarcation between what should be done by the State or the municipality, and what should be left to the individual, and where is it to be drawn?

The steady advance of knowledge has had the effect of increasing our obligations both as individuals and as citizens. The responsibility of this should be brought home to and appreciated by every one. How far can State or municipal control and this catering for the individual be safely carried out without a loosening of the moral fibre of the community, and the gradual lessening, if not abolition, of this sense of individual responsibility.

Some of our most recent legislation seems to have the tendency to shift some of the obligations of individuals—parents, for instance—on to the shoulders of the State, the reason adduced being that such measures are advisable in the interests of the State in the evolution of a healthy and physically capable race.

Of course, we must bear in mind that a community is just a segregation of units—the unit being the individual—who is fraught with great potentialities for good or evil. In public health, as in all legislation, the purpose is to procure the greatest good to the greatest number, but sometimes in its administration one is apt to lose sight of the individual in one's anxiety to tackle the wider problem of the welfare of the community. Sometimes, I fancy, in our desire to grapple with great problems, we are apt to be carried away—to lose our sense of proportion—and in an alluring perspective forget what lies closer to our hands. No doubt it is an inspiring thing to launch and carry through some great scheme of sanitary

reform which will have a far-reaching effect on the community to which we belong, and by which we may be gratefully remembered, but let us beware of taking too wide an outlook—of fixing our gaze on the stars and stumbling over the obstacles which lie at our feet. Often more substantial progress is to be made by shortening our views and narrowing our sphere of action, in the first instance, to the unit, and from this allowing it to circle outwards till it embraces the community. One illustration suggests itself to me in relation to the subject of environment, which plays such a dominant part in determining the health conditions of the people. This, of course, is something entirely outwith the individual, which cannot adapt itself to him, but which has a very definite and direct relation to his general wellbeing. We all heartily approve of the policy now universally adopted by large communities of providing plenty of open spaces and playgrounds for the children, and public parks to which the adult members of the community may betake themselves for recreation. By all means let us have these in abundance, but, if they are to be procured at the expense of neglecting to see that each individual house is provided with an adequate curtilage, is the price we are paying not too high? Nothing to my mind can compensate for such neglect, and a policy of this kind is an instance of being led away with the larger measure which appeals to the popular appreciation to the neglect of the more immediate, though not so striking, measure of greater importance to the individual health.

I feel convinced that many of the problems affecting communities, and especially those with which the science of eugenics deals most directly, are to be solved by working from the lesser to the greater, that is, from the individual outwards rather than in the

opposite direction, and it is more especially with this tendency, as evinced by recent legislation, that I am to deal.

In our work in the suppression of infectious disease, while we recognise that epidemics are frequently the result of influences affecting a large body of the people, we also recognise that, to a very large extent, we have to concern ourselves with the individual. Of course, those general sanitary measures so closely bound up with the health of the community must not be overlooked, but the item of paramount interest is the dangerous unit.

A tramp appears in the city, and is found to be suffering from typhus fever. Recognising him as a potentiality, whose presence is fraught with the greatest danger to the community, our efforts are mainly concentrated on him and on every individual with whom he has come in contact. At the same time, those other conditions with which the disease is associated must not be forgotten—dealing with overcrowding and the suppression of filth conditions generally—but we are in the first instance more concerned to get hold of the individual. So it is with other diseases of an infectious character, though, curiously enough at the present time, there seems to be a tendency in some quarters—where I think it was least to be expected—to minimise this necessity in the case of a disease now universally recognised as infectious, and which is one of the greatest scourges of the age—I mean what is known as the white man's plague—pulmonary tuberculosis.

In a volume recently published as a supplement to the report of the medical officer of the Local Government Board of England, Dr. Bulstrode, in dealing with this subject, minimises the factor of personal infection in the spread of consumption, and Sir Shirley

Murphy, medical officer to the County Council of London, in his annual report for the year 1906, has adopted his views. This is, of course, neither the time nor the place to discuss this question, but it seems to me that the possibility of this disease being communicated from person to person has been abundantly proved, and that to concentrate attention on heredity and environment, and to minimise the imperative necessity of dealing with the individual, is to put back the hands of the clock to a time when we were in utter darkness as to the exact pathology and etiology of the disease.

We in Scotland are, I think, to be congratulated upon the more enlightened view taken by our Local Government Board, and on the strenuous efforts they are making to have this disease grappled with by adopting, as the starting point in direct practical work, the individual himself, and at the same time indirectly attacking the disease by general measures for the improvement of his environment.

The recent circular issued by the Board, following up that of 1906, strengthens the hands of municipalities in dealing with this scourge, and recognises that the most direct and effective measures to eradicate this is to work from the individual upwards, recognising him as a dangerous member of the community whenever, from ignorance or carelessness, he neglects those simple precautions which can render him a perfectly safe citizen.

It is quite true that, in the light of recent investigation, we may have to review our belief as to the main channel by which the tubercle bacillus reaches the lung. It may be that we have not sufficiently recognised the danger of tuberculous milk as a direct cause of pulmonary phthisis in adults as well as in children, still whether the infection reaches the lung directly

through the respiratory or indirectly through the digestive track, the fact remains that the individual is the danger point, and, as such, should be guided and controlled.

The steady decline in our national birth-rate, and a recognition of the fact that in the evolution of a healthy and capable race fit to carry on the policies and traditions of this great Empire, we must be specially solicitous of the welfare of our children, have led to the adoption of measures which are viewed with alarm by many of our more sober-minded citizens. In attempting to lessen our abnormally high infant mortality, some municipalities have undertaken the duty of instructing ignorant mothers in the elements of infant hygiene and feeding, and have appointed lady health visitors, who devote their whole time to work of this kind. Others have provided, by means of milk depôts, a suitable food for infants whose mothers are unable to suckle them.

Recognising, too, that this mortality is greatest in the earliest months of life, and that if any assistance is to be given the most opportune time is as soon as possible after birth, Government has passed a measure which provides for the notification of births to the medical officer of health within thirty-six hours. The object of this is to allow the mother to be visited early in cases where assistance is considered necessary, and, by encouragement and advice as to the proper means of rearing a healthy child, do what is possible to preserve the infant's life. In many towns a corps of lady voluntary workers is carrying on this work in a most praiseworthy and self-denying manner. Now, observe that provision is thus made for the giving of advice, but in a very large number of cases something more substantial is required if the work is not to be rendered almost useless. I am in heartiest sympathy

with those measures for getting at the individual mother and child in grappling with the problem of infant mortality, but an important question arises in relation to this.

Having undertaken the duty, can we stop there? I am constantly being told something like this—Our efforts, the visitors say, are often nullified by the fact that the mother is frequently unable to put our advice into practice; what is the use of advising a mother to suckle her infant when she has no food for herself and no means of procuring it?

I am not thinking of those cases in which a lazy or vicious husband has failed to do his duty in providing for this emergency. Such cases are far too numerous, and I think the State is much too considerate of men of this type. The most drastic measures possible should be used to compel them to do their duty.

The cases I refer to are such as the following:—The husband has a very small wage, or is perhaps out of employment, and the wife's earnings are required to keep the house going. She has, of course, been compelled to leave her work some time before her confinement, and has found it impossible to provide for this event. We have here a woman who, in the performance of a function of the most vital importance to the State, has been reduced, through no fault of her own, to such a condition that the health and even the lives of herself and her child are endangered. She is not to become a permanent burden to any one. She only requires assistance till she is able to assist herself. Who is to do it? Must she be dependent on private charity, which is at the best uncertain, and in the working of which not infrequently the most necessitous and deserving cases are those that escape recognition? Or is it the duty of the State to make provision for such a case? The State has already recognised the right to spend

public money in obtaining knowledge of the birth. Is it not the logical outcome of this that it should provide for the emergencies arising therefrom?

Another aspect of the same question presents itself with reference to the expectant mother. As we all know, a great proportion of our infant deaths arise from ante-natal conditions, such as insufficient feeding of the mother. Has the State any obligation to the expectant mother who is about to perform a signal State service? Is it in any way concerned to see that the child about to be born is cared for, so that it may come into the world in a healthy state, in which it is likely to survive? In the interests of both mother and child, the feeding of the expectant mother is a matter of the utmost importance. Of course, the duty of making this provision rests with the father, and we would all deprecate any measure which relieved him of a responsibility, which ought to be a pleasure as well as a duty, but, where this is not done, should the State see that it is done, and, when necessary, do it?

In Dundee, with the social needs of which I am most familiar, we have been attempting to do this on a small scale through the agency of a restaurant for nursing mothers. This is supported mainly by the generosity of one individual, who undertook to carry out the scheme for three years. There, for payment of twopence, expectant mothers or suckling mothers are provided with a nourishing meal, and those who are unable to pay this trifling sum are fed gratuitously, each individual case being carefully considered by the committee. The period for which the expense of the experiment was guaranteed has now nearly expired, and the question arises, how is it to be continued? I cannot go into details here, but I am convinced of the excellence of the results we have obtained in the case

of both mother and child. The question is this, the State having recognised and accepted the duty of doing something for the infant, how far ought it to go?

Having thus provided up to a certain point for the supervision of the infant, the State now concerns itself with the child when he has attained school age.

I think that nowadays the advantage of the systematic inspection of school children is practically universally admitted.

The reports which have been published of investigations made in all quarters show that a considerable proportion of children attending schools are suffering from some physical abnormality which seriously interferes with their ability to receive instruction. Now, the State insists on every child attending school, and it is therefore the duty of the State to assure itself that every child is both physically and mentally fit to receive instruction. There is no question that a vast amount of public money is annually thrown away in attempting to educate insufficiently fed and physically defective children.

Is it the duty of the State—to put it on no higher than economic grounds—to see that these defects are remedied? It has now undertaken the duty of diagnosing these conditions; should it also see to their removal? Is it, or is it not, the logical outcome of the position? Here, again, in both the matter of feeding and remedying of special defects, the primary duty devolves on the parent. When such parent is negligent or indifferent, ought the State to assume the responsibility of seeing that the duty is performed, and, in the event of its non-performance, ought it to undertake the duty itself? Beyond question, in whatever way it is to be done, the child must be fed.

It appears to me that children could be fed at school more economically and receive a more nutritious diet

than many of them do at home were this carried out on a large scale and the meals prepared at school by the senior scholars under proper supervision, and I should think it ought not to be beyond the wit of man to devise means by which parents could be made to pay for such feeding, unless in cases where it can be shown that they are unable to do so from causes over which they have no control.

I am aware that there is a section of the public who advocate that every child should not only be fed by the State, but also clothed as well as educated. They consider that the State should accept the whole responsibility for his entire upbringing, thus abolishing parental responsibility altogether, but I do not think that many of us are prepared to go as far as that. The problem which arises from all this is to define the point at which the responsibility of the individual may cease and that of the State begin.

You will observe I do not attempt to answer the questions I have raised. Any one of them would furnish sufficient material for a prolonged debate.

My object is simply to state the position, as the principle involved is most important, and the carrying of it to its logical conclusion is fraught with grave consequences.

This matter is well worthy of the attention of all who are concerned about the future of our great Empire, and which of us is not?

Some writers gravely question the wisdom of the policy on which we have embarked. Professor Haycroft is of opinion that racial degeneration has already begun, as a sequence of that care for the individual which has characterised the efforts of modern society, and considers it questionable whether in the long run the people as a whole will be better for the efforts of preventive medicine in producing more healthy

surroundings to the advantage of all individually. With this opinion I by no means concur.

Hitherto the policy of State or municipal interference has been carried out by measures which, while benefiting the community as a whole, give to the individual an opportunity of expanding by improving his environment, enabling him to live a healthier and cleaner life without unduly weakening his sense of personal responsibility.

Ought the interference of the State to stop here, or should it be extended along the lines I have indicated?

I leave those questions with you as matters which concern us all, with the hope that, whatever policy is pursued in the future, it will make for the building up of a race not unworthy to uphold the traditions of an Empire to which we are proud to belong.

Dr. A. K. CHALMERS—Ladies and gentlemen, a pleasing duty falls to me at the present moment, and that is to ask you to express to our President your appreciation of the excellent address he has delivered to us. On this particular occasion I think a special meed of praise is due to Dr. Templeman. In the first place, he has undertaken the work, as he has told you, on very short notice; and, secondly, he has discharged it in a manner which reflects the greatest credit on himself. (Applause.) During the half-hour he has held us listening closely to every word he said, and he has covered very many of the problems which await solution. Whether they properly belong to the department of eugenics or fall within the sphere of practical hygiene, there they are—problems concerning the whole social life of the country. I ask you to express your appreciation of Dr. Templeman's address, and to accord him a very hearty vote of thanks. (Applause.)

The PRESIDENT—Ladies and gentlemen, I thank you and I also thank Dr. Chalmers for the very kind way in which he has proposed this vote of thanks, and you, ladies and gentlemen, for your very hearty response. Now, we begin to the more serious business of the meeting, but before doing so I would call your attention to two facts—first, that the programme before us is exceedingly long and a

most important one, and that, if we are to get through the work, those who read the papers and speak in the discussions must adhere very strictly to the conditions which are laid down in the programme, namely, the gentlemen reading papers must not exceed fifteen minutes, and those taking part in discussions must not be allowed more than five minutes. Now, I hope that those who are concerned in this will see that it is carried out, because, unless this is done, it will be perfectly hopeless to get through the enormous business which this programme contains.