THE AIMS AND OBJECTS OF STATE MEDICINE.

By R. BRUDENELL CARTER, Esq., F.R.C.S.

(Being the Introductory Lecture to a Course of Lectures instituted by the College of State Medicine.)

(ABSTRACT.)

I CONCEIVE that the functions of a College of State Medicine should be, firstly, to enlarge the knowledge of members of the medical profession with regard to the causes and prevention of disease ; and, secondly, to instruct the public with regard to the value and importance of such knowledge, and with regard to the national advantages likely to follow from its methodical application to the events of life.

The study of the causes and the prevention of disease, as it appeals to the medical practitioner, presents itself under two widely different aspects, and calls for the assiduous employment of widely different faculties and forms of knowledge. We have, in the first place, a demand for the constant prosecution of inquiries analogous to those by which William Budd traced the diffusion of enteric fever to a faecally polluted water supply, by which Netten Radcliffe traced the diffusion of cholera to the same agency, by which Dr. Ballard traced the diffusion of scarlet fever to milk, and by which Mr. Power was led to the conviction that, in the last named example, the material of contagion might be contained within the milk itself, independently of any water with which it had been diluted, or of the personal infectiveness of those who were engaged in the work of distribution. The results of researches of this order have now become so familiar to us, that we are apt to overlook the keenness of insight, the vividness of scientific imagination, and the absolute devotion to truth, of the inquirers by whom the facts were in the first instance discovered and established ; and, as Dugald Stewart says, that one effect of the simplicity of perfect English composition is to induce those who read it to think that they also could write in a similar manner, so it may possibly happen that some of those, whose official positions afford them special opportunities of investigating the origin and course of epidemic disease, may not adequately realise the amount of mental preparation that is required before such opportunities can be exhaustively, or even profitably, employed. Who shall say that opportunities, similar to those which the men whom I have mentioned turned to such splendid account, may not be daily offering themselves to many of us, and passing away unrecognised ; or who shall say there are not many problems, connected with the diffusion of disease, concerning which evidence is not entirely wanting, but which still await for their solution the searching glance, not only of the philosophically-minded, but also of the trained enquirer. I well remember that, some years ago, a medical practitioner wrote to the *Times* paper, to express his belief that an

outbreak of scarlet fever in his neighbourhood had been produced by the use of bullock's blood as a manure. He described the putrescent odour which proceeded from the fields ; and being one of those people in whose minds two and two make four, he drew the inference that such an use of blood should be avoided. His communication excited little notice, and most of those who read it are likely to have supposed that he had overlooked some ordinary source of infection. If he had been one of the people in whose minds facts have power to add to their number, in whom, it may be said, two and two sometimes make five, and if, instead of only writing to the *Times*, he had devoted himself to a scientific study of the phenomena, is it not possible that he would have anticipated Mr. Power's discovery of the participation of the bovine race in one of the most dreaded of human maladies, and of the consequent possibility that bovine animals may sometimes be concerned in its distribution ?

The people who read, even those who read with the attention which is their due, the reports on various subjects of the Medical Inspectors of the Local Government Board, reports in which the life histories of epidemics are often traced back, from termination to origin, with consummate sagacity and skill, perhaps seldom realise the amount of training which the proper conduct of such investigations requires. It was my privilege to be for many years on terms of close intimacy with Netten Radcliffe, and to see much of his work while it was still upon its way towards completion. It would be impossible to exaggerate the minute care and pains with which it was conducted, the labour that was devoted to the elimination of every uncertainty, the rigid scrutiny which was brought to bear upon every conclusion. It was his custom to bear witness, in no stinted terms of admiration and gratitude, to the assistance which he derived from the criticism of his official chief, Sir John Simon, and to the way in which that criticism compelled him, as far as possible, to render every part of his structure unassailable, and taught him to seek for and to marshal every attainable particle of evidence, whether it told in favour of his views or in opposition to them. It was thus that he contributed so largely to the foundations of sanitary science in this country ; and it will be an important part of the duty of our College to assist others to follow his example, to teach the arts of observing and of recording, to direct attention to the relative values of different orders of facts, as well as to the proper methods of pursuing different lines of inquiry, and finally to inculcate the caution, circumspection, and reserve, without which no new or important conclusion should in the first place be given to the world.

(The lecturer next proceeded to state that the immediate future of preventive medicine seems to be the pursuit of bacteriology and that it would be one of the chief objects of the College to provide practical teaching of this subject, another branch

of instruction is to be the hygiene of occupations and a third the analysis of foods. The lecturer then spoke of the necessity of educating the public.)

Few things are more remarkable, or at first sight more difficult of comprehension, than the generally prevailing indifference concerning the cost of disease, especially when we contrast this indifference with the impatience so often displayed under less onerous pecuniary burdens, unless it be the similar indifference to the misery which disease produces, when this, in the same way, is contrasted with the somewhat maudlin sentimentality so often excited by other and comparatively trivial forms, not only of suffering, but even of inconvenience, more particularly when these befall the lower animals rather than man. There have not been wanting, during recent years, persons possessing the ordinary complement of limbs, and seemingly of senses, who have been vehemently opposed to the abolition of hydrophobia, apparently for no other reason than because this abolition could only be accomplished by compelling every dog to wear a light muzzle for a sufficiently prolonged period.

It will probably be an almost ludicrous understatement if I assume, for the purpose of my argument, that every case of scarlet fever, or of "fever," including under the latter word typhus, enteric fever, and ill-defined forms of continued fever, and taking into account the disability of the sick person, the withdrawal of other persons from their occupations, the supply of food, of medicines, of medical attendance, and of nursing, and in a definite proportion the funeral and its consequences, costs at least two pounds sterling to the community. In the decade between 1851 and 1860, the average annual number of deaths from "fever," in England and Wales, was 908 per million persons living; and, in the decade between 1871 and 1880 this number was reduced to 484 per million persons living. Roughly estimated, in each year of the latter period the deaths were less numerous by 12,000, and the illnesses by 150,000, than in each year of the former, showing a moneysaving of at least £300,000 a year.

(The lecturer next proceeded to consider the nature and extent of the legislative provision which should be made for the enforcement of conduct which is called for, and the repression of that which is injurious, laying down the principle that no one is entitled to use his liberty in such a manner as to inflict irreparable injury on his neighbours.)

It is well known to my audience that measures to render the notification of infectious disease compulsory have come into operation in various localities, by virtue of clauses tacked on to private Acts of Parliament, gas acts or others, which apply only to specified districts. There is evidence to show that these partial enactments have been productive of much good, and also that they have excited some anger among both medical practitioners and patients. My own feeling is that it ought to be

made the statutory duty of the medical attendant to give notice to the master of the house, the parent, or other responsible person, of the occurrence of infectious disease; and that it should then be the statutory duty of the person so notified to pass on the information to the local sanitary authority in the person of its appointed officer. In order to avoid intentional ignorance on the part of the householder, I would provide a penalty for any case of infectious disease to which a doctor was not summoned. It has been urged by some that the necessary enactments would produce friction between doctors and their patients, but I do not believe that this effect would follow, except, perhaps at a very early period. The public should be taught to understand that a person suffering from infectious illness is for the time a dangerous public enemy; and the fact that it was the statutory duty of every medical man, all over the kingdom, to give the necessary warning, and of the person so warned to carry it on, would speedily bring about the desired conviction. As long as the enactments requiring notification are partial in their character, affecting some localities and not others, it is difficult for illiterate people to discern the essential propriety of a course which must be pursued in one parish while it may be omitted in the next. The duty which the receipt of the notification would impose on the local authority would vary very much in different cases, chiefly in accordance with the different power or will of different people to carry into effect the measures required for the safety of the public and for the advantage of the sufferer. Among the poor and ignorant, it would generally be necessary to extend assistance to the parents in order to enable the right course to be pursued, the patient being perhaps removed to a hospital, the dwelling and its contents disinfected at the public cost, and articles which it might be necessary to destroy being replaced in the same way. With the wealthier and more intelligent classes, the local authority might receive the certificate of the medical attendant to the effect that all proper precautions were being observed; and, between these two extremities of the scale, there would be many gradations calling for intermediate treatment. Obviously, and always, it would be the duty of the health authority to obtain reasonable security that the precautions called for in the case were not being evaded, or carried out in a deceptive or perfunctory manner. If the patient were a child, and the disease one to which children are prone, it would be necessary to exercise supervision over the local schools and scholars, and, when the illness occurred in a house from which articles of any sort were distributed, it would be necessary to warn the recipients of such goods, and to see that their health was watched over until the period of probable incubation had passed away. I believe that, if precautions such as these could be carried out universally, the effect would be, before long, to

produce such a diminution of epidemics that a generation would soon arise possessing no knowledge of their former prevalence or severity, and one which might therefore be disposed to grumble at the very restrictions to which they were indebted for their happy ignorance and immunity. This has notoriously been the case with regard to small-pox; for the silly outcry which has been raised against vaccination has had its chief basis in the popular want of knowledge of what were once the ordinary effects of an epidemic of the disease upon the inhabitants of any locality in which it occurred.

(Referring to the Local Government Bill, the lecturer urged strongly the desirability of the medical officer of health being in future appointed by the county council, and deprecated the system of importing party considerations into questions which afford no proper place for them.)

Most of those who are here present will remember how one of the most complete sanitary Acts which ever passed through the English Legislature was rendered almost nugatory by the Minister whose duty it was to carry out its provisions, and whose one fear seemed to be lest its enforcement might alienate the votes of nuisance-owners at the next election. Most will remember how the same Minister succeeded in preventing the republication of the official reports of Sir John Simon, an achievement which has always reminded me of the story—for the credit of the canine race I am glad to believe it a fable—of the way in which Newton's spaniel upset an ink-bottle over the calculations of his master. If we desire a still more recent instance of the relations between political officialism and the public health, we may turn to the *Times* paper of the 30th April, in which, among the telegraphic intelligence from India, we may read as follows:—

"The Calcutta health officer, a very able and energetic sanitary expert, has written a strong report on the insanitary condition of a portion of Calcutta. Much improvement is needed before the Calcutta Conservancy for the northern portion of the town will deserve better treatment than that lately given to it in a public print, wherein it was stated that the condition of Calcutta resembled that of an African village. This has greatly offended the acute susceptibilities of the native Commissioners, and those officials who pander to their vanity and prejudices, and the health officer has been solemnly called upon by a formal resolution to explain away or withdraw his description of them as discourteous and disrespectful. It is becoming very difficult for independent persons to accept municipal employment and honestly do their duty to the public, although questions of sanitation vitally affect the whole community. Cholera is spreading in Cashmere. Two hundred and fifty cases, with ninety-three deaths, are reported."

It would hardly be credited that the state of things which this sanitary officer has disclosed,

and for the disclosure of which he is being persecuted, is that which is shown in some of the photographs which I distributed at the beginning of this lecture, photographs which were used by Mr. Justice Cunningham for the purpose of illustrating a paper which he read before the Indian Section of the Society of Arts. In the centre of the seat of government of our Indian empire, within a few minutes' walk of Government House, these conditions exist. There is no drainage, there is no filth removal, there is no water supply, there is nothing but a hotbed specially prepared for the cultivation of fever and cholera, a hotbed which yields an abundant harvest to its cultivators, that is, to the municipality of Calcutta. The conditions can only be described in the words which Dr. Russell, as correspondent of the *Times*, applied to the condition of the British army in the Crimea. It is "horrible and heart-rending." Our officials will not raise a finger to compel reform, they probably will not raise a finger to prevent the sanitary officer from being sacrificed to the wicked incompetence which he has exposed and condemned. This is the way in which our politicians govern India; and in the face of such government they have the impudence, for I can call it by no other term, to appoint "Commissioners," and to institute so-called "inquiries," upon subjects relating to the health of the millions whom they control.

In spite, however, of all difficulties, it cannot be denied that there are indications of the coming of a brighter future, and that the progress of scientific teaching, as an element in education, is beginning insensibly to influence the state of public feeling. A recent debate in the House of Commons gives much reason to hope that this process may be carried still further, and that, before very long, it may reach the level of the secondary schools for the middle classes. In Lord Macaulay's description of the state of England in 1685 there occurs a remarkable passage, concerning which it may be hoped that, in substance, history will repeat itself. After sketching the conditions which culminated in the foundation of the Royal Society, he adds: "One after another phantoms which had haunted the world through ages of darkness fled before the light. Astrology and alchemy became jests. Soon there was scarcely a county in which one of the Quorum did not smile contemptuously when an old woman was brought before them for riding on broomsticks or giving cattle the murrain." May we not hope that some of us may live to see the day when similar smiles will be excited by any proposal to conceal the existence of a contagious malady, or to tolerate the causes of its diffusion; and may we not hope that the establishment of the College of State Medicine will be pointed to, at some future time, as one at least among the causes by which an adequate knowledge of the importance of the public health was at last made to prevail.

THE POSITION OF THE HEALTH OFFICER UNDER THE EXISTING SYSTEM.

To appoint officers, whose duties are :—To interfere in certain cases with personal liberty, to take by force tainted goods, to detect the knavery of the builder, and to tax the rapacity of the tenement landlord; then to give the individuals thus interfered with the most ample and unchecked power over such officers, is one of the most extraordinary bungles and mistakes the legislature has ever been guilty of.

One of the latest examples of the effect of this state of things is the dismissal of Dr. Hime by the local authority of Bradford. So far as we know, there has not been the faintest attempt at justification; he has been dismissed because he has done his duty fearlessly and well; he has been dismissed because in the exercise of his functions he has made personal enemies of a few mean spirits to whom the town has been unfortunate enough to entrust the management of its public affairs; and his dismissal is a warning to health officers, that most of the pretended interest in public health by the people is not sufficient to support a single man in any just conflict with his local board, and that the government of the country will allow sanitary authorities to do any foolish thing they please.

One might have thought the old generous spirit, which felt as a personal wrong harsh treatment to a fellow townsman, still survived, and that each right thinking inhabitant of the town would have rallied round Dr. Hime in such a way as to make it dangerous for an elected body to neglect public duty for the purpose of gratifying private resentment. Is it too late to hope for the honour of the place that the offenders, whose names must be known, will be thrown out at the next election? Unless the people themselves keenly watch the treatment of officials by local boards no men of character and standing will take office; sanitary officials instead of being honest enough to risk unpopularity and faithful enough to give unpalatable advice, will become sycophants and time-servers.

The case of Dr. Hime is neither solitary nor exceptional; since the Health Act of 1875 has come into operation there has scarcely been a year in which some one of the local bodies has not shown abhorrence of efficiency and activity by harrying, annoying or dismissing their health officer. In the west of England, after fifteen years of admitted efficient service, the Dursley Rural sanitary authority recently dismissed Dr. Francis Bond without preferring any charge against him.

The leading facts of Dr. Bond's case, as contained in the official records of the authority and in the correspondence, have been printed in pamphlet form, bearing the not inapt free translation of Juvenal's *quis custodiet* phrase "God guard those whom some guardians are set to guard." The obvious inference from these documents is that from some obscure personal spite, a plot was

formed to get rid of Dr. Bond. It succeeded, for on the 12th of January a resolution was carried, after a feeble discussion in which actually no single sane reason was advanced, to withdraw from the combination. When, however, 70 days afterwards a reason had to be adduced and a pretext found, for the first time the clerk writes to the Local Government Board "that the authority fully acknowledge Dr. Bond's efficiency as a sanitary officer, but consider that his connection with the Sanitary Company and the Dairy Company interfere seriously with the satisfactory performance of his duties."

A judicial bench which sentences the man to be hung first and tries him afterwards may be tolerated in a new country, it is out of place in modern civilization; the assertion should have been made in such a way as to have given Dr. Bond opportunity of explanation and defence; and not brought 70 days after the resolution. It seems on enquiry that Dr. Bond possesses shares in one company and is honorary secretary to another, hence it is evident the charge is a flimsy and clumsy pretext attempting to justify an unjustifiable action.

These two cases drawn from widely distant parts of England show how grossly the present bodies may abuse the power entrusted to them, and with the greatest impunity; they accentuate in the strongest manner the view urged by the Medical Officers of Health Society, that the health officer should in future hold office from the county council to be created by the new Bill; but since there is no certainty, the council in the larger towns will be composed of different elements to the present; there must be a farther change yet, and those who desire a firm and efficient sanitary administration must never rest until the Medical Officer of Health and his subordinates have tenures of office secure from the effects of ignorance, malignity, selfishness and revenge. Impossibility of dismissal so long as efficiency of duty exist, charges of bad conduct or inefficiency to be made publicly and in such a way as to give an officer opportunities of defence, are principles as just as they are simple, and these principles must be insisted upon.

SANITARY INSPECTORS AT CROYDON. — The members of the Association of Public Sanitary Inspectors, on the invitation of Dr. Alfred Carpenter, visited Croydon on Saturday July 7th to inspect the sanitary works of the town. The chief interest of the visit was the inspection of the sewage farm of the Croydon Corporation at Beddington. The system in use is that of broad or surface irrigation, and as a rule the sewage passes over three separate fields. Financially, the working of the farm is deemed very satisfactory. The outlay for the year shows a surplus of £1,000, which is appropriated entirely to pay interest and purchase-money for the land.