

for the sake of possible medico-legal investigations after interment, but still he did not think that absolute security against foul play could be obtained by means of medical certificates, as suggested. Cases of poisoning, for instance, were of rare occurrence, and as the symptoms often closely resembled those of diseases which occurred daily, it was more than probable that some of the former would escape detection, however vigilant a watch were kept. Burial in solid wooden or leaden coffins certainly needed reform, for the present system was bad, and the proposal to leave burial grounds undrained would only make matters worse. While Mr. Lawrence's plan was a great improvement, and deserved to be warmly supported too much was claimed for it in one respect, viz.: as regards the asserted "disinfection" by earth. In point of fact, earth was a very poor disinfectant indeed, though an excellent deodorizer. It was now generally recognised that, so far from destroying bacteria and their products (which was the true meaning of disinfection), the earth and the subsoil water often played a most important part in the spread of certain diseases by such means. It was said that it was the natural thing to restore the body to the earth, and to utilise again the elements of which it was composed, but the present system of burial scarcely attempted to do either. The question of providing mortuaries was of great importance. They had been established to some extent in Nottingham, but the poor showed great prejudice against them.

The Rev. F. LAWRENCE (York) in the course of his reply, said that decomposition of human remains would depend very much on the nature of the soil in which they were interred. Legislation should be sought in three particulars. 1st. To limit the period during which a body should remain unburied. 2nd. To render it illegal to place between the body and the earth anything that should retard its dissolution. 3rd. To compel the directors of cemeteries to supply each body with sufficient earth to ensure its speedy dissolution. He did not agree that earth was not a good disinfectant.

Dr. W. MARCET, F.R.S. (London), remarked that the earth successfully absorbed noxious gases, as for example in the case of earth-closets. At the same time there could be no doubt whatever that the body did undergo absolute putrefaction after burial.

THE ESSENTIALS OF LOCAL GOVERNMENT REFORM.

LECTURE TO THE CONGRESS.

BY ERNEST HART.

Chairman of the National Health Society.

NEED AND IMPORTANCE OF REFORM.

THE question of Local Government Reform is now by universal consent looked upon as one of the very first matters to which the new Legislature that we are on the eve of electing will have to bend its energies. To read the comments which are made upon the subject by public men and in the press, one might think that it was a matter that had only just come within the range of "practical politics," and was now for the first time ripe for reform. We have so many things to occupy our attention now-a-days that we are apt to forget the legislative aspirations and struggles of the past. I take leave, therefore, by way of introduction, to remind you that this is no new subject on which I hope to engage your attention to-night. At least seventeen years ago, within my personal political experience, local government was quite as burning a question as it appears likely to become now; and we ardent sanitary reformers of those days were in great hopes of the accomplishment of a thorough and satisfactory settlement of the very difficulties under which the nation is now, as it was then, ignorantly suffering with a kind of fatalistic idea that they are insurmountable. The chaos of local government was felt then, as it is now, to be a primary obstruction to efficient sanitary administration. There are these differences, however, between the state

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a new cry.

of affairs at the two periods: that those whom the extravagance and wastefulness of our present local administration affect most immediately and closely will have a far more powerful voice and influence in the forthcoming elections than they had in 1868, and that we have had in the meanwhile a variety of experiments in "boards" of various kinds—sanitary, educational, and what not—which ought to have had some useful lessons for us.

On the importance of local self-government in the abstract, it is unnecessary for me to speak at any length. All constitutional writers agree in considering it as of high political importance. It has indeed been generally recognised as of the essence of our national vigour. Local administration is the distinguishing feature of our government. The theory is, that all that can should be done by local authority, and that public expenditure should be chiefly controlled by those who contribute to it. Whatever concerns the whole nation must be dealt with nationally, while whatever concerns only a district must be dealt with by the district. But local administration has its drawbacks. The spirit of that self-government, which Englishmen have always vindicated to themselves through every developing period of their history, has led to the growth of many discrepancies in their institutions, and to many disconnected and even conflicting laws. Imperfect local administration has been the natural result.

The complications of our present system of local Government are so numerous and tangled that few have had the patience to attempt to unravel them. Every one is agreed that the system wants reform; but the details to be grappled with are so many that the majority find themselves unable to "see the forest for the trees." For example, there are something like 700 Acts of general application which relate to local affairs, starting with the statute *De Officio Coronatoris*, passed in 1275, and ending for the present with the Housing of the Poor Act, 1885. A number of most excellent books have lately been published with the object of enlightening people as to what local government is, and how it is managed. From the authors of all these I have derived most useful hints and suggestions, for which I take the earliest opportunity of making my cordial acknowledgments.* But most of them do not give with the minuteness which is desirable a connected statement of the reforms which are necessary to make local

* These books are, in the order of their publication:—

1. "Local Government in England," by the Hon. George C. Brodrick. One of the Essays published by the Cobden Club, on "Local Government and Taxation

government an efficient machine; and I shall therefore be excused if I address my attention chiefly to the latter point, and taking for granted a knowledge on the part of my auditors of what local government is, dwell with most insistence upon what local government ought to be.

I suppose there are few people who will not agree with John Stuart Mill, that the control of all the business of a locality should be united under one body, and one only.* This is called the "ideal of the reformer;" but I see no valid reason why it should not be carried into effect, save that our methods of legislation are now almost uniformly scrappy and patchy. As has been pithily said in one of the works just referred to:—

"Almost all the failings of the local administration may be traced back to the mode in which it has grown up. Throughout the present century new social wants have been multiplying. Whenever a particular want became so clamorous that it could no longer be ignored, the Legislature provided for it as if it were the only want of society. For almost every new administrative function the Legislature has provided a new area containing a new constituency, who by a new method of election choose candidates who satisfy a new qualification, to sit upon a new board, during a new term, to levy a new rate, and to spend a good deal of the new revenues in paying new officers and erecting new buildings. Thus there has been created, not a system but a chaos; a chaos of areas, a chaos of elections, a chaos of authorities, a chaos of rates, a chaos of returns." ("Local Administration," page 14.)

This jungle of institutions is, of course, firmly rooted in the soil by vested interests of all kinds. Every petty board or authority must have its own staff for the purposes of its work, however unnecessarily large or expensive that staff may be.† Confusion, extravagance, waste of time and money, are the necessary outcomes of such a system.

in the United Kingdom." Cassell & Co., 1882. [More as to the history of the question].

2. "Local Government," by M. D. Chalmers, M.A. One of the English Citizen Series. Macmillan & Co., 1882. [More as to what it is].

3. "An Outline of Local Government and Local Taxation in England and Wales," by R. S. Wright and H. Hobhouse. W. Maxwell & Son, 8, Bell Yard, 1884. [More as to the law on the subject].

4. "Local Government and Taxation," by Wm. Rathbone, M.P., Albert Pell, M.P., and F. C. Montague, M.A. One of the "Imperial Parliament" Series. Swan, Sonnenschein & Co., 1885. [A popular exposition of the whole question].

* "Considerations on Representative Government." By John Stuart Mill, chapter xv. London: Parker, Son & Bourn, 1861.

† The Census of 1881 gives the number of officials employed in the business of Local Government as 53,493; and the amount paid in salaries by local

We may start, therefore, with the truism that local administration must be simplified. This chaos of areas, and chaos of everything else, of which we hear so much, must be turned into cosmos. We must have a single area for all local business, administered by one authority, elected on an uniform basis, and exercising identical powers all over the country. Our local burdens must be fairly apportioned; our rates must be unified; and the state of our municipal finances must be consolidated and kept under control.*

It is of no practical moment to us at this juncture to speculate upon, or to analyse too closely, the reasons for the indifference which has heretofore been manifested by the people at large as to the way in which they are locally governed. Mr. Rathbone, M.P., an acknowledged master of this difficult and complicated subject, thinks that our system of local government has by its own exceeding complexity, been guarded from criticism and condemnation.

"So gradual in its development that its history could not be fully given without also giving the whole political and social history of our country; so often amended that the Acts of Parliament relating thereto would compose a very respectable library; so intricate that the local taxation of this realm is raised by no less than three-and-twenty distinct kinds of local authority; yet so rudely constructed that to trace out the relations, the powers, duties, and liabilities of the twenty-three might tax the best-trained legal intellect; so mysterious in its workings that we might safely challenge the most practised man of business to tell even the names of the various local bodies by whom he is taxed and ruled, our Local Government has eluded the general censure, because very few of us could spare time and trouble to find out what it did or where it resided. It has hitherto escaped the fate which must at length overtake every bad government, because it was so bad as scarcely to be a government at all. Yet an intelligent and vigorous local administration is of immeasurable consequence to a free, busy, and highly-civilised country like our own."†

We devote an enormous amount of our national strength to the task of legislating, and we scrutinise with rigour the growth of the national estimates. But we allow our local expenditure

authorities was calculated by Major Craigie in 1877 at fully £2,400,000 per annum (*Journal of the Statistical Society*, vol. xl., p. 282.)

* It is beyond my present purpose to compare the Local Government of England with that of Foreign countries, but a vast amount of valuable information as to foreign systems is contained in the Cobden Club Essays on Local Government, published in 1875 (Cassell & Co.). A more popular account will be found in a paper by Sir Charles Dilke, in vol. xxxvii. of the *Statistical Society's Journal*, pages 313-321.

† "Nineteenth Century," February, 1883.

to increase without question or inquiry, for the very sufficient reason, perhaps, that none of us can see and grasp it, nor control it if we could. Legislation need not of necessity go on, but administration must. Inasmuch as our national health, our national relief of the distressed, our national education, our national internal safety, are in the hands of our local governing authorities, the method in which the administration of such authorities is effected, and its cost, should be matters of very considerable and active interest to us all. Except, perhaps, in large and flourishing boroughs like this, it is a mere truism to say that they are not; that the average citizen, bewildered by the multiple organisations which claim a right to rule over him, and to exact toll from him, gives up the task of unravelling the tangled skein of local government as a hopelessly bad job, and allows local administration to be captured by people who make vestries and local boards the medium of what is expressively termed on the other side of the Atlantic "log-rolling." And as to control of the local finances, the ordinary ratepayer, as Judge Chalmers well observes, "looks on a rise in his rates in the same way that he looks at an increase in his rainfall. Both are matters to be grumbled at, but in neither case does he inquire into causes, and he considers the one as irremediable as the other."

This ought not to be. We ought to strive to attract the best intellects to the service of the community, and to make the office of local councillor a distinction, instead of, as it is in many parts of the country, something of a reproach. We can only do this by making the local council important enough to attract to it men of the stamp we desire to see upon the board. There is but small encouragement for a man of parts to sit upon a school board, or highway board, or sanitary board, to fritter his time away in the discussion of petty details in which he takes little or no interest. Whereas, if all the business of a locality were concentrated in one board, it would be a worthy object of citizen ambition to have a seat at it; and there would be a sufficient variety of duties to find for each member congenial work on one or other of the committees to which the detail business of necessity would have to be confided.

In these boards, too, men would be trained for the larger business of imperial government, and would come to recognise, what so few of our "machine" politicians can be brought to understand, that the other side may have some arguments that are worth listening to, and some ideas that are worth adoption.

Local administration must be simplified.

Reasons for present indifference of citizens as to their Local Government.

Local Administration affects and should therefore interest everybody.

The best intellects should be attracted to the local service of the community.

Training for imperial duties.

It is a little fanciful perhaps, but there is one other aspect of the reform and dignifying of local self-government which I think wants attention. No one can fail to have been impressed with the extraordinary centripetal influence which the Metropolis has exerted over the dwellers in the provinces, since the introduction of railways and improved methods of communication. The huge and overgrown province of houses that we call London attracts to itself more and more people year by year, and tends to suck the life-blood of the intellectual culture of provincial communities. There are many reasons for this. One certainly is that as London arrogates to itself more and more the dictation of everyone's life and modes of thought, provincial interests have ceased to absorb those who fifty years ago were content to have a share in county business, or to do their duty as citizens in some honourable but obscure local office.

Now I should like to see the business of local government exercising an influence that should act centrifugally as regards London, and restore to our local councils that enlightenment and interest which they lack at present. A statistician recently told us that in another 36 years or so, the Metropolis and its outer ring of districts will, at the present rate of progress, contain more than seven millions of people*! One is almost inclined to cry out for the re-enactment of the old statute of Queen Elizabeth forbidding the further growth of London. The struggle for existence grows daily more and more keen; the fight for notoriety and eminence more and more intense and painful. Would this latter not be allayed to some extent if it came to be generally recognised that there was dignity and profit, in the right sense of the word, attaching to the performance of duties in local Parliaments as well as in the National Council? People who in London are nobodies might in the provinces achieve a quite considerable and enviable reputation. If the present centripetal tendency could be turned into a centrifugal one, the happiest results would arise for everybody.

AREAS.

In proceeding to discuss the various directions which reform should take, the initial difficulty, and I am prepared to admit that it is the most formidable one, is that of areas. Mr.

* Mr. R. Price Williams, C.E., Paper to the Statistical Society, June, 1885.

Goschen's oft-repeated and now somewhat thread-bare remark about "the chaos of areas" but feebly expresses the utter hopelessness of affairs at present. A dweller in a town lives in four kinds of districts, none of which are conterminous (unless by accident) with any one of the others. He is governed by six kinds of authorities, and these authorities and their districts are mostly different for inhabitants of different parts of the same town. He has to pay at least four kinds of rates, which are not all assessed on the same principle; and he is subjected to the burden of a number of debts charged on the different areas which happen to include his house. There are a variety of minor matters in which the district authorities and rates are additionally multiplied and complicated, concerning which I cannot now go into details.

A mere enumeration of some of the areas may suffice to show the complication at present existing. We have the parish, the hundred, and the county, the two latter being multiples of the first; the union, which is an area by itself; the urban sanitary district or borough, which also corresponds with nothing, and may intersect any number of parishes, and even more than one county; the highway district, and the School Board district: to say nothing of the coroners' districts, the petty sessional districts, and the electoral districts.

There is a universal opinion amongst those who have had occasion to examine the question of areas in its practical working that the present system is utterly irrational, confusing, and absurd. I could adduce any number of authorities to prove this contention, but it is hardly necessary. I shall content myself with quoting what two Government organisations have to say on the subject.

The Royal Sanitary Commissioners, in their Second Report of 1871, proposed (p. 53) that sanitary government should be committed to one authority in every area, and laid "the utmost stress upon the importance of taking every possible step towards introducing coincidence" of area.

"Unions, and sometimes even parishes, overlapping county boundaries; registration districts making incomplete correspondence with them in statistics of births and deaths; highway districts made optionally, and respectively of all other areas, or coinciding sometimes with one, sometimes with another; petty sessional divisions generally differing from all: cause altogether to a country whose life is self-administration, probably the maximum of embarrassment and waste of local government, and the utmost loss of means and effectiveness."

The Census Commissioners of 1881 complain bitterly both in their first and fourth reports of the trouble caused to them and to their enumerators by the present chaos of boundaries. They observe:—

“England and Wales have been parcelled out at various times in a multiplicity of ways for diverse purposes; and it has often happened that, when a new parcelling out for some special purpose has been in hand, those entrusted with it have laid out their new areas without any, or with insufficient, regard to pre-existing areas of administration. The boundaries of civil and of ecclesiastical parishes, of municipal and of parliamentary boroughs, of urban and rural sanitary districts, of registration counties and counties in the ordinary sense, not to mention numerous other sub-divisions of the country, overlap and intersect each other with such complexity, that the enumerators and the local registrars in a vast number of cases failed altogether to unravel their intricacy. Nor is this to be wondered at, seeing that often no official or authoritative statement of the exact boundary of an area was procurable.”

The census of 1881 shows that fourteen boroughs (Abingdon, Bristol, Burton-on-Trent, Cardigan, Oxford, Peterborough, Stalybridge, Stamford, Stockport, Sudbury, Tamworth, Thetford, Warrington, Yarmouth), and 22 local board or improvement commissioners' districts, are in more counties than one. The number of urban sanitary districts that intersect parishes is too large to be counted without much trouble and exploration.

The urban sanitary district of Mossley comprises parts of four registration sub-districts, parts of four parishes, parts of two unions, and parts of three counties, but only parts of two registration counties. The municipal city of York, which together with the Ainsty is included for parliamentary purposes in the North Riding, is included for registration purposes in the East Riding, and for all other purposes in the West Riding. The parliamentary borough of Stoke-upon-Trent consists of parts of six civil parishes and parts of four unions, and contains four municipal boroughs. Halifax registration district contains one rural sanitary district and 19 entire urban sanitary districts, with part of one other. The boundaries of 13 of these 19 districts do not correspond to any parish boundaries. Bury registration district includes one rural sanitary district, and four entire urban sanitary districts, with parts of three others. There are in this registration district 12 civil parishes or townships, and of these only two are not divided for registration purposes, the other ten being split up so as to have portions in two, three, or more registration sub-districts. Moreover, each of six of the parishes contributes parts to two or more sanitary districts. The parish of Ashton-under-Lyne, at

Examples
of inter-
section of
areas.

the date of the census, contributed parts to no fewer than six urban sanitary districts, and to one rural sanitary district. It also comprised three registration sub-districts, and part of a fourth. The registration district of Crickhowel contains one rural sanitary district, one entire urban sanitary district, and parts of three others. The remaining part of each of these three is not only in a different registration district, but in a different county.

Who can wonder at the despair with which these anomalies and intricacies have filled the hearts of our reformers?

THE NEW UNIT OF LOCAL GOVERNMENT.

Simplification of area and authority is therefore a cardinal necessity. The unit of area should be the same for all local purposes, and larger areas should be as far as possible exact multiples or aggregates of that unit.* This is generally agreed; but as to the proper unit to be taken, opinions differ widely. The parish has been favoured by the earlier reformers, and was indeed proposed by Mr. Goschen in his Rating and Local Government Bill of 1871 as the primary unit of local administration in rural places. But then, to use his own words, he “proposed to reconstitute the parish entirely.”† Throughout his speech he spoke more or less disparagingly of the parish, and apparently only adopted it because it was less objectionable than the poor law union. For organisation this Bill provided a parochial board with nothing very definite to do, except that the chairman was to be civil head of the parish, and vote in the election of a county financial board. It left, without attempting a remedy, the confusion of powers, authorities and areas; and it added another authority.

The milder kind of reformers urge in favour of the parish as the primary unit, that it has a history; that it carries us back a thousand years into the past; that a certain sentiment attaches to it which its rejection as the unit of government would destroy, and last, and most practically important, that it comparatively seldom overlaps the county boundary, and has already been used as the foundation of areas and petty sessional divisions.

* Second Report of Royal Sanitary Commission, vol. I. (C. 281, 1871), p. 54.
† Speech of 3rd April, 1871, on moving for leave to bring in the “Rating and Local Government Bill.” For a full report of this speech see pages 189 et seq., of “Reports and Speeches on Local Taxation,” by G. J. Goschen, M.P. Macmillan & Co., 1872.

Now it is undoubtedly the fact that we can trace the descent of the modern civil parish, through the ecclesiastical parish, up to the old Saxon township.* Some indeed have carried its lineage still higher. But as an administrative unit, the parish is now of no importance whatever. Its varying size and primitive organisation render it unfit for efficient administration; and one by one its governing functions have been taken from it and transferred to others. Its only administrative use at the present day is as the unit for taxation and electoral purposes; all rates included in the poor rate being collected parochially, and the list of voters for Parliamentary and Municipal Elections being also made out parochially. Moreover, parishes are of all sizes and all populations. Their importance, as parishes, dates from the poor law of Queen Elizabeth, and still more from the Settlement Act of Charles II.; and they are further entangled in the question of ecclesiastical organisation, which introduces further difficulty. An enormous number would for one reason or another have either to be grouped together or subdivided, and in that case where is the local sentiment to come in?

There are many parishes with an area of less than 50 acres, and many with an area exceeding 10,000 acres. There are 800 parishes with a population of less than 50 persons, and 6,000 parishes with a population under 300. On the other hand, there is a considerable number of parishes with a population exceeding 30,000. Toxteth Park township contained 109,455 people at the last census. The average population is about 1,500, and the greater number of parishes have a population varying between 200 and 1,000. In 1873 there were more than 1,300 parishes which were not contained in a ring fence boundary, positions of parishes being intermixed with the lands of other parishes. This number has since been reduced under the operation of the Divided Parishes Acts of 1876-9 and 1882, but not very materially.

Again, Urban Sanitary Districts have been, in a multitude of instances, carved out of parishes without any respect for parochial boundaries. What is to be the status of a parish which has part of its area inside a borough and part outside? Another fatal objection is that for most administrative purposes a parish is too small. It would be impossible to get a sufficient number of persons willing and qualified to attend properly to local government if every parish had its separate governing body.

* For a very instructive summary of the early history of our local institutions, see Vol. I., of the present Bishop of Chester's learned "Constitutional History of England." (Oxford, 1874).

Appreciating these difficulties, other reformers have fastened upon the Union as the future primary unit. But here again, any quantity of rectification would be needful before we could get uniformity of area. It is generally felt that any re-casting of our counties is out of the question. The feeling of local sentiment in the case of counties is very strong, and the friendly rivalry between different parts of the kingdom is very important to be kept up. If we were dealing with an absolutely new country with no history, we should no doubt portion it out differently, but we have to deal with an area honourably known to history for a thousand years at least. We have happily not the same reason for abolishing our counties that the French had for converting their provinces into departments at the time of the Revolution: and county boundaries will have therefore in any revision of local government to be respected.

My reason for this apparent digression will be seen immediately. Unions were created in 1834 by a staff of central inspectors whose instructions were to make the best grouping of parishes that could be devised, but at all events to get the principle of poor law union

accepted in some form or other. As I am not sure that people at large understand the way in which these unions were carved out, believing that there must have been some geographical or topographical principle underlying their formation, I think it well, in order to dispel any illusions on the subject, to disinter from the evidence given before the Royal Sanitary Commission the plain statement of Sir John Lambert, the late Secretary of the Local Government Board, than whom no one was more familiar with the facts. According to Sir John's evidence*, at the period when the country was divided into Unions, the Poor Law Commissioners sent assistant commissioners down into all parts of the country to make inquiry as to the most convenient way of arranging groups of parishes into unions having regard to the area: that it should not be so extensive as to create inconvenience in the administration of relief, and that the population of the parishes to be united should be sufficiently extensive to warrant the formation of a union. (Q. 4671). As a result of that grouping, there was a great difference in the population of unions, arising in many instances from the fact that some districts were very extensive and had a very small population in them, whilst where a population was found entirely homogenous and formed one community, it would be embraced in one and the same union. (Q. 4672.) But in the formation

* First Report of the Royal Sanitary Commission, page 259.

of a union there were other things that had to be taken into account, such as the existence of local Acts and the difficulty of obtaining the consent of certain persons where those local Acts were in force; so that it was found not only expedient but necessary in a number of instances to depart from some of the general principles that had been laid down. (Q. 4673.) The assistant commissioners placed themselves in communication with the principal residents, landowners and magistrates in the district, calling a meeting and proposing their plan, hearing what objections there were to be made to it, and what suggestions offered for its improvement. They then made their report to the Poor Law Commissioners, who under the act of 1834 had absolute power to unite as many parishes as they thought proper into a union, except in those cases where parishes were under local Acts, when they had no such power. (Q. 6474.) But when they recommended combination into unions, where that combination was carried out, regard was had to local feeling irrespective of the localities. (Q. 6475).

It would be difficult to find any process of area-making more elastic or squeezable than this. And what is the result? At least 176 out of the 617 extra metropolitan unions, or considerably more than a fourth, cut into the boundaries of counties, often in the most complicated way. Twenty-nine unions are in three counties each, and four in four counties each; only eight of the 617 unions are co-extensive with municipal boroughs. Only two counties (Northumberland and Cumberland) have their boundaries co-incidental with those of unions. The unions vary in size from West Derby (Lancashire), with a population of 360,000, down to Sedbergh (Yorkshire) with 4,000, and Hoo (Kent) with 3,100 inhabitants.

These unions are moreover whole and undivided only for poor-law purposes. For sanitary purposes their area is diminished by nearly 1,000 boroughs and urban sanitary districts, which intersect unions as well as parishes in the most perplexing manner, are of all sizes and populations, and have had their boundaries settled on no regular and systematic plan.*

* Mr. Hagger's description of Liverpool at the Poor Law Conference of 1877 has often been quoted, but it so powerfully supports my argument that I may be pardoned for re-producing part of it here:—

"When the country was divided into unions, the parish of Liverpool, which was then conterminous with the municipal borough of Liverpool, was formed into a separate poor law district as a single parish, and twenty-three of the surrounding townships were formed into the West Derby Union. Subsequently the municipal borough was extended, so as to include two of the adjacent townships and portions of two others. Then the township of Toxteth Park was separated from the West Derby Union, and formed into a distinct poor-

To adopt the Union as the primary unit would therefore involve first of all the rectification of the areas of at least a quarter of the Unions, and a decision as to the merging of a large proportion of the smaller urban districts. This task could only be usefully attempted if there were a reasonable chance of unions becoming effective administrative areas: and in my view, the adjustments would have to be so numerous that nothing but the husk would remain of the working capacity, which is after all the great argument in favour of the unions as areas. Moreover, the grouping which might have been convenient fifty years ago has become inconvenient or not so convenient as others, through changes of population, and the development of railways and other means of communication, so that unions are not entitled to any special consideration on the head of convenience.

It is no doubt true that boards of guardians are the only bodies which at present have the elements of local organisation strongly developed; but they are not bodies that are much looked up to, and the same or a stronger common life would rapidly centre round any other district more convenient than the union upon which the same or wider powers were conferred.

The petty sessional district and the highway district may be dismissed at once. They are of all sizes and shapes, and have nothing to recommend them from the sentimental point of view. Hundreds, on the other hand, have a very old and honoured history; but they are now so split up into fragments that their revival as a unit for reformed government would be out of the question. The only remaining area which is possible is that suggested by Mr. B. F. Lock, in his paper read before the Social Science Congress in 1880*: a paper admirably clear and well-reasoned. Mr. Lock argues at some length in favour of the electoral divisions under the Ballot Act, which have been specially planned since 1872 for the purpose of convenience of access and facility of locomotion, all being grouped round a town or large village.

law area, under a separate board of guardians. There have been also formed within the same area eleven local board districts and a second municipal borough, that of Bootle. Thus, there are within this area—which is practically that of the West Derby Union—two municipal councils, three boards of guardians, eleven local boards of health, twenty-four bodies of overseers; and there are besides five burial boards, two school boards, and one highway board, making a total of forty-eight local authorities acting in complete independence of each other; the complication being increased by the fact that a single board exercises its different functions over different areas. Thus, the West Derby Board of Guardians have control over the whole twenty-two townships in the union for poor law purposes, whilst they are the rural sanitary authority in only ten of them, and the educational authority in eighteen and a half."

* Transactions of the Social Science Association for 1880, pages 697 *et seq.*

Speaking generally, I find much to approve in Mr. Loek's scheme; but I do not think we have at present the materials for assessing the workability of these respective suggestions.

It appears to me that a first step in the reform which we hope to attain is the institution of a Boundary Commission, with instructions to examine in detail and geographically the various areas now in force in each county, and to see how far they can be harmonised and unified on one comprehensive plan. The really wonderful way in which the recent Boundary Commission got through their very laborious and delicate work, and the surprisingly universal acquiescence in their decisions throughout the country, seems to me to be of the very happiest augury for the success of a similar Commission for settling the areas of local government. Some words, in fact, of Sir Charles Dilke would seem to imply that there was, at one time at any rate, an idea of extending the functions of Sir John Lambert's Commission with this view. The Commission is still being kept alive, possibly with some object of future usefulness, and I can imagine nothing more fitted to expedite the reform of local government than the inauguration of a Boundary inquiry such as I have suggested.

In settling the areas for local government, regard should be had not only to the symmetry of the area, but to the natural characteristics and boundaries of the locality and the class of inhabitants that dwell in it. Dr. Rumsey gives, in one of his works,* a striking instance of contrariety in the selection of areas for registration purposes:—

"The Forest of Dean is an extensive district, of remarkable geological formation, bounded on two of its three sides by important rivers, and inhabited by a distinct class of people, living for centuries past under peculiar laws and local customs, and now largely employed in mining and metallic works. One might expect that the published statistics of mortality and reproduction in the Dean Forest would throw some light on the physical and sanitary condition of its inhabitants. But the census and registration returns give no precise information on the subject, and not only do those districts (unions) which contain most of the Forest parishes, include other parishes, outlying and different in kind, but no fewer than twelve of the real Forest parishes, with a total population of more than 20,000, are included in unions belonging to the adjacent 'Registration counties' of Hereford and Monmouth. Nor do the Forest portions of these unions constitute separate sub-districts, so as to admit of being again grouped together for statistical returns. To determine, therefore, the longevity, mortality, and sanitary

* Essays and Papers on Some Fallacies of Statistics. By Henry W. Rumsey, M.D., F.R.S. Smith, Elder, and Co. 1875. (Page 3).

Boundary Commission should be appointed.

In settling areas regard must be had to characteristics of locality.

state of this singular people would require a new territorial distribution of the population, and a new compilation of primary facts."

Another and very obvious point would be that the district must be important enough to treat the problems of government in a scientific spirit, and at the same time compact enough and manageable enough to ensure the practical and business-like supervision of details.

PRIMARY AUTHORITIES.

For each of the existing areas there is of course an authority fulfilling functions more or less important. But I doubt if many people know or appreciate the astounding number of separate organisations that now exist for one or another purpose of local government. A recent Parliamentary return (No. 96 of 1885) gives some figures on this head which may be worth reproducing. For 1882-3, accounts were received from the following number of local authorities in England and Wales:—

Poor Law Boards of Guardians	617	Bridge and Ferry Trustees.....	29
Overseers of Poor Law Parishes	14894	Metropolitan Sanitary Authorities, &c.	45
County Authorities	63	Commissioners of Sewers (Extra Metropolitan)	54
Municipal Corporations	247	Drainage, Embankment, and Conservancy Boards	178
Urban Sanitary Authorities ...	970	Churchwardens (Church Rate Accounts)	182
Rural Sanitary Authorities ...	577	Harbour, Pier, and Dock Authorities	62
Port Sanitary Authorities	47	School Boards	2115
Joint Boards.....	21	Highway Authorities (Rural Sanitary Districts)	6890
Burial Boards	882	Turnpike Trustees	113
Commissioners of Baths and Washhouses	12		
Lighting and Watching Inspectors	187		
Markets and Fairs Commissioners	7		

Or a total of 28,222 authorities in all, levying at least 18 different kinds of rates.

The *relief of the poor* is looked after exclusively by boards of guardians, who also control, as such, public vaccination, the registration of births, deaths and marriages, assessment for poor rates, attendance at elementary schools where there is no school board, and the charges of pauper lunatics. Most of the work that we are accustomed to class as "sanitary" is performed by town councils, local boards, or other urban authorities; or in default of such, by boards of guardians acting as "rural sanitary authorities." The powers of rural are not so great as urban authorities. Both are responsible for water supply, sewerage and drainage, the inspection and prevention of nuisances, and the limitation of the spread of infectious diseases. But an

Distribution of duties amongst these local authorities.

urban authority has in addition powers as to town improvements, lighting, maintenance and regulation of streets and roads, new houses and the like, which are not possessed by rural authorities.*

The *highways* are now under a variety of jurisdictions. There are (a) the highway "parish," (b) the highway district, and (c) the district of an urban or rural sanitary authority exercising highway powers. About 6,000 parishes now separately maintain their own highways. There are about 362 highway districts, composed of some 8,000 rural parishes combined for highway purposes. Every urban sanitary authority is, by virtue of the Public Health Act, the exclusive highway authority within its district; but rural authorities do not, as a rule, exercise any highway powers, though they may be invested with such powers under the Highways and Locomotives Act of 1878.

The maintenance of *elementary schools* may be either under the care of school boards elected *ad hoc*, the area for which boards is always a borough or poor law parish. When a school board is not desired, primary education is placed under the supervision of a school attendance committee. In boroughs this committee is appointed by the town council, in urban sanitary districts by the local authority, and in rural districts by the boards of guardians.

It might have been thought that the guardians of the public health would have been the fittest authority for securing the proper and decent *burial of the dead*. But even here our passion for multiplying authorities manifests itself. The boards to whom we commit this lugubrious function consist of a committee of ratepayers nominated by the vestry; though the board once appointed has power to fill up its own vacancies, and thus can arrogate independent functions. The Burial Acts may also be adopted by any poor-law parish, or by any ecclesiastical parish, or by any township or district, although embraced in a common-law parish which has already a burial board of its own. And when any portion of a common-law parish has acquired a separate burial board, the remnant of that parish is entitled to have a similar board.

The duties of the other local authorities mentioned in the above list scarcely call for detailed description.

Unification of Authorities.

It has been argued against the proposed unification of local authorities, that the duties now performed locally are so diverse that they could not all be fulfilled by the same body. As

* This senseless and utterly unnecessary distinction should at once be swept away; indeed, with a revised local authority there would be no place for it.

well might one say that because the objects of Imperial Government are many and varied, therefore we should have a separate ministry to look after the Army, another for the Navy, another for the administration of justice, and so on. We have only to imagine each department of state "working by itself, drawing up a detached budget of its own, for its own independent parliament, and obtaining for itself the grant of a separate income-tax," which would be the strict Imperial analogue of our present local system, to reduce this argument to an absurdity. No doubt in the future the affairs of the unified local authority would fall more and more under the immediate supervision of committees acting in its name, though responsible to it; but this is only applying to local administration principles of division of labour, which hold good and work well in every other department of industry.

It is contended, too, that this unification of area, this suppression of the myriad petty authorities that now divide amongst themselves the duties of local government, would render useless all the machinery that has been forged at so great a cost, and destroy many old and valuable historical associations. Not at all. No machinery that was worth preserving would be thrown aside.

We should only fit new motors to it in place of those that were old, worn out, and unfitted to present circumstances. As to historical associations, what halo of sanctity clings round the poor-law union that we should gaze at it with bated breath, and hesitate to invade its sacred area? It is a

creation of fifty years old, which until twenty years ago had no common life growing up around it. The parish is unfitted, from its diversity of size and population, to become the unit of local government, and, moreover, the course of all recent legislation

has been to deprive it of such powers as it formerly had. Highway areas are largely co-extensive with parishes. Local boards are barely twenty years old; rural sanitary boards only thirteen years old; school boards fifteen years old. Why should we be thought to lay sacrilegious hands upon local government in the abstract, because we propose the amalgamation and co-ordination of these manifold, intricate and irrational organisations?

Let our reformers take heart at what was done fifty years ago for the reform of municipal corporations. The circumstances of 1835 and 1885 are in many respects strikingly similar. At both periods there has been a reforming spirit in the air. Having put the Imperial Government in order in 1832 by the

Arguments against unification.
Unification does not mean destruction.
Present authorities are nearly all of modern growth.
Precedent of reform of Municipal Corporations in 1835.

passing of the great Reform Act, our legislators set to work to attack municipal government, or rather misgovernment, which then existed in rank luxuriance.*

Shall I affront your Leicestral susceptibilities by reminding you that during the election of 1826, the then unreformed corporation of Leicester spent £10,000, and mortgaged part of their property to secure the return of a political partisan? †

The Municipal Corporations Act of 1835, whose jubilee was celebrated on the 9th instant, swept away all the manifold abuses that then disfigured municipal government, and provided, instead of an infinite variety of rotten and antiquated charters, an uniform constitution for all boroughs to which it applied, based on the model of the best administered municipal corporations existing at that time.

We have just undergone, though with an entire absence of the excitement and rioting of fifty years ago, an equally profound change in the character of the Parliamentary electorate. The marvellously quiet manner in which that change has been brought about, and its now universal acceptance by all parties, lead one to hope for a similar greeting to and acquiescence in any well-devised system of reform which shall bring unity, efficiency, economy, and a better reflection of the popular views into the counsels of local governing bodies.

On this subject of unification of area and functions, Mr. Mill's remarks are peculiarly *appropos*. He says:

“In each local circumscription there should be but one elective body for all local business, not different bodies for different parts of it. Division of labour does not mean cutting up every business into minute fractions: it means the union of such operations as are fit to be performed by the same persons, and the separation of such as are better performed by different persons. The executive duties of the locality do indeed require to be divided into departments for the same reason as those of the state; because they are of diverse kinds, each requiring knowledge peculiar to itself, and needing, for its due performance, the undivided attention of a specially qualified functionary. But the reasons for subdivision which apply to the execution do not apply to the control. The business of the elective body is not to do the work, but to see that it is properly done, and that nothing necessary is left undone. This function can be fulfilled for all departments by the same superintending body; and by a collective and comprehensive far better than by a minute and microscopic view. It is as absurd in public affairs as it would be in private that every workman should be looked after by a superintendent to himself. The government of the Crown consists of many departments, and there are many Ministers to conduct them, but

* For details of some of the scandals then rife in the administration of Municipal Corporations, see *Sanitary Record* for September, 1885.
 † Report of the Commissioners on Municipal Corporations, 1835, page 54.

those Ministers have not a Parliament apiece to keep them to their duty. The local, like the national Parliament, has for its proper business to consider the interest of the locality as a whole composed of parts, all of which must be adapted to one another, and attended to in the order and ratio of their importance.”*

Position of Large Boroughs in Scheme of Local Government.

An obvious criticism on the proposed amalgamation of all duties of local government in the hands of one authority would be the impossibility of carrying it out whilst populous boroughs were maintained as separate organisations. Certainly no one would wish to destroy corporate activity in large cities, and I am prepared to admit that the performance of all local functions in a town like this (Leicester), for example, by one single board, would be a serious, perhaps too great, a strain upon its members. For a great corporation to be under the control of the County Board (to be presently spoken of) of hardly, if at all, superior rank to itself, would be justly felt a grievance, and would deter good men from coming on the council. Seen at close quarters, however, these difficulties disappear. All that is necessary is to make each large town of say more than 100,000 inhabitants a “county” by itself, as is already the case in 19 towns† of very various populations for a different reason. And, after all, there would not be more than 30 places at the outside that would require this exceptional treatment. The Registrar General gives us weekly returns as to London and the 27 largest towns in England and Wales. These and their estimated populations in the middle of 1885 are as follows:—

Towns.	Popula- tion.	Towns.	Popula- tion.
Birkenhead	93,093	Liverpool	579,724
Birmingham	427,769	Manchester.....	337,342
Blackburn	112,574	Newcastle-on-Tyne	153,209
Bolton	110,085	Norwich	91,215
Bradford.....	214,431	Nottingham	211,424
Brighton.....	114,672	Oldham	126,390
Bristol.....	218,169	Plymouth	76,045
Cardiff.....	97,031	Portsmouth	134,659
Derby	89,691	Preston	100,406
Halifax	77,378	Salford	204,075
Huddersfield	87,327	Sheffield	305,716
Hull	186,292	Sunderland	125,327
Leeds	333,139	Wolverhampton	79,185
Leicester	136,147		

* “Considerations on Representative Government.” By John Stuart Mill, pp. 273-4. London: Parker, Son and Bourn, 1861.
 † It may be useful to give the names of these 19 cities and boroughs which

In these towns, then, the major authority should possess all the attributes of a County Board as subsequently defined. Whether the detailed work of the local administration as to health, medical relief of the poor, education, highways and the like could be better accomplished in such towns by a wholesale delegation of powers and duties to committees, or whether it would be preferable to appoint sub-authorities for wards, corresponding in their functions with the "primary authorities" in less populous places, may be left for future consideration.

Perhaps it might be possible in counties where there were a good many considerable towns below the 100,000 population provisionally fixed upon as the limit for a County Authority, to clothe them either alone or in combination (though in the latter case local jealousies would be sure to arise) with similar County powers. The boroughs still smaller, which would no doubt be the most tenacious of their franchises, need not be absolutely destroyed. No sentiment has yet gathered round a local board district or a poor law union. But a borough links us in a way with the past, and I have not the least desire to do away with what a little girl once identified with the "poms and vanities of this wicked world"—the Mayor and Corporation going to Church in full regalia. The boundaries and boroughs would of course have to be altered where necessary so as to fit in with the new primary areas to be settled by the Boundary Commission; but otherwise their organisation might be retained, added splendour being given to their deliberations by the accession of new and important duties.

For the "primary areas" in the new dispensation which will not be boroughs, the excellent name of baronies has been suggested by Mr. Benjamin Fossett Lock.* "Barony" is the "Baronies." Norman successor of the old Saxon "hundred" (which name cannot be used as it would conflict with the actual hundreds that still exist for some purposes), and it is a name common to England, Scotland and Ireland. Indeed in the latter country it is of some considerable importance; and its adoption for our new "primary area" may I think be unhesitatingly approved.

are separate counties (sometimes called *counties corporate* as contrasted with *counties at large*), though the dignity is of no particular legal importance at present, except that they elect their own sheriffs.

Counties of Cities.—Bristol, Canterbury, Chester, Exeter, Gloucester, Lichfield, Lincoln, London, Newcastle, Norwich, Worcester, York.

Counties of Towns.—Berwick, Carmarthen, Haverfordwest, Hull, Nottingham, Poole, Southampton.

See p. 71 of "Justice and Police," by F. W. Maitland. (Macmillan & Co., 1885).

* Social Science Transactions, 1880, page 701.

Constitution of Primary Authorities.

Having settled our area of local government, the next point should be the constitution of the administrative body and the mode of its election. As to this there is not much to be said. It has already been argued that for all local business there should be one authority, and one only. Municipal corporations, local boards, highway boards, boards of poor law guardians, school boards, burial boards, and the other boards that now vex the soul of the ratepayer would disappear as such, their functions being all performed by committees of the unified local authority. So that we should at once sweep away all those extraordinary variations in the qualifications of local councillors and in the mode of their election, which the ingenuity of the draftsmen of different Acts has devised. It would be impossible to explain these permutations in a connected statement, and I would therefore refer enquirers to a very useful table which was prepared in the office of the Local Government Board for the use of a Select Committee of the House of Commons of 1878, on the election of Poor Law Guardians. Town councils are elected on the 1st November, local boards in the first week of April, highway boards on the 25th March, and school boards at any time of the year. School boards once elected endure for three years; Highway boards and boards of guardians only for one year; whilst in town councils and local boards one-third of the members retire every year. The rating which gives a man only one vote for a town councillor, may give him six when he is voting for a burial board, and an intermediate number when he is voting for a board of guardians. Sometimes a ratepayer can vote by filling up a paper, whilst at others he must attend at a polling station; sometimes he gets placed on the voting list without any personal trouble, at others he cannot vote because he has not made a formal claim; sometimes the voting is conducted openly without concealment, whilst at others it is secret, and a divulging of the way in which a vote has been given may invalidate it and get the voter into trouble. For school boards no qualification is required for candidates; they need only be ratepayers to serve on burial boards and highway boards; but for town councils, guardians, and local boards they must be rated in amounts which are different in each case. There is no sort of justification for all this variation and confusion.

"The system is extravagant in time, in men, and in money. A further and more serious evil, consequent on the dispersion of functions, is this: the

number of capable men able and willing to take part in local government is limited. The numerous boards therefore have to be filled up with very indifferent material. A locality which might well furnish a single board of competent men, is quite unequal to provide four or five such boards. Besides the very limited sphere of usefulness which is open to a man who serves in any one of the existing petty boards, effectually deters many good men from coming forward.*

What we want is one uniform system of voting, election, qualification and tenure of office. This would be provided for by our unified authority. Each rate-payer should have a vote, but only one, and those qualified to vote should be qualified to be elected. This would put working men in a position to get their special wants met, and their special difficulties recognised and provided for. The representation of owners opens up large questions of the incidence of local taxation, into which it is beyond my present purpose to go. But whatever financial reforms may take place with regard to local burdens, it seems inevitable that the owner as well as the occupier will have to take his share of direct local taxation, and in this case he would be clearly entitled, as it would certainly be to his interest, to have a voice in the election of local representatives.

Duties of the Primary Authority.

On this subject it is not needful to go much into detail; it must suffice to say that to the new local authority should be transferred all local functions which primarily affect the particular district alone. The conservation of the public health in its broadest sense, including, for instance, in that term, the giving of medical relief to the poor, the supervision of public vaccination, the registration of births and deaths, and the burial of the dead, the elementary education of the young, the maintenance of the highways, and generally all matters affecting the well-being of its constituency, should all be under the management of this authority. The law should everywhere be uniform. Powers now only given to urban authorities in one case, and to places over 25,000 population in another, should be granted universally. The senseless and mischievous limitation of the powers of so-called rural authorities should be broken down. In most of the clauses in the Public Health and other Acts in which *may* appears, *shall* should be

Uniform system wanted of voting, election, qualification, and tenure.

Conservation of the public health.

Law to be uniform.

* Judge Chalmers on "Local Government," page 23.

substituted for it. It would not of course be needful that every power given should be exercised to begin with; but it should be there, and the scandals of unrestricted and unregulated building by jerry-builders in the so-called "rural" outskirts of great towns should be made impossible.

I need hardly say that a considerable experience and study of public medicine has shown me a number of defects in the law which I should like to see remedied. But the imperfection of our present code of legislation is not so much my theme to-night as the imperfection of our present system of administration. I do not therefore propose on the present occasion any detailed criticism on particular points of law, but shall confine myself as far as possible to statements of principle.

Staff of Primary Authorities.

At present every local authority that now exercises lilliputian sway over a portion of our social life has its staff of officials, the collective salaries of whom are out of all proportion to the work done. Such officials receive remunerations which may appear little more than nominal, but which total up to an enormous aggregate. The amount paid in salaries by local authorities has been calculated by a competent authority at something like two and a half millions sterling per annum. A retaining fee of £10 or £20 simply means that a man does local government work with his left hand when he has time to spare from the pre-occupations which constitute his means of livelihood. In our unification of area and authority there would be no need for this huge undisciplined army. Officials should be required to devote their whole time to the duties of their office, and should be paid a salary which would attract intelligent and business-like men to accept such appointments. I am of course now speaking of the non-technical officials, such as clerks, rate collectors, assistant overseers, relieving officers, registrars, school attendance officers, sanitary inspectors, surveyors and the like. These appointments would not endure in their separate and fragmentary form. They would be consolidated and re-cast, and one official would in future exercise the functions of a good many of the present officers—in sparsely populated areas, perhaps all of them. The only professional officers which of necessity need be attached to the primary authority would be a legal adviser, who would probably, as a rule, act as the clerk or secretary to the authority, and might also exercise the functions of superintendent registrar;

Army of present Local Government officials.

Professional officers of local authority.

and a medical officer, who would look after the sick poor, and act as general medical adviser to the authority on ordinary matters of health. The latter would be in communication with the superintendent medical officer of health, to be presently referred to; would send him notice of all attacks of infectious diseases; and would take of his own motion such immediate action as to outbreaks and as to nuisances as might be necessary to set the ordinary health law in motion. He would also act as factory surgeon under the Factories and Workshops Act of 1878. But he would not himself make any recommendations as to new works or schemes of sewerage or water supply to the local authority. He would express his views to the medical officer of health, and the latter would then make inquiry and report on the subject.

THE COUNTY AUTHORITY.

Necessity of an Authority intermediate between Local and Central Authority.

At the time of the earlier agitation for the reform of local government, to which I referred in my opening remarks, there was less unanimity than at present as to the necessity of an authority intermediate between the primary and central authorities. Although a great majority of the witnesses before the Royal Sanitary Commission spoke in favour of such an authority, the Commissioners themselves did not recommend its creation.* Their opinion is now, however, of little more than historical interest, as the arguments against the establishment of an intermediate authority have been disproved by all subsequent experience. Practically the only witness of any weight that spoke against intermediate authorities was Mr. John Simon, who then held the post of Medical Officer of the Privy Council. Even Mr. Simon thought it possible that the county magistrates "might advantageously act for some special health purposes, and also where the administration is to be over a larger area than that of Unions" (Q. 1828). But in the administration of the nuisance law he thought "there ought to be no successive local authorities, that there should be but the one responsible local authority and the central government to look after it."

It is evident from this answer, and from the fuller views as to the laws and administrative agencies contained in his Eleventh

* Second Report, vol. i., p. 54.

Report to the Privy Council (1868), that Mr. Simon, in expressing a view antagonistic to intermediate authorities, was not contemplating that general reform and unification of local government now in question. He thought that as regarded health matters it would be inexpedient that anything should come between the central authority and the local board in bringing what the latter was doing to the notice of the former. "It would intercept communication rather than promote communication, and diminish the force of stimulation rather than give it effect." (Q. 1973). It has, however, to be remembered that in those days it was thought possible to create a central authority that should directly influence, and, so to say, interfere in the every-day business of local authorities. This bureaucratic dream must since have been effectually dispelled. No one disputes that a power in reserve against recalcitrant, idle, or wasteful authorities is of the highest importance, and that a central office for the purpose of harmonising and assisting local action may be of real helpfulness to the country. But anything more than this, any general supervision or interference in the ordinary functions of a local authority by a department of government, has always been resented, and always will be.

At the same time, there are many matters which require joint action or an area larger than the "primary area" for their proper performance. It has been found enormously difficult to get local authorities to voluntarily combine for any joint purpose whatever; and when they are compulsorily combined, it stands to reason that they are not particularly anxious to make the combination a success. There are perpetual bickerings and struggles for supremacy, and the last state of that joint area gets to be worse than the first. Witness the difficulties which have arisen in the combinations for the appointment of a medical officer of health debarred from private practice. One combination after another has fallen through, and the unfortunate health officer cast adrift. The bond which keeps together those that remain is but a rope of sand.

Our primary areas need, therefore, a multiple of some kind to which shall be delegated certain larger functions that an ordinary local authority cannot with economy or efficiency carry out by itself. Such stimulation to activity on the part of the primary authority as is ordinarily necessary could be accomplished by the machinery of the authority for the larger area in a way to be presently explained, and as the county authority would consist

Interference by central authority in every-day local business.

Difficulty of arranging combinations.

Primary areas require a multiple.

largely of delegates of the primary authorities themselves, there would be less restiveness at such control than at that exercised by permanent Government officials sitting at desks in Whitehall, with little or no knowledge of the practical difficulties in any particular case. When I come to discuss the functions of county boards, I think it will be seen that there is a quantity of good and useful work for them to do, and that their establishment would ensure greater economy and efficiency in our local administration. I content myself therefore for the present with a simple statement of the need for the establishment of an authority intermediate to the primary and central authority.

Inasmuch as sanitary matters form so large a part of the duties of local self-government, it would clearly be desirable that in any mapping out of the country for administrative purposes, the configuration of the country most adapted for sanitation should be studied and as far as possible followed. For the reasons already given, it would, I think, be impossible to adopt as our "intermediate area" anything else than the county, which has many generations of useful work to recommend it, and is hallowed by historical associations which we cannot lightly set aside. Short of an absolute re-arrangement of the whole country, which this century at all events is not prepared for, and which appears in any case to be unnecessary, the only alternative to the country as an "intermediate area" is that of the watershed. Now there is much to recommend a watershed as an area for sanitary purposes, and, as Mr. Tom Taylor well observed in his evidence before the Royal Sanitary Commission, a watershed board, if we were absolutely free to choose, would be most naturally fitted to be the intermediate authority.*

Sir Henry Thring, the Parliamentary Counsel, would establish a conservancy board over a whole river basin; Sir Robert Rawlinson would map out the whole kingdom by its watersheds under River Conservancy Boards, and put each tributary river area under a Sub-Conservancy Board, the entire organisation being under one Central National Conservancy. The Town Clerks of Liverpool and Manchester, Dr. Rumsey of Cheltenham, and Mr. Bailey Denton, gave evidence before the Commission to much the same effect. But none of these gentlemen, except perhaps the last, whose view was that "there is no other proper division of the country than watershed divisions" under the control of Conservancy Boards (Q. 4848), seem to

* First Report, page 20. Q. 223 *et seq.*

have looked upon these latter if erected as anything else than special boards formed for definite purposes of arterial drainage, water storage, and river protection. They did not contemplate their acting for all purposes of local government as what Mr. Tom Taylor called a "buffer" between the local and the central authorities.

It is one argument against counties as intermediate areas that they are so various in size and population. But has anyone thought at all of the varying sizes of watersheds? The table given in the Appendix (a), which I borrow from Mr. Bailey Denton's evidence, is conclusive, I submit, of the impossibility of our looking, in these latter days, upon a "watershed area" as a practical factor of local government. For instance, the Thames and its tributaries pass through ten counties; the Trent and Derwent through seven counties; and the Cambridgeshire Ouse through nine counties. No divisions of the country such as these could be tolerated at the end of the nineteenth century, at the expense of all existing areas.

Constitution of Intermediate Authority.

For reasons which have already been discussed, the intermediate area must be the county. But if we were to make the present administrators of county matters, viz., the justices, into the "County Board" which is in everyone's mouth, and to the establishment of which both political parties are more or less committed, we should be met with the objection that the justices are in no sense delegates of the people. They are the last surviving relic of the feudal system in this country. They derive their power from the Crown itself, and the popular voice has nothing whatever to do with their appointment. Practically they represent but one class of the community—the landlords; and tenants and ratepayers have for years, almost for generations, been clamouring for a share in county government.

A good many proposals have been made as to the constitution of county boards. They have mostly attempted the grafting of such boards upon our existing system of local government, and were therefore foredoomed to failure. The erection of one unified local authority for each "primary area" makes the constitution of county boards easier. Notwithstanding the arguments which have been put forward for making these boards directly elective by the ratepayers, I am inclined to the belief

that a more sober and reflective administration of county matters will be achieved by making the members of the county boards delegates of the primary boards; i.e., that each of the latter should choose a number of members for the county board, proportionate to the size and importance of its district, from among its own members or those ratepayers qualified to act as such. Mr. Goschen suggested in his Rating and Local Government Bill of 1871, that to delegated members of this kind should be added an equal number of magistrates chosen by the Quarter Sessions; and Mr. Selater-Booth made a somewhat similar proposal in his County Government Bill of 1878, though he did not propose the development of the county board or any of her organisation. If it be necessary that there should be an infusion of the magistracy in these county boards, a point which is open to argument, but which is too complicated to enter upon here, then, I think, a proportion of one-third would be quite sufficient to meet all views.

County Boards to consist of delegates from primary Boards.

Infusion of magistracy in County Boards.

Duties of County Authorities.

The duties of the County Board have next to be considered. In the first place, they would take over all the administrative business at present performed by the quarter sessions, except that of the control of the police, which being a department of the administration of justice, should be kept apart from the administration of the public health. The former is primarily a matter of Imperial concern, the latter is primarily a matter of local concern only. The purposes of the present county organisation are of two kinds, Imperial and local. Included in the first are: the maintenance of the peace, the reserve forces or militia, the administration of justice, including the control of the police, and parliamentary representation. Amongst the duties of local government now performed by the county magistrates, are: the management of bridges and main-roads, the control of lunatics, licensing of houses for the sale of intoxicating liquors, licensing of knackers and others, the execution of the Contagious Diseases (Animals) Act, including the inspection of dairies and milk shops, the regulation of weights and measures, the adulteration of foods and drugs, the registration of voters, and the control, by way of appeal or otherwise, of minor local authorities. All the duties of the second class would be transferred to the new County Board.

Purposes of present County administration.

But there are many additional functions which may properly be transferred to it. In the first place, I think that—much as the county has to provide and administer lunatic asylums—it should take up also the control of all workhouses and pauper infirmaries in the county, and administer in-door relief. I cannot myself see what essential connection there is between providing food and shelter for the poorest and weakest members of the community, and giving temporary medical or other relief to those suddenly struck down by sickness or misfortune. The proper organisation of what is now called the “poor law” is a subject of great complexity, which has exercised the minds of some of our best administrators. I cannot now go into details with reference to it, but it seems to me that its solution would be immensely simplified by a definite rupture of the two kinds of municipal assistance to the individual now known by the names of “in-door relief” and “out-door relief.” The latter is a fair object for the consideration of the primary authority; the latter is a matter affecting more closely the county at large, and needing for its proper administration an area larger than that of the primary authority. There could not be a workhouse for each of these, and there must of necessity be combination. Let workhouses therefore be—as lunatic asylums are already—provided and administered by the county authority. Medical and other “out-door” relief would still remain in the hands of the primary authority, and, divested of its poor-law taint, might be made, under a judicious system of combination with provident dispensaries, a valuable means of encouraging self-help among the poor.

Additional functions for County Board.

In-door relief.

Workhouses.

Unfairness of present Poor Law Rating.

Workhouse test.

Financially, too, this transference of in-door relief would be an advantage. Nothing is more anomalous or unfair than the poor law rating as at present practised. Let us suppose a town which, together with certain rural parishes around it, forms a poor law union. The town contributes by far the greater proportion of the paupers, but the incidence of the poor rate is not thereby made heavier on the town than on the rural parishes. All pay alike, so that the rural people help to lighten the poor law burdens of the urban. And to make the matter still worse, a farmer is rated upon a system that may make his assessment greater than his whole income, whilst a tradesman in the town probably pays only on a part of his income. These inequalities would be less severely felt if all in-door relief were transferred to the county boards; and the “workhouse test” which has so diminished out-door relief when

guardians are in earnest about it, would tend to become more generally applied if the expenses of pauperism could be thereby shifted from their own shoulders to that of the county at large. The success of the Metropolitan Poor Fund under Mr. Hardy's Act of 1867 ought, I think to give us some encouragement in spreading the expenses of the maintenance of in-door paupers over a larger area than at present.

The present state of the highway law is very unsatisfactory. A bridge is under the control of the county; the roadway which it was erected to support is under the control of the highway board. "Main roads," a new class of highways invented in 1878, are under the care of highway authorities, but the county has to pay half the expense of their maintenance, and has also some general powers of control over highways. In the revised arrangements all main roads and the bridges over which they run should be under the definite control of the county board. All other roads and bridges should be under the local authority.

The county authority would also have to watch and from time to time to intervene in enquiries and legislation affecting watersheds, drainage, and rivers.

These are definite duties, in which there would be no possibility of overlapping of jurisdiction between the primary and intermediate authorities. Nicer questions would arise when a duty primarily devolving upon a local authority, such for instance as the provision of sewerage or of a proper water supply, was plainly beyond its unassisted powers. In such cases the county authority, which would be cognizant of these difficulties through the agency of its officials, to be presently referred to, should have power to combine two or more authorities for a definite sanitary purpose, and to apportion the expense of the necessary works amongst the jurisdictions concerned. Where one authority obstinately refused to join in a work that was plainly required, or denied facilities to its neighbour which it had no moral right to refuse, then the county board should have the power of coercing such local authority into doing what was necessary. Similarly, if a district was insufficiently supplied with schools, it should be the duty of the county board to see that the deficiency was corrected. Obviously this exercise of power would be less resented if coming from an elective board, in which the offending body was itself represented, than if emanating from a Government department.

There is one function which should devolve upon county authorities on which I find it necessary to enlarge a little.

The supply of pure and wholesome water by a local authority to its constituents is of course of primary importance. But in casting about for sources of supply, authorities have not been particular to confine themselves to their own watershed, the yield of which fairly belongs to them, but have impounded supplies just where it happened to be convenient for themselves, regardless of the present wants or possible future needs of the districts included in the watershed. Practically there has been no one to say them nay; and an Act of Parliament once obtained, "vested rights" of the most uncompromising kind have been claimed and fought for in the law courts. It has even happened that a district to which a water supply captured by a great corporation properly belonged, at least in part, and whose area was traversed by the corporation water mains, has been refused any share of the water, on the ground that it was the property of the corporation, and none of it could be spared.

It must not be forgotten that there are other interests besides those of the local authorities and the water consumers to be considered and guarded. *Prima facie* each district may be entitled to consume so much of the water found *within* it as may be necessary or convenient for its purpose. It may acquire the right to take the water, either by agreement with those who have the right over it, or by compulsory process by provisional order where those parties oppose.

But the taking of water from *beyond* the district is a question not merely between the water owner and the water consumer immediately at issue, but involves other, perhaps much wider, interests; and if public inquiry be necessary in cases where the local authority and the owner are at issue, much more is it needful to require vigilance on the part of some outside authority where those parties are agreed. True it may be that in many instances there might be no practical mischief in allowing the local authority to bargain without restriction, with the owner of neighbouring land or water, for its necessary water supply; but there must be other instances—*e.g.*, a proposed taking, by agreement, of water from another watershed within, or beyond, the district—where the exercise of such unrestricted power might operate to the serious prejudice of another district, perhaps adjoining, and perhaps even distant. It is impossible to anticipate by Statute Law the varying circumstances which may arise, and the consent of the county authority ought invariably to be obtained to the taking of water by a local authority for the purpose of public supply, power being given to the central authority, if the consent of the county authority

should be withheld, to hear the parties interested, and to decide.*

The giving of this consent ought never to be a mere formality. The inquiring authority should order skilled investigation by its own officers into the whole circumstances of the watershed as regards sufficiency of supply for its own wants; and an unopposed petition for sanction should make it, if possible, more vigilant in ascertaining that the future interests of the community at large would not be prejudiced by its present consent.

Inquiry should be made in all cases.

County Authorities and Private Bills.

It is a point worthy of consideration, whether county authorities could not relieve the Imperial Parliament from part at least of its incubus of private bills, if they were clothed with powers to authorize the construction of railways, canals, water-works, drainage, and other schemes affecting their county. The reform of private bill legislation is, like the reform of local government matters, a matter to which Parliament will have to give attention very shortly, and I do not propose to obscure my present issue by enlarging on this very fertile and suggestive topic. But I have thought it would be useful, as indicating the possibilities of a transference of some at least of the private bill duties of Parliament to the authority of each county, acting as a kind of local legislature, to take out the objects of the local bills which have been passed into law during the last four years. The result is as follows:—

	1882.		1883.		1884.		1885.	
	Bills.	Royal Assents	Bills.	Royal Assents	Bills.	Royal Assents	Bills.	Royal Assents
Public Acts	247	124	283	118	231	82	191	81
Private Acts—								
Railways	141	93	118	78	121	80	105	68
Canals and Docks } and Harbours...}	24	20	21	17	23	15	15	7
Corporations	33	30	24	21	22	20	28	22
Gas and Water	36	31	22	16	24	17	24	21
Tramways	21	21	27	15	21	16	15	12
Miscellaneous	48	30	50	33	70	55	49	31
	303	225	262	180	281	203	236	161

* See on this subject the report of the Metropolitan Water Supply Commission, 1869, p. cxxiv.

Now as regards the gas and water and tramway schemes at least, the county authority would be likely to give as sound a decision as the chance agglomeration of four or five members of parliament, and those of necessity not the most enlightened or business-like. It is true that the latest writer on the subject, Mr. Frederick Clifford, expresses the opinion that "a change of tribunal from parliament to some outside tribunal, might, and indeed would, affect the character and weight of the decision, but would alter none of the other conditions which make existing procedure costly."* A rising and successful counsel at the parliamentary bar is, perhaps, hardly the most impartial judge on this question; and I leave the point open for the moment, with the expression of my strong opinion, derived from a very extensive experience of private bills of different kinds, that nothing could be more wasteful of time, strength, and money, than the present system of private legislation.

Wastefulness of present system.

Against Mr. Frederick Clifford, I may perhaps be allowed to put John Stuart Mill. Says Mill:

"It is but a small portion of the public business of a country which can be well done or safely attempted by the central authorities, and even in our own Government, the least centralised in Europe, the legislative portion at least of the governing body busies itself far too much with local affairs, employing the supreme power of the State in cutting small knots which there ought to be other and better means of untying. The enormous amount of private business, which takes up the time of Parliament and the thoughts of its individual members, distracting them from the proper occupations of the great council of the nation, is felt by all thinkers and observers as a serious evil, and, what is worse, an increasing one."†

This was said nearly a generation ago, when the procedure of Parliament was more leisurely and infinitely less fatiguing than at present. What would Mill have said of the new order of things, when almost everything is the subject of interminable wrangles and discussions, and Parliament is absolutely choked and paralysed by its own verbosity, and by its cumbrous and antiquated methods of procedure?

For the re-adjustment of the areas, debts and property of the primary authorities which would become necessary when the scheme of reform sketched out in this paper was brought into force, the county board would be responsible, being perhaps temporarily constituted for that purpose from delegates of the existing local authorities. This would ensure a hearing of all claims, and a settlement by one's own people, which

County Boards to re-adjust areas, debts, and property of Primary Authorities.

* "A History of Private Bill Legislation," page 260. (Butterworths, 1885).
† "Representative Government," page 266.

is always preferable to that of a stranger, as a government official must necessarily be.

There are some other matters which might properly come under the control of the county authority, such for instance as the decision as to "local option" with regard to the sale of intoxicating liquors in any area, the administration and supervision of the charities and charitable foundations of the county, and the like; but as I am addressing a Congress of sanitarians, and am looking at the question of local government reform more from the hygienic point of view, I do not think it necessary to do more than mention these.

Officers of Intermediate Authority.

It will have been pretty obvious from what has gone before, that I am contemplating the grouping of all skilled and technical officials round the county board. This will conduce at once to economy (because each primary authority could not provide an expensive staff for itself), to efficiency (because the county can afford to pay for the entire services of good men), and to continuity and symmetry (because the same official can be employed on all works of an identical kind). The superior officials that a county board would require for the proper management of its business would be the following:—

A *Secretary*, who should be a man of administrative ability and organizing power; not necessarily a lawyer, as the clerk of the peace would look after the legal business of the county.

An *Architect and Surveyor*, under whose care should be the county buildings, the roads, and the bridges. To him should be referred all plans for new public buildings and erections, such as hospitals, infirmaries, asylums, and the like; and he should possess the power of inspecting and reporting on the fabric and sanitary arrangements of all existing buildings of the kind. All technical points arising out of the passing by the "primary authority" of plans of new domestic houses should come before him.

A skilled *Chemist*, who should act as public analyser of all adulterated food and drugs, of all suspected water, of the purity of gas supplies, and of the pollution of the air by noxious trades. [In smaller counties these duties might be made over, as they are already in some large towns, to the medical officer of health].

A *Veterinary Surgeon*, to advise as to the contagious diseases of animals and the movement of flocks and herds in the county.

And lastly (and most important) a number—proportionate to

Skilled officials of County Board.

the size of the county—of *Superintending Medical Officers of Health*.

Before a mixed audience I should not be justified in enlarging, as I should otherwise be certainly tempted to do, upon the disgraceful and contemptible way in which the just claims of medical officers of health to recognition and security of tenure have been derided and set aside. Nothing is more anomalous in our present system of sanitary government than the position of the medical officers of health.

Present scandalous position of Health Officers.

When the appointment of health officer was first made obligatory upon local authorities, one Local Government Board inspector urged one plan in one part of the country, whilst another as strongly advocated a different plan. But local authorities were nearly always allowed to decide for themselves according to their own unassisted intelligence, and the consequence

Jumble of Health-Officering.

has been the most extraordinary jumble of health-officering that it is possible to conceive; a jumble of areas, a jumble of salaries, a jumble of terms and conditions of appointment; a jumble of everything.

Some idea may be gained as to the variations of health appointments that at present exist from the following table, which I extract from the last Annual Report of the Local Government Board (p. exix.):

MEDICAL OFFICERS OF HEALTH.		Rural Sanitary Districts.		Urban Sanitary Districts.	
		No. of Authorities.	No. of Medical Officers of Health.	No. of Authorities.	No. of Medical Officers of Health.
Officers whose salaries are partly paid by Government.	Acting for the district of a single Authority.	297	297	385	385
	Acting for divisions of the district of a single (Rural) Authority	65	191	...	...
	Acting for the district or two or more Sanitary Authorities	142	44	170	45
Officers whose salaries are wholly paid by the Local Authorities.	Acting for the district of a single Authority.	29	29	225	225
	Acting for divisions of the district of a single (Rural) Authority	22	79	...	...
		555	640	780	655

Combinations of authorities which had with infinite trouble been got together, in order that an officer debarred from private practice and devoting himself entirely to his health duties might be appointed, have in quite a number of instances crumbled to pieces at the will of a cross-grained or ignorant constituent body. The greatest personal sufferer in all these cases was, of course, the medical officer of health, who had forsaken other avenues of professional advancement in the hope that he might find fame and honour in the paths of public medicine. Officers have been dismissed for speaking their minds with truth and freedom as to the sanitary evils they found around them, or their official lives have been made so intolerable that, like Mr. Shirley Murphy, there was no course open to them but resignation. Practically every officer, however tried and skilful, has been subjected to the trying ordeal of re-election at frequent, sometimes annual, periods, with the haunting fear ever present upon him, that some member of the local authority with whom the fearless performance of his duty had brought him in conflict, would compass his rejection or supercession. To these re-elections has lately been added a new terror. It has come to be the fashion for local authorities to re-elect their officers only on the condition of their accepting a diminution of pay. The Local Government Board have been making some futile protests against this growing habit; but it appears to be, nevertheless, extending.

Grievances
of Health
Officers.

One of the best and most energetic of health officers, Mr. H. E. Armstrong of Newcastle-upon-Tyne, remarked truly enough, in a recent address, that, "in the present state of opinion, and the perpetual conflict between private interest and public duty, the post of an earnest conscientious officer of health is one of devotion, danger, and self-sacrifice, scarcely justifiable considering the inadequate return he receives for it. His ever-increasing duties bring with them increasing anxiety and responsibility, and the need of additional effort without compensating benefit to himself. A practical exponent of virtue, which, according to Pythagoras, means to seek truth and to do good, he too often finds his conduct its own and only reward."

Clearly, health officers must be appointed on some more reasonable system; they must be safeguarded from capricious clippings of their already inadequate emoluments, and they must have greater security of tenure. This would be provided for by handing over their appointment to county boards, and by enacting that they were to hold their office on good behaviour, and to devote their whole time to their duties.

The functions of a superintending medical officer of health

might profitably include not only the present duties of disease-prevention and repression now contemplated by the official order of the Local Government Board, but also many other duties of a kindred nature, at present performed by different people, or not performed at all. For example, he should conduct and control the post-mortem examinations for coroners' inquests and other medico-legal inquiries, and direct investigations in the case of all suspicious uncertified deaths. He should act as medical assessor or referee in obscure or disputed cases, sanitary or medico-legal, which require forensic adjudication. He should act as inspector of burial grounds, and advise the county board as to their closure when necessary. He should be empowered to inspect factories, workshops, bakehouses, dressmakers' establishments, and all other workplaces, as to their sanitary condition and the health of the employes. He should inspect the sources and take measures for safeguarding the purity of water supplied to urban communities, examine and report on the supplies of gas, the management of alkali and other chemical works, the arterial drainage of river valleys within the county, and the prevention of smoke and other noxious vapours in towns and populous districts. Generally, in fact, he should afford skilled medical assistance in all the branches of local government which may require it.

In this connection I think it may be useful to reprint (see Appendix B.) the substance of a very exhaustive memorandum which was prepared by the late Dr. Rumsey (one of the earliest and clearest-headed of sanitary reformers), for the purposes of a memorial which was presented in May, 1868, to the Lord President of the Council, the Home Secretary, and the President of the Poor Law Board, by a joint committee of the British Medical and Social Science Associations, of which I had the honour of being a medical member.

This Joint Committee was appointed in 1866 to promote a better administration of the laws relating to registration, medico-legal inquiries, and the improvement of the public health. Under the fostering care of Drs. Rumsey and A. P. Stewart, who are unhappily no longer with us, and of Messrs. W. H. Michael and W. Clode, whose wise counsels we are fortunately still able to command, the committee took a foremost share in shaping and guiding public opinion on sanitary matters, and it was directly instrumental, through its memorial of the 22nd of May, 1868, in procuring the appointment of the Royal Sanitary Commission. For several of the ideas which I have developed in this

Functions
of Superin-
tending
Medical
Officers of
Health.

Dr. Rum-
sey's memo-
randum on
State
Medicine.

The Joint
Committee
on State
Medicine.

paper I am indebted to the labours of that committee, and although it has for several years ceased to have any organized existence, I should like to take this opportunity of calling attention to the excellence and thoroughness of the work which it accomplished.

The annual reports of the secretaries are amongst the most remarkable papers on State Medicine with which I am acquainted; and the zeal with which, during its period of office, the Joint Committee plied the ministers of the period with deputations and memorials is worthy of all praise in these latter days, when we are accustomed to think that we ourselves are the only people that have discovered the deficiencies of local government. As a specimen of several such, I take leave to reprint in Appendix C. a memorial presented by the Joint Committee to Lord Beaconsfield in June, 1877 (unhappily with but little practical effect), on the subjects of the unification of the sanitary law, the establishment of county boards, and the remodelling of the public health medical service. This memorial sums up as succinctly as it is possible to state them, many of the arguments which I have in the course of this address attempted to elaborate.

A study of Dr. Rumsey's memorandum and the Committee's memorial will serve to convince the most casual reader of the "Little dabs very fragmentary manner in which local medical of doctoring" agency is even now managed. The "little dabs of doctoring" of which Mr. Simon spoke so caustically thirty years ago* still endure, in an even accentuated form.

With the exception of a change of tense and a little shortening, I have left Dr. Rumsey's memorandum pretty much as it was, indicating in the margin the points on which the agency employed has been varied or improved since the memorandum was written, now 17 years ago. No one who reads these papers can fail to perceive how imperfectly the objects desired by the Joint Committee have been met by subsequent legislation. And here I must leave for the present the very important and pressing question of the appointment, duties, and tenure of office by Medical Officers of Health.

THE CENTRAL AUTHORITY.

The functions and attributes of the Central Authority need not detain us long. One thing is certain: it must not take upon itself the actual work of local government; it must be advisory and

* Minutes of Evidence of Select Committee on Adulteration of Food. (Q. 806), 1855.

admonitory, but not administrative. It must steer clear of the rock on which the General Board of Health was wrecked: for so completely is self-government the habit and quality of Englishmen, that the country would resent any central authority undertaking the duties of the local executive. The views of the Royal Sanitary Commission as to the functions of the central authority may perhaps be usefully reproduced:—

"To keep all local authorities and their officers in the active exercise of their own legally imposed and responsible functions; to make itself acquainted with any default and to remedy it; to direct enquiries, medical and otherwise; to give advice and plans when required; to sanction some of the larger proceedings of the local authorities; to issue provisional orders, subject to Parliamentary confirmation; to receive complaints and appeals; to issue medical regulations on emergencies; and to collect medical reports." (Second Report, vol. i., p. 36.)

I do not know that the true positions which the local and central authorities should bear to one another have been anywhere so clearly and succinctly stated as by Mr. Mill, whose views I have so often echoed in the course of this address. At the risk of twanging always on the same string, I transcribe his remarks on this subject also:

"The authority which is most conversant with principles should be supreme over principles, while that which is most competent in details should have the details left to it. The principal business of the central authority should be to give instruction, of the local authority to apply it. Power may be localized, but knowledge to be most useful must be centralized; there must be somewhere a focus at which all scattered rays are collected, that the broken and coloured lights which exist elsewhere can find there what is necessary to complete and purify them. . . . The central authority ought to keep open a perpetual communication with the localities; informing itself by their experience, and them by its own; giving advice freely when asked, volunteering it when seen to be required; compelling publicity and recordation of proceedings, and enforcing obedience to every general law which the legislature has laid down on the subject of local management. That some such laws ought to be laid down, few are likely to deny. The localities may be allowed to mismanage their own interests, but not to prejudice those of others, nor violate those principles of justice between one person and another, of which it is the duty of the state to maintain the rigid observance. . . . As an adviser and critic, an enforcer of the laws, and a denouncer to Parliament or the local constituencies, of conduct which it deems condemnable, the functions of the executive are of the greatest possible value."—"Representative Government," pages 283-5.

LOCAL FINANCE.

I have left until the last, partly because of its intricacy, and partly because of its importance, the question which will after

all compel attention to local government, if nothing else will: and that is the very alarming condition of local finance. It is no part of my present purpose to analyse the rapid increase of local taxation, and of the indebtedness which, in so *debonair* a fashion, is being piled up by the present generation for the next to repay. It is, however, impossible to doubt both taxation and indebtedness would be decreased by the unification of area and authority which I propose, since the present superfluous machinery and consequent increased expense would be saved, and the local budget could be more efficiently controlled where it was set before those concerned in an intelligible way.

To quote Mr. Rathbone again:—

“ At present it is impossible to ascertain the total amount of local taxation at any given moment, because all the returns are much in arrear, and because the returns sent in by different authorities are not made up to the same date. It is impossible to compare with any certainty the expenditure in rural and in urban districts, because the boundaries of unions and parishes intersect the boundaries of boroughs and local board districts. It is impossible to determine the proportions in which the county expenditure is charged on boroughs, on local board districts, and on rural places, or the proportions in which the school rate is charged upon local board districts and upon rural parishes partly included in them. It is impossible to furnish an accurate statement of ordinary income and expenditure within urban sanitary districts and for purposes merely urban, partly because the capital expenditure on sewers, on streets, on gasworks and waterworks, is not distinguished from the recurring annual expense of maintenance and supply, partly because places which provide their own gas and water are not distinguished from those in which they are supplied by private enterprise. Finally, it is altogether impossible from the accounts of twenty-three several kinds of local authority, all differently constituted, all presiding over areas which often overlap or interlace, using different periods of account and levying rates or contributions on different bases and on different valuations, to extract any clear budget of local finance, to know exactly the total annual income or expenditure or the total indebtedness of the local government of this kingdom, or to compute the proportion which these several sums bear to one another in the same year, or to themselves in former years.”*

I print in Appendix D, for the information of those who may care to study the question in detail, a comparative view of the receipts and expenditure of local authorities at the date when Mr. Goschen made his famous report of 1870, and at the present time, or at least as closely to the present time as the cumbrous machinery of the Local Government Board permits. Two intermediate periods are also printed for comparison. A great many *caveats* would have to be made in instituting comparisons between these four

Growth of
expenditure
since 1868.

* *Nineteenth Century*, February, 1883.

sets of figures, since more and more authorities have been prevailed upon to make returns, and the earlier and later figures are not, therefore, strictly comparable. But making all allowances, the increase of expenditure in the short period of fourteen years from £30,000,000 to £54,000,000, or 80 per cent., is sufficiently startling. In 1868, the rateable value of England and Wales was £100,668,000, having increased from £51,898,000 in 1815.* In 1882-3 the rateable value was £141,407,000, or an increase of 40 per cent. So that in the period under review the growth of expenditure has been twice as rapid as the growth in value of the property subject to local taxation.

I cannot pursue this comparison further, but may perhaps usefully give for reference the sources from which the receipts were derived at these two periods:

1868-9. [Mr. Goschen's Report, Appx., Pt. III., Tab. V.]	1882-3. [Parliamentary Paper No. 209, 1885, p. 10.]
£16,223,000	Receipts from Rates
1,225,000	Government Grants
4,363,000	Tolls, Dues, Rents, &c.
2,874,000	Miscellaneous
5,453,000	Loans
	£24,477,000
	3,182,000
	4,691,000
	10,389,000
	10,958,000

Growth of Local Indebtedness.

But the growth of expenditure is not in itself the worst feature of the returns. So long as the expenditure of the year was fairly met out of current receipts, no great permanent harm might happen. But we are year by year drawing bills upon the future to an increasing amount, and are availing ourselves of loans for the purposes of making both ends meet to a far greater extent than we pay off old scores.

The local indebtedness of the county was returned in 1870-1 as £38,250,000, but practically no reliance is to be placed upon the figures as to outstanding loans given in the years before 1874-5. At the end of that financial year, the outstanding loans of local authorities amounted to £92,820,000. By 1878-9 they had expanded to £128,190,000, and in a second interval of four years, viz., by the 31st March, 1883, they had further risen to £159,140,000. In eight years, therefore, local indebtedness increased by more than 66 millions, or over 71 per cent., being an average increase of £8,300,000. If from this amount be

Local In-
debtedness
increased
71 per cent.
in 8 years.

* Appendix to Mr. Goschen's Report on Local Taxation, 1870, Part II., Table VII., B.

deducted the average annual amount of the loans raised by the local authorities during the same years, the average annual amount repaid would appear to be £1,672,000, or 36 per cent. of the amount borrowed.

The following table gives the exact figures for each of the years in question:—

Year.	Amount of New Loans raised.	Amount of Loans Outstanding.
1874-5	£11,917,288	£92,820,100
1875-6	£10,115,535	£99,407,510
1876-7	£12,057,007	£100,015,465
1877-8	£14,367,880	£114,412,201
1878-9	£14,565,052	£128,189,589
1879-80	£13,080,729	£136,931,070
1880-1	£13,351,935	£144,203,299
1881-2	£15,351,914	£151,701,610
1882-3	£10,957,601	£159,142,926

Thus the total amount of new loans raised in these years amounted to £116,665,000, equal to an average of £12,963,000 per annum.

I give in Appendix E a table showing the outstanding loans of the more important classes of local authorities, together with the population and valuation of the country, at the end of each of the last seven years. As might be expected, the largest amount of indebtedness has been incurred by town councils and local boards for sanitary purposes. The loans of urban sanitary authorities increased from £41,539,549 in 1877 to £72,378,929 in 1883; and during the same time the loans of School Boards rose from £5,456,361 to £12,818,861.

It may be worth while in this connection to compare the respective amounts of our National Debt and Local Debt, in 1883 and eight years previously. In the year 1875 the National Debt of the United Kingdom was 772 millions, whilst the local debt of England and Wales was 93 millions. By 1883 the National Debt had diminished to 756 millions, or a decrease of 16 millions; whilst in the same eight years the local debt had expanded to 159 millions, or an increase of 66 millions.

It stands, of course, to reason that the claims upon local authorities have of late years tended to increase very largely in number and amount. But these figures cannot be looked at with complacency. Nor would they be so regarded by the community at large, which busies itself little with local taxation returns two

Local Budgets should be brought before Parliament and before Ratepayers.

and sometimes three years old, if the local budget were brought before Parliament* in the same way that the National Budget now is, and if local accounts were submitted to every ratepayer on the debtor and creditor principle of a joint-stock company's report. If a citizen were told frankly that the total of his rates was six and eightpence in the pound, and that the amount of the local indebtedness of his district was equal to its rateable value for three whole years, he would probably bestir himself to see that the local finances were got under better control, and put on some sounder footing. At present local indebtedness is so broken up and is incurred under so divided a responsibility that its growth, which can only be checked locally, is not known locally, and could not be effectually resisted even if it were.

Local Taxation.

To attempt to discuss the incidence of local taxation would be impossible for me with the time at my command. Moreover, there are so many intricate questions of local and imperial needs and requirements mixed up with it, that I think it best to confine myself to the truism that there should be an uniform assessment of all real property for purposes of all rates and taxes, whether local or imperial, and an unification of all the rates at present levied at different times and on different systems. At present there may be three different assessments—by the union, the county, and, if it thinks fit, the borough. There are the poor rate, the highway rate, the borough rate, the general district rate, and the county rate, for the collection of each of which a separate machinery is or may be employed. Each authority makes up its own accounts in its own way and for its own periods. Prior to 1877 there were nine different dates to which the accounts of local authorities were made up in the Local Taxation Returns. One of these nine dates was "the year last ended previous to June," which obviously lent itself to 365 possible permutations. Since then the Local Government Board has succeeded, under an Act of 1877 (40 and 41 Vict., c. 66), in getting most of the local authorities under its own immediate control to make up their returns to the 25th March. The accounts of the metropolitan vestries and district boards, of sewer autho-

* This was done on one or two occasions some years ago. It ought to be made a rule.

rities, of drainage, embankment, and conservancy authorities, of markets and fair authorities, of bridges and ferries authorities, and of harbour authorities, are, however, still made up to "the year last ended previous to June"; those for Church rates are made up to Easter-Day; those of the City of London, the Metropolitan Board of Works, and Pilotage Authorities to the 31st December; and those of the Commissioners of Sewers to the 29th September.

At present the complete unification of rates cannot be carried into effect because the general district rate exempts railways, agricultural land, and canals, to the extent of three-fourths, whilst the poor-rate and other rates admit of no such exemption. Inquiry is needed as to the justice or injustice of this exemption, but meanwhile the rates might at least be consolidated into two, or better, into one divided into two parts; one with the exemption, and the other without. There would be this further advantage in the latter plan, that the second half of the rate would represent substantially the same thing as the existing poor and borough rates, on which the parliamentary and municipal franchises are based.

Probably to the County Board must be given the control and direction of valuation for the purposes not only of whatever rate may represent the existing county rate, but also, if rates are to be consolidated, of all rates and contributions; and it will be one of its most important and difficult functions to see that the existing inequalities and discrepancies in valuation in different unions are removed. The disbursement of rates in each unit should be under one control and subject to one audit, and accounts of the receipts, disbursements, and liabilities should be prepared and published on one uniform plan throughout the country, and for the same period of account.

Another reform, based upon both official and business experience, may here be mentioned. Every local authority and every county board should be required to prepare and to publish for general information, full and precise estimates of its proposed expenditure for the coming year, as is already required of communes and departments in France. This would be a very important check upon waste and extravagance, and would afford to every ratepayer the opportunity of familiarising himself with the return he gets for his money. The Annual Balance Sheet should also be prepared, and when officially audited, published in the local newspapers for general information. This publication should not be optional with the local authority, but compulsory. It is most important that the

Annual Balance Sheet.

Estimates of proposed expenditure.

Expenditure must be under one control.

Valuation.

Consolidation of Rates.

fullest publicity should be given to everything connected with the finance of local administration. At present, any information on the subject is only obtainable with difficulty, and the annual accounts are nearly always—except in some well-administered boroughs—highly complicated and unintelligible.

Treasury Subventions to Local Rates.

There is one other point connected with local finances upon which I feel it incumbent to say something, viz., the question of treasury subventions to local authorities. Nothing which has grown up as some particular grievance, could be less systematic than the present system, made itself articulate, and a weak ministry has throttled its voice for the moment by a sop in the shape of a parliamentary grant. The cry is always for more money from the government, under the mistaken impression that this means someone else will have to find it, and you will not. To scatter money as at present amongst a multitude of petty authorities, for a number of widely different objects, is simply to encourage its waste.

The total amount of Treasury Subventions, according to the latest obtainable figures,* was £2,391,090 in 1882-3, distributed as follows:—

<i>Poor Law Authorities</i>	£647,508
[Medical Officers' and Schoolmasters' and Schoolmistresses' salaries; Maintenance of Pauper Lunatics; Additional Fees to Registrars of Births and Deaths.]	
<i>County Authorities</i>	£594,146
[Police, £123,908; Lunatic Paupers chargeable to Counties, £16,012; Criminal Prosecutions, &c., £154,226.]	
<i>Municipal Corporations</i>	£423,666
[Pay and Clothing of Police, £374,762; Prisoners, £48,346; Lunatics chargeable to Boroughs.]	
<i>Urban Sanitary Authorities (including Town Councils acting as such)</i>	£72,792
[Grants for salaries of sanitary officers and for main roads.]	
<i>Rural Sanitary Authorities</i>	£43,606
[Grants for salaries of sanitary officers and for main roads.]	
<i>Port Sanitary Authorities</i>	£564
[Salaries of sanitary officers.]	
Carried forward.....	£1,782,282

* The local rates paid on Government property—a source of receipt of recent date—are also omitted, as properly belonging strictly to the locality. The rates paid by Government in this way amount to about £160,000.

	Brought forward ...	£1,782,282
<i>Metropolitan Board of Works</i>	... ..	£10,000
	[Government contribution to Fire Brigado.]	
<i>Commissioners of Police for Metropolis</i>	... ..	£186,582
	[Salaries of Commissioners, &c., and contribution on assessed rental.]	
<i>Corporation of London</i>	... ..	£3,913
	[Various.]	
<i>Highway Authorities in Rural Districts</i>	... ..	£108,313
	[Towards expenses of main roads.]	
	Total	£2,391,090

I have omitted * from this account (as it is left out from this column in the Local Taxation returns), the item of £790,988 received by school boards as grants in aid of elementary education. Strictly speaking, this is of course a Treasury subvention also; and if added to the above it would raise the total grants from the nation towards the relief of local taxation to £3,182,078. But inasmuch as the promotion of the national education is a truly Imperial object, it will be just to regard the cost of elementary schools as an expense in which it is proper that the nation as a whole should bear a substantial share.†

But none of the other subjects for which money is now granted by the State appear to me to stand on the same footing, and if every one of the subventions were withdrawn, I think no injustice would follow, provided some tax of equivalent or nearly equivalent amount now paid into the national treasury were handed over to the local authorities. Now we have fortunately an impost ready to our hand for this purpose in the Inhabited House Duty. A tax on inhabited houses was first imposed in 1696, but this was repealed in 1834. The tax was re-imposed with some alterations in 1851, when the duty on windows was discontinued, and it has been levied on the revised basis ever since. Houses under £20 in value are exempt;

* Local Taxation Returns (England). Year 1882-3. Parliamentary Paper No. 411 of Session, 1884.

† The total receipts of School Boards for the year 1882-3, excluding loans, were £3,157,719, of which £1,837,567 was raised by rates, £479,645 was received in fees, £790,888 was granted by the Education Department, and £49,619 was received from miscellaneous sources.

houses occupied partly for purpose of trade and partly as dwelling houses are charged 6d. in the pound of rateable value; and ordinary dwelling-houses are charged 9d. in the pound. The receipts from this impost have enormously increased of late years. In 1854-5 the receipts were £650,241; in 1864-5, £916,806; in 1874-5, £1,380,770; and in 1884-5, £1,855,292.*

It was one of the proposals of the Government Rating and House Tax Bill of 1871, that this particular tax—really a local impost—which is indeed, in its essence, more of a local than a national impost—should be handed over to, and levied by, local authorities. (Clause 2.) Mr. Gladstone has expressed himself emphatically averse to the system of state subventions of the present kind; and I submit that they are bad in principle and mischievous in practice. I should see great advantage in the compounding once and for all of these sops to local clamour, by a tax like the house-tax, which is practically their equivalent in amount, and is incomparably a more legitimate source of local revenue than the payment of a sanitary officer, for example, is a matter for Imperial subsidy.

CONCLUSION.

I have now finished this long—necessarily long—explanation of the reforms which appear to me to be required to bring local government into its proper position as one of the most important organisations in the country. My main propositions admit, however, of being very concisely stated. They are the simplification and unification of the primary area; the creation of one authority for all local business, and only one; the creation of county boards; the re-organisation of the staff of local government officials, and the consolidation of local finance.

Let me, paraphrasing the words of the Royal Sanitary Commission, give expression, by way of conclusion, to my profound conviction that no system of administration, however complete in theory, upon a matter of such importance and complexity as

* Twenty-eighth Report of the Commissioners of Her Majesty's Inland Revenue, for the year ended 31st March, 1885 (C. 4474 of Session, 1885), Pages 86-7.

the health and well-being of the community, can be expected to attain its object, unless men of superior character and intelligence throughout the country feel it their duty to come forward and take part in its working. The system of self-government, of which the English nation is so justly proud, can hardly be applied with success to any subject, unless the governing bodies comprise a fair proportion of enlightened and well-informed minds. A more vigorous and intelligent public opinion on local government has yet to be created in many places, and until it is created the action of the authorities will be more or less hesitating and inconsistent. Many questions of vital importance are from their very nature incapable of being completely provided for by any amount of legal enactment, however minute and explicit. So large a discretion must of necessity be left to local authorities as to details, that in practice much will always depend on the energy and wisdom of those who compose such authorities. Moreover, there are limits to the power of any central authority to remedy the evils produced by local inefficiency. It may control, stimulate, and in some cases supplement the efforts of local bodies, but it cannot be a substitute for them. It seems therefore peculiarly incumbent on those who have leisure to take their share in administering local government. In this work not only will prejudices have to be overcome and inactivity quickened to exertion, but a sound judgment must be exercised as to the extent to which, and the limits within which, considerations of public welfare ought to interfere with the absolute rights of private owners of property, and even with the personal liberty of individuals. It is work therefore which cannot be performed without effort; but it ought to be, and let us hope that it will be, zealously undertaken, now that Parliament and the nation is becoming alive to the importance of the subject.

APPENDIX A. (See Page 313.)

[From page 271 of the First Report of the Royal Sanitary Commission.]
 Tabulated statement of the principal Rivers of England and Wales, of which the Catchment Basins or Watershed Areas exceed in extent 250 square miles.

NAME OF RIVER.	Length of Main Channel in miles.	Number of Tributaries.	Total length of Tributaries in miles.	Extent of Area in square miles.	Number of Counties intersected.	Principal Town within the Area.
Arun, Sussex	51½	...	...	319	3	Arundel.
Avon, Somerset	78½	4	59½	869	3	Bristol.
Avon, Wilts	67	1	28	666	2	Salisbury.
Blackwater, Essex	50	2	53	465	1	Chelmsford.
Bure, Norfolk	52½	1	11½	338	1	North Walsham.
Dee, Cheshire	93	4	82	850	5	Chester.
Derwent, Cumberland	35½	1	13	268	1	Cockermouth.
Dovey, Wales	35	5	44	264	2	Machynlleth.
Eden, Cumberland	70½	4	97½	916	2	Carlisle.
Elwy, Clwyd, Wales	31½	3	50	306	2	Denbigh.
Exe, Devon	58½	5	82	562	2	Exeter.
Humber (Ex, Ouse & Trent)	37	2	55	1220	2	Hull.
Lane, Lancashire	53½	2	30	434	3	Lancaster.
Medway, Kent	69	3	62	997	3	Maidstone.
Mersey	68	6	187½	1706	3	Liverpool & Manchester.
Nen, Northamptonshire	99	1	11	1055	3	Northampton.
Orwell, Suffolk	35	...	...	257	1	Ipswich.
Ouse, Yorkshire	59½	10	580	4207	2	York and Sheffield.
Ouse, Cambridgeshire	156½	8	212½	2394	9	Lynn and Cambridge.
Parret, Somersetshire	38½	4	106	561	2	Bridgewater.
Ribble, Lancashire	61	3	72½	501	2	Preston.
Rother, Sussex	33½	...	...	281	2	Battle.
Severn (Exe, Wye)	178	17	453	4437	8	Glo'ster & Shrewsbury.
Stour (Essex)	61½	2	33	420	2	Manningtree.
Stour, Kent	52½	1	12	291	1	Canterbury.
Stour, Dorset	64	2	25	479	3	Blandford.
Tamer, Devon	55½	2	31½	381	2	Launceston.
Tees	95	10	132	744	3	Darlington.
Teifi, Wales	70	4	30	389	3	Cardigan.
Test, Hants	35½	1	6½	544	2	Romsey.
Thames	201½	15	463	5162	10	London.
Torridge, Devon	52½	2	30	349	1	Torrington.
Towy, Wales	66½	3	55	522	3	Caermarthen.
Trent and Derwent	232	13	331	3972	7	{ Stafford, Birmingham, { Leicest'r & Notting'm
Tweed	22	1	30	267	2	Berwick.
Tyno	35	6	154½	1053	2	Newcastle.
Usk	76½	7	107	650	2	Newport & Pontypool.
Waveney, Norfolk	58½	...	...	339	1	Yarmouth and Beccles.
Wear, Durham	70	5	66½	455	1	Durham.
Welland, Northampton	72½	3	78	707	2	Stamford.
Witham, Lincoln	89	4	75	1052	1	Lincoln.
Wye, Hereford	148	9	223	1653	6	Hereford.
Yare, Norfolk	35	4	84	533	1	Norwich.
Chichester, Hayling and } Portsmouth Creeks } .....	.....	.....	.....	315	.....

These river basins or watershed areas amount to 41 in number, and comprise more than four-fifths of the whole surface of England and Wales. The remaining river basins descending to streams only three miles long are 143 in number, and vary in size from 2,000 acres to 136,000 acres. Of these, 39 streams exceed 65,000 acres in extent, and the whole (143) do not cover one-fifth of the surface of England and Wales.

APPENDIX B. (See Page 323.)

EXTRACTS FROM MEMORANDUM ON STATE MEDICINE,
prepared by DR. RUMSEY, and submitted to Her Majesty's Ministers by
a Deputation from the Joint Committee of the British Medical and Social
Science Associations in May, 1868.

The Joint Committee asked for a thorough, impartial, and comprehensive Inquiry into the operation of the several Laws, Regulations, and Customs, under which Members of the Medical Profession were employed, constantly or occasionally, in Towns and Rural Parishes,—by different departments of Government, by Public Bodies, by Local Authorities, or in Voluntary Societies; or under which Medical Practitioners acted as Witnesses in Courts of Law and Medico-legal Inquiries, or otherwise;—for any of the following objects and purposes:

		KIND OF AGENCY NOW EMPLOYED.
<i>Mortuary Registration.</i>	1. To give information concerning the CAUSE OF DEATH, by certificate to the Registrars of Deaths and by evidence at Coroners' Inquests.	Local Practitioners.
<i>Medico-legal Inquiries.</i>	2. To perform <i>post-mortem</i> examinations and analyses, in suspicious or obscure cases, for the information of Coroners and Courts of Law.	Local Practitioners or Special Experts.
<i>Medical and Scientific Observations.</i>	3. To record and report, periodically, the number and nature of all cases of SICKNESS (diseases and injuries) attended at the Public Expense, with their causes and results; and more minutely and frequently during outbreaks of Epidemic disease; to observe and record meteorological and other physical phenomena; to note, investigate, and report outbreaks of Epizootic and Epiphytic diseases, and any exceptional and important local facts of animalcular, parasitic, fungic, or other like, invasions.	Voluntary enterprise of local practitioners in a few towns. [Returns of sickness attended by Poor Law Medical Officers are now pretty generally sent to Medical Officers of Health, but they are not of much use.]
<i>Medico-Sanitary Inquiries.</i>	4. To investigate and report, on particular occasions and in selected places, facts and circumstances relating to the prevalence of disease, —especially of Epidemics.	Inspectors under Privy Council. [Now Local Government Board].
<i>Interments.</i>	5. To inquire into the condition of Burial Grounds, and to superintend the execution of laws and regulations for the BURIAL OF THE DEAD.	Inspectors under Home Office.

MEMORANDUM ON STATE MEDICINE—Continued.

		KIND OF AGENCY NOW EMPLOYED.
<i>Aid and Aid to Authorities.</i>	6. To afford advice and aid to Local Authorities in matters relating to the Public Health; especially as to the avoidance and removal of Causes of disease, and the condition and sanitary regulation of Common Lodging Houses and the Dwellings of the Poor.	Officers acting under Local Boards in certain places. [Every sanitary district has now a Medical Officer of Health.]
<i>Sanitary Measures, Vaccination, &c.</i>	7. To inquire into and report upon the Local Administration of Laws for the prevention of disease and mortality; for instance, the extent and efficiency of proceedings under the Nuisances Removal Acts; the progress, performance, and results of Vaccination, &c.	Inspectors under Privy Council. [Now Local Government Board].
<i>Workhouses, Medical Relief and Charities, &c.</i>	8. To inquire into and report upon the sanitary condition and management of Workhouses; and to inquire into the administration of Medical Relief to the Poor, in Districts and Workhouse Infirmaries,—also in Medical Charities and other Public Institutions.	Inspectors under Poor Law Board* and Privy Council. [Now Local Government Board Inspectors].
<i>Asylums, &c., for the Insane.</i>	9. To inquire into and report upon the condition and management of Asylums, Hospitals, Licensed Houses, and lodgings, for the reception and treatment of the Insane.	Commissioners in Lunacy, Chancellor's Visitors, County Visiting Physicians, and District Medical Officers.
<i>Prisons, &c.</i>	10. To inquire into and report upon the sanitary condition and management of Prisons, Reformatories, and other corrective establishments.	Inspectors under Home Office.*
<i>Schools, &c.</i>	11. To inquire into and report upon the sanitary condition and management of Elementary Schools and other places for the education and industrial training of the Young.	Inspectors under Privy Council.* [Education Department.]
<i>Occupations, &c.</i>	12. To examine and report on the sanitary condition and the protective regulations of Mines, Factories, Potteries, Bake-houses, Dress-makers' establishments, and all other Work Places, under various Enactments for the control and regulation of LABOUR.	Inspectors under Home Office,* Certifying Surgeons and officers under local authorities.
<i>Food and Drinks.</i>	13. To examine into the purity, genuineness, and wholesomeness of Articles of FOOD AND DRINK, supplied to the community, or to particular classes or public establishments; and to perform chemical analyses and microscopic examinations for the detection of Poisons and Adulterations.	Officers (sometimes Analytical Chemists) under local authorities, or County Magistrates, in a few places. [Analysts now appointed in all Boroughs by Corporations, otherwise by County.]
<i>Water Supply.</i>	14. To examine into and report upon the WATER SUPPLY of towns and villages, and the condition of rivers and streams.	Officers under local authorities, in some places. [Now universal.]

MEMORANDUM ON STATE MEDICINE—Continued.

		KIND OF AGENCY NOW EMPLOYED.
<i>Gas, Smoke, and Chemical Works.</i>	15. To examine into and report upon the supplies of Gas, the management of Alkali (and other Chemical) Works, and the prevention of Smoke and other Noxious Vapours, in towns and populous districts.	Officers under local authorities. Inspectors under Board of Trade. [Now Local Government Board instead of Board of Trade.]
<i>Animals.</i>	16. To inspect, with or without the aid of scientific Veterinarians, the ANIMALS intended for human food;—to report and advise upon the manner in which such animals are kept and fed, conveyed by land or sea, and imported; and to assist in carrying into effect any Government regulations on these matters;—and to examine into and report upon the condition of Slaughter-houses, Cow-houses, Stables, Pigsties, etc., etc.	Officers under local authorities in a few places. [Now universally]. Officers under Privy Council in certain cases. Custom House Officers.
<i>Imported Diseases.</i>	17. To superintend and aid the execution of measures for preventing the Importation of Foreign Pestilence at Sea Ports; for regulating the sanitary condition of Ships; and for protecting the health of sailors and passengers.	Quarantine Officer under Privy Council Officers under local authorities.
<i>Medico-legal Certificates.</i>	18. To investigate and certify the condition—physical or mental—of persons accused of crime, or needing legal protection, or demanding compensation for personal injury,—or whose competency to fulfil any social or family duty, or labour-contract, becomes the subject of legal inquiry,—and to determine the fitness of children and young persons for work. [Under this head would be included Certificates of Insanity, and the duties of Certifying Surgeons, under various Factory and Labour Enactments.]	Any Registered Medical Practitioner. Special Experts. Certifying Surgeons
<i>Forensic Evidence.</i>	19. To give medical or scientific evidence on any of the preceding matters in Courts of Law.	With few exceptions, those marked with asterisk (*) are not medical.

II. The Joint Committee suggested that—while many of the Provisions and Arrangements, described under the preceding head, were of merely partial, occasional, and exceptional application—there were several other objects, then wholly unaccomplished, as to which legislative action was urgently required, and for the proper fulfilment of which, as also for the purposes

before mentioned, the appointment of skilled Medical Officers in Districts would be found necessary;—for example:—

1. *Registration.*—To examine and revise all Registers of Births and Deaths, in Registration Districts; to verify the Fact of death in certain cases; to investigate and record accurately, in all uncertified or doubtfully certified cases, the Cause of death.

2. *Medico-legal Inquiries.*—To bring special knowledge and experience to the conduct, under authorized rules, of *post-mortem* examinations for Coroner's Inquests or other Medico-legal Inquiries; and to examine before burial the bodies of Infants alleged to be still-born.

3. *Forensic Medicine.*—To act as Medical Assessors or Referees in obscure or disputed cases—sanitary or medico-legal—which require Forensic adjudication.

4. *Interments, Mortuaries, &c.*—To advise and assist Local Authorities in carrying into effect regulations for the removal and burial of the dead, especially in crowded populations and in times of pestilence or great mortality; and to inspect Mortuaries or other places for the reception of corpses before burial.

5. *Dwellings.*—To advise and aid Local Authorities, Building Societies, and other public companies, in regulating the Site, Construction, and sanitary arrangements of Dwelling Houses, especially of those proposed to be erected for the Poor, and to certify the satisfactory completion of such undertakings.

6. *Veneral Diseases.*—To direct and aid the execution of Measures concerning the health of Women, within the meaning of the Contagious Diseases Prevention Act, 1866.

7. *Pharmacy.*—Aided by skilled Pharmacians or scientific Chemists, to inspect establishments for the sale and preparation of Medicines, and to detect Adulterations of Drugs.

8. *Medical Police.*—When directed by a proper authority, to inquire into and report upon offences against the Medical Act, especially "infamous conduct in any professional respect" of medical practitioners, in their respective districts.

9. *Nurses and Female Midwives.*—To inquire into the qualifications of Midwives and Nurses, in the same districts; and to aid in carrying into effect any Law which may be enacted for the Examination and License of Women intending to act in such capacities.

[Nos. 4 and 5 of these points may be said to have been provided for by the universal appointment of Medical Officers of Health, but otherwise the catalogue of matters to be accomplished remains in the same state as seventeen years ago.—E. H.]

III. The Joint Committee expressed their belief that abundant Evidence could be adduced to show:—

Defective and Incoherent Legislation and Administration.—(1) that the Laws and Regulations which relate to the appointment and action of medical men in the Statistical, Medico-legal, Supervisory, and Sanitary departments of the Public Service, are for the most part defective, complicated, and incoherent,—that they differ considerably in different places and parts of the kingdom,—that they are often inefficient and fallacious in operation, and sometimes even found to be subversive of their professed objects;—

- No special qualification for officers.* —(2) that there is no sufficient guarantee for the general competency or the special qualifications of the medical men appointed;—
no recognized plan of Education for Officers of Health and Medical Jurists, nor any Examining body for directing the standard of their acquirements and for testing them;—
- Impediments to free exercise of opinion and function.* —(3) that these appointments are made without any proper conditions to secure the free, unbiassed and unfettered exercise of judgment, delivery of opinion, and discharge of duty;—
- Ill-defined districts and conflicting jurisdictions.* —(4) that the districts and areas of jurisdiction in which sanitary and other public medical duties are now performed, are not defined or settled on any sound or rational principle,—
that, except in the metropolis, they are rarely continuous with other districts for local administration or record;—
and that they are not used for the performance of the same functions in all parts of the kingdom;—
- Entire neglect of the majority of the population.* —(5) that the greater portion of the population is now excluded from the benefits which might result even from the present imperfect system of appointments;—
- Want of authorized co-operation of officers.* —(6) that there is a total absence of and a great necessity for some authorized co-operation between the several medical persons officially employed in different public duties, within the same district;—
- Necessity for organization and consolidation of duties.* —(7) that many sanitary enactments, protective regulations and medico-legal investigations, are imperfectly carried into effect, owing to the want of a scientific staff of Officers, appointed to act in districts of extent sufficient to engage the whole of their time and attention;—and
- (8) that, consequently, an improved organization of districts, and a consolidation of public medical duties therein, are indispensable to the Efficiency and Economy of Local Administration.

April, 1868.

APPENDIX C. (See Page 324.)

Memorial of the Joint Committee on State Medicine of the British Medical and Social Science Associations, dated 10th June, 1877.

TO THE RIGHT HONOURABLE THE EARL OF BEACONSFIELD.—
The Memorial of the Joint Committee on State Medicine of the British Medical and Social Science Associations

Humbly sheweth:—

That your memorialists in 1868, asked for the appointment of a Royal Commission of enquiry into the operation and administration of the Sanitary Laws, under the conviction that the laws then in force were to a great extent inoperative, owing to opposition or indifference on the part of local authorities, to clashings of jurisdiction within the same areas, to the want of sufficient power in the hands of the central authority to enforce compliance with their enactments, to the difficulty of administering the laws, and to the ambiguous and often contradictory character of the laws themselves.

The Royal Sanitary Commission collected much valuable evidence, and reported that the duties of sanitary authorities were "seldom discharged," and recommended a consolidation of the law relating to public health, and other changes in sanitary administration, several of which have been adopted and made law by the Public Health Act, 1875.

That your memorialists in May, 1876, convened a Sanitary Conference of representatives of local governing bodies, and others interested in public health, under the presidency of Lord Aberdare, to consider how, in any change of the existing system, greater efficiency of action, more complete representation, uniformity of powers of local authorities, simplicity of laws and economy of expenditure could best be obtained. The result of that Conference is the memorial we have now the honour to present to your Lordship.

[*Unification of the Sanitary Law for "Urban" and "Rural" Districts.*]

[1] Your memorialists believe in the urgent necessity of some further action on the part of the Legislature in order to protect the public health, and which they are persuaded can be largely advanced by so far re-modelling the laws relating to government as to remove the distinctions which now exist in the powers and obligations vested in urban and rural sanitary authorities. These distinctions create many difficulties and much confusion in local administration, and it is notorious that many portions of rural districts are more strictly urban, both in character and population, than many outlying portions of urban districts, or even the districts themselves.

The law which regulates streets and buildings is now mainly under the control of urban authorities, and any differences in the condition of rural districts in these respects, as contra-distinguished from cities and towns,

could easily be met by the passing of bye-laws, always capable of being altered and amended to meet the existing conditions of the district.

The breaking down of this distinction between urban and rural sanitary districts would secure simplicity in the law, and attain an object long and earnestly sought for by your memorialists—uniformity of public health enactments for every part of the kingdom.

[Establishment of County Boards.]

[2] Your memorialists have been very strongly impressed with the need of economy in carrying out sanitary improvements, and generally in the administration of the functions of local government; and they believe that a reconstruction of sanitary agency such as is hereinafter recommended, is consistent not only with complete efficiency, but with the accomplishment of a much larger amount of work done at a less cost than at present. This can readily be obtained by constituting, instead of the many local authorities under various names now existing, one elected and representative body, clothed with all executive functions, whether municipal or sanitary, with the area of its jurisdiction.

There are, however, duties and obligations which cannot be exercised altogether satisfactorily within a limited area, whether of a borough or a local board district, so as to secure the greatest amount of benefit with the smallest necessary outlay. Many works can only be adequately carried out by the combination of districts, with a money contribution spread over the whole area, to be levied in a ratio proportional to the benefit to be conferred. Lunatic asylums, workhouses, bridges and the like, come within this category; and there are many difficulties in the present system, with respect to water-supply, drainage, sewerage, and the disposal of sewage, which would be reduced to a minimum were such a combination as is here proposed provided for by law, and not left, as at present, to the almost impossible agreement of the constituting and contributory authorities. There are other and most important functions, which would be fulfilled by a representative body of a high order, such as the constitution of a board of appeal between district and district, within the area of its jurisdiction, or between ratepayers, inhabitants, and authorities, to authorise and require to be executed, and, if necessary, to execute works when authorities are in default and their districts suffering from the neglect of the duties and responsibilities with which they are clothed, or where joint works are desired, and specially to control watershed areas, and to regulate such matters as relate, both in finance and use, to a county, rather than to a sanitary district. An almost universal consensus of opinion has been arrived at that the establishment of a County Board for purposes alike and akin to those here indicated is an essential element in any scheme for ensuring local and sanitary progress.

[Re-arrangement of Boundaries of Districts.]

[3] Some inquiry is necessary to re-arrange the boundaries of districts, but your memorialists believe that existing areas should be as little interfered with as is consistent with the public service; although this re-arrangement becomes of less importance when an authority shall be provided, clothed with sufficient powers to regulate or remove anomalies arising from peculiarities in the position or constitution of districts, and to act as an intermediate body between the representatives of district and central government.

[Remodelling of the Public Health Medical Service.]

[4] Thus also an opportunity would be furnished for entirely remodelling in the national interest the public health medical service. By establishing a

County Board for administration and finance, it would be possible to secure the services of health officers of high scientific attainments and of acknowledged ability; paid adequate salaries for superintending the whole or a division of a county; acting as consultants under the direction of a chief attached to the central authority; affording counsel and assistance to district officers in all cases of doubt or difficulty arising in the discharge of their duties; examining and acting on the weekly returns of disease and deaths furnished by district registrars; and also aiding courts of justice by acting as experts in all cases of criminal jurisprudence requiring medical evidence as to injuries causing or tending to cause death. To these county officers should be added medical officers of a district with assistants, all forming parts of a great department of the State, under the presidency of a minister of health; but all these officers should be under central control, so far as making up one great body of workers for general State medical purposes. In this, as in all other departments of local action, there should, in the opinion of your memorialists, be the minimum of interference with local government. All officers of health should be debarred from private medical practice, and be holders of diplomas in State medicine; their emoluments being secured as in the case of medical officers of the army and navy, but with a portion only of their salaries provided out of moneys voted by Parliament, the rest being paid out of local rates. It is believed that were this system in practice, the cordial co-operation of the medical profession would be secured. Without the aid of the medical attendant in giving, either directly or through the intervention of the householder, timely notice of the occurrence of zymotic disease and early intimation of death in all cases, the adoption of effective measures for preventing the spread of diseases of an infectious character becomes almost impossible.

With respect to all officials, security in the tenure of their offices, so long as the duties attached to them are adequately and faithfully performed, would tend, in the opinion of your memorialist, greatly to the advantage of the public service.

[Simplification of Sanitary Law and Practice.]

Besides the matters thus generally touched upon, it is believed by those who have given the matter much and careful attention, that in many cases the law and the proceeding under it may be much simplified, and the exercise of the powers of local authorities be made more easy and effective.

[Central interference with Local Government.]

By far the greatest help to an improved sanitary condition of the people must be expected from the progress of general knowledge and belief in the benefits to be obtained from an ample supply of pure air and pure water, and from a more assured conviction that these essentials to a healthy life may be secured by a moderate expenditure, which in the end will prove remunerative. We believe that much may be done by the educated efforts of the governed on their own behalf, that the action of their representatives should be encouraged, not beset with difficulties, and that local government should be as little interfered with as is consistent with efficient action; but that when, unhappily, from apathy or neglect, the public welfare demands intervention of a controlling power, there should be in the law such provision as would insure the adoption of the best devised means for averting any threatened advent of disease, and for securing the permanent maintenance of the conditions of health.

Your memorialists, believing that changes in the existing law will materially

aid those charged with this administration, venture most respectfully to suggest:—

1. That the present existing distinctions between urban and rural sanitary districts should be removed, and that all sanitary authorities should be clothed with similar powers, and that these powers should be extended in order to enable them to carry out all purposes of local administration within their district.

2. That in each county, or division of a county, a representative authority of a high order should be constituted for the execution of joint works, to aid, and in case of default, to exercise control over district sanitary authorities.

W. H. MICHAEL, } Hon. Secs.
A. P. STEWART, M.D., }

APPENDIX D.—Comparative Statements of RECEIPTS AND EXPENDITURE of Local Authorities at different periods since 1868.

[Note.—The figures for 1888-9 are taken from Mr. Goschen's Report of 1879; the remaining figures from Parliamentary Paper No. 204 of this Session (1885) and from the Local Taxation Returns. The expenditure of the intermediate periods (1876-7 and 1878-80) has never been isolated according to authorities; but it will not, of course, differ materially from the receipts.]

AUTHORITIES.	[From Mr. Goschen's Reports.]		1876-7.		1878-80.		1882-3.	
	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
Poor Law Authorities	9,069,754	8,977,504	8,930,984	8,977,504	9,347,511	10,115,093	9,785,314	9,785,314
County Authorities	2,292,948	2,319,348	2,842,148	2,319,348	3,116,347	3,159,907	3,281,570	3,281,570
Municipal Corporations	2,704,768	2,976,031	4,546,776	2,976,031	3,510,560	3,469,345	3,275,561	3,275,561
Town Councils Acting as Urban Sanitary Authorities	4,074,732	4,040,292	13,928,380	4,040,292	13,824,951	13,077,844	13,470,186	13,470,186
Urban Sanitary Authorities other than Town Councils .....	.....	.....	.....	.....	4,677,014	4,319,557	4,098,909	4,098,909
Joint Boards .....	.....	.....	.....	.....	.....	268,082	444,891	444,891
Rural Sanitary Authorities .....	.....	.....	368,316	.....	498,216	546,132	516,757	516,757
Port Sanitary Authorities .....	.....	.....	2,398	.....	8,473	4,842	13,498	13,498
Highway Authorities in Rural Districts	1,401,695	1,399,918	1,677,731	1,399,918	1,867,684	2,054,394	1,937,043	1,937,043
Turmpike Trustees	1,023,563	1,033,073	485,271	1,033,073	255,815	131,851	142,525	142,525
Burial Boards	208,386	209,365	332,775	209,365	406,504	524,050	564,916	564,916
Commissioners of Baths and Washhouses .....	.....	.....	.....	.....	.....	44,885	44,813	44,813
Inspectors Under Lighting and Watching Act	82,153	79,116	44,090	.....	36,916	24,158	24,198	24,198
Metropolitan Vestries, District Boards, &c.	1,423,557	1,469,223	1,884,017	1,469,223	2,296,164	1,997,003	1,919,975	1,919,975
Metropolitan Board of Works	2,109,330	1,935,495	2,406,965	1,935,495	3,445,982	3,449,751	3,152,816	3,152,816
Commissioners of the Police of the Metropolis	822,051	822,835	1,099,939	822,835	1,136,686	1,288,583	1,294,407	1,294,407
Commissioners of Sewers of the City of London	1,824,656	1,771,096	531,480	1,771,096	253,673	595,132	587,144	587,144
Corporation of London .....	.....	.....	1,232,605	.....	1,091,016	1,229,338	1,241,569	1,241,569
School Boards .....	.....	.....	2,875,372	.....	3,694,005	4,295,322	4,217,579	4,217,579
Commissioners of Sewers (Extra Metropolitan)	46,410	50,941	85,805	.....	59,850	64,561	68,304	68,304
Drainage, Embankment, and Conservancy Boards	198,947	154,325	299,254	154,325	315,755	463,735	426,353	426,353
Churchwardens (Church Rate Accounts) .....	.....	.....	13,333	.....	14,800	12,053	11,162	11,162
Markets and Fairs Commissioners	64,198	63,454	38,928	63,454	30,968	15,716	9,784	9,784
Bridge and Ferry Trustees	134,372	135,942	59,036	135,942	62,951	13,834	12,391	12,391
Harbour, Pier, and Dock Authorities	2,637,413	2,762,987	3,789,648	2,762,987	3,369,361	3,688,327	4,110,593	4,110,593
Totals	30,139,223	30,237,605	47,294,361	30,237,605	53,331,811	54,844,206	54,652,228	54,652,228
Less Deductions .....	.....	.....	571,672	.....	589,724	1,432,151	1,774,172	1,774,172
Nett Totals	30,139,223	30,237,605	46,722,689	30,237,605	52,742,087	53,412,055	52,878,056	52,878,056

APPENDIX E.
AMOUNT OF OUTSTANDING LOCAL INDEBTEDNESS AT THE END OF EACH OF THE SEVEN YEARS
ENDING WITH MARCH, 1883.

LOCAL AUTHORITIES.	LOCAL TAXATION YEAR.						
	1877.	1878.	1879.	1880.	1881.	1882.	1883.
Poor Law Authorities.....	£ 3,803,771	£ 4,260,767	£ 4,653,617	£ 4,975,980	£ 5,271,303	£ 5,560,720	£ 5,842,012
County Authorities.....	2,981,999	3,012,117	2,993,014	2,924,915	2,995,311	3,112,185	3,235,635
Municipal Corporations.....	6,221,037	6,421,082	6,313,217	6,172,887	6,495,112	6,836,034	6,936,941
Town Councils acting as Urb. San. Auth.	{ 41,539,549	46,183,928	46,056,978	50,225,471	53,213,834	55,358,329	59,791,800
Urb. San. Auth. other than Town Coun.	{ 330,313	451,680	10,467,472	11,354,152	12,818,333	13,000,728	12,587,129
Rural Sanitary Authorities.....	47,336	49,754	642,617	848,198	1,081,056	1,218,218	1,352,941
Highway Trustees.....	1,283,017	1,009,998	713,164	550,237	430,294	42,860	45,062
Burial Boards.....	1,258,874	1,589,852	1,664,829	1,682,009	1,717,612	1,835,385	2,179,385
Metropolitan Vestries, Dist. Boards, &c.	1,708,113	1,901,220	1,936,723	2,140,496	2,145,526	2,147,143	2,057,148
Metropolitan Board of Works.....	11,257,190	11,898,706	13,126,259	14,045,816	15,245,229	16,669,641	17,520,679
Com. of Sewers of the City of London	336,775	346,775	336,775	276,033	265,951	458,809	693,881
Corporation of London.....	5,531,000	5,376,000	5,256,000	5,129,800	5,274,800	5,470,150	5,121,100
School Boards.....	5,436,361	7,188,909	8,685,008	9,957,192	10,888,988	11,841,142	12,818,861
Harbour, Pier, and Dock Authorities...	22,214,124	22,731,436	23,165,561	23,950,405	24,296,722	24,813,673	25,945,768
Miscellaneous Authorities.....	1,985,806	1,987,578	1,949,080	1,970,919	1,935,644	2,195,163	2,765,927
TOTALS.....	£ 106,045,465	£ 114,412,201	£ 128,189,589	£ 136,934,070	£ 144,203,299	£ 151,704,640	£ 159,142,926
Population.....	24,460,000	24,760,000	25,010,000	25,323,000	25,974,439	26,055,406	26,406,820
Valuation to Poor Rates:	146,989,979	150,980,679	154,606,467	157,968,723	160,248,997	165,143,300	167,449,369
Gross Estimated Rental.....	124,587,474	127,948,380	131,021,019	133,769,875	135,645,473	139,636,307	141,407,686
Rateable Value.....							

“PREVENTION IS BETTER THAN CURE.”

ADDRESS TO THE WORKING CLASSES,

BY

CAPT. DOUGLAS GALTON, R.E., C.B., D.C.L., F.R.S.

The Sanitary Institute has made it one of its duties to provide an address to the working-classes of the town in which it holds its Annual Congress. And it has been allotted to me, as Chairman of the Council of the Sanitary Institute, to address you on this occasion.

If it were necessary to assume a title for my address I would select the motto of a kindred society, viz., the National Health Society, which is, “Prevention is better than Cure.” For we sanitarians hold that the health of a nation depends very much upon the will of the nation. More than one-half the diseases from which we suffer, and more than one-half the deaths, arise from causes which we sanitarians say are within our own control.

The present is an occasion of more than usual importance, for not only does the near approach to our shores of a dire epidemic, the cholera, compel us to direct our attention to the progress of sanitation in this country, but Parliament and the public have at last awakened to the fact that a large portion of the working classes of this country have been, and still are, permitted to live in wretched unhealthy dwellings, and an Act of Parliament has been passed for amending the law relating to the housing of the working classes.

These two subjects are closely related to each other.

There are many people who assert that we have made so much progress since the last visitation of cholera to this country that we may now hope almost entirely to escape from its ravages. I earnestly wish I could believe that it might be so; but when I

endeavour to take stock of our sanitary progress, I see that whilst much, very much, has been done, yet much, very much, remains to be done. The sanitary motto is, "Nil actum reputans dum quid superesset agendum"; which may be translated, "Do not stop to congratulate yourselves on how well you are getting on before your work is even half done."

I do not think that, so far as cholera is concerned, much has been learned in late years which previous epidemics had not taught us.

No doubt there have been many theories. It was asserted by the eminent German physiologist, Dr. Koch, that cholera is caused by the presence of a minute organism or microscopic creature present in the blood of the sufferer.

When this theory was first put forward, many persons were prepared at once to accept the theory, because it accorded with discoveries made in recent years that certain diseases, especially in animals, have been traced to the presence in the blood of minute creatures, visible only by the strongest microscopes, and that these microscopic creatures are under certain conditions present in air or water in quantities innumerable in the form of germs, that is to say, spores or seeds, or eggs.

When these germs are drawn into the body of a man or animal, either by breathing, or eating, or drinking, or otherwise, they thence pass into the tissues or the blood, and are hatched into creatures called microbes, or bacilli, or micrococci.

The theory put forward by Dr. Koch to account for the cause of cholera has, however, not yet been established; but notwithstanding, I think it may interest you to give you a short sketch of the work upon which some of these minute creatures are employed, because this knowledge throws an important light upon the processes which cause what we call the decay of matter, by which we are constantly surrounded. It is owing to this decay of matter that many sanitary difficulties arise, especially where large numbers of people are crowded on to a small area; and a knowledge of the conditions which govern the processes of decay, is essential to enable us so to direct them, that instead of being a source of injury, they may be made beneficial to the community.

The existence of these minute creatures was first discovered in connection with the fermentation of beer. One important species are the active workers who by their proceedings produce what we call fermentation in beer or wine. They convert into alcohol the sugar which is present in the malt or in the grapes or other fruit. What we call putrefaction is the work of other similar creatures. Others, again, appear to be the agents in some forms of disease.

If on a bright day the shutters of a room be closed, and a single ray of sunshine be allowed to penetrate, the ray will reveal the presence in the air of moving particles of fine dust. Dr. Tyndall has shown us that there are ever present in this dust many germs of certain low forms of life, which are always ready to become alive and assume activity whenever they fall on substances favourable to their development. Although these creatures, as we may call them, are only to be seen through a very powerful microscope, they are of the greatest importance in nature.

Whenever and wherever there is going on a decomposition of organic matter, or what we call putrefaction, whether it be the case of an herb or an oak, of a worm or a whale, the work is exclusively done by these infinitely small organisms.

You may have heard that in Constantinople and other eastern towns all the refuse matter from houses is thrown into the streets, and that a number of dogs who are homeless live entirely in the streets, and by feeding on this refuse matter perform the part of scavengers. To compare small things with great we may say that these microscopic creatures are nature's scavengers. They are the important, almost the only, agents of universal hygiene. They clear away, more quickly than the dogs of Constantinople, or the wild beasts of the desert, the remains of all that has had life. They, therefore, protect the living against the dead. If dead matter were not thus cleared away, there would be no room left by this time on the earth for the living; and if there are still living beings, if, since the hundreds of centuries during which the world has been inhabited, life continues to be equally easy and plentiful, it is to them that we owe it.

Let me explain this a little further. Animals or vegetables, whilst they are in the condition which we call alive, are continually employed in working up into the solid matter of which their bodies are composed, gases taken from the atmosphere, or nitrogenous and saline substances which are dissolved in water. For instance, if you take some seeds of mustard and cress, and put them on a piece of flannel in a plate with water, and place the plate in the sunlight near your window, you will soon have a luxuriant crop of mustard and cress, derived from a combination of the salts dissolved in the water and the gases in the air, assisted by the sunlight. Thus it is possible, by means of air, and the gaseous elements it contains, by means of water, and the elements contained in rain, to create and develop the smallest blade of grass as well as the largest oak whose mass exceeds by many hundred times that which originally existed, ready made, in the portion of earth in which it took root.

An oak, a blade of grass, an animal that lives by eating grass, as for instance a sheep, or a carnivorous animal that lives by eating the sheep, as for instance a lion, or indeed each one of you here present, were all originally water, carbonic acid, salts of ammonia, and soluble mineral substances. But when once these substances have been converted into the oak or the blade of grass, or into the sheep, or the lion, or the man, that is to say, into organic matter which can be handled, and which is insoluble in water, this new matter is as it were paralysed, and incapable of contributing to the nourishment of a new vegetable life; and if it were to remain perpetually in this state, if its elements were never to pass back into the atmosphere, or into the water which circulates around the globe, the atmosphere would soon be deprived of the elements it contains, out of which organisms are produced; water would be deprived of its nutritious matter, and life would become impossible on the surface of the globe.

It is these minute microscopic beings, who we are barely beginning to know, but who have always existed side by side with us in the larger world of animals and plants with which we have always been familiar, who have been the workers, who, at the moment when life has ceased in a plant or an animal, begin to redistribute its component parts back into the air and the water, and thus make it possible for fresh generations to succeed each other, inheriting not only the form, but the matter of previous generations. They are very small, you will say, for such a duty. Their infinite smallness is balanced by their prodigious activity. Their function is to destroy organic matter. But the larger animals also destroy organic matter, for their food, with this difference: a man consumes daily a quantity of food equal to one-fiftieth part ($\frac{1}{50}$) of his weight. One of these microscopic creatures will remove in one day from 50 to 100 times, and even more, its own weight of the organic substances which it is occupied in breaking up. In addition to this their number is enormous, and the rapidity with which these low forms of life increase is marvellous. It has been calculated in the case of one or two forms grown under favourable conditions that every individual produces 8,388,408 other individuals in twenty-four hours.

But there is another side to the part played in nature by some of these minute beings. It has been undoubtedly proved that certain diseases in plants, animals, and men, arise from one or other species of these minute creatures when present in the plant, or in the blood, or in the tissues of animals suffering from disease.

For instance, the disease from which silkworms long suffered

in France is one; the disease called anthrax in sheep is another; also pig plague, splenic fever in cattle, and fowl cholera.

It has been ascertained that blood or fluids containing these minute creatures or their spores or seeds transmit the disease when inoculated into other animals; but that when these minute beings or their spores are absent, or artificially separated, from the blood or fluids inoculation gives no such result. It has also been proved that these minute beings taken from the blood of a diseased animal can be cultivated in gelatine or other substances, and after ten or fifteen generations the gelatine or fluid which contains the creatures which are the descendants resulting from these successive crops can, if then inoculated into a healthy animal, reproduce the original disease. And what is still more remarkable is that the methods employed in the cultivation can modify or increase at will the virulence of the communicated disease.

These minute beings work at the destruction of dead matter, and cause the disappearance of organisms which life has forsaken; others take possession of living organisms, sometimes producing rapid death, sometimes only local disorders; or, when they are not strong enough to fight and conquer, they lie in wait till some external circumstance, a loss of blood, or a chill, shall weaken the animal in which they are implanted, and shall make their prey easier to seize.

In this double part of theirs, when they are working for us in clearing away dead matter, or when they are working against us in producing what we call disease, they display the same double characteristic of infinite smallness in apparent means and of powerful destructive energy in results. The study of these creatures, of their habits, and of the methods by which they can be increased or destroyed is, therefore, as it were, a study of the laws of health and disease; for if the various theories which are being now deeply studied both in England and abroad should prove to be all correct, and if the laws which govern the propagation or destruction of these minute beings were fully ascertained, on the one hand the sanitarian would learn how to get rid of refuse matter easily and effectually in a manner beneficial to the community; whilst on the other hand the art of the physician would be raised from dependence on empirical observation into the position of an exact science.

When we consider the marvellous facility of reproduction, which these creatures possess, we are lost in astonishment that any higher form of life can exist subject to the possibility of invasion by such countless hosts of occult enemies.

The spores, or seeds or eggs, of these minute creatures are incessantly spreading in abundance through the air. But there

they meet with causes of destruction or stagnation. Some are dried up; others are destroyed by the oxygen of the air, or by the heat, and the light of sunshine; whilst cold slackens or puts an entire stop to their energy. No doubt they do not all perish, and those endued with greater powers of resistance survive; but fewer germs are found in the air on hills than in plains, in a frozen desert than in fertile soil, away in the country than near dwellings, in private houses than in the crowded dormitories of barracks, schools or workhouses, in an empty cellar, where the ground is dry and the air calm, than in a damp, windy yard.

You will thus see that even if the views of those who are prepared to accept the germ theory of disease to its fullest extent were shown to be true, we have it in our power on the one hand to promote to some extent the destruction of these germs; whilst on the other hand it seems to be certain that unless the germs fall on congenial soil they seldom fructify into disease.

And as we pursue the subject further, we find that the science of the prevention of disease, that is to say, the science of hygiene, advances quite as rapidly as our knowledge of the causes of disease.

Indeed, these inquiries bring us round to the same conclusion at which sanitarians arrived before these new theories of disease were developed.

Moses laid down strict rules of cleanliness for the Israelites in the desert, and there has not been to this day a better sanitary teacher than Moses. Ever since his time it has been established that when epidemics of disease have prevailed, those localities suffered most in which dirt was accumulated in and around the houses, where the ground was saturated with foul matter, where people were crowded together, and where the water they drank was impure or stagnant.

It is through the faith which this teaching has given us in the certainty that if we keep our towns, our houses, and our persons clean in the true sense of the word, if we allow of no pollution around us of air or water, we need not dread the cholera which is approaching.

We may learn from the past history of cholera, both in this and in other countries, what we have to expect on this occasion if it should visit us.

Let me tell you the facts as to what is the experience of India. Cholera is never absent from the low-lying district at the mouth of the Ganges, in India; and in that district the population, numbered by millions, live in wretched hovels, crowded into large villages, surrounded by a luxuriant jungle. The soil is a rich

and fertile black loam. It is scarcely above the level of the water in the streams which meander through it, and consequently the soil is always water-logged. The water the people drink is taken from stagnant fetid pools. The atmosphere is saturated with moisture.

When the country is flooded there is no cholera. Cholera appears with the drying up of the surface.

In certain years, but why we know not, the cholera spreads out of this district. The course of cholera over India has no relation to roads, railroads, or movements of the population. It moves out from the Delta, sometimes towards the north-west, sometimes towards the south-west, or sometimes into Assam in the north-east. In India it never reverses the direction in which it is proceeding. Its course is determined by season, and by topography. It increases in the dry months, and decreases with the advent of rain. It does not spread from point to point of an area. It falls like a series of rain-showers, and this only on a few places. Thus, out of 480,549 towns and villages, all the deaths in 1882 were furnished by 47,648, or less than a tenth, scattered over the whole area of India.

Thus the cholera exercises discrimination in its attacks. It will visit one town or village, and leave many others in the vicinity untouched. Similarly it will attack one house and leave another. But it has been generally found that the attacked house or village held out a special invitation from its insanitary condition.

In Europe the great epidemic of cholera took place in 1832, when it seems that 16,437 persons died in England and Wales. In 1849 another cholera epidemic visited this country, when the deaths numbered 53,293. In 1854 there was again an epidemic but of a less severe character; the deaths numbered above 20,000; and again in 1866 there were 14,378 deaths from cholera in England and Wales, and during at least 13 out of the last 20 years cholera has been present in one or other part of Europe.

Whenever cholera has taken an epidemic form in Europe it has invariably followed the same law as in India, and has selected for its temporary halting places those localities which offer to it the best inducements to visit them.

The Royal Commission who reported upon the very severe visitation of cholera which occurred in 1849, say that the experience of that and former outbreaks showed that the same houses or the same localities have often been revisited in recurring epidemics; but that where material improvements have been made in the condition of the dwellings of the labouring classes there has been an entire exemption from the

disease, and that where minor improvements have been introduced the attacks have been less severe and less extensive, and the mortality comparatively slight. Let me give you some instances of what I mean. At Malta it was found that the same localities and houses which had yielded the majority of plague deaths there in 1813, yielded the majority of the deaths in the cholera epidemics of 1839 and 1867; and that during the intervals of those years the same localities had yielded the majority of cases of small-pox, fever, and of anthrax, a very special eruptive epidemic attended by carbuncles. Also, it is noteworthy that in 1848 the first case of cholera that occurred in the town of Leith took place in the same house and within a few feet of the very spot from whence the previous epidemic of 1832 commenced its course. On its re-appearance in 1848 in the town of Pollockshaws it snatched its first victim from the same room and the very bed in which it broke out in 1832. Its first appearance in Bermondsey in 1848 was close to the same ditch in which the earliest fatal cases occurred in 1832.

Indeed, so long as the insanitary conditions remain epidemics invariably haunt the same localities. A few scattered drops of the storm may fall elsewhere, but the violence of an epidemic is spent where its purifying influence is most required.

Thus you will see that the experience of Europe entirely corroborates the experience which has been acquired in India.

Cholera travels slowly; it stops where it finds filth, decaying refuse, a crowded dirty population, bad water, damp polluted subsoil, or any other of those conditions which lead to bad health in a population, and which, when cholera is absent, afford an evidence of their existence by the prevalence of scarlet fever, small-pox, typhoid and other fevers, measles, whooping-cough, &c.

You have read no doubt in the newspapers of how largely the Spanish nation has suffered from cholera. In that country the deaths from this disease have numbered nearly 100,000 in the present year; and you have heard how severely that disease affected the town of Marseilles last year, and has again visited it this year.

The severe visitation in Spain is the result of the dirty condition of Spanish towns, and the use of water drawn from wells into which the matter from the cesspits percolates.

In Marseilles the following description will give you some idea of the state of the town.

It is the account of his visit to the town in the month of August last sent by a correspondent to the French *Journal d'Hygiène*.

It is as follows:—"Yesterday I wandered about one of the

suburban quarters of Marseilles. In vain I sought for a paved or macadamised street. The inhabitants dig out of the soft earth of which the streets are formed small winding uneven channels to receive the foul water from their kitchens and wash-houses. In the more level parts of these channels the solid refuse matter accumulates and causes small pools filled with foul stagnant putrefying liquid. When the accumulation of liquid becomes troublesome, a neighbour makes a passage for the water by clearing out the black mud with his spade and throwing it on to the road, where it is left to dry up and exhale fœtid vapours in the hot sun."

More than a hundred streets, containing 60,000 inhabitants, are in this condition, and these streets abut on the old port, the surface of the water of which is covered with a thick coating of stinking liquid. On the east side of the old port is a collection of houses containing 700 persons, where the discharge from the privies all falls into the courtyard round which the houses are built, and forms a mass of night soil, in some cases two or three yards thick. Such is the condition of the town this year after the terrible warning which the inhabitants received in the fearful cholera visitation last year.

This shows you what a pressing invitation Marseilles sent to beg the cholera kindly to visit it in its journey west.

It has been assumed in most European countries that cholera is the most infectious of all diseases. Experience shows that it is one of the least infectious.

If the money which is now spent on useless quarantines in Italy and France, and on other measures which are a curse to mankind in general, and especially to the countries where they are carried out, were spent on sanitary improvements, there would be some solid benefit to show for it.

You will thus see that whilst we are unable either to account for the cause or to prevent the periodic recurrence of epidemic diseases, the sanitarian has learned that it is possible to mitigate the severity of the visit.

The latest conclusions of Indian experience tell us that sanitary improvements, and sanitary improvements alone, embrace the whole action which a Government can take in order to prevent cholera. Pure air, pure water, pure soil, good and sufficient food, proper clothing, and suitable healthy employment for both mind and body, these are the great requisites for resisting the cause or combination of causes which produce cholera. The avoidance of overcrowding is just as important as the provision of pure water; good drainage, and good conservancy are essential—just as it is essential that the people should be well housed.

In fact, we may sum it up that from whatever cause the disease arises, pure air and pure water afford almost absolute safeguards against cholera, as indeed they do against most forms of zymotic disease.

We cannot feel certain that we shall escape from the present visitation of cholera to Europe, for in previous visitations it has first commenced in September or October, assuming its maximum virulence in the following summer. But if, on this occasion of its visiting Europe, we do suffer from the disease, it will be because we fully deserve to suffer for our neglect.

If cholera does visit our shores—if it should visit this city—do not fear its spread by personal infection; but look well after epidemic localities, and get the people out of them. A very short distance will often separate a deadly spot from a safe one.

Cholera begins with diarrhoea. For treatment, you should establish house-to-house visitors to look after premonitory diarrhoea; and one of the most essential provisions is to have some place for treating cases as close as possible to the attacked house. Removal of a collapsed or recovering case to a distance means death, and the best thing to do, whenever it can be done, is to remove the unattacked persons out of the house, and to keep the patient at home. The house to be thoroughly cleansed, aired, and lime-washed before being again occupied.

One of the special objects of epidemics seems to be to arouse mankind, by signs which cannot be mistaken, to a sense of the necessity of recognising and obeying the laws of his physical existence. The health, the well-being, and the duration of the life of man are intimately connected with the observance of the natural laws of the universe in which he dwells. The knowledge of this fact has unfortunately not been sufficient to insure obedience to those laws. Periodical epidemics are therefore necessary, in order that men may be taught individually and collectively to obey these laws: for it is only by obedience to the laws of nature that we can insure the possession of that immunity from disease which the great Creator obviously intended His creatures to possess.

There is a free choice given. On the one hand there is obedience and health, with all the numberless blessings and privileges which go with it; on the other there is neglect and its infallible consequences, which no human power can fully avert when they are entailed, and these are disease, death, pauperism, loss of property, ignorance, debasement, crime.

We have too long neglected these matters. We have neglected them in our Parliament, in our municipalities, and in our houses—and more especially have we neglected to educate our children in a knowledge of the laws of health.

The social evils of this neglect are at present ramified throughout the entire framework of society. A vast amount of property has grown up in all parts of the country, of which it is not too much to assert that it is as productive of misery to the people, as it is unproductive of legitimate revenue to the possessor. Large masses of population have been allowed to congregate together without sufficient attention being paid to those conditions on which their healthy existence depends.

It is only in recent years that the community has become awakened to the fact that if a large population is to be allowed to crowd itself into a town, it can only do so safely with a due regard to its health by observing strict sanitary regulations.

If you live in a town you must conform to regulations in the laying out of streets, in the building of houses; you must bring in pure water from a distant source; you must carry off fouled water by drains, and not simply turn it into your rivers, so as to convert pure streams into dangerous nuisances. If all this had been recognised and acted upon during the last 80 years, what a large amount of sickness, what a number of premature deaths, would have been avoided!

We must remember that we have for years, nay, centuries, neglected these matters; and that if we now find that they are expensive to carry out, we are merely paying for this neglect of our forefathers or of ourselves.

The fact is, the whole question of sanitation brings us to that of the housing of the people.

It is for that reason that I have always held that the question which is of far the highest importance amongst the social questions of the day is that of the manner in which the working classes are housed; and I maintain now, after forty years of watching the development of this question, that the root of all real progress in a nation lies in the condition of the dwellings.

Upon this question hinges the morality, the education, the religion, the health, and the happiness of the nation.

How can a population be moral if men and women, girls and boys, are crowded together in one room, and often in one bed? Of what profit can the schools, the churches, and the chapels be to a population which lives in houses where decency or privacy are impossible? How can health be maintained in houses where the water supply is defective, where the means for removing the refuse are neglected, where the overcrowding vitiates the air?

You have long ago passed laws to prevent the adulteration of food. But it is only the other day that Parliaments enunciated the very mild doctrine that no one has a right to let a house which is not in all respects reasonably fit for human habitation.

Nearly 50 years have elapsed since this question of the housing of the working classes was brought into prominence by the leaders of sanitary improvement, and great blame attaches to those in whose hands the government of the nation has rested during those years, of whatever party they may be, for their long-continued neglect of this question.

Dr. Farr, who died two years ago, after attaining to the position of being the leading sanitary statistician of this age, devoted the best years of his life to tracing out the facts which relate to disease in connection with its surroundings. He showed that in proportion as you have a population concentrated on a small area, so will the mortality of that population be increased. That is to say, supposing you have a thousand families living in cottages, in country districts, a certain number will be ill and a certain number will die every year; whereas if those thousand families, instead of each having its cottage and garden with fresh air round it, live close together in a town where often several families are crowded into one house, where streets are narrow, a much larger number out of the thousand will be constantly ill, and a larger number will die.

It has also been shown that the grandchildren of people who live in towns, and who grow up to become adults, are only half as numerous as those of labourers who live in healthy country districts.

You will say that Leicester has increased by 27,000 persons between 1871 and 1881, and many other towns have increased as fast, if not faster; but the great increases in town populations depend upon the people who come in from the country districts; and although, as I will presently explain to you, sanitary science shows that the inferior health of town populations can be much modified, yet the town population starts with a disadvantage as to the health of the inhabitants. Now I want to impress upon you that it is possible to a great extent to diminish this disadvantage by improving the surroundings of a town population, by making the dwellings airy, by not building them too close together, by so placing them on the ground that air and sunshine may penetrate between them, by removing daily all refuse from the houses, the yards and the streets; and by thus diminishing the adverse influences which the crowding together of people in towns exercises on health.

There is much experience on this matter. In London the most densely peopled areas used to be the most unhealthy, but by adopting a new form of building, densely peopled areas have become very healthy, although the number of people on each acre was increased. For instance, in the old buildings in which 67 families lived on an acre of ground, the death-rate was 24·16

per 1,000. In the model blocks of artisans' dwellings, where there are from 140 to 180 families congregated on one acre, and where the conditions I have just mentioned have been carefully attended to, the death-rate has been only from 16 to 18 per 1,000. The reason of this is obvious. The old system was to cover the ground with houses of one, or at most two storeys high, placed close together in narrow streets, whereby there was no space left for the circulation of air between and around the houses. These new model dwellings in town districts, where the surface of the ground is so valuable, are built in blocks of several storeys; the blocks of buildings should be placed with their axes lying north and south, so that the sun may shine on each side during part of the day; five or six houses thus placed as it were one above the other, and in that way you can reserve plenty of space at the back, and at the front of the houses so as to allow ample circulation of air all round and through them, whilst at the same time a large number of families can be accommodated in them. In these houses, moreover, there is a porter who sees that the ground surface all round is kept scrupulously clean, that no refuse is allowed to remain in or near the houses. He is always at hand to see to small repairs, so that things are not allowed to get out of repair for want of "*the stitch in time.*"

Let me tell you briefly what are the principal matters which should be attended to when you build a house, so as to make it healthy. You must start with the condition that it must be surrounded with pure air to breathe, and be supplied with pure water to drink. You can only have pure air to breathe, provided the surface of the ground round the house is clean, and provided the soil on which your house is built is also clean. A house must not be built upon old rubbish heaps, because the air which is drawn up by the warm atmosphere of the house from the ground will bring with it, from the slowly decaying rubbish, noxious vapours which will occasion fevers and other diseases. There must be a damp course above the ground level to prevent damp from the ground rising in the walls. The surface round must be paved to prevent dirty water from lying in stagnant pools near your house, or from soaking into the soil either under or round your house. The walls must be of clean and sound materials, and they, as well as the roof, should exclude damp. Houses should never be built back to back, but there should be windows and doors at both front and back to allow of a thorough current of air. The windows should open near the ceiling. There should be abundance of light, and no dark corners. No house can be clean that is dark; no dark room can be kept clean, for dirt

must be seen to be removed. Pure light, especially sunlight, purifies, destroys the organic poisons of spreading diseases. Observe how plants sicken and die if they have no light, but live and grow rich in the sunlight.

Dr. Richardson says, "A clean home is a pleasant home, a thrifty home, and a healthy home."

You must not keep dirty water or slops in the house, but there should be no direct communication with a drain into the house. Sink and waste pipes should empty in the open air outside over trapped gullies.

Decaying matter must not be retained in your houses. Dust-bins, &c., are a source of much danger to health, and more efficient and quicker means of removal of dust and waste from our houses ought to be adopted than that of storing it in the back yards close to the windows of the rooms. In some towns, indeed, the very objectionable plan is in force of removing the contents by taking it through the house.

I may mention that in Poplar district in London, dust-bins and ash-pits have been abolished. Each house is supplied with a zinc pail large enough to hold three days' refuse, and on known days twice in the week the dustman calls and empties these pails into a cart, which is covered so as to prevent the dust blowing about. I mention this not as a perfect mode of dust removal, but only as a great improvement on what prevails generally.

You thus see that with a proper application of sanitary principles in laying out your towns and building your houses, you may rest satisfied that there need not be any very great difference in healthiness between the town and the country dwelling, although no doubt we should all prefer free bracing country air to town air, if we could get it.

People may say that whilst it is easy to talk about improved dwellings, it is a very difficult matter to improve the houses which already exist, except gradually. I concede that. But what I want to emphasize is that for the last 40 years this question of healthy dwellings has been continually urged upon the public by sanitarians. During that interval what has happened?

The houses in England and Wales, which numbered 2,943,945 in 1841 have increased to 4,831,519 in 1881; that is to say, the houses have increased by 2,000,000.

In the last ten years there have been 5,000 new houses added to Leicester, 6,000 to Derby, 10,000 to Birmingham, besides which numbers of the houses and cottages which were enumerated in 1841 must have been reconstructed in the interval.

It has not been for the want of knowledge that this question of proper accommodation for the working classes has not advanced more rapidly. My friend Mr. Chadwick, Sir Robert Rawlinson, Dr. Sutherland, and many others now dead, explained in reports to Parliament what were the necessary sanitary measures nearly fifty years ago. Nor, in the face of the above figures, can it be said that there has not been the opportunity to improve the houses of the working classes; and if full advantage had been taken of our sanitary knowledge during these many years, in the construction of the new houses which have been built, and in the reconstruction of old houses, there would not be much now left to be done, and the sanitary and moral state of the country would be much better than it now is.

The opportunity has been neglected because neither Parliament nor the municipal authorities cared sufficiently for the sanitary wants of the community, and because the owners of house property were satisfied to accept the profits derived from letting their houses without fulfilling those duties towards their tenants which in common honesty they were bound to fulfil.

The fact that so much still requires to be done, is, therefore, the result of the supineness, neglect, and interested motives which have been governing this question for so long.

The new Act of Parliament passed last session has, no doubt, made a great step in the direction of sanitary progress. Indeed, this Act is the commencement of a new era in this question. It says that "in any contract made after the passing of this Act, for letting for habitation by persons of the working classes a house or part of a house, there shall be implied a condition that the house is at the commencement of the holding in all respects reasonably fit for human habitation."

The bill, as originally presented to Parliament, went further. It stated explicitly what we sanitarians desire should be the effect of the clauses. It said, that "in the event of a breach of any such condition as above-mentioned in the case either of a furnished or unfurnished house, any inmate of such house who suffers any loss by injury to health or otherwise in consequence of such breach, shall be entitled to recover damages from the person responsible for such breach." These words were omitted from the Act; but the omission would not necessarily prevent a court of law from giving effect to the intention.

Let me explain to you what that intention was. If a house were let to you in an insanitary condition, the landlord would be responsible for the injury which such insanitary condition entailed upon the tenant. For instance, if the house in which you live has been built on a rubbish heap, and fever and sickness prevail in

your family, and your landlord did not warn you when you took the house as to what was under it, he ought to compensate you for the disease from which you suffer. And if, when you pour away the dirty water down the sink the pipe which conveys it away leads straight into the sewer and brings you back sewer gas in exchange, and if disease results to yourself or your family, the person who owns and has let you the house should compensate you for the injury he has done to you by letting to you an unhealthy house which contains such insanitary conditions. Or, again, if your roof is in bad repair and lets in water, and you consequently get rheumatism, your landlord should compensate you for the injury you have suffered in consequence of the defect in the roof.

I have long enunciated the view that all plans of new buildings intended for habitation in towns or villages, or detached houses, and all important alterations of existing buildings should be submitted to a local district surveyor, who should certify that the position and construction of the building would be in accordance with recognised sanitary conditions.

But I am now inclined to think that, so far as the actual construction of the house is concerned, if the provision in the new Act relating to the housing of the working classes should be held by courts of law to enable a tenant to obtain compensation from a landlord for letting him a house in an insanitary condition; that provision may operate much more effectually and much more rapidly to improve the sanitary condition of dwellings over the whole country than any regulations made by a municipal body could do; and if the provision as it now stands be not sufficient for obtaining our object, I trust that the new Parliament will take steps to make it efficient.

Owners of house property and ratepayers may no doubt be called upon to pay large sums for putting the houses into a healthy condition, but such expenditure would not have been necessary now if during past years the owners of houses had paid due attention to sanitary laws in the construction and maintenance of their houses, or if municipal bodies had exercised adequate supervision over the growth of the towns.

If now they are called on to pay large sums, the money must be looked upon as the compound interest of the money which they have saved at the expense of the diseases and the lives of the people whom they have allowed to suffer from, and to die of, preventable diseases.

It may be said that if owners of house property have to pay large sums for removing sanitary defects, they will, unless there be some counteracting influence, charge increased rents; that would probably be so.

In considering this great question we must bear in mind that these wretched and unhealthy dwellings are not only centres of disease, but they are moral cesspools, which foster misery, discontent and crime. The community, if it had done its duty in times past, would not have permitted them to come into existence, and it is for the advantage of the community that they should be abolished. It is, therefore, reasonable that, since the community has by its own long-continued neglect allowed these insanitary dwellings to come into existence, the cost of removing them and replacing them should be, in part at least, borne by the community. This has been recognised in the Act of Parliament passed last session on the Housing of the Working Classes. This Act enables urban and rural sanitary authorities to contribute out of the rates to the cost of improving the dwellings of the working classes; and if the various authorities concerned in the administration of the law do their duty in this respect in their several localities, they will take care that an adequate number of sanitary houses shall be provided for the working classes, and thus prevent the private owners of house property from unduly raising their rents.

This question has another and very important aspect. The improvement of the home means less sickness, and more energy for work. To the ratepayer it means a diminished poor-rate, whilst to the individual it means more opportunity for self-education and culture, and it opens out to every one the possibility of having a refined and comfortable home. The improvement in the standard of living and of house accommodation is only what has been going on gradually for centuries. We are told that in the 15th century, in the houses, such as they were, of the poor, the walls were of rough unhewn stone, without cement, or of mud; the roofs of thatch, or of rude straw; the windows unglazed; the floors of bare earth, without tile or boarding; the accommodation of but one room, or at the most, two, let the family have been ever so numerous; and their animal stock, where they possessed any, frequently sheltered at night under the same roof as themselves. And indeed such cottages were not uncommon 50 years ago. As a rule the working classes would be ashamed of such accommodation now.

So they will in time be ashamed of living in bad unhealthy houses. In the United States of America I have visited the dwellings of the artisans and wage classes in many manufacturing towns. I have frequently found them living in small, comfortable houses, in which each family have their parlour with appropriate furniture, pictures, and often their piano. They had come to look upon these things as a necessity. This state

of things is the result of the free education and general civilization which pervades American society.

An improved standard of living follows education, and it may be fostered by legislation; but it must come from the people themselves. Therefore do not go away with the idea that Parliament or town councils can do everything for you. They can do something. Acts of Parliament may be necessary to assist sanitary progress and to enforce sanitary discipline, but for real practical progress, we must look to our own exertions. Laws can do but little unless aided by the earnest, the strenuous co-operation of every individual member of the community.

"How small of all that human hearts endure,
That part which laws or kings can cause or cure!
Still to ourselves in every place consigned,
Our own felicity we make or find."

However dirty the locality, and however poor the house in which you live, you can yourselves do much to preserve your health.

Amongst the first necessities of health is cleanliness. You must keep your rooms clean and well-aired. This means that you must not accumulate rubbish in your houses. You must pay attention to cleanliness in your persons. You must not wear nor let your children wear dirty clothes. No doubt to men and women who have to do dirty work this is not always easy, but it is very much a matter of individual care. Look at different individuals engaged at the same occupation, and how clean one often is compared with others. The difference between cleanliness and uncleanness is very much a question of habit.

Clothing should be not only washed and brushed, but when removed from the body at night it should be turned inside out and suspended in the air. You should wash yourself and well rub yourself or scrub yourself all over every day with a brush. All the vital functions of the body are benefited by this one simple act. This habit of daily ablution should be taught to the young from their earliest life. It then becomes a habit—a second nature. Expensive appliances are not required for cleansing the surface of the body. A wash-hand basin, a shallow tub to stand in, a lump of soap, a large clean towel, and a gallon of pure water are all that can be wanted for daily ablution. Indeed, a quart of water, with the aid of a soaped brush to scrub yourself with, could be made to suffice. There are few so poor who cannot afford these few things, and the experiment always pays in the increased health, happiness, and vigour which it brings.

Mr. Chadwick, who is the leader of all sanitary progress in this country, and who is now about eighty years old, showed that in an orphan asylum the death-rate (which may be taken as an evidence of the degrees of health) was greatly reduced after the practice was adopted of washing the children from head to foot every day, so as to maintain cleanliness of skin. He also asserts that a well-washed child will require less food than an unwashed child, and that the food which would be required for four children who are unwashed would suffice for five children who are washed. In further corroboration of this it is known that pigs that are washed put on one-fourth more flesh from the same quantity of food than do pigs that are unwashed.

Bad health is wasted force, and is therefore actually a money loss to the community. It is very difficult to find out what is the extent of this wasted force. The death rate of a town gives us some idea of the sickness. I found, in an insanitary district in St. George's-in-the-East, that with a death rate of 31 per 1,000, the sickness rate was 270 per 1,000, or 9 cases of sickness to one death. But in the worst parts of the same district the sickness rate amounted to 620 per 1,000, which gives 20 cases of sickness to one death. And it may be generally assumed that there are on an average 20 cases of sickness to one death, of which 4 cases out of 5 are those of children.

The loss from sickness arises partly from the loss of earnings of the individual who is ill, and in the younger members of a family from the expense which the sickness causes, by loss of time and otherwise, to the other members of the family.

But if the loss by sickness is great, consider for a moment the losses to the community which are evidenced by a high death rate.

Look at the contingent losses. In the case of the cholera epidemic of 1848, it was estimated that the burden which fell on 12 of the parish unions for the maintenance during 4 years of widows, widowers, and orphans, in consequence of the deaths of relatives from cholera and diarrhoea, amounted to £121,576.

Then consider the money loss to the community from the individual deaths. To begin with, Mr. Chadwick estimates that each death involves on the average a cost of £5 in funeral expenses.

In the next place, Dr. Farr calculated that the present value of the future wages of an agricultural labourer at the age of 20 is £637. Therefore if the labourer dies at, or soon after 20, that sum is practically lost to the community. Hence every case of death from preventible diseases represents an unnecessary waste of money.

But there are many whose early death entails a far greater loss to the community than can be valued in money.

Take a professional man who has accumulated a large amount of knowledge, and what is better, of experience; or take an artisan who is a skilful craftsman. If they die in the prime of life, when they are most fitted to use these qualities, the knowledge, experience, and skill, which have required many years and much labour and expense to accumulate, all go with them, before the crop of usefulness, in the cultivation of which so much has been expended, has ripened and been gathered.

When we consider how important health is, how great should be the efforts which we ought to make to maintain it! How wicked any person is who knowingly assists in preserving those conditions in the midst of a community which allow preventible diseases, or, as some one has named them, dirt diseases, to continue.

A Jewish book, the "Mishna," says:—"Outward cleanliness is inward purity;" and, indeed, as my friend, Dr. Richardson, has so well expressed it, "cleanliness covers the whole field of sanitary labour." Cleanliness, that is purity, of air; cleanliness, that is purity, of water; cleanliness in and around the house; cleanliness of your persons; cleanliness of dress; cleanliness in food and feeding; cleanliness in work; cleanliness in the habits of the individual man or woman; cleanliness of life and conversation, morality, purity of life, temperance—these are important influences in promoting individual health; these are still more important influences in promoting individual happiness.

CLOSING GENERAL MEETING OF THE CONGRESS.

The Closing General Meeting of the Congress was held on the afternoon of Friday, September 25th, at the close of the Sectional Meetings. The President, Prof. F. de Chaumont, F.R.S., took the Chair, supported by the Mayor and other members of the Local Committee, and the Chairman and Council of the Institute.

Votes of thanks were passed to the President, the Local Committee, the Judges, and others who had been engaged in the work of the Congress and Exhibition.

The following reports upon the subjects brought forward for consideration at the Sectional Meetings were read by the Senior Secretaries of the respective Sections.

SECTION I.—SANITARY SCIENCE AND PREVENTIVE MEDICINE.

I have to report that the Preventive Medicine Section of the Congress has harmoniously conducted its sittings to a successful issue, under the Presidency of Dr. Arthur Ransome, and although the place of meeting was changed three times, the votaries of sanitation refused to allow their ardour to be damped, Sir Charles Cameron on one occasion coming to the rescue.

We are much indebted to the Vice-Presidents, Dr. William Collingridge, Mr. Henry Lankester, and Dr. George Shaw, as well as to the Honorary Secretaries, Dr. Moore and Dr. Johnson, for the successful arrangements. To the Readers of Papers we owe our thanks for much interesting matter.

Dr. Arthur Ransome's address on Sanitary Progress, and Dr. Buck's paper on Infantile Diarrhœa were well received, and possibly the discussion upon the latter paper may result in indicating the remedy for the heavy diarrhœa mortality of which Leicester has hitherto been the all too patient victim.

Surgeon Major Pringle's paper upon the Vaccination Question, it is to be hoped, will encourage our opponents to examine fully into this very serious question in a less biased and more dispassionate manner than has hitherto been the case, and I am quite sure that the Council of the Sanitary Institute altogether disclaim the imputa-

tion of the Editor of the *Times*, that "Because the Institute is accepting the bountiful hospitality of Leicester, therefore errors of omission and commission have been met in a too friendly spirit." It is rather that the Institute recognises that *Salus generis humani* is not to be found in crushing opposition by dictatorial assertion, but in persuading opponents by force of argument and demonstration.

Mr. Lewis Angell laid bare some impediments to sanitary progress, and Mr. F. Scott urged the extension of voluntary effort.

We are indebted to the Countess de Viesca for a paper which should encourage the management of the house upon sanitary principles, and to Mr. J. H. Buckley for an interesting sketch of ambulance work in Leicester.

The result of the second day's gathering of the Section again elicited the fact that if a special day, or part of a day, were devoted to the consideration of domestic sanitation and ambulance work, in both of which ladies take such a very great interest, it would add immensely to the success of future Congresses, and I feel it my duty to represent this to the Council of the Sanitary Institute.

JOHN F. J. SYKES.

Honorary Secretary.

SECTION II.—ENGINEERING AND ARCHITECTURE.

The observations of the President, Mr. Percival Gordon Smith, of the Local Government Board, as to the increased attention paid by the public to sanitary matters, were strikingly confirmed by the good attendance at the meeting of the Section. The allusions made by the President to the prime importance of securing efficiency in public sewage and water works, at whatever cost might be necessary, were particularly applauded. The strong recommendations of the President as to the abolition of cesspools were generally approved. A vote of thanks to him was proposed by Prof. de Chaumont, and seconded by Mr. Rogers Field, who entirely concurred in the President's opinion as to the necessity for the abolition of cesspools. The papers of Messrs. J. Underwood and J. Gordon—the first on the subject of the History of Sewage and Sewage Treatment in Leicester, and the second on the Drainage of Continental Towns—received much attention, and evoked a very animated discussion, in which Mr. Alderman Kempson, Prof. Robinson, Mr. Lemon, Mr. Peregrine Birch, Mr. Laws, Colonel Jones of Wrexham, and others, took part. Mr. Saxon Snell's paper on Circular Hospital Wards produced some discussion, but, on account of the late hour at which it was read, it was not fully considered. The opinions expressed were generally in favour of the parallelogram form of wards, and many strong objections to the circular form were raised, which remained unanswered.

The Section re-assembled this morning, and the first paper was on Smoke Abatement, which led to an interesting discussion, in which the President of the Section took part and referred to the Building Acts defining the size of chimneys. Mr. Ernest Hart, Chairman of the Council of the National Smoke Abatement Institution, Mr. J. Gordon of Leicester, Mr. Scott of Manchester, Prof. de Chaumont, and several others also took part. The effects of smoky atmosphere on health were particularly discussed. Mr. Gordon stated that the use of gas stoves in Leicester was very extensive and fast increasing since the Corporation had adopted the policy of letting stoves on hire at a nominal rent, and he pointed out that the use of gas stoves was the best means of preventing smoke from domestic chimneys. A paper by Mr. E. C. Robins, on the Ventilation of Chemical Laboratories and Science Schools generally, was read, and discussed by Mr. Rogers Field, Mr. Saxon Snell, Prof. de Chaumont, and others. An interesting branch of the discussion was upon the accuracy of Anemometers as instruments for measuring the volumes of air referred to in the paper. It was mentioned by Prof. de Chaumont that a series of experiments, to test the accuracy of anemometers, was being carried on by a Committee of the Sanitary Institute, and would be published shortly. A most important paper on Plumbing and Plumbers' Work was read by Mr. F. Scott, of Manchester, setting out the action taken by the Plumbers' Guild of London to guard the public against the evils arising from defective plumbing work. Prof. de Chaumont, Mr. Emptage, Mr. Robins, and others took part in the discussion, and the action of the Plumbers' Company was generally approved.

W. R. E. COLES,

Honorary Secretary.

SECTION III.—SECRETARY'S REPORT.

The President of the Section, Dr. William Marcet, read a most interesting address, dealing with the distribution and object of Carbonic Acid in nature and with its sanitary relations, and also on the influence of great altitudes on the Chemical Phenomena of Respiration, in which Dr. Marcet described some most interesting experiments which he had made upon the amounts of carbonic acid expired by persons at different altitudes, extending over a period of upwards of seven years. From these experiments Dr. Marcet adduced the fact that the body required the inhalation of a smaller weight of air, or volume of air reduced to freezing point and sea level, to produce the same weight or corresponding volume of carbonic acid as greater heights are attained.

Dr. Marcet also exhibited and explained a very interesting diagram, showing the analogy which exists in London between fogs and an excess of carbonic acid in the air of that city.

Mr. John D. Paul gave a lengthy and interesting geological lecture upon the Valley of the Soar, of considerable local and general interest, and in the discussion which followed the President of the Section, Mr. Mott, and others took part.

The Rev. T. Lawrence read a paper upon the Sanitary Evils arising from the improper burial of the dead, and in the discussion which followed cremation was advocated by Captain Douglas Galton, Prof. Symons, Mr. Boulnois, and others.

A valuable paper was then read by Mr. Charles E. Cassal, F.C.S., upon Hygienic Analysis, which was of a very interesting character, and which led to a long discussion.

In the absence of Mr. Whitaker, the Secretary of the Section read a paper entitled "A recent Legal Decision of importance in connection with water supply from wells," and the paper on "The use of Sodium Aluminate for softening and purifying hard and impure water," was taken as read, the author not being present, and the hour having arrived for closing the sectional meeting.

H. PERCY BOULNOIS, M.I.C.E.

Honorary Secretary.

REPORT OF THE JUDGES OF THE EXHIBITION, LEICESTER, 1885.

We, the undersigned, the Judges appointed by the Council, beg leave to recommend to the Council the following distribution of Medals and Special Certificates, and of Certificates of Merit.

Exhibits which have already received Medals at previous Exhibitions of the Institute are excluded from awards of Medals, but those Exhibits to which a second Medal would otherwise be awarded receive Special Certificates, and these are distinguished in the following list by asterisks.

THE RICHARDSON MEDAL for an EXHIBIT SELECTED FROM THE ENTIRE EXHIBITION will be awarded by the Judges in case of pre-eminent merit only.

SILVER MEDALS OFFERED BY THE GAS DEPARTMENT OF THE CORPORATION OF LEICESTER.

Four SILVER MEDALS are offered by the Gas Department of the Corporation of Leicester for Gas Stoves exhibited under the following classes:—

- 1.—For the best Gas Stove or Gas Apparatus for Cooking purposes for families, to include means for heating a good supply of water.
- 2.—For the best Gas Cooking Stove suitable for an artizan's family, for at least six persons.
- 3.—For the best and most Economical Gas Fire.
- 4.—For the best arrangement for Heating Baths by Gas.

SILVER MEDALS ARE OFFERED ALSO BY THE EXETER GAS COMPANY.

- 1.—For the best Gas Stove or Gas Apparatus for Cooking purposes for families, including a sufficient supply of hot water.
- 2.—For the best and most economical Open Gas Fire.