far from uncommon are those simple follicular dropsies of the ovary, seeing them in autopsies as very thin-walled cysts, often less than an orange. Such cysts are, I am sure, the source of much difficulty in practice, and a retrospective diagnosis of them may be formed in this way. A distinct ovarian swelling is found larger than any ovaritis ever grows, clearly diagnosable as an enlarged ovary; but the diagnosis cannot be made more exact. The commencement of an ovarian dropsy is dreaded. After a time, the tumour disappears. Frequently its disappearance is accompanied by adhesive perimetritis. Now, what has happened in these cases? Of course, it may be said that it is a case of mere ignorance, or that the cysts were parovarian; but, to this latter explanation, there is, for me, the great objection that the cases occur more frequently by far than to admit of their being justly so explained. We must suppose, therefore, the bursting of the not infrequent small follicular dropsies. I would further add that the bursting of simple parovarian cysts does not appear to me to be followed by perimetritis, or accompanied by it, so generally in the case of the disease of which I have been speaking.

In connection with parovarian cysts, a great step of good progress in practice has been made, and progress also in pathology. Such cysts used generally to be described as never reaching a great size, but this is not true. They do certainly attain enormous dimensions, so as to be in competition in this respect with true ovarian cystic disease. After death, or when they are removed by gastrotomy, they may, at least frequently, be easily distinguished by characters which Bantock has recently described; chief among them are the non-implication of the ovary, the almost invariable unilocularity (not surgical, but pathological or absolute unilocularity), and the easy separation of the peritoneum from the internal coat of the cyst-wall. During life, they are also, at least occasionally, diagnosable by examination of the fluid withdrawn by tapping from examples of them which have never been inflamed. Then we find the fluid to be limpid or very slightly opaline, of very low specific gravity, containing little or no albumen, and having in solution only a little saline matter, chiefly chloride of potassium and of sodium. Such cysts have been long known and partially described. Even yet they are imperfectly described; but it is interesting to note a kind of identification of them in those ovarian cysts which Boinet found to be most readily cured by the once famous iodine injection. Only the important fact is now known that many at least of such cases are far better cured by mere tapping than by that combined with iodine-injection; and the practitioner should always keep in mind these propitious circumstances when he meets with cases of this kind. The subject of parovarian cysts, when fully made out, will be still further interesting and fruitful in gynecology; for already we may presume that the numerous kinds and examples of cures of ovarian dropsy, without resort to ovariectomy, which have been described by many, including the highest authorities, were merely examples of delusion arising from imperfect knowledge. We know no one example of the cure, otherwise than by the operation of Ephraim McDowell, of an ovarian dropsy properly so-called; not one, however many may be found described, or whoever may be the describer. Cures by one or more tapplings, cures by medicines, cures by spontaneous rupture, cures by advancing pregnancy, have been, if not mere egregious mistakes, almost certainly cures of parovarian cysts whose history, as already known, quite accords with and explains such erroneous allegations. These remarks are based chiefly on observations of parovarian cysts that have never been inflamed. The study of inflamed cysts is still in a very backward state. Their pathology and treatment are matters of great difficulty. It must also be kept in mind that simple inflammatory serous collections take place in the peritoneum, and may be mistaken for parovarian cysts.

Ovarian cystoma is the great disease of the ovaries, and improved ovariectomy is the greatest recent step in therapeutics. It is probably to the inspiring influence of the beneficence of this operation that we owe the great amount of scientific exertion that is being made in the field of ovarian anatomy, physiology, and pathology; and already the student may catch glimpses of justly expected practical fruits of this scientific zeal which will enormously extend the utility of the practitioner.

The anatomy and physiology of the ovary, closely connected as they are, have recently received many additions, and more may still be expected from the application to them of the newest methods of investigation. First among these researches comes the histological anatomy of the organ, and here we find the most recent views of Waldeyer receiving, besides verification, addition also and correction by the excellent work of Foulis. Like Waldeyer, this author, beginning with the normal ovary, pushes his studies into the more difficult and more vexed inquiries as to the origin and growth of the multiple ovarian cyst. These points have by many, and frequently, been supposed to be settled; but it is a vain thought, as any one may find who tries to

unravel the divisions and subdivisions of recent pathological writers, and then peruses the most recent inquiries and setting forth of views by such authors as Malassez and Foulis.

To notice the whole of the work that is being carried on in connection with this department, is far beyond my present intention. I shall merely, in conclusion, make brief reference to the difficult questions in connection with the malignancy of ovarian cystoma. The uterus, although far from being an isolated organ, is generally regarded, among others by Walshe, as remarkable for the slowness or rarity of the spreading of cancerous disease from it as a centre, the slowness or rarity of what is now called the infection of neighbouring or distant parts. There is, on the other hand, no organ in the body which is actually more isolated than the ovary, whether in health or disease, at least so long as it has no adhesions; yet many pathologists, especially Klebs, who cites various authors, have attracted attention to cases of apparent infection, especially of the peritoneum, having malignant ovarian cystoma for their source. The diagnosis, especially in the earlier stages of growth, of even large malignant ovarian cystomata, is often a matter of great difficulty, and the examination of the fluids drawn off by tapping is anxiously made with this view, but, as yet, without completely satisfactory results. In fact, we have, in all departments of ovarian diagnosis, more to admire in the zeal and diligence of histologists, in regard to the fluids, than in the exactness and reliability of the practical results they can show. In connection with burst and unburst ovarian cystoma, it is well known that chronic peritonitis of great extent is often set up and long maintained; but the examination of the fluids has led Foulis to the belief that in the bursting of malignant ovarian cysts we have a new kind of evil, an explanation of the infection of other parts, and especially of the peritoneum, with malignant disease. While the diffuse chronic peritonitis is explained, to some extent, by a rude induction of analogies, the diffusion of cancer is less understood. Foulis believes he can identify in the fluids of certain ovarian cysts a peculiar richly proliferating epithelial cell which he regards as the seed sown broad-cast, when a malignant cyst bursts, over the peritoneum, finding in any part of this large surface a suitable soil for its further development into cancerous nodules, such as are seen in the ordinary malignant peritonitis, as it is sometimes called. To the discussion of this subject, Thornton and Lawson Tait have contributed, and we hope that, as a final result, the truth will be elicited. We shall then have ovariectomists instructed and guided as to the special urgency and claims of a class of cysts that may be equally important and urgent with those which are in a condition of suppuration.

I might still further enlarge on the present state of ovarian pathology, had I not already overpassed the proper limit of time. Many diseases and many researches I have not even hinted at, and the silence is not to be attributed to neglect or to an estimate of inferior importance.

In opening the section with these remarks, I congratulate you on the promise of interest that is offered by the list of papers to be read, and I can assure you that everything which contributes to increase, improvement, or illustration of our knowledge, will be received with the respectful attention which it ought to command.

AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF PUBLIC MEDICINE.

*At the Annual Meeting of the British Medical Association,
in Edinburgh, August 1875.*

BY THE RIGHT HON. LYON PLAYFAIR, M.P., C.B., F.R.S.,
President of the Section.

I HAVE recently delivered so many speeches and addresses on public health that you will not expect me to do more than give some practical remarks on the recent efforts of the legislature to improve the health of the people. The present session of Parliament has had under consideration several important sanitary measures. Modern sanitary legislation dates from the year 1846, when Parliament carried out many of the recommendations of the Health of Towns Commission by a large and comprehensive Act to promote the health of communities. Since that year, Act after Act has been supplemented on the main one, as the necessities for increased powers arose. And, at last, sanitary laws became so cumbrous and complicated that neither experts in law, nor experts in hygiene, could master the accumulated legislation on public health. A Royal Commission sat a few years ago, under the presidency of Sir Charles Adderley, and recommended a consolidation of sanitary law. The president of that Commission prepared, not without much labour, a Consolidating Bill, upon which the present Government

have considerably improved by judicious condensation; and now an Act has been passed which repeals the numerous Acts of previous years, and consolidates them into one statute. It is rarely wise to attempt such consolidation while law is in flux. Bacon long ago described the danger of such a proceeding, when he pointed out that the conversion into method of changing subjects results in fixing and stereotyping them into a form which resists further change, and therefore arrests their progress. Now, sanitary law is eminently in a state of flux. We have been groping our way very much in the dark as to the means of attaining the ends which we desire to reach. Organisation is altogether deficient. Medical officers of health, who more and more are being made the motive powers of sanitary administration, are appointed at haphazard, without being required to prove their knowledge of, or qualifications for, their important duties. Some of them have a single parish in charge, for which they receive a nominal fee, and probably give nominal work. Others have a thousand square miles, with a substantial salary, but with an area too large for efficient management, unless they are aided by assistant medical officers of health. Again, the sanitary law in regard to the prevention of disease is yet in its infancy. Our knowledge on this subject grows from day to day, and requires continued formulation into accreting law. If, then, the consolidation of law which has been accomplished this session meant, as it usually means, the stereotyping of law for a long period of time, you would join with me in deploring the result. But the responsible minister who introduced it, Mr. Sclater Booth, gave the most distinct pledges that it was not to be considered in this sense. And with this assurance, we may well congratulate ourselves that a consolidated statute gives a firmer foundation than the old shifting patches of law, upon which our permanent sanitary edifice may be built. It is in this view alone that all sanitarians will gladly recognise the Consolidating Act of this session as an important contribution to sanitary law. As an amending Act, it is altogether trivial; as a consolidating Act, it is distinctly useful.

Another sanitary measure to improve the Dwellings in Large Towns has also become law. Its objects are excellent, and it has received much attention from Parliament. Will it be productive of much good? In towns animated with the spirit of Edinburgh, Liverpool, and Glasgow, it certainly will. They have already shown by local Acts how much may be done to improve the unwholesome dwellings of crowded populations. Let us hope that there are other towns which will follow their example. I am not confident that as yet many will do so; but the necessity for action will in time force itself upon local authorities. London will certainly use the Act, and root out some of its nests of disease and crime. But it takes a long period to remedy well recognised evils. Recollect how Queen Elizabeth, in her vigorous language, spoke and legislated against overcrowding of cities; and observe how little progress we have made to arrest ills which monarchs and legislators, several centuries ago, recognised as clearly as we do at the present day. The new statute is only permissive, and is limited to towns of twenty-five thousand inhabitants. It must be followed by an Act applicable to smaller towns and country districts, if it is to exert any marked effect on the general evil of overcrowding, which is common to all gatherings of people in civilised communities. In strictly rural districts, as in the Highlands of Scotland, you may have wretched houses, filthy outside and in, crowded and unventilated except by defects in the building; and yet the people have not a high death-rate. In the day they are out in the uncontaminated air of the mountains, and are isolated from epidemic influences. But the more that a community becomes congregated, the more marked becomes the influences of unsanitary homes. You see this especially in savage life. The American Indians on the war-track, daily changing their position, have remarkably small mortality; for the bullets of the whites strike them less surely than diseases do in their permanent wigwams. These Indians in peace die rapidly, not only from that introduction to fire-water which they owe to civilised man, but also from the unsanitary conditions of their dwellings. When things grow too bad, however, they change their encampments, and the mortality lessens. But when the Christian missionary comes among them they are doomed; for they become fixed in villages, with all the traditions of their modes of uncivilised life still clinging to them; and, unable to change their locality, the fatal effects of overcrowding and filth tell upon them with far more severity than the bullets of their enemies in their life of savage warfare. You see all this in a less degree among the inhabitants of country districts who flock into our towns. For this congregation into towns is the characteristic of the age. Hamlets rapidly become villages; villages concrete into towns; and towns become great cities. And with every increase of density of population, there is an increase of the rate of mortality, not as a necessity, but as a consequence of sanitary organisation being defective in the provisions for removing filth and giving an abundant supply of air to accumulating inhabitants. These are the evils which the new statute for im-

proving the dwellings of towns hopes to remove. But a permissive law depends upon a ready formed intelligence for its application, and I confess my misgivings as to the immediate or general utility of the measure.

The law relating to Adulteration of Food and Drugs has been remodelled this session. Its chief changes have been in relaxing its provisions in the interest of traders, and in diminishing the securities which the former law gave to the public. However, the main effects produced by the last law will be continued in the present one, so that the poor will still have the benefit of unadulterated bread and milk. These two staple articles of food are now scarcely adulterated, since detection became easy and certain. There is one kind of vitiation of food and drink at present altogether outside legislative prevention, but which must before long be brought under the dominion of law. I allude to common articles of food being made the vehicles for the transmission of contagious diseases by containing within them particulate contagia. Our evidence as to various articles of food is still inconclusive, but that in relation to water and milk is thoroughly convincing. Our knowledge as to the propagation of contagion is like all other knowledge, passing from occult to simple causation. The human mind seems incapable of accepting the most obvious and simple explanations of natural phenomena, till it has exhausted the most recondite and complex interpretations. So in olden times, and in part at the present day, men looked for sources of contagion above and beneath them, as in celestial conjunctions and in emanations from the bowels of the earth, but not in their own surroundings. When we enter any new field of inquiry, we grope with our eyes bandaged, and traverse it in every direction, from one side to the other, though, when the bandage is removed, we are surprised to see how limited the field is in extent, and how easy it is to take a short cut across. We have reached this stage in regard to food and drink. We begin to see that in any case of common epidemic, such as scarlet fever and measles, we are not only to investigate epidemic waves propelled by some unknown law, but we must examine whether the food of the population may not be infected by some diseased person. Take the case of the epidemic of scarlet fever in St. Andrew's, investigated a few years ago with so much ability by the late Professor Bell. In that small town, the epidemic, though apparently general, was more frequent among a better class of houses. Then the able physician noticed that all the houses attacked were supplied with milk from one dairy. The dairy, on being visited, had scarlet fever on the premises, and the people who milked the cows were convalescents from the disease. A very instructive case of this kind occurred only a few weeks since in London. A member of the present Government had a dinner party, and an evening reception afterwards. None of the guests at the latter observed any particular effects from their visit, but eight of the dinner guests and seven of the household took scarlet fever. All of these partook of a cream which, it is believed, contained the particulate contagium. One or two streets off, there was another dinner party, and four of the guests took scarlet fever. This case has been investigated by one of the medical officers of the Local Government Board, and we may expect an exhaustive report on it. We have already numerous examples of this propagation of disease through food and drink. The Marylebone fever of 1873 is equally instructive. That enteric fever is known to have attacked 143 households, and was clearly traced to infected water, used for dairy purposes, connected with one particular quality of milk, which was distributed in sealed cans. The epidemic was arrested as soon as the milk-supply was no longer distributed. The enteric fever at Armley, in Leeds, was allocated to a particular dairy in the same way, and was stopped by chaining up the pump which supplied water to the dairy. Now, such illustrations of the distribution of contagium are very important, because the source of it may be altogether outside the locality in which the disease is manifested. In the case of the Marylebone epidemic, the polluted well which infected the milk was in Buckinghamshire, and, therefore, might naturally have escaped attention, unless the investigation had been minute and exhaustive. In the cases which I have mentioned of water-pollution, it is usually traced to the most foul of all filth, the intermixture of excrementitious drainage with the water which man uses as a beverage. When introduced into the system as a fluid, though the contagium is not soluble, it seems more certain in its effects than when respired as air. We may err on the side of grandfatherly legislation; but is it possible to allow the law in relation to food to remain as it is at present? You punish a soda water manufacturer if lead be in his distributed beverage; but hitherto he has been allowed to use what water he chose to make aerated drinks. If the water contained sewage, it was found by experience that lemonade would not keep under such conditions; but the common aerated drinks do. In the recent Adulteration Act, we managed to insert a clause requiring the use of pure water for aerated beverages; and this provision of law may become a precedent for future

legislation. For the distributors of food and drink must be made responsible that they do not distribute contagious diseases with them. When, for instance, we had Dr. Frankland's continued reports that the water of one London Company contains distinct evidences of excrementitious matter, the moral responsibility of a distributing water company becomes very serious, and its legal responsibility is only one step forward in the history of preventive hygiene.

We have lately suffered from a powerful epidemic wave of Small-pox; and it will be a matter of great interest to study Dr. Seaton's forthcoming report upon the results of our preventive measures in regard to this disease. If we have failed when we possess a specific preventive remedy in vaccination, we may well be despondent. But I do not think that there has been a failure. Small-pox epidemics are numerous; in fact, they occur at intervals of about four years. But since the great epidemic of 1837-41, there has been none so serious, either in extent or in malignancy, as the epidemic of 1870-3. It travelled as a wave over all Europe; and we are able to compare its attack upon this kingdom as contrasted with that on other countries. In last century, before vaccination was general, the annual small-pox rate of death was 3,000 per million of the population, including non-epidemic as well as epidemic years; as a mean of the late epidemic, it was 928 per million. But that difference, gratifying though it be, tells us little. Compulsory vaccination has only been reached by successive Acts; and the population below five years of age had scarcely been covered by them in 1870, when the epidemic struck us. Previous to these compulsory laws, three-fourths of the small-pox mortality were among children under that age; but, in the recent epidemic, less than a third of the mortality in England, and less than a fourth in Scotland and Ireland, was due to young children. Our compulsory laws gave them a large, though not complete, immunity from the force of the attack. We learned, moreover, by this attack that the protective power of vaccination wears itself out, and that it requires repetition at puberty. The most gratifying result of a general survey is that our protection laws against small-pox, defective as they still are, seem more efficiently administered than those of other countries. In former epidemics, our rate of mortality contrasted unfavourably with them; but, in the late epidemic, this was reversed. While less than 700 per million died in the chief towns of Scotland, and 1,180 in London, Berlin lost 3,448, Hamburg 5,717, Leipsic 6,200, and the large Dutch towns 6,455. The general result of our protective laws against small-pox may be summed up thus: at the rate of mortality in the last century, we should lose 70,000 of our population annually by this preventable disease; whereas our annual average mortality in England is now about 5,000, and was only 3,500 until the last severe epidemic raised the average.

Let us now consider the position of our ministry of Public Health, as represented in the functions discharged by the Local Government Board. That Board has two main purposes to discharge; viz., to superintend public health and pauperism. It is reasonable to join them under one administration, for they are closely connected as cause and effect. But, though both should be made subjects of prevention, pauperism is an existent evil of such persistence, that it is treated chiefly as one of economical administration, and thus it happens that sanitation is viewed in the same light, although its chief relation to public interests is in the prevention of disease. The Local Government Board has never yet fully realised its preventive functions. It looks upon its medical officers of health, much as it does upon its Poor-law medical officers, as curers, and not as preventors of disease. The difference of their functions was well described long ago by Xenophon, in his *Cyropædia*; for he states that ordinary doctors are "menders of garments which are already torn", while sanitary officers have "a care of health of a nobler kind; for it is their duty to prevent the men from becoming sick". As the name of the Central Board implies, it ought to foster and not to discourage local government. But, if there be one thing which local authorities might be expected to possess, without being imparted by a Central Board, it is common sense in the transaction of business; and, if there be one thing which a Central Government ought to give, it is scientific sense which is not common. But here the Local Government Board completely misunderstands its functions; for it crams common sense into local authorities already saturated with it, and refuses them the scientific sense which they cannot be expected to possess. Its estimates already amount to £695,000, of which only £93,000 are applied for all kinds of prevention, including the sanitary officers and inspectors of the Board, the vaccination system, the Alkali Act, the medical officers of health and inspectors of nuisances. The "menders of torn garments", as Xenophon would describe the Poor-law medical officers, absorb £127,000 more; but I am inclined to add that sum to the preventive staff; for I think they do very largely act as preventors of pauperism in the cure of disease. The Local Government Board, by its present and past ministers, uphold powerfully the

independence of local authorities from medical despotism. They think it a gross interference with local authority that the skilled medical experts in London should advise local boards as to their procedure in the eradication of local causes of disease; but they think it no encroachment of central authority when guardians are not allowed to change gruel for arrowroot in a workhouse dietary without the permission of the President of the Local Government Board. If there be some small excess in expenditure in a local authority, down goes one of the thirty-nine Poor-law auditors to audit the accounts. But the idea of auditing the death accounts of the same authority would be deemed to be a wanton interference with the independence of local government. Yet such an audit would be incalculably beneficial, in an economical point of view, both in its relations to the prevention of disease and of pauperism. If one district have a rate of mortality of seventeen and another locality one of thirty-four in the thousand, a rigid medical audit of the death accounts is called for, in order to discover why there is such an unequal local assessment of life, and why one population is taxed so heavily by a double rate of deaths. Such an audit of death accounts involves in its exercise the scientific sense which I have described as uncommon, and which cannot be possessed by the local authority, whose common sense the Local Government Board so rigidly bridles by central interference.

It is quite true that the Local Government Board sends down medical inspectors to localities to investigate diseases when they have become a scandal to the community; and these officers have often been useful in detecting the causes of the prevalent diseases; yet, practically, there are only three medical inspectors available for this duty. Out of 1,588 boards, they managed last year to visit 57, and this fractional aid was not very substantial. What I desire to urge is, that their duties should not be detective, but preventive. No doubt, prevention cannot be effectively carried out until there is a public registration of diseases as well as of deaths; for the former represent the wrecks which strew the shore after the storm has passed, while disease-registration would give us the rising and falling of the barometer required to give ample warning of the coming storms. It may be difficult to obtain full knowledge of contagious diseases in private practice, but there should be no difficulty in organising a system by which all such diseases as are treated at the public expense, in hospitals or by Poor-law medical officers, should be made available for the purposes of public hygiene.

I think that the House of Commons will soon take this matter into its own hands. A new department like the Local Government Board, with an expenditure of nearly £700,000, ought to be looked upon with much public watchfulness. If it have any justification at all in its relations to public health, that must rest in its powers of preventing disease in the localities which it governs. Does it succeed in this primary function? Is preventable disease, other than small-pox, prevented by its agency? I cannot answer these questions either in the affirmative or negative. There are no means for doing so, either in the reports of the Local Government Board or in those of its medical staff. In the latter, indeed, I find important investigations of epidemics which have run their course, and an excellent history of their causation. But I find no accounts of action taken to prevent these epidemics from occurring. I find no action described upon an audit of excessive rates of death. The President of the Local Government Board did tell me, in debate in the House of Commons, that he had quarterly returns of death-rates put upon his table, and that he directed inquiry if he found them excessive. Well, utterly inefficient as such a quarterly examination would be, I want to know the results of them. The nation has a right to a specific answer to the question, Is preventable disease prevented by our great expenditure on a central administrative machinery, and by the constant increase in local rates? For no less object is such expenditure justifiable, or should central interference with local government be tolerated. But all the elements for answering this important question are absent from the information given to us by the Local Government Board. I take this opportunity of giving notice that, as far as the influence of a single member of the House of Commons can be effective, I intend to use my constitutional rights to obtain the information necessary to enable the nation to judge whether the Local Government Board is effective in preventing preventable disease; for no lesser function justifies its existence, either in its relation to public health or to pauperism, which stands in such close causation with the insanitary state of communities. It is by a constant care in preventing the growth, or in removing the accumulations of filth in and about the dwellings of the people, that the watchful public officer of health can hope to prevail against disease. He knows well that pure air, pure water, and pure soil are the main conditions for the health of communities when they are earning wages enough for their comfortable existence. The simplicity of the ends in view is not disturbed by the

complexity of the problem how foulness acts in producing disease. There may be filth without disease of an epidemic sort. King Edward II, when in confinement at Berkeley Castle, was placed in a room contiguous to a well into which carcases of horses and dogs were thrown, in order to poison him with their effluvia; but the poor monarch would not die, and his entrails were burned with red-hot irons. Yet a sanitarian would know that not only the king, but all in the castle were in jeopardy by the foul experiment; for a single particular microsome of a fatal disease might have planted itself on the filthy soil and multiplied exceedingly.

Even the septic living germs of disease may be wanting under certain conditions; but more generally they are present to attack the bodies of the living and to corrupt the bodies of the dead, if they find a filthy soil suitable to their growth. Though the royal captive escaped the deadly effects of his exposure, prisoners before the time of Howard were notoriously victims to like influences. Tennyson, in his recent drama, thus describes the effects of filth on captive heretics.

"In breathless dungeons over steaming sewers,
Fed with rank bread that crawled upon the tongue,
And putrid water, every drop a worm,
Until they died of rotted limbs; and then
Cast on the dunghill naked, and become
Hideously alive again from head to heel,
Made even the carrion-nosing mongrel vomit
With hate and horror."

Independently of all theories of causation, we know that diseases require filthy surroundings in the air, water, food, clothing, and soil before they become permanently located. A great wave of an epidemic may pass over all our sanitary barriers, though the ordinary and lesser waves are broken by them. The greater and lesser epidemic waves are, like storms in the air, beneficent remedies of a disturbed equilibrium; for pestilences, in relation to whole populations, resemble that angel of mercy who stood in the way of the prophet armed with a sword, ready to smite if he had not turned from his evil course. So, when mankind allows itself to be sapped and undermined by the insidious consequences of sanitary neglect, so that the members of a community lose their manly strength, their morality and liberty, then pestilence falls upon the degenerate society and rouses it to a sense of their danger. When the sanitary neglect is general, an epidemic gathers itself up in a wave and sweeps along till it meets with some barrier, like an outstretching headland, to break it in its course. Certain diseases, in their epidemic form, appear to break up entirely under the improvements of civilisation, or at least cease to travel in their former force. Instances of black death and sweating sickness are still said to appear in remote parts of India and Persia, but, like the typhus gravior of our large towns, are unable to accumulate into the waves which some centuries ago used to sweep all over Europe. The plague of the East, which still gathers itself up into a frowning crest, breaks before the sanitary barriers which the civilised communities of modern Europe have raised against its progress. But as yet these have been insufficient to meet the cholera wave which every few years threatens to pass over us. We have lately seen it pass with more or less strength over our continental neighbours; but it has broken upon our own shores, and has not traversed the country. Is this due to our sanitary improvements? It would be premature to answer in the affirmative; for at the present moment we see another threatening cholera wave gathering itself up in the East, and we will have more reason for confidence if it again break innocuously on our sanitary barriers. The recent serious epidemic of small-pox should teach us that, though we may be better prepared than other countries for such visitations, yet our preventive medicine has much to do before it has exhausted its powers for the protection of the people. It is because I earnestly desire that our State authorities charged with the care of the health of the people should constantly inform us of their successes and failures that I have, through you, to-day urged the necessity of a national audit of death and disease. But this audit should not be a mere central one. The Local Government Board ought, of all administrative departments, to develop a system of local government as distinguished from a central bureaucratic government. When improved local organisation of authorities renders that possible, the Central Board should more and more exert a guiding rather than a controlling influence. Registrars of sickness and death must first be made useful in each locality, for they stand small chance of accomplishing their work of prevention of disease if the whole responsibility for using them be thrown upon the central authority. Thence should emanate the scientific knowledge necessary to apply facts to a general system of useful application; but unless the medical officers of health are trusted by the local authorities as their immediate sanitary advisers, and are encouraged to use the knowledge of sickness and death, gathered in the locality, for the prevention of disease, local government will con-

tinue to be looked upon as an unpleasant machinery for augmenting rates, and not as one for economising the life and resources of communities. And so, in my opinion, not increased central administration, but more effective organisation of local authorities, is the crying want of sanitary progress.

An improved organisation would enable local authorities to obtain more highly qualified medical officers of health than they can possibly obtain at the small salaries frequently offered. Although many of them were appointed without adequate knowledge of public hygiene, there has been much growth of technical knowledge among them, and already about nine hundred furnish specific reports of their labours to the central government. Many of these are characterised by great ability, but their influence extends little beyond their own locality, and hard-won experience is lost for the public good. When local organisation is improved, and the central authority is brought into more effective scientific relations with it, we may see an immense impulse given to preventive medicine.

AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF PSYCHOLOGY,

*At the Annual Meeting of the British Medical Association,
in Edinburgh, August 1875.*

By WILLIAM H. LOWE, M.D., F.R.S.,
President of the Section.

GENTLEMEN,—Allow me, in the first place, to thank you for the honour you have done me by placing me in this chair—an honour, I beg to assure you, I very highly appreciate. I must, at the same time, say, as I glance around me, I feel that you might easily have selected one who would have more ably fulfilled the duties now devolving upon me. As, however, it has been your good pleasure to elect me your President, it only remains for me to do my best to merit your choice. As I have only now for the first time become a member of the British Medical Association, I hardly know what may have been customary by my predecessors in office; but, in the face of this fact, that our secretaries, instead of having to beat up for papers to be read, are, on the contrary, rather embarrassed by their riches, and find it difficult to assign time for the perusal and due discussion of a variety of highly interesting topics, my own remarks will be extremely brief.

I have often contemplated that which I think must be admitted as an indisputable fact; viz., the fashion which obtains in medicine, what I may term the ebb and flow of medical opinion, both as to remedial agents and methods of treatment. For example, it is not long since the familiar antimonial wine was almost universally prescribed; now how little it is employed. Warm plasters to the loins, strengthening plaisters to the chest, cupping and dry-cupping, and fifty other things easily remembered, were considered invaluable. I will not say the trade of the leech is gone; but certainly leeches now are scarcely sold; and, to point to a more recent instance of the caprice to which I allude, podophyllum was introduced within the easy recollection of us all by a practitioner of high and well deserved repute, and yet I am told by the druggists that at present it is rarely made up. Even cod-liver oil, as Dr. Bennett reminded us, was not a new remedial agent, only one revived after being out of fashion for an indefinite time. These medicines were not inert, nor the remedies inefficacious; nay, many of them were valuable, and amply bore out the reputation given by those who originally introduced them; still we see they have their day, and are then shelved and forgotten until, by a turn of fashion, they again appear. Nor will anyone, I think, deny that this fashion, this ebb and flow of opinion and practice, has not obtained in that particular branch of medicine which we call the Psychological School. At one time, Indian hemp was said to do wonders; at another, ergot of rye. A few years ago, we heard a good deal of the pack-sheet and Turkish baths, and very many other things we all know have from time to time been extolled, and then, without other reason, as far as I can see, than no longer possessing the charm of novelty, have fallen into disuse, or taken their place as measures to be occasionally resorted to by the intelligent physician; and who dare say but that chloral and bromide of potassium, our sheet-anchors at present, will not in turn give place to remedies themselves to have their day? I am not in the slightest degree depreciating either the remedies or practices to which I have alluded, but only ask how this perpetual revolution of opinion is indicative of progress, and I believe we shall be inclined to admit that ebb and flow may take place without advance; and yet this was all we had arrived at apparently until a few years ago, when something more than a tem-