

APPENDIX.

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APPENDIX.

APPENDIX I.

(THE RIGHT HON. LORD ROBERT MONTAGU, M.P.)

- (1.) EXTRACT from the REPORT of the HOUSE of COMMONS SELECT COMMITTEE ON SEWAGE, 1864.

THE Secretary of the Local Government Office, as well as Mr. Rawlinson, the inspecting engineer, while concurring in the necessity of appointing a board for each catchment basin, gave a decided opinion that the duty of the watershed board should be merely to supervise the action of the local boards within their district, and enforce an obedience to the law in causing them to desist from polluting the streams; but that the necessary works should be carried out by the local boards alone.

We recommend that the important object of completely freeing the entire basins of the rivers from pollution should be rendered possible by general legislative enactments, enabling the inhabitants of such entire districts to adopt some controlling power for that purpose; but it should include a provision for compelling local boards to render the sewage of their districts innocuous by application to the land for agricultural purposes.

- (2.) EXTRACT from the EVIDENCE taken by the SEWAGE COMMITTEE, 1864.

2992. (W. J. Ffennell, Esq., Commissioner of Fisheries, examined by the Chairman.) It has been proved in evidence, and it stands to reason, that if one town stops the sewage from running into a stream, and another town allows it to run into that stream, the pollution remains as much as if both towns allowed the sewage to run into the stream?—It is not quite equal, but it is very bad.

2993. Then are you of opinion that there should be one authority over the whole catchment basin?—Certainly.

2994. Are you of opinion that there should be a separate authority in the case of each catchment basin, or that there should be one central authority in London?—There should be a central authority in London; but I do not think that you could work without deputies in the districts. Some catchment basins are so large that they must require two functionaries, such as the Severn or the Trent; whereas in other districts one functionary would be sufficient for each, or perhaps for two or more basins.

2995. But still there should be a unity of action and one authority throughout the catchment basin?—Certainly.

3184. (S. H. Gael, Esq., examined by the Chairman.) Then in fact each town which is on a stream, and sends its sewage into that stream, sends it on the next town below it?—So it appears, although the law says that they are not to create a nuisance.

3185. In fact they do it to preserve their own health and to the injury of the health of the next town?—Yes.

3186. Then in one basin of a watershed, or what is technically called a catchment basin, it is of very little use for one town to prevent its sewage from going into the stream, unless all the towns above it in the same catchment basin adopt the same precaution?—There is the difficulty about the contributions in the case of each catchment basin.

3187. For instance, although we may drain London and send our sewage some miles down the river, still we are drinking water which is polluted with the sewage of some 800,000 persons; is not that the case?—Yes, and all that they do in London is to take the sewage to some other place.

3188. But do not the London people get water which is polluted by the sewage of Oxford and Reading, and of other places on the Thames?—No doubt.

3189. Have you heard of the case of Salford, where they proposed to utilize their sewage at an expense of £0,000; they proposed then that the other towns in the basin should do the same, but those other towns refused to adopt the remedy, and so the plan was abandoned?—I have heard of that.

3190. With regard to gas refuse, are there not Acts preventing gas refuse from flowing into rivers?—All Gas Acts

prohibit the gas refuse from going into rivers under very heavy penalties, but they do not prevent the practice.

3191. Do you think that there ought to be some board or some authority for each catchment basin, which must be appointed with adequate powers to prevent the pollution of streams?—I think that taking analogous cases, one of the closest of which, perhaps, is the late legislation upon salmon fisheries, it would be requisite to have some sort of district and some sort of body, which one may say is exemplified in the different way of treating those salmon fishing questions in England, in Ireland, and in Scotland. You may set about it in different ways. I think that there is no board in England for salmon fisheries, but there is a board in Ireland and there is a board in Scotland, under which they make a jurisdiction and have the power of enforcing the law against parties who pollute the rivers to such an extent as to destroy the fish; that is an active executive board with power to levy rates in order to enforce the law.

3192. Does their authority extend over the whole of Ireland or of Scotland, as the case may be?—The commissioners' authority extends over the whole of Ireland and of Scotland. They form districts and appoint a board, and they or the board have authority and power of instituting prosecutions.

3193. Do you conceive that that would be better than to have a separate local board for each catchment basin or watershed?—I think that you could not have a mere local board for each town. If you went upon that principle you must have some delegates from the several boards to meet upon the common concernment of the outlet.

3194. Does it not seem to you that if unity of action is preserved throughout a catchment basin, that would be sufficient to prevent the pollution of the stream which drains that watershed?—I think that if there was a powerful board that could enforce the law, as well as agree upon some plan by which the towns themselves would cease to be contributors to these nuisances, perhaps it might be got rid of; but it is attended with a vast deal of difficulty, because it involves not only the question of the town, but also the question of the trade nuisances on the rivers.

3195. Supposing that there were this board for a catchment basin, and that exactly the same powers were given to that board which are given to any local board of a town, do you not conceive that that would be sufficient?—No, I think not.

3196. Why do you think that it would not be sufficient?—I think that it would require some superior authority. I do not think that a local board of itself would ever devise the means of dealing with the nuisance.

3197. If those local boards were put under the Home Office, or under the Board of Health in London, and the Home Office should issue a *mandamus* to make them enforce the law, would not that be better than to have a central board in London?—That would involve an inspection by some officer appointed by the Home Office, some authority to take proceedings, some fund out of which the expense of the proceedings is to be defrayed; and in fact, if you trace it out, it requires pretty nearly the whole machinery of a central authority and a district authority also.

3203. Then we come exactly to the same point as before. If the Local Government Act seems to work well when confined to local boards of towns, why should not a similar law work equally well if, instead of having the local boards of towns to deal with, you had a local board extending over a whole catchment basin?—It would require some one to appoint the catchment basin; that is to say, to define the district, which is, in the first place, the business of a central authority.

3204. Has not the district been already defined geographically by the watershed?—The district, by nature perhaps, may be defined, but that is not sufficiently definite to work upon by any process of law.

3205. Supposing that your object is to secure the discon-

tinuation of the pollution of streams of water, and therefore that you must have unity of action throughout the whole catchment basin or watershed, would it not be the best means of obtaining that object to appoint a board for the catchment basin which should have exactly the same powers as are given to the local boards now under the Local Government Act?—Yes; but in order so to do, Parliament cannot itself legislate in each case; they must have it brought forward by some authority. It must be propounded; in fact, ready cut and dried to their hands. It involves the necessity of an investigation on the part of some of the Government authorities, in order to ascertain the district which is to be made and exactly defined, so as to form the jurisdiction of the local authority.

3206. Supposing that we were to say that the Local Government Acts, instead of applying to towns and boroughs, should apply to those basins which are geographically defined by watersheds, would not exactly the same machinery and the same amount of inspection be as efficient in that case, or even more efficient, than it is now with regard to the numerous little local boards of all the towns?—I think that it would be requisite to keep a much stricter hand over them, the subject being a great deal larger and involving a great many more interests both public and private; and I think that it would be necessary to have a much closer contract on the part of the governing authority.

3207. Then you are rather in favour of one great central authority instead of those local boards?—A central authority may appoint the local or district boards, just as in the case of the Irish and Scotch salmon fisheries, where they take the stream and all the tributaries of the stream. But the commissioners there assign the districts in the first instance to the boards and authorities who are to carry out the law locally on these several rivers and their tributary streams. Amongst other things they have this very case to provide for: they have power to prosecute traders and manufacturers whose works pollute the streams.

3208. Then how far do you agree with the suggestion which has been made to you? You allow, do you not, that this is for the general good, and that therefore it must not be left to individual action?—Certainly I think so.

3209. And you are also of opinion that it ought to be under local boards for the catchment basins, but you think that those boards ought to be more directly under the management of and appointed by a central authority in London?—The district should be assigned, I think, by some central authority. The boards might be elected or appointed in some way, but that is quite a subordinate question.

3210. Supposing that instead of assigning the district we were to take the appointments of nature, would that in your opinion work satisfactorily?—I do not think that you could successfully do that.

3211. Why could not that be done?—Because, in order to have anything safe and practical, you are obliged to define so closely by maps and plans, and metes and bounds, that I do not see how the object could be obtained by taking the mere geographical limits of the basins.

3212. Can anything be more definite and more minutely defined than a watershed?—If it involves the question of taxing all the people in that watershed it would then become a question of which of the owners of several of the places within that watershed were at all interested in the question, and whether they ought to be comprised in that taxation or not.

3213. Then is the only difficulty that as to the taxation?—There is that of jurisdiction in all questions.

3214. Then would you leave the definition of the district to some central board in London?—Yes.

3215. Would you leave the appointment of the chairmen and members of these local boards to the central authority?—No; they might be locally appointed.

3216. Perhaps the chairman of the quarter sessions and the chairman of the board of health should be *ex officio* members, and the rest should be elected by the ratepayers; would that be your view?—Some expedient of that sort might be adopted.

3217. Are you aware that some of these catchment basins cover an area of 2,000 square miles?—I believe that some of them comprise several counties; because rivers are so often the boundaries between counties that they would include several counties.

3218. In order to prevent travelling expenses being an item of this board, ought you not to have a high qualification for election, so that members should pay their own expenses?—I really am not prepared to go into those detailed questions.

3219. What powers would you give to those boards? would you give them the same powers as are given under

the Local Government Act?—They would require more extensive powers than those.

3220. Under that Act they have power to raise rates, have they not, as well as to prevent pollution?—Certainly.

3221. And have they not power also to enter lands to carry their works through, just as a railway has?—Clearly so; just the same as a railway, except that they do not take the surface of the land.

3222. And have they not power to lease for the establishment of these works?—They have power to take land on lease.

3223. They have power to purchase land, have they not?—They have power to purchase land by voluntary arrangement; but that would not be sufficient. They would require compulsory powers in many cases, but under the Local Government Act they have voluntary powers only.

3224. Do you think that compulsory powers would be necessary?—In some cases I think they would.

3225. Would there be any other powers necessary?—I think that probably it would be necessary for them to make rules and regulations of the nature of the old sewer ordinances.

3226. Would you allow each district to make its own rules and regulations?—They would have to be controlled, because everything which is effective in this way must intrude very largely indeed into what may be called individual liberty. Indeed there are so many things done that are productive of the pollution of rivers, that if the process of cleansing them is to be put into operation fairly and equally, very considerable control must be exercised over operations in houses, in manufactures, and in land, all of which tend more or less, in the way in which things are managed now, to produce that pollution; and it would not do to deprive manufacturers, for instance, of what they consider to be their vested privileges, unless you put control upon the contributions made by the land to the nuisance; nor would it be right to throw any impediments in the way of ridding the houses of the sewage matter.

3227. But you consider, do you not, that something of the sort is necessary?—No doubt, something of the kind is necessary, if the present state of things is ever to be altered.

3228. According to the evidence which you have already given, it would not be contrary, either to the principles of ancient law or of modern legislation, that such a course should be taken?—I think it is clearly shown to be conformable to the principle of ancient law, and also to the modern cases.

3231. Under those circumstances what controlling power would you bring to bear upon the local board?—That involves a question of forcing local boards to do their duty, and that is a question upon which the legislation of this country is very deficient indeed. An authority like a local board of health is one of the most difficult to call to account for not doing its duty than can be conceived.

3232. You have paid great attention to this subject; can you suggest any controlling power under the circumstances which I have brought under your notice?—I think that for preventive purposes a control such as has been suggested by the noble chairman might be adopted. My opinion is, that to take measures for the prevention of those inconveniences is by far the most promising course to adopt; but how far it is consistent with considerations of expense, and other questions, is a matter that would have to be determined by the different localities. I do not say that you could have a general law all over the country, that the people who should consider that they constitute the watershed district should form themselves into such district, elect a governing body, levy rates, and prosecute by means of indictment criminal information, action at law, or any other mode persons whom they considered to be infringing the rights that they are employed to protect.

3462. (*H. W. Acland, Esq., F.R.S., Regius Professor of Medicine, examined by the Chairman.*) Do you think that the Government should take in hand the management of the whole of the catchment basin of the Thames?—With the best attention that I have been able to bestow on the subject, I really cannot see how, in any river basin whatever, whether it be the Thames or other basins (but I will speak only of the Thames as that with which I am most acquainted), those evils are to be remedied, unless there is a general power of superintending and regulating the course of the waters, and of course a purification of the water.

3472. If I understand you rightly, the first requisite is unity of action throughout the whole of the catchment basin, so that one town should not pollute the water while another town diverts the sewage from the water and yet suffers from the action of the town above?—Certainly.

3503. If I understand you rightly, the conclusion at which you would arrive is this, that the Government should undertake the regulation of the whole of the catchment basin of the Thames, and that the sewage of the towns

should be used for irrigation, and that attention should be given to the breeding of fish in the rivers, in order to purify them?—That would generally express my opinion.

3863. (*T. Taylor, Esq., M.A., Secretary to the Local Government Board, examined by the Chairman.*) Some of the witnesses who have been examined before the Committee have proposed a remedy for that state of things, namely, that the Local Government Act should apply not to individual towns but to a whole watershed or catchment basin; do you think that that would tend to remedy this state of affairs?—I do not think that the Local Government Act is framed for that purpose, and I should doubt extremely if it would be found applicable for such a purpose.

3864. Supposing that it were compulsory to appoint a board which should have authority over the whole catchment basin or watershed, what would be your opinion upon that point?—An Act of Parliament would have to be framed defining the functions of such boards, and giving them powers to execute their functions. They must have different functions, and different powers also, from those of local boards, and it is clear that you must have some authority which would control the whole district which is drained by any great arterial stream, that is to say any one catchment basin or watershed.

3865. Would not the main duty of that board be to keep the river free from pollution?—I should apprehend that that would be their principal duty.

3866. And it would be the duty of some authority, such as the Home Office or the Board of Health, to see that that local board enforced the law with regard to the pollution of that stream, would it not?—When you come to the question of a hierarchy, each degree seeing that the one below does its duty, it is difficult to see where you are to stop. We know that in this country persons are very averse to investing the central authority with powers to control local authorities.

3867. Do you think that if the board were a local authority, and if it were its duty to observe and enforce the law, there would be any control exercised by a central authority if the Home Office were merely to see that the law was administered practically?—I think it comes to be control.

3868. Is it not the case with any other body; the Government really administers the law?—The law courts really see that the law is carried out, and not the executive Government.

3869. Is not the law put in motion by the executive Government?—Not necessarily so; it is generally put in motion by the application of the individual injured, or by the application of corporate bodies.

3870. But should you think that, in this case, it would be insufficient to leave it in the hands of an individual?—I am not aware that I have expressed that opinion.

3871. Have you not stated that it is not the duty of anyone to see that the law is enforced, and that a matter of this great moment should not be left in the hands of one individual, but that there should be some functionary to see that the law is observed; is that your opinion?—I can hardly answer the question by saying yes or no.

3872. Do you consider that some such board ought to be appointed whose duty it should be to see that the rivers are freed from pollution?—If you intend to remedy this evil you must have a body with a very wide area of jurisdiction, but the point as to who is to control that body is of course a further consideration.

3873. Would it not be their duty to see that the law is observed?—They would have to see that the law is observed in that respect, that is to say that the rivers are not polluted.

3874. Supposing that that body do not execute their duties, who is to put the law in motion?—I apprehend that where a positive duty is imposed upon a public body, as the common law at present stands, on any neglect of their duty any person injured by their neglect can apply to the Court of Queen's Bench, which issues a writ of mandamus requiring them to do their duty. You have nothing corresponding to a public prosecutor in this country; in Scotland they have the procurator fiscal, who is charged with the duties of public prosecutor.

3875. Do you think that that would be advisable in England?—I do not give any opinion upon that point; I merely say that we have no such officer.

3876. Supposing that all local objects, such as streets, pleasure grounds, and the like, were still left to the local boards, would not the same powers as are given under the Local Government Act be required for the board of the catchment basin or watershed?—I should rather apprehend that the functions of the board appointed for such a purpose would be to see that the rivers were not polluted. It would not be for them to carry out works to save the river from pollution, but rather to exercise a restraining jurisdiction.

3877. Do you mean that it would be their duty to see

that the law was observed, and that they would force the local boards of the towns to carry out the works necessary for such a purpose?—I mean that they should have certain powers over the local boards of towns to restrain them from polluting the rivers.

3907. Do you think that it would be desirable to give such powers to local boards?—You want a more general authority; I mean to say that really to protect the streams you ought to have an authority over the whole watershed or catchment basin.

3935. (*Examined by Mr. Sclater-Booth.*) Passing to the other question that you have raised, as to the advisability of the jurisdiction of a local board extending over a whole valley or catchment basin, would your opinion be that such a local board as that should supersede the smaller boards or should absorb them?—I apprehend that it would be a distinct board altogether, upon which the smaller boards would be represented. I suppose that in order to make such a board effective it ought to include the representatives of the great towns upon the streams and the centres of population, which are in fact polluting the stream, and that it should be either a board composed of delegates from those smaller boards or, where there are not such boards, of persons elected by the owners and ratepayers, so that it should be a board of supervision, so to speak.

3936. In order to give such a board any power or importance, must you not provide it with a power of rating?—Certainly, if it is to take proceedings against offenders; for instance, it would have to take proceedings in chancery, and it would have to set the law in motion.

3937. Do you not think that there would be great clashings and jealousies of interests between such a board as that and the local boards of the towns?—No doubt you would have difficulties in the working.

3938. Would it not be almost as bad, if I may use the expression, as an interference on the part of your office without the advantage of being completely a central authority, so that it would be a tendency towards centralization without such centralization being effective?—If the evil is of sufficient magnitude to require being met, I do not see any other way of meeting it but that.

3958. (*Examined by the Right Hon. W. Cowper.*) If such a board as we have been alluding to were created, is it your opinion that it should extend throughout the whole boundary of the watershed?—I apprehend that to be effectual in its actions that would be necessary, because the pollution of any one of the streams within that area would tend to the pollution of the main stream, and unless you can secure the whole of that area it is useless to purify any part of it.

3959. Would it be necessary for such a board to protect the river against every sort of pollution coming from manufacturers, coming from wanton acts and individuals, as well as from the combined action of the severage of the town?—Subject to the principle *De minimis non curat lex*, it would, because many manufactures, for example, cause quite as serious pollutions of streams as local boards do.

3960. Do you think that it would be fair that their rating powers should be exercised over the whole of the watershed districts, or that they should be confined to the particular district which is suffering from the nuisance?—I think that you would have to give them powers of dividing their district for rating purposes; they should themselves have some authority to determine their district and rating areas; as a rule I should think their rates would be excessively small, unless in the case of expensive legal proceedings against particular manufacturers or local boards, when their rates might be heavy.

3961. (*Examined by Mr. Bright.*) Would you consider a board such as you speak of to be necessary for London?—London is a case apart, and I should rather not attempt to speak off-hand upon that. We suppose that London, in the next few years will be relieving the Thames from its own sewage at least, and then what London would have to look out for, would be that the towns above it, in the valley of the Thames, did not pollute the river.

3962. (*Cross-examined by the Chairman.*) Did you not give an instance which proved that the local boards had not weight enough; but that, rather than be enforced by injunction to carry out the law, they are themselves crushed by those injunctions?—We have seen the case of a local board being crushed, where they have, not very wisely I think, waived their functions altogether.

3963. Those smaller local boards appear then to be ineffective for the object which you have in view; is not a board of greater weight required for that object?—A board of entirely different construction and different character altogether is required.

3964. There is a difference between your opinion and the opinions which have been given by other witnesses on this point; other witnesses have agreed that there should be a

board for each watershed, but they have said that this board should carry out the necessary works, and that a central authority in London should put them in motion and see that they enforced the law; if I understand you rightly, although you agree with them that there should be a board for each watershed, yet you are of opinion that it should be that board which should see that the law is put in force, and that the local boards should carry out the works; is that the difference between you and the other witnesses?—That is substantially the difference.

4077. (R. Rawlinson, Esq., examined by the Chairman.) Did you hear Mr. Taylor's evidence with regard to watershed boards?—Yes.

4078. Are you inclined to give an opinion upon that matter?—I think that if you are to do any good, practically in the prevention or diminution of the present evils you must have some form of action which shall take cognizance of an entire watershed. It is quite clear that you have no organization in existence now, so far as I am aware, in corporations or in local boards, for dealing with anything but their immediate area. You have no machinery for dealing with a watershed as a whole, and therefore to improve any part of that watershed, and to leave the rest to take its course, would be the work of Sisypheus; your work in separate towns would come back upon you.

4079. Do you consider that there must be some unity of action throughout each watershed?—I think so, decidedly; not only as regards the sewage, but for other matters, such as the filling up and fouling of natural streams.

4080. Could that be procured in any other way except by a board whose powers should extend over the whole catchment basin or watershed?—You cannot set up in this country a centralized authority, as in France; it must be effected by some local authority.

4081. It would be, would it not, for that board to see that local boards and towns carried out the works, and prevented the streams from being poisoned?—Yes, and there are many local boards who would do their duty properly, if they had the legal power to do it, and could work simultaneously with the other boards connected with them.

4082. Do you mean that they would at present?—I believe they would, if they had power to intercept the sewage and remove it on to the sites where it could be applied.

4083. What powers do they require for doing it; do you mean powers for going through the lands of other persons?—I think that they would require such powers as a parliamentary committee gives to a railway company.

4084. Do you think that they ought to have compulsory powers to purchase that land?—It would be of very small use for the people of Birmingham to make ten miles of sewage carriers, for instance, into the country if every landowner or every farmer bordering upon said carriers pointblank declined to have anything to do with the sewage.

4085. Then you must give them powers to purchase land to utilize the sewage upon?—In some cases you would be obliged to do so.

4086. Would those be the only powers that would be requisite?—I do not know of any others.

4087. Then, in fact, the change in the law would be very slight, would it not?—Very slight.

(3.) EXTRACT from the APPENDIX to the REPORT of the SEWAGE COMMITTEE, 1864.

Remarks by P. H. Holland, M.R.C.S., Medical Inspector, Burial Acts Office.

"I feel very confident of its being possible to reduce the evils to a very small amount, at less cost than the endurance of them entails, but it unfortunately happens that those who would have to bear the cost of the remedy are not always or generally the same persons who suffer losses and inconveniences from the pollution of streams. If however the streams were placed under an effective conservancy, such authority having power effectually to prevent any stream from being unfairly injured, those who now, from idleness, carelessness, or love of saving their own money, even at greater cost to others, would be compelled to study how to carry on their business without injury to others; and experience in other analogous cases shows there is great probability of such injuries being preventible with little trouble or expense, at least with little compared with the injury to be prevented."

(4.) EXTRACT from the THIRD ANNUAL REPORT of the INSPECTORS of SALMON FISHERIES, 1864.

"The reason of this failure, especially in rivers of any size, —and it is, of course, the interests of the large rivers that must first be considered—are obvious. The co-operation

of all concerned, and an uniformity of management, are necessary in the cultivation of salmon fisheries. Protection is required on different portions of the river at different times of the year, and a good superintendent will know how to distribute his force as the season varies, thus affording the greatest amount of preservation to the fisheries at the smallest expense to the proprietors; and this is of vital importance to success. A salmon fishery must be treated as a farm, if the public at large are to receive any great and permanent benefit; and as extravagantly high farming will not pay, watching, without economy, will soon disappoint the persons who practise it.

"This co-operation cannot be voluntarily obtained; the larger and more valuable the river, the greater the difficulty. Men cannot be brought to see the advantage of spending their money at a hundred miles, or perhaps a greater distance, from their own water. They have never seen the river at that part of it; they do not know the water bailiffs who are employed, or the persons who employ them. The consequence is, the formation of a number of different associations on the same river, giving no assistance to each other, whose interests are mutual and actions, perhaps, opposed. Even a greater difficulty is found in the division, unfortunately sometimes amounting to an hostility of feeling, that prevails between the upper and lower proprietors.

"The lower, tidal, or commercial fisheries, as they may be called, of necessity reap the harvest which the spawning beds of the upper men produce. Naturally, the lower men gather in as much of the crop as they can; and reports of the amount taken, carried upwards and not diminished by the transit, exasperate the fresh-water fishermen, who alone, in nearly every instance, have subscribed the funds by the expenditure of which the fish have been reared. Now the interests of these two bodies are identical. No unfair fishing can be carried on in Montgomeryshire, or in the Bristol Channel, without injury to every fishery on the Severn. It is impossible, however, to induce the very persons who admit this truth to work together when they are locally so far apart, and but too often this community of interest is forgotten or denied." (p. 71.)

"These difficulties might be overcome by entrusting the management of the fisheries within each district to a committee, to be appointed by the courts of quarter sessions, under whatever general statutory regulations might be thought necessary; and in cases where rivers flow through two or more counties, the quarter sessions court of each county might nominate so many members to sit on a joint committee, as is now done in cases where there is a common lunatic asylum for two counties." (p. 73.)

"I am convinced by the experience we have now had of the working of that Act, and by the observation I have lately had the opportunity of making of the fisheries of the three kingdoms, that some compulsory means of raising funds, and of producing co-operation between the different interests to be found in salmon rivers, are absolutely indispensable. The present system may work on for a year or two more, but I think its weakness and inadequacy are so generally felt, that if the hope of an amendment in this particular were for long disappointed, most of the existing associations would break down, and the progress now gained would be lost." (p. 74.)

(5.) EXTRACT from the FOURTH ANNUAL REPORT of the INSPECTORS of SALMON FISHERIES, 1865.

"It will be observed that the necessity of an amendment in the present law was everywhere insisted upon, and that, with scarcely an exception, the amendments as proposed were approved. The proposal to entrust the management of the respective rivers to boards of conservators, to be appointed by the quarter sessions of the different counties through which each river may run, was universally accepted. An error in detail was, however, pointed out, and it requires correction. The courts of quarter sessions of counties will be represented in the fishery committees, to whom, where a river flows through two or more counties, the appointment of the conservators is entrusted; but the case of cities which are counties of themselves is not provided for. The cities of Chester and of York, for instance, have great interest in the Dee and the Ouse, and as they exercise in all other respects the privileges of a county, they should have the same powers in the Fishery Acts. The Chester corporation are at the present moment, in virtue of a very ancient Act of Parliament, the conservators of the Dee, and would be superseded by the bill." (p. 23.)

(6.) EXTRACT from the FIRST REPORT (on the THAMES BASIN) of the COMMISSIONERS on the POLLUTION of RIVERS, 1866.

"The necessary powers should be vested in a body which exercises control over the whole river. Constant local

supervision being indispensable, boards of health might also have concurrent authority for the same purpose, exercisable within their local limits. But it would not be advisable to commit the whole of the powers exclusively to local boards, as some local boards, up to this time, have been the chief offenders. Each town needs to be protected from the abuses of towns above it, and to be prevented from committing abuse towards towns below. The question of sewage pollution of a river is an indivisible one for the whole river basin. Attempts to keep the main stream pure will be vain so long as the tributaries are allowed to remain foul." (p. 18.)

"The land-drains pass directly from the lands into the river above the weir. But it would be otherwise under an improved system of land drainage. The proper method of draining a river valley, according to the opinions of the best qualified persons, is to divide the valley into a series of districts following the course of the river downwards, and to carry the drains of each district into the next district below, so as to give them an outfall into the river at a lower level. Under such a system weirs properly constructed would not interfere with drainage, nor in the aggregate would there be any loss in water power to the river. The river must be dealt with as a whole; else one district might be receiving the water from above without a corresponding right to discharge into the district below, which unfortunate result sometimes happens under the partial operation of the existing Land Drainage Act." (p. 26.)

"These embankments and drainage works should, in our opinion, be carried out, and afterwards be superintended by the body having the government of the whole river; which body should, for the purpose, be invested with all necessary powers; amongst others, power to levy a tax for the construction and maintenance of the works upon the land falling within the limit of their beneficial operation." (p. 28.)

"In our opinion it is necessary that the government of the whole river should be consolidated. Many measures, such as land drainage, embanking, prevention of pollution, are each urgently needed, yet cannot be partially dealt with. They concern the whole river, and require to be carried out under authority according to a system which shall obtain continuously throughout the valley. Again, the various interests connected with the river, navigation, land, mills, water supply can be harmoniously developed, but only by the whole of the river being placed under one management." (p. 31.)

(7.) EXTRACT from the SECOND REPORT (on the RIVER LEE) of the COMMISSIONERS on the POLLUTION of RIVERS, 1867.

"The Lee exemplifies the evils inevitably entailed by absence of river government. Left without control, towns naturally take advantage of running water to get rid of their sewage, regardless of the fact that the process is simply a transfer of the nuisance from themselves to their neighbours lower down the stream; litigation follows; but litigation, besides being expensive and breeding ill-will, is unsatisfactory. Courts of law are in fact incompetent to deal with the difficulty, and too frequently the party proceeded against may not possess either the legal powers or the pecuniary means to provide by permanent works a good and sufficient remedy." (p. xiv.)

"In the case of both rivers [the Thames and the Lee] the result will be the same; the substitution of a small governing body for a multitudinous collection of nominal governors; and the consolidation, in the hands of a single administration of all the powers requisite to be exercised, for any purpose, throughout the watershed." (p. xxiv.)

(8.) EXTRACT from the THIRD REPORT (on the RIVERS AIRE and CALDER) of the COMMISSIONERS on the POLLUTION of RIVERS, 1867.

"The law as it at present exists is only applicable to local and individual cases. There is no power of general application. One town or one manufacturer may be proceeded against, but there is no authority having the means and the power to deal with nuisances throughout an entire drainage area. We found the law relative to the pollution of these (Yorkshire) rivers to be the subject of general and well-grounded dissatisfaction. Theoretically, the law recognizes that protection is due to public and private rights in running water. It prohibits all public nuisance, and imposes upon each riparian proprietor the obligation of allowing running water to pass on in its course without obstruction or pollution. But a person judging from the present appearance of the streams in the West Riding would infer the contrary to be the law, and would conclude that there existed a general licence to commit every kind of

river abuse. . . . If some are permitted to obstruct and pollute the river, it is in vain that others abstain from abusing it. Thus by the maintenance of exceptions the law discourages those who are well disposed, and renders ineffectual voluntary combination, even upon a large scale, amongst manufacturers, to preserve the river." (p. li.)

"However serious the evil, it is very difficult to find a prosecutor, for the principal offenders are the governing bodies of large towns. These do not prosecute one another, for the reason that each is guilty of the same offence towards his neighbour, and they are rarely prosecuted by private persons, because few are willing to bear the expense and odium of acting as public prosecutors. . . . Accordingly, whatever the inconvenience to the public, the nuisance continues unabated. Rich and poor alike submit to it as to a sort of destiny." (p. liii.)

Conclusions. Where manufacturers have been established and a large resident population has grown up, as before stated, the greatest amount of pollution takes place, the area of country over which such form of nuisance is spread having no defined boundary other than the dividing ridges of such watershed and the shores of the sea. In order to prevent the pollution, and legally control the management of rivers, their basins or watersheds must be placed under supervision irrespective of any arbitrary divisions of county, parish, township, parliamentary, municipal, or Local Government Act boundaries, or, indeed, of any artificially established division. Running waters flow on from their source to the sea, and if the upland waters are polluted by town sewage and by refuse discharged from manufactures, as in the West Riding of Yorkshire, the entire length of a river is necessarily polluted, and will require to be conserved or protected. Towns situated midway or on the lower branches of rivers, as Leeds, Manchester, Salford, and many other places, will establish and carry out local improvements, and would clarify their sewage and other refuse fluid to little practical purpose, if the towns, villages, and manufactures on the same river with themselves and its tributaries are not placed under restrictions against sending down pollutions. This state of things applies equally to villages and even to single mills and factories as to large towns; it prevents local authorities, as also manufacturers, from taking up the question of separate purification. Thus, for instance, the corporation of Salford, which occupies one side of the river Irwell opposite Manchester, entertained the idea of intercepting sewers. Plans were prepared and estimates made, and the project was discussed, but was abandoned on the plea that money expended in Salford alone on such works would not accomplish the purification of the river Irwell so long as Manchester and all the great manufacturing towns and mills of Lancashire, situated on the river and its tributaries, continued to pollute the running waters of their respective districts. . . . One conclusion, therefore, forces itself upon anyone who honestly deliberates upon the existing state of things in regard to the rivers we have visited with a view to its permanent improvement. A stronger power than has hitherto been available must be brought to bear if the present abuse and pollution of streams is to be arrested, and government supervision and inspection must enforce and strengthen the action of local authorities.

(9.) EXTRACT from the EVIDENCE on the THAMES NAVIGATION BILL, 1866.

1858. (S. W. Leach, Esq., examined.) Might it not suit your purpose as well if, between Ensham Bridge and Lechlade, there should be drainage areas under the control of an engineer appointed for that purpose, whose duty it would be to use the river both as a receptacle and as a carrier of the drainage of the district?—Such areas might be formed, but I think even then it might be desirable to have a controlling power over them, because it would not follow that they would be acting in accord with one another.

1864. Would it not be possible on the part of the conservancy when any such bill as this was introduced, to get proper clauses put in to protect the water as regards the conservators?—That would of course be necessary, but I still think that a general control over the whole would be advantageous.

1865. You see that by the present bill the whole of the Thames, from Lechlade to Staines, is to be handed over?—Yes.

1866. According to your view now, you think that there ought to be different regulations above and below Oxford?—Not different regulations; I say that in my opinion the conservators ought to have the control over the whole.

2046. Is it not desirable, therefore, that if we should embark in any large scheme for improving the basin of the Thames, that those affluents should also be brought under control as well as the main river?—Certainly, with regard to the main stream.

2753. (*R. Rawlinson, Esq., C.B., examined.*) Have you considered whether it is very desirable that there should be unity of management throughout the whole of the river, beginning at Cricklade downwards?—I am opinion that it is quite necessary to the due and proper management of the river that there should be one jurisdiction over the entire river, from Cricklade down to the boundary of the City conservancy; and I will go further and say that, in my opinion, it would be a more complete bill if it took jurisdiction over the entire basin of the Thames, including its tributaries; that is my opinion.

2756. You are clearly of opinion that it would be a pernicious thing now to set up an authority for the part of the river above Oxford distinct from that which would have the control over the river immediately below Oxford?—I am satisfied it would; you would have two separate boards, you would have two separate sets of paid officers, and you would have that divided action which is always a disadvantage where a thing can be looked after by one and the same.

2757. The works of the river below Oxford might greatly affect the river above Oxford, might they not?—No; the works above Oxford might affect the river below Oxford.

2758. I was going to take it in both ways; the absence of works on the river below Oxford might greatly affect the river above Oxford; for instance, the works below Oxford might keep the water up?—Yes; and if the river is to be made navigable, the defective works below Oxford, or improper works, might affect the river above Oxford.

2759. And, *vice versa*, the works constructed above Oxford might have a most injurious effect, or, on the other hand, might have the most beneficial effect on the river below Oxford; is that not so?—It is.

2760. If that is so, would it not be very desirable that there should be one constituted authority for the execution of these works, both above and below?—It would.

2992. May I gather from that that you consider it almost impossible, with regard to the upper part of the river, so far as jurisdiction is concerned, to prevent the pollution by sewage?—In my opinion there ought to be jurisdiction over the entire water of the Thames, to prevent pollution, even beyond what is at present contemplated by this bill; I think that it should take in not only the main river but its tributaries.

2996. Then, not wishing to repeat unnecessarily the evidence which you have been giving, of course that would be conclusive proof that your opinion is that there should be unity of management through the whole?—That is my opinion.

2999. I mean that the parties who have the control of the lower part should have the power of seeing that the control of the upper part assimilates with their system; so that the unity of management for the entire river which you think so desirable should be preserved?—Yes; that the conservancy board should be so constituted as to represent the lower and the upper part in some way, and have jurisdiction over the area placed under them.

3000. There would then be one area from the mouth of the Thames to the source of the Thames, and one system of management?—Yes.

3001. That you think desirable?—I do think it desirable.

3012. I see that in page 18 of your report you say, with regard to the sewage question, "The necessary powers should be vested in that body which exercises control over the whole river; constant local supervision being indispensable, boards of health might also have concurrent authority for the same purpose exercisable within their local limits;" do you still adhere to that opinion?—Yes.

3015. Are you of opinion that some of the local authorities are chief offenders?—Yes; and if the Committee will allow me, I will give my reason for that, which may have some weight hereafter; I wish to show the Committee how it is that the local boards require some outside authority to enable them to do that which is necessary, for the knowledge of the local board is powerless to act for the benefit of the community if there is an ignorant opposing ratepaying interest outside of them; the town councils and the local boards, who have already been compelled to resort to proper means of purifying sewage, and to do necessary works for the purpose of purifying the sewage irrigation, so far as my knowledge goes, have been forced by an outside legal authority; the majority of the boards have quite sufficient intelligence to know that they must do it, but they were powerless to do it because of the ratepaying interest.

3260. (*J. T. Harrison, Esq., examined.*) Are you of opinion that there ought to be any control over the placing of obstructions of that kind?—From the evidence we received and from inspection of the land, I have not the slightest doubt of the necessity of giving power to the conservators (who have the control over the river), the power of drainage, and they should be able to carry out the works for the prevention of the flooding of the adjoining land such as are carried out under the Drainage Act.

3261. Do you think it important that the conservators should have the control of the direction which each catch-water drains or lateral drains would take, and the points at which the outfall should enter the river?—I think it would be very desirable.

3262. Do you think that it would prevent opposition among the landowners?—I think it would be so greatly to their interest that they would offer no objection.

3264. Do you think the evils of which we have heard so much here, about Oxford, could be remedied if the conservancy board had only the control of the main channel, without having any control of the side or lateral channels too?—Certainly not.

(p. 345) The Chairman (*the Right Hon. T. Milner Gibson*) stated that the Committee had agreed to the following resolutions:—

1. That the upper navigation commissioners should be discontinued.

2. That there should be one governing body for the Thames above and below Staines.

3. That the governing body should be the conservators of the river Thames, with a modification of their constitution.

4. That above Staines, the conservators should have the like powers as they have below Staines, and also the powers now belonging to the upper navigation commissioners.

APPENDIX II.

DOCUMENTS TENDERED BY WITNESSES.

(1.) SUGGESTIONS FOR AMENDMENT of the LOCAL GOVERNMENT ACT and SANITARY ACT, (TOM TAYLOR, Esq.)

See Question 336.

(N.B. This includes only matters of primary importance.)

A. AS TO LOCAL GOVERNMENT ACT.

Orders as to Costs of Adoption.

When the Local Government Act is adopted the Secretary of State shall have power to make order as to the payment of costs incurred prior to and for the purpose of the adoption of the Act, and may order the taxation of such costs by Her Majesty's Treasury, and may to such amount as he thinks reasonable order the payment of such costs when so taxed out of the rates levied under the Local Government Act.

Alteration of Number of Local Boards, or Division or Alteration of Wards.

Where in any district in which the Local Government Act is in force, or in any corporate borough, it shall appear to one-tenth at least in number or value of the owners and ratepayers in such district or borough, that the number of the local boards should be altered, or that the said district should be divided into wards, or that alteration should be made in the number of wards into which the said district is divided for the purposes of the Municipal Corporations Act or the Local Government Act, or in the number of wards, or of aldermen or councillors of any corporate borough, it shall be lawful for them to address a petition to one of Her Majesty's Principal Secretaries of State praying for such division or alteration.

Such petition shall be signed by at least one-tenth in number of the owners of property in, and ratepayers paying

Purchase of Lands for Waterworks.

The powers and provisions of the 75th section of the Local Government Act shall extend to the purchase of lands and rights which the local board may require to purchase, without their district, for the purposes of water supply.

Penalty for bringing forward Houses.

When any house or building is brought forward without consent of the local board, contrary to the 28th section of the Local Government Act Amendment Act, 1861, the person by or under whose direction it is so brought forward shall be liable to a penalty not exceeding 5*l.* for every day such house or building is allowed to continue so brought forward.

Loans for the Purchase of Lands or Buildings.

When a local board raise money for the purchase of lands or tenements, or for the construction of permanent works or buildings, they may do so, on the security of such lands, tenements, works, or buildings, instead of the security of rates and charges leviable by them; or they may give the security of such lands, tenements, works, or buildings, in addition to the security of such rates and charges.

Monies borrowed for purchasing Lands, &c. repayable in 50 years.

Monies required for the purchase of lands and tenements may be borrowed for such period not exceeding 50 years, as the local board, with the sanction of one of Her Majesty's Principal Secretaries of State shall in each case determine. And any local board that has already borrowed monies for such purchase as aforesaid may, with the consent of the lenders or mortgagees having advanced the same, and with the sanction of one of Her Majesty's Principal Secretaries of State, re-borrow the portion of such loan still due and unpaid for such term, not exceeding 50 years from the date of the original borrowing, as may be sanctioned by one of Her Majesty's Principal Secretaries of State.

Adding amount of Expenditure under recent Acts, to amount authorized by Local Act.

When by any local Act rates for purposes of local improvement are limited to a sum named or fixed by the Act, and new duties, involving the expenditure of monies in the payment of officers, the execution of works or otherwise, are imposed on the commissioners or trustees administering such local Acts, by any general Act passed after the passing of such local Acts, it shall be lawful for the said commissioners or trustees to add the expenditure so incurred to the amount they are entitled to raise under such local Act.

Power to close Foul Wells.

Local boards and sewer authorities, and all other local authorities having powers of water supply, shall, on the certificate of any medical officer of health or of two medical practitioners or an order of one of Her Majesty's Principal Secretaries of State, made after local inquiry and report, have power to fill up wells or to remove or otherwise render useless as the case may require, pumps and other sources for the supply of water so foul or so polluted as to be injurious to health.

Compensation.

When any question of compensation arises in which a local board or any other local authority for the purposes of the Sanitary Act and the Sewage Utilization Acts has to proceed to arbitration, the costs of and incident to such arbitration and award shall, if either party so require, be settled by one of the masters of the Court of Queen's Bench, in the same way as the (now so taxable under the 30 & 31 Vict. c. 117) costs of and incidental to arbitrations arising in relation to the purchase of lands by railway companies.

Incorporating Powers of Waterworks Clauses Act, when Local Boards supply Water.

When local boards or sewer authorities supply water to their districts under the powers of the Local Government Act, 1858, or the Sanitary Act, 1866, there shall be incorporated with the said Local Government Act, 1858, or the said Sanitary Act, certain portions of the Waterworks Clauses Act, to wit, the sections of the said Act with respect to the construction of waterworks, numbered 7, 8, 9, 10, 11, 12, 13, 14, and 15 (in so far as the said sections relate to England), and the sections with respect to mines in so far as the same relate to England.

And when the local board or sewer authorities have not the control and superintendence of streets, the sections with respect to the breaking up of streets for the purpose of laying pipes; and the sections with respect to the supply of water to be furnished by the undertakers, except so much thereof as relates to agreement between the town commissioners and undertakers, or requires, or requests of

rates in the district, or the owners and ratepayers in respect of one-tenth of the property rated in the district respectively, or either of them. Such owners and ratepayers being reckoned together in computing such tenth in number or value.

On the receipt of such petition the Secretary of State may direct inquiry. Fourteen day's notice of the time, place, and subject of the inquiry shall be given in the place to which it refers, in the same places and the same manner in which public notices are usually given.

The Secretary of State may, after such inquiry, dismiss such petition, or may prepare a provisional order in relation to the subject matter thereof, and either make such division, increase, annexation or alteration as prayed in the said petition, or make such other provision, in relation thereto as he may think expedient.

And shall take all necessary steps for confirmation of the said provisional order by Parliament, along with and in the same manner, and subject to the same conditions in all respects as Provisional Orders under the 77th section of the Local Government Act. When alteration is made by such Provisional Order as aforesaid, in the wards, or number of the aldermen or councillors of any municipal borough, the alteration shall apply to and effect the election of the members of the town council of the said municipal borough, as if the alteration had been made under and in pursuance of the Acts relating to municipal corporation.

[N.B. This is much urged as necessary for the purposes of the Municipal Corporations Act as of the Local Government Acts, and is so framed, but of course the matter is as much one for amendment of the Municipal Corporations Act as of the Local Government Act.]

As to Byelaws.

Byelaws made by local boards for the closing of buildings and part of buildings unfit for human habitation, and for the prohibition of their use for human habitation, shall, notwithstanding anything in the Local Government Act, 1858, extend and apply to buildings erected before the constitution of the district.

Byelaws in the form contained in the schedule of this Act shall be, and the same are hereby declared to be binding and of legal effect, as if the same were enacted in this Act, and may be adopted in the manner prescribed for the adoption of byelaws by the Public Health Act, 1848, in which or in part by local boards, and the legal validity of the same shall not be impaired by the filling up with any figures of the blanks in the same, provided such figures are confirmed by one of Her Majesty's principal Secretaries of State, as required by the Public Health Act, 1848.

Roads converted into streets may be dealt with under 69th Section of the Public Health Act, 1848.

When a road which at the date of the constitution of the district is not a street having houses abutting on it, whether such houses be contiguous or separate from each other is converted or in process of conversion into a street with houses as aforesaid abutting thereon, so as to render it necessary for the convenience of dwellers in such houses and persons resorting thereto, to provide such a roadway and sidewalks, and such curbing, flagging, channelling, and sewerage, or any of those things as are required for public use and convenience in such a street as aforesaid, but not in a road not being such a street as aforesaid, the first cost of providing such roadway, sidewalks, curbing, flagging, channelling, or sewerage as aforesaid, as may be rendered necessary by or in the course of conversion of a road into a street as aforesaid, may be defrayed in the manner provided by the 69th section of the Public Health Act, 1848, as if such road had not been a highway repairable at the public expense.

Prohibiting erection of Houses on existing lines of Road at less distance from centre of Road than half the breadth prescribed for carriageways by the Byelaws of the Local Board.

When a road (certified to be) in course of conversion into a street as aforesaid is narrower than the breadth prescribed for streets being carriageways in the byelaws of the local board, it shall not be lawful for persons erecting houses or buildings on either side of the same to erect such houses at a distance which will leave less than one-half the breadth prescribed for streets being carriageways as aforesaid, from the centre of the said road, and all plans of such houses or buildings which do not show such a distance as aforesaid from the centre of the road may be rejected by the local board.

And any person erecting houses or buildings at less than such distance shall be liable to the same penalties, and to the taking down and removal of such building as if such houses and buildings were in violation of the building byelaws of the said local board.

town commissioners to the said undertakers, or as imposes any penalty or forfeiture to the said town commissioners.

And the sections with respect to the communication pipes to be laid by the undertakers, and the section with respect to the communication pipes to be laid by the inhabitants.

And the sections with respect to the waste or misuse of water to be supplied by the undertakers.

And the sections with respect to the payment and recovery of water rates.

And the sections of the Waterworks Clauses Act, 1863, with respect to the security of reservoirs.

And the sections of the same Act with respect to the supply of water to be furnished by the undertakers.

And the sections of the same Act with respect to the waste or misuse of the water supplied by, or belonging to the undertakers.

When local boards provide or maintain landing-places, piers, esplanade, public walks, pleasure or recreation grounds, they may make byelaws for the proper regulation of the same, and for maintaining order and decency therein and may by such byelaws charge tolls for admission to any landing-place, pier, esplanade, public walk, or pleasure, or recreation ground so provided or maintained by them.

To extend operation of 24 & 25 Vict. c. 61. to 50l., and to allow proceedings for recovery of penalties to be taken in County Courts.

Local boards shall have the same power to take proceedings in the county courts for the recovery of demands up to 50l., as they have now for the recovery of demands below 20l., and may also take proceedings for the recovery of penalties before such courts.

Consents.

When a provisional order has been made for the separation of any part of a district, or for the incorporation with any district of any parish, township, hamlet or place maintaining its own roads or its own poor, or any portion of such parish, township, hamlet or place, owners as well as ratepayers shall be summoned and allowed to vote at meetings for the consents required by the 77th section of the Local Government Act to be given to such provisional order, and at such meetings if a poll be demanded it shall be taken in the same way, and the voting shall be on the same scale as on resolutions for adoption of the Local Government Act.

Smoke.

Where in proceedings against any person for a nuisance arising from the use of a fireplace or furnace sending forth black smoke, it is proved that the fireplace or furnace from which such black smoke proceeds is so constructed or is furnished with such appliances as to consume all smoke arising therefrom as far as practicable, having regard to the nature of the manufacture or trade in which it is used, and that the issue of black smoke is caused by the act or default of the stoker or person in charge of such fireplace or furnace, it shall be lawful for the justices to inflict on such person a penalty not exceeding for such act or default.

B. AS TO THE SANITARY ACT.

Appeals under the Sanitary Act, and as to the parties by whom the costs of the same are to be borne.

That the Secretary of State shall have the same power to make order as to the costs of inquiries and appeals under the Sanitary Act, and as to the parties by whom the same are to be borne, as he now has with regard to costs of inquiries and appeals under the Local Government Act.

That the notice convening the sewer authority of a special drainage district may be signed by the incumbent of any church or chapel in the special drainage district, or in any parish of which part is included in the special drainage district, and posted on the door of such church or chapel on which public notices are usually affixed.

That the Secretary of State shall have power to borrow at interest the amount required to meet the first cost of works to be done by any person appointed by him under the 49th section.

That whenever a resolution forming a special drainage district is passed by the vestry, a copy of such resolution shall be forwarded to one of Her Majesty's Principal Secretaries of State, and no such resolution shall be valid without the sanction of such Secretary of State, to be published in the "London Gazette" in the same manner as orders of the Secretary of State settling boundaries under and for the purposes of the Local Government Act, 1853.

That the accounts of every vestry, or committee thereof acting as a sewer authority, shall be subject to audit by the poor law auditor for the district in which such parish or special drainage district is situate, in the same manner in

all respects, and subject to the same appeal, as accounts under the Acts relating to the relief of the poor.

The fourth and fifth sections of the Sanitary Act, 1868, shall be repealed, and in lieu thereof be enacted, that:

When a sewer authority petition the Secretary of State to be allowed to exercise the powers conferred by the 51st and 54th sections of the Public Health Act, 1848, as amended by any subsequent Act of Parliament, and of the 31st section of the Local Government Act, 1858, or the powers for the cleansing, sewerage, levelling, paving, flagging, and channelling of streets, as are vested in local boards by the Local Government Act, 1858, and for the better execution of such powers, to be constituted the nuisance authority of their district, the Secretary of State may direct inquiry into the subject-matter of such petition, and may either dismiss the same or may make order, to be published in the London Gazette, vesting in the said sewer authority the powers for which they have petitioned, or such of them as he conceives may be usefully vested in such authority. And from and after the date of such order, or from a date to be mentioned therein, the jurisdiction of the nuisance authority within which the petitioning district is situate shall cease in and for such district, and the sewer authority of such district shall be the nuisance authority in and for the same, and shall have all the powers and discharge all the duties of such nuisance authority, and the expenses of executing the said powers and duties shall be defrayed as part of the costs of executing the Sanitary and Sewage Utilization Acts in such district.

That the Secretary of State shall have power after inquiry made in the manner directed by the Local Government Act for inquiries preliminary to provisional orders, to make a provisional order for the combination of districts for the purposes of the Local Government Act or Sanitary Act. And all the provisions relative to the confirmation of provisional orders under the Local Government Act, 1858, shall extend and apply to provisional orders under this section.

(2.) MEMORANDUM on the Repayment of Expenses incurred under the Local Government Act and the Sanitary and Sewage Utilization Acts, (ARNOLD TAYLOR, Esq.)

See Question 1131.

The following Memorandum has been drawn up in view of the necessity which recent sanitary legislation involves for the increase of the staff and office expenses of this department. And it proposes to show that no hardship will be caused if nearly the whole cost of the Local Government Act Office be made repayable, as it is now in a very limited and unequal degree, and if the office were to cease to be a burden on the Government, the greater part of its expenses being transferred to the localities benefited by its labours, in fair proportion to the amount of work done for such district. The following statement shows the whole cost of the working of the Local Government Act, and since 1865, that of the Sewage and Sanitary Acts:

August 1865 to August 1866	-	£5,898	3	2
" 1866 " 1867	-	5,536	7	8
" 1867 " 1868	-	6,075	18	8

The month of August is taken as a beginning because the annual returns of the work done in the office begin and end in that month. The following were the travelling and personal expenses of the inspectors of this office for the corresponding period:

August 1865 to July 31st 1866	-	£631	5	7
" 1866 " 1867	-	460	7	4
" 1867 " 1868	-	586	8	5

or speaking roughly, about 10 per cent. of the total cost of the office.

Now, the work done here embraces a great variety of subjects. First, the granting of provisional orders; next, adoptions or settlement of boundaries of districts under the Local Government Act; third, examination, and when needful, visits paid to districts by the inspectors before the recommendation of loan sanction; fourth, appeals of various kinds, with reference to the legality of adoption of the Act, auditor's surcharges, the confirmation of byelaws, and generally in respect to disputed questions relating to all sorts of sanitary matters and regulations affecting local board districts, and the ratepayers resident within them. The 10 annexed annual reports (the eighth, and ninth, and tenth not yet being printed), show in detail the nature and extent of the work done in the office.

In addition, however, to the administration of the Local Government Act, there has been entrusted to this office since 1865 the working of the four Sewage and Sanitary Acts, which were passed in 1865-66-67 and 68 respectively.

Under these Acts business is transacted of a kind almost as various as that under the Local Government Act, whilst the charges incurred for travelling and personal expenses by the inspectors are of course the same. As to extent of work, that under the Sanitary Acts often involves more time, labour, and trouble than business under the Local Government Act, inasmuch as, under the former Acts, the Secretary of State is petitioned and empowered to put in force his compulsory powers, over local authorities in default.

By section 27 of the Local Government Amendment Act, 1861, the costs incurred in respect to all provisional order cases are made repayable by the district to which the order may relate, and a similar practice exists with reference to all inquiries connected with adoptions of, or settlements

of boundaries under the Local Government Act. But even in these two classes of inquiries nothing is ever charged to a district except the inspector's personal and travelling expenses; whilst in all other cases not one sixpence is charged, although the districts are having substantial and exclusive service rendered them by the staff of this office.

Under the Sanitary and Sewage Acts, probably by an oversight of the Legislature, no expenses whatever are repayable, although under these Acts inquiries may and do take place with respect to provisional orders, boundaries, and the like, the cost of which are, as has been stated partially at least repayable under the Local Government Act.

The following table shows the amount of such repayments in the last three years:

		Repayments.	
1865-1866.	Provisional order cases	-	164 15 4
" "	Boundaries and adoption	-	74 13 11
			239 9 3
1866-1867.	Provisional order cases	-	129 6 1
" "	Boundaries and adoption	-	83 9 9
			212 15 10
1867-1868.	Provisional order cases	-	206 6 3
" "	Boundaries and adoption	-	42 10 4
			248 16 7
Or in all receivable in the three years		-	£701 1 8

The total personal and travelling expenses for the same period having been as has been stated 1678l. 1s. 4d. It must be noted that no part of the time, either of the staff or inspectors of the office, is charged even in those few cases, where travelling and personal expenses are held to be repayable. Now salaries form a far heavier item in the annual charges than travelling or personal expenses, and every inquiry involves work to the whole of the office in some shape or way, as well as to the inspector who may be sent down to the locality. Hence the so-called repayable expenses form a most inadequately small portion of what every district ought to pay:—

which a local board, at a present cost of 7l. or 10l., or less, obtains what is as useful to them as a Local Improvement Act, which would cost them anything from 500l. to 2,000l. In each of these cases the local board has to do nothing more than present its petition for provisional order, after which the whole trouble and responsibility of drawing the order, and ensuring its passage through Parliament in one of the Local Government Act confirming bills is, unless the order be opposed, discharged for the district by this office.

First. To take the provisional order cases, by means of

Between 1865 and 1868 the number of provisional order cases, was as under:

1865-1866,	39	Provisional orders confirmed.
1866-1867,	35	" " "
1867-1868,	39	" " "

The following is an approximate estimate of the actual average cost to this office of a provisional order case, say:

	£	s.	d.	£	s.	d.
Secretary's time, 2 days at	-	-	5 5 0	10	10	0
Inspector's " 6 "	-	-	3 3 0	18	18	0
Clerk's " 5 "	-	-	1 1 0	5	5	0
Inspector's travelling and personal expenses	-	-	-	6	6	0
Incidental and office expenses (say)	-	-	-	4	1	0
Total	-	-	£45	0	0	

Certainly no local board district could refuse to pay such a trifling amount as this, when it is considered what is the value given in return for it.

levied, would have an useful influence in deterring districts from asking for provisional orders to effect very trifling objects, as is now sometimes done.

And the demand of some larger sum than that now

Independent of provisional order cases there were, in

1865-66,	45	inquiries on miscellaneous subjects.
1866-67,	21	" " "
" "	21	under Sanitary and Sewage Acts.
1867-68,	37	" " "
" "	16	under Local Government Act upon miscellaneous subjects.

Only a very approximate estimate can be made of the cost of these inquiries, varying as they do, in their objects

and importance, and in the amount of time and trouble spent upon them. But the following is about a fair average:

	£	s.	d.	£	s.	d.
Secretary 1 day	-	-	5 5 0	5	5	0
Inspector 5 "	-	-	3 3 0	15	15	0
Clerks 1 "	-	-	1 1 0	1	1	0
Inspector's travelling and personal expenses	-	-	-	1	6	0
Office charges and incidentals	-	-	-	1	13	0
Total	-	-	£30	0	0	

One of the most important services rendered by this office to the many districts in which the Local Government Act has been adopted, consists in the inspection and checking of the plans, reports, and estimates, which every local board is obliged to furnish before it can receive the Secretary of State's sanction to any loan which they may propose to raise for defraying the cost of improvement works. Hence every application for sanction represents a separate report by an inspector, and frequently a visit by

him to the district, as well as a certain amount of clerk's work in the office, a formal document having, in each case, to be prepared for the signature of the Home Secretary, and a duplicate of it retained here for reference.

A per-centage charge cannot be imposed upon loan sanction applications, because the time spent on the work is often in an increase ratio to the amount of the loan to be raised. But on an average, 10l. 10s. 0d. may be taken as a fair charge.

The following is a summary of this branch of the office work during the last three years:

	£	£
1865-66. 136 sanctions under Local Government Act	-	870,355
" 2 " " Sewage Act	-	2,450
		<u>872,805</u>
1866-67. 10 " " Sanitary and Sewage Acts	-	24,000
" 146 " " Local Government Act	-	668,488
		<u>692,488</u>
1867-68. 142 " " " " " "	-	588,394
" 23 " " Sanitary and Sewage Acts	-	35,028
		<u>623,422</u>
Total for three years -		<u>£2,188,715</u>

There is finally the work connected with the scrutiny and revision of the byelaws and lodging-house regulations which have to be sent here for careful examination and consideration, and occasionally for inquiry by an inspector in the district, before they are submitted to the Secretary of State for confirmation.

1865-66. 95 sets of byelaws were submitted and examined.
1866-67. 101 " " " " " "
" 17 " " " " " " lodging-house regulations.
1867-68. 28 " " " " " "
" 171 " " " " " "

It is considered the 5l. 5s. 0d. would be a very moderate charge to place upon each of these. The following summary shows the amounts that would have been paid back to the Treasury in the past three years, had the above-mentioned scales of charges been levied on each class of work specified:—

	£	s.	d.	£	s.
1865-66. 39 Provisional order cases at -	-	45	0	1,755	0
" 45 miscellaneous inquiries -	-	30	0	1,350	0
" 138 sanctions to loans -	-	10	10	1,449	0
" 95 sets of byelaws approved -	-	5	5	498	15
					<u>£5,052</u>
1856-67. 35 provisional order cases at -	-	45	0	1,575	0
" 42 miscellaneous inquiries -	-	30	0	1,260	0
" 156 sanctions to loans -	-	10	10	1,638	0
" 101 sets byelaws approved -	-	5	5	530	5
" 17 " lodging-house regulations -	-	-	-	89	5
					<u>5,092</u>
1867-68. 39 Provisional order cases at -	-	45	0	1,755	0
" 53 miscellaneous inquiries -	-	30	0	1,590	0
" 165 sanctions to loans -	-	10	10	1,732	10
" 171 sets of byelaws at -	-	5	5	897	15
" 28 " lodging-house regulations -	-	-	-	147	0
					<u>6,122</u>
Total for three years -					<u>16,266</u>

The total cost of the office having, as already stated, amounted during the same time to £17,510

There are certain minor charges and expenses coming on this office, such, for example, as the analyses of water samples at the Government laboratory, for which nothing is at present charged to those districts which send the water.

But the foregoing summary will show the principle sought to be established, that work done should be paid for by those for whom it is done.

The cost of this office is but small, still if such a principle

could once be established and successfully worked here, it is obvious that it might be extended to many other Government departments which have to supervise, inspect, or control particular localities and interests, exclusively for the benefit of the ratepayers of these localities.

(Signed) A. TAYLOR.

Local Government Act Office,
November 19th, 1869

AMOUNT of LOANS sanctioned by the Secretary of State under the Local Government Act, 1858; the Sewage Utilization Acts, 1865 and 1867; the Sanitary Acts, 1866 and 1868.

	£	s.	d.
1st Sept. 1858 to 12th Augt. 1859 - Under Local Government Act -	260,905	13	0
12th Augt. 1859 to 21st Augt. 1860 - " " " -	280,259	7	4
21st Augt. 1860 to 1st Augt. 1861 - " " " -	356,192	0	0
1st Augt. 1861 to 1st Augt. 1862 - " " " -	314,568	5	6
1st Augt. 1862 to 27th July 1863 - " " " -	236,892	0	0
27th July 1863 to 28th July 1864 - " " " -	496,603	6	0
28th July 1864 to 28th July 1865 - " " " -	538,446	10	10
28th July 1865 to 1st Augt. 1866 - " " " -	870,355	10	0
" " " " " Sewage Utilization Act -	2,450	0	0
" " " " " Local Government Act -	668,488	8	0
" " " " " Sanitary and Sewage Acts -	24,000	0	0
1st Augt. 1866 to 1st Augt. 1867 - " Local Government Act -	588,394	0	0
" " " " " Sanitary and Sewage Acts -	35,028	0	0
	4,672,583	0	8
	2,956,178	6	8
Amount of loans sanctioned by the General Board of Health under the Public Health Act, 1848, from 1st June 1850 to 1st September 1858.			
Total -	£7,628,761	7	4

(3.) QUERIES issued by the PUBLIC WORKS LOAN COMMISSIONERS to APPLICANTS for a LOAN, (WM. W. WILLINK, Esq.)

See Questions 1606-1608.

Public Works Loan Office,
3, Bank Buildings, London, E.C.,
1869.

(A.)
To the Local Board, or Local Board of Health.

1. When was the local board constituted, and in what manner?

A copy of the order, advertisements, or other evidence of the due constitution of the board should be forwarded, and also a plan of the district.

2. What are the limits of the district of the local board, and has the same been subdivided, and how, and by what order?

3. Has one of Her Majesty's Secretaries of State authorized the local board to borrow any and what sum or sums of money, irrespective of the loan now required, and for what purpose or purposes?

4. What amount has been borrowed, whether under such authority or otherwise; for what purposes and from whom, and how much has been repaid, and from what sources and at what times?

5. What securities have been granted for the amount so borrowed? and at what rate of interest? and how is the repayment of the principal monies stipulated to be made?

6. Was the Public Health Act in force, wholly or partially, within the district on the 2d August 1858, the day on which the Local Government Act was passed?

7. What sum is required by way of loan from the Public Works Loan Commissioners?

A copy of the resolution of the local board to provide the works, and to apply for the loan should be furnished.

8. Under what Act and section is the loan applied for authorized to be borrowed, and has the Secretary of State sanctioned the borrowing?

If yea, forward a copy thereof.

9. By what instalments and at what times is such loan required to be advanced?

10. For what purpose or purposes is the loan required, and under what Act and section are the works authorized?

Describe the works executed, in progress, and projected.

11. Are there any and what waterworks companies established for supplying water within the limits in which the local board is desirous of supplying or laying on water? If yea, evidence must be furnished that every such company is unable or unwilling to lay on water for the purposes proposed by the local board in terms of the 75th section of the Public Health Act, 1848.

12. Are any lands or premises required to be purchased for the proposed works? If yea, have such lands and premises been purchased and paid for, and are there any and what charges or incumbrances affecting same?

13. Are the expenses in aid of which the loan is required for works of a permanent nature, and how is this evidenced?

14. If any of the works have been executed a detailed statement showing the expense thereof should be furnished.

15. Has any and what part of the money so sanctioned been borrowed, and what security has been given for same?

16. Have any and what contracts been entered into for the execution of the works, or has any tender been made in relation thereto, and state what notices were given?

17. What security was taken for the due performance of each contract, and was such security deemed sufficient?

18. If no contract has been entered into or tender made, what is the estimated cost of the proposed works? Full details must be furnished.

19. Is any and what property in any part of the district exempted from general district rates?

20. What amount of annual rates is estimated to be necessary to repay the principal and interest charged and proposed to be charged upon the property assessable thereto for the works, and how is such estimate formed?

21. Have any and what general district rates been made during the past year, what sums have been received in respect thereof, and how have the monies received been expended?

22. Will all the persons proposed to be rated derive some direct benefit from the works for the expense of which they are liable to be assessed?

23. What security is proposed to be given for repayment of the loan applied for if granted, with interest at 5l. per cent. per annum on the principal from time to time remaining unpaid?

24. By what annual or other instalments, not exceeding 20, (vide Act 16 & 17 Vict. cap. 40. sec. 1, Public Works Loan Act, 1853.) is it proposed to repay such loan if granted, or the several advances thereof with interest thereon?

25. What is the annual value of the property assessed to the poor rates in the district and division of the district?

26. What is the population of the district, and division if subdivided?

27. Have all the requirements, provisions, and regulations of "The Local Government Act, 1858," and the Acts incorporated therewith, been strictly complied with by the local board?

N.B.—The answers to the foregoing queries must be written on this paper, and verified by statutory declaration in the form attached, to be made before a magistrate.

I, do solemnly and sincerely declare that the answers to the queries hereunto annexed and numbered 1 to both numbers inclusive, are true and just to the best of my knowledge, information, and belief. And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of an Act made and passed in the Session of Parliament of the fifth and sixth years of the reign of His late Majesty King William IV., intituled "An Act to repeal an Act of the present Session of Parliament, intituled 'An Act for the more effectual abolition of oaths and affirmations taken and made in various departments of the State, and to substitute declarations in lieu thereof, and for the more entire suppression of voluntary and extra-judicial oaths and affidavits, and to make other provisions for the abolition of unnecessary oaths.'"

Subscribed and declared at this day of 18 }

(B.)

Public Works Loan Office,
3, Bank Buildings, London, E.C.,
1869.

To the Sewer Authority for the parish of in the county of acting under the Sewage Utilization Act, 1865, the Sanitary Act, 1866, the Sewage Utilization Act, 1867, and the Sanitary Act, 1868.

1. Who are the sewer authority for the parish of and how constituted? Refer to Act and section.

2. Did the sewer authority at a meeting specially convened form any committee under Section 4 of the Sanitary Act, 1866? If yea, forward a copy of the notice convening the meeting, and of the proceedings thereat.

3. Has any part of the parish been formed into a special drainage district under the Sanitary Act, 1866? If yea, forward copy of the notice convening the meeting, and the resolution passed thereat; if under the Sewage Utilization Act, 1867, furnish copy of the order of the Secretary of State. Also a plan of the district.

4. Was a copy of such resolution or order published and advertised as required by section 7 of the Sanitary Act, 1866? If yea, furnish a print of the newspaper containing the advertisement, or a certificate, as mentioned in the same section.

5. Was there any appeal against the formation of the district? If yea, furnish copies of the order of the Secretary of State thereon.

6. Have the sewer authority borrowed any and what sum or sums of money under the above-mentioned Acts? at what rate of interest? how repayable? for what purpose or purposes? and on what security?

7. What sum is required by way of loan from the Public Works Loan Commissioners?

8. Has the Secretary of State sanctioned the borrowing of the loan applied for pursuant to section 57 of the Local Government Act, 1858, and also signified his recommendation of the advance by the Public Works Loan Commissioners according to section 12 of the Sewage Utilization Act, 1865?

9. If yea, forward copies of the sanction and the recommendation.

10. For what purpose or purposes is the loan required, and under what Act and section are the works authorized?

11. Describe the works executed, in progress, and projected, and forward copies of the plans and specification, the resolutions of the sewer authority authorizing the execution of the works and relating thereto, and also relating to the borrowing of the sum required and the application to the commissioners for the money.

12. Are there any and what waterworks companies established for supplying water within the limits in which the sewer authority is desirous of supplying or laying on water? If yea, evidence must be furnished that every such company is unable or unwilling to lay on water for the purposes proposed by the sewer authority, in terms of the 75th section of the Public Health Act, 1848.

13. Are any lands or premises required to be purchased for the proposed works? If yea, have such lands and premises been purchased and paid for, and are there any and what charges or incumbrances affecting same?

14. What is the estimated cost of the proposed works, including the cost of land and all other expenses? A copy of the estimate or tender, and of any report thereon, should be furnished.

15. Have any and what contracts been entered into for the execution of the works? If yea, furnish an abstract or copy, and state what security has been taken for due performance, and what notices were given before entering into such contracts.

16. If the works have been executed, a detailed statement showing the expense thereof should be furnished.

17. What is the population of the parish and of the special drainage district respectively?

18. What has been the annual value of the property in the parish according to the poor rate assessment in each of the last three years, and what rates have been assessed thereon?

19. The like with reference to the special drainage district.

20. What security is proposed to be given for repayment of the loan applied for if granted, by not exceeding 20 annual instalments, with interest at 5l. per cent. per annum on the principal from time to time remaining unpaid?

21. What name have the sewer authority adopted (vide section 46 of the Sanitary Act, 1866)? and how are they designated on their common seal?

22. Have all the requirements, provisions, and regulations of the Sewage Utilization Acts, 1865 and 1867, the Sanitary Acts, 1866 and 1868, and the Acts referred to therein or incorporated therewith respectively, been strictly complied with by the sewer authority?

N.B.—The answers to the foregoing queries must be written on this paper, and be verified by statutory declaration in the form attached, to be made before a magistrate.

I, do solemnly and sincerely declare that the answers to the queries hereunto annexed, and numbered 1 to , both numbers inclusive, are true and just to the best of my knowledge, information, and belief. And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of an Act made and

passed in the Session of Parliament of the fifth and sixth years of the reign of His late Majesty King William IV., intituled "An Act to repeal an Act of the present Session of Parliament, intituled 'An Act for the more effectual abolition of oaths and affirmations taken and made in various departments of the State, and to substitute declarations in lieu thereof, and for the more entire suppression of voluntary and extra-judicial oaths and affidavits, and to make other provisions for the abolition of unnecessary oaths.'"

Subscribed and declared at this day of 1869.

(4.) TABLES for the REGISTRATION OF DISEASES used by the NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY, (ROBERT R. CARR, Esq.)

See Question 2788.

REGISTRATION OF DISEASE.

A SYSTEM of registration of disease in Newcastle-upon-Tyne, since the year 1863 has been carried on by the Northumberland and Durham Medical Society, and complete reports, entitled, "Health and Meteorology of Newcastle and Gateshead," with weekly tables of the actual number of cases of disease and death since the year 1867, have been issued by the same society.

The Reports from the first have been prepared by Dr. Philipson, of Newcastle, and have been read by him at the meetings of the Northumberland and Durham Medical Society, and afterwards printed in the transactions of the society. Frequently, upon the reading of the Reports, interesting and valuable discussions have followed, and upon different occasions, entirely from the statements contained in the Reports, representations have been made by the society to the authorities of the two towns, of the outbreak or alarming amount of typhus fever, or other epidemic disease.

The returns upon which the reports have been based are contributed weekly by the public medical practitioners, those in charge of the union districts, the charitable and public institutions. The returns have been regularly and most cheerfully forwarded, and are now complete, every practitioner engaged in the public practice of Newcastle and Gateshead assisting.

The expense of printing and issuing the blank schedules, and printing the reports, has been entirely defrayed by the Northumberland and Durham Medical Society.

Hereunto have been affixed the reports for the months of January and February 1869, one of the weekly schedules which are issued to the contributors, and one of the forms used in the compilation of the returns.

Newcastle-upon-Tyne, June 1869.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

REGISTRATION OF DISEASES.

RETURN of New Cases of Disease coming under treatment in my public practice, during the week ending Saturday the of 186 , at

Table with columns: Diseases, Number of Cases, Deaths during Week, Remarks. Lists various diseases like Small-Pox, Measles, Scarlet Fever, etc.

Signature

* Cases ought only to be returned under this heading when the distinctive kind of fever cannot be ascertained.

[No.

1869.

RETURN of UNION, CHARITABLE, and PUBLIC INSTITUTIONS of NEWCASTLE and GATESHEAD, day of

New Cases of Disease coming under Treatment during the week ending the

Main table with columns for Newcastle and Gateshead, including Poor Law Districts, Public Institutions, and Diseases. Lists various diseases and their counts.

Medical Officers, &c., to whom the Society is indebted for the above returns. 19, 20, 21, 22, 23, 24. 18, 14, 15, 16, 17, 18. 7, 8, 9, 10, 11, 12. 1, 2, 3, 4, 5, 6. 3 N

BOROUGH OF NEWCASTLE-UPON-TYNE.

A RETURN for the fortnight ending Saturday the District of

1869, of Deaths within the

(Signed)

Registrar of the District.

Date.	Name.	Age.	Residence.	Certified cause of Death.	Remarks.

Summary of the foregoing:—

	Number of Cases
Typhus Fever	-
Typhoid "	-
Scarlet "	-
Continued "	-
Puerperal "	-
Bronchitis	-
Pertussis	-
Diphtheria	-
Inquest cases	-
Total cases	-
Corresponding week of last year	-

MEDICAL REPORT of NEW CASES for the Week ending

1869.

Infectious Diseases.	New Cases only for the past Week.	Removed to Fever Hospital.	Died during the Week.	Number of Cases for the corresponding Week last Year.
Fever - - -				
Measles - - -				
Small-Pox - -				

Total Number of Cases for the Week ending 1869 - -
 " " " for the Corresponding Week of last Year - -

Localities of New Cases

Remarks

(Signed)

Medical Officer of the Newcastle-upon-Tyne Union, District No.

(5.) MEMORIAL of the JOINT COMMITTEE on STATE MEDICINE of the British Medical and Social Science Associations. (HENRY W. RUMSEY, Esq., M.D.)

See Questions 4421, 6452.

To His Grace the Lord President of Her Majesty's Most Honourable Privy Council; to Her Majesty's Principal Secretary of State for the Home Department; and to the President of the Poor Law Board; the memorial of a Joint Committee of the British Medical and Social Science Associations, appointed to promote a better administration of the laws relating to registration, medico-legal inquiries, and the improvement of the public health, humbly sheweth,

That it seems to your memorialists not unreasonable to ask that the Imperial Parliament, which for many years has devoted much time and attention to the enactment of laws having reference to the amount, the causation, and the diminution of mortality in the United Kingdom, should take measures to ascertain how far its benevolent intentions have been appreciated, its laws obeyed, and its suggestions adopted; and how far, on the contrary, local regulations, customs, and prejudices, the parsimony of local authorities, the existence in the same districts of conflicting jurisdictions, and defects or obscurity in the laws themselves, have tended to defeat, in whole or in part, the labours of the Legislature.

It is affirmed by those whom large official experience entitles to speak with authority, that the registration of the causes of death, though much more satisfactory than it once was, is still very imperfect; that the registrar's certificate is not accepted as evidence of death by the Bank of England; and that, under the present system, which has doubtless led to the discovery of some murders, but probably allows many to escape detection, scarcely any further improvement is possible; while it makes absolutely no provision for returns of cases of disease not proving fatal, nor of children actually, or reputed to be, stillborn.

It is also felt by many, including coroners and others who know its working, that the present mode of conducting medico-legal inquiries tends in numerous instances to defeat the ends of justice; that verdicts are often arrived at by coroners' juries on evidence that is insufficient, erroneous, or misinterpreted; without any *post mortem* examinations, or after examinations made without the guidance of any fixed rules for the performance of them, and by persons unskilled in such investigations; while it is notorious that the appearance, in courts of justice, of medical witnesses summoned *ex parte* to speak not to matters of fact, but to matters of doubtful opinion, hinders or altogether prevents the discovery of truth, discredits scientific medicine, and is a fruitful source of perplexity and misconception to bench, bar, and jury.

It further appears, from extensive inquiries conducted by private individuals, in the absence of trustworthy official returns, that in many of the towns and districts of this country, scarcely a semblance of sanitary organization exists; that the majority of the large towns throughout the kingdom have no medical officers of health, and that, in most of those which have them, their remuneration is utterly inadequate; while, on the other hand, many local boards have been established, and even officers of health appointed, in places which are by far too small and insignificant for

separate statistical reports; and that frequently their position of dependence on the local authorities renders those officers comparatively powerless for good. It appears, moreover, that inspectors of nuisances are often independent of the officer of health, instead of being under his control; that in many towns, where a single inspector—burdened, as is not unfrequently the case, with other laborious duties—is appointed to populations of 30,000, or 40,000, or, as in one case, of 130,000, and likewise in country districts, where such officers exist only in name, there is practically no inspection whatever; and that, owing to the want of public analysts, and competent inspectors of food, the Acts for the prevention of adulteration of food, and of the sale of diseased and unwholesome articles of food, must be, in most cases a dead letter. It is also proved by the Registrar-General's returns, that the death-rate, instead of being reduced, has in some extensive districts been maintained, while in others it has actually increased, during the last twenty years.

Yet it is believed, by those who have directed their attention to the subject, that the amount actually disbursed under the present disjointed and very inefficient system would, if otherwise distributed—the districts and many of the duties being consolidated—go far to maintain a sufficient staff of specially trained and highly qualified district scientific officers, with inspectorial functions. Without such officers it is vain to expect any material improvement in this important department of the public service.

For all these reasons, and for others set forth in the accompanying "Memorandum" (drawn up by Dr. Rumsey, and approved by the joint committee), we ask for a thorough, impartial, and comprehensive inquiry, by a Royal Commission having power to visit, or to send sub-commissioners to visit, the large towns and other districts of the country, to obtain information and evidence, and to report on:—

1. The manner in which the cases and causes of sickness and of death are and should be inquired into and recorded in the United Kingdom.
2. The manner in which coroners' inquests and other medico-legal inquiries are and ought to be conducted, particularly in regard to the methods of taking scientific evidence.
3. The operation and administration of sanitary laws, with special reference to the manner in which scientific and medical advice and aid in the prevention of disease are and should be afforded; and also with special reference to the extent of the areas or districts most convenient for sanitary and medico-legal purposes.
4. The sanitary organization, existing and required, including a complete account of the several authorities and officers. The education, selection, qualification, duties, powers, tenure, and remuneration of the said officers to be specially reported on.
5. The revision and consolidation of the sanitary laws, having special reference to the increase of the efficiency of their administration both central and local.

Signed in name and by appointment of the Joint Committee,

J. P. KAY SHUTTLEWORTH, Bart.,
 HENRY W. ACLAND, M.D. Oxon., F.R.S., } Chairmen.
 WILLIAM CLODE,
 A. P. STEWART, M.D., } Hon. Secs.
 London, May 1868.

(6.) MEMORANDUM ON STATE MEDICINE, (H. W. RUMSEY, Esq., M.D.)

See Question 4421.

MATTERS TO BE PROVIDED FOR BY SKILLED LOCAL AGENCY.

I. We ask for a thorough, impartial, and comprehensive inquiry into the operation of the several laws, regulations, and customs under which members of the medical profession are employed, constantly or occasionally, in the towns and rural parishes of England, Scotland, and Ireland, or in some of them,—by different departments of Government, by public bodies, by local authorities, or in voluntary societies; or under which medical practitioners act as witnesses in courts of law and medico-legal inquiries, or otherwise;—for any of the following objects and purposes:

Mortuary registration.

1. To give information concerning the cause of death, by certificate to the registrars of deaths, and by evidence at coroners' inquests.

Medico-legal inquiries.

2. To perform post-mortem examinations and analyses, in suspicious or obscure cases, for the information of coroners and courts of law.

Medical and scientific observations.

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.

Medico-sanitary inquiries.

4. To investigate and report, on particular occasions and in selected places, facts and circumstances relating to the prevalence of disease,—especially of epidemics.

Interments.

5. To inquire into the condition of burial grounds, and to superintend the execution of laws and regulations for the burial of the dead.

KIND OF AGENCY NOW EMPLOYED.

Local practitioners or special experts.

Voluntary enterprise of local practitioners in a few towns.

Inspectors under Privy Council.

Inspectors under Home Office.

Advice and aid to authorities. 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.

Sanitary measures, vaccination, &c. 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.

Workhouses, medical relief and charities, &c. 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.

Asylums, &c. for the insane. 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.

Prisons, &c. 10. To inquire into and report upon the sanitary condition and management of prisons, reformatories, and other corrective establishments.

Schools, &c. 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.

Occupations, &c. 12. To examine and report on the sanitary condition and the protective regulations of mines, factories, potteries, bakchouses, dress-makers' establishments, and all other work places, under various enactments for the control and regulation of labour.

Food and drinks. 14. 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.

Water supply. 14. To examine into and report upon the water supply of towns and villages, and the condition of rivers and streams.

Gas, smoke, and chemical works. 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.

Animals. 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, &c., &c.

Imported diseases. 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.

Medico-legal certificates. 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.]

Forensic evidence. 19. To give medical or scientific evidence on any of the preceding matters in courts of law.

II. We suggest that, while many of the provisions and arrangements, described under the preceding head, are of merely partial, occasional, and exceptional application, there are several other objects, at present wholly unaccomplished, as to which legislative action is 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:

Registration. 1. 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.

Medico-legal inquiries. 2. 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.

Forensic medicine. 3. To act as medical referees in obscure or disputed cases—sanitary or medico-legal—which require forensic adjudication.

[N.B. This requirement should be limited by the following recommendation (from Dr. Rumsey's Address on State Medicine at Dublin, 1867, p. 24): "That the Lord Chancellor or the judges should appoint a limited number of eminent persons, men held in general esteem, and known to be specially learned—some in psychology, some in the forensic department of chemistry and toxicology—as assessors to the Courts of Assize. These officers of circuits would receive the most important aid from the proposed official district physician."]

Interments, mortuaries, &c. 4. 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.

Dwellings. 5. 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.

Veneral diseases. 6. In all populous districts, to direct and aid the execution of measures concerning the health of women, within the meaning of the Contagious Diseases Prevention Act, 1866, when the main provisions of that Act shall be extended to the civil population of the kingdom.

Pharmacy. 7. Aided by skilled pharmacians or scientific chemists, to inspect establishments for the sale and preparation of medicines, and to detect adulterations of drugs.

Officers acting under local boards in certain places.

Inspectors under Privy Council.

Inspectors under Poor Law Board* and Privy Council.

Commissioners in Lunacy, chancellor's visitors, county visiting physicians, and district medical officers.

Inspectors under Home Office.*

Inspectors under Privy Council.*

Inspectors under Home Office,* certifying surgeons, and officers under local authorities.

Officers (sometimes analytical chemists) under local authorities or county magistrates, in a few places.

Officers under local authorities, in some places.

Officers under local authorities.

Inspectors under Board of Trade.

Officers under local authorities in a few places.

Officers under Privy Council in certain cases.

Custom House officers.

Quarantine officer under Privy Council.

Officers under local authorities.

Any registered medical practitioner.

Special experts.

Certifying surgeons.

* Those marked with an asterisk are, with few exceptions, not medical.

Medical police.

Nurses and female midwives.

Defective and incoherent legislation and administration.

No special qualification for officers.

Impediments to free exercise of opinion and function.

Ill-defined districts and conflicting jurisdictions.

Entire neglect of the majority of the population.

Want of authorized co-operation of officers.

Necessity for organization and consolidation of duties.

8. 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. 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.

III. We believe that abundant evidence can be adduced to show,—

(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;

(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 attesting them;

(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;

(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;

(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;

(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;

(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.

(7.) RETURN OF MUNICIPAL BOROUGHS (WM. FARR, Esq., M.D., F.R.S.)

See Questions 4440, 5046 and 5054.

At the census of 1861 there were 781 towns in England and Wales containing a population of 10,960,998.

The Commissioners appointed in 1834 to inquire into the municipal corporations visited and instituted inquiries in 286 places, of these

178 were subsequently placed under the operation of the Municipal Corporations Act (1835).

2 (Hartlepool and Ashton-under-Lyne) were at a more recent period, brought under the provisions of that Statute on new Charters being granted to them.

16 contained corporations which proved to be of a character exclusively manorial.

89 were ultimately left undisturbed by the legislative enactment.

285

By Section 141 of the Municipal Corporations Act (5 & 6 Wm. IV., c. 76.) charters of incorporation may be granted to towns on the petition of the inhabitant householders if Her Majesty, by the advice of Her Privy Council, shall think fit to grant them.

178 boroughs were as above-mentioned named in the schedule to this Act.

18 towns received charters between 1835 and the census of 1851 (when the population of the 196 was 4,473,138).

11 towns received charters between 1851 and the census of 1861 (when the population of the 203 was 5,432,637).

It is stated in the census volume of 1851 that "Pwllheli, though comprised in the Municipal Corporation Act, has ceased to elect a mayor or other officer."

MUNICIPAL BOROUGHS IN ENGLAND AND WALES.

Name of Municipal Borough.	Population, 1851.
DIVISION I.	
MIDDLESEX.	
London - - - - -	112,063
DIVISION II.	
SURREY.	
Godalming - - - - -	2,321
Guildford - - - - -	8,020
Kingston-on-Thames - - - - -	9,790
KENT.	
Canterbury - - - - -	21,324
Deal - - - - -	7,531
Dover - - - - -	25,325
Faversham - - - - -	5,858
Folkeston - - - - -	8,507
Gravesend - - - - -	18,782
Ilythe - - - - -	3,001
Maidstone - - - - -	23,016
Margate (Charter 1851-61) - - - - -	8,874
Rochester - - - - -	16,862
Sandwich - - - - -	2,944
Tenterden - - - - -	3,762
SUSSEX.	
Arundel - - - - -	2,498
Brighton (Charter 1851-61) - - - - -	77,693
Chichester - - - - -	8,059
Hastings - - - - -	22,837
Rye - - - - -	3,738
HAMPSHIRE.	
Andover - - - - -	5,221
Basingstoke - - - - -	4,654
Lymington - - - - -	2,621
Newport - - - - -	7,934

Name of Municipal Borough.	Population, 1861.	Name of Municipal Borough.	Population, 1861.
Portsmouth - - - - -	94,799	Dartmouth - - - - -	4,444
Romsey - - - - -	2,116	Devonport (Charter 1835-51) - - - - -	50,440
Southampton - - - - -	46,960	Exeter - - - - -	33,738
Winchester - - - - -	14,776	Honiton (Charter 1835-51) - - - - -	3,301
BERKSHIRE.		Plymouth - - - - -	62,599
Abingdon - - - - -	5,680	South Molton - - - - -	3,830
Maidenhead - - - - -	3,895	Tiverton - - - - -	10,447
Newbury - - - - -	6,161	Torrington - - - - -	3,298
Reading - - - - -	25,045	Totnes - - - - -	4,001
Wallingford - - - - -	2,793	CORNWALL.	
Windsor - - - - -	9,520	Bodmin - - - - -	4,466
DIVISION III.		Falmouth - - - - -	5,709
HERTFORDSHIRE.		Helston - - - - -	3,843
Hertford - - - - -	6,769	Launceston - - - - -	2,790
St. Albans - - - - -	7,675	Liskeard - - - - -	4,689
BUCKINGHAMSHIRE.		Penryn - - - - -	3,547
Buckingham - - - - -	3,849	Penzance - - - - -	9,414
Chipping Wycombe - - - - -	4,221	St. Ives - - - - -	7,027
OXFORDSHIRE.		Truro - - - - -	11,337
Banbury - - - - -	4,059	SOMERSETSHIRE.	
Chipping Norton - - - - -	3,137	Bath - - - - -	52,528
Oxford - - - - -	27,560	Bridgwater - - - - -	11,320
NORTHAMPTONSHIRE.		Clard - - - - -	2,276
Daventry - - - - -	4,124	Glastonbury - - - - -	3,496
Northampton - - - - -	32,813	Wells - - - - -	4,648
HUNTINGDONSHIRE.		Yeovil (Charter 1851-61) - - - - -	7,957
Godmanchester - - - - -	2,438	DIVISION VI.	
Huntingdon - - - - -	3,816	GLOUCESTERSHIRE.	
BEDFORDSHIRE.		Bristol - - - - -	154,093
Bedford - - - - -	13,413	Gloucester - - - - -	16,512
CAMBRIDGESHIRE.		Tewkesbury - - - - -	5,876
Cambridge - - - - -	26,361	HEREFORDSHIRE.	
Wisbech - - - - -	9,276	Hereford - - - - -	15,585
DIVISION IV.		Leominster - - - - -	5,658
ESSEX.		SHROPSHIRE.	
Colchester - - - - -	23,809	Bridgnorth - - - - -	6,240
Harwich - - - - -	5,070	Ludlow - - - - -	5,178
Maldon - - - - -	4,785	Oswestry - - - - -	5,414
Saffron Walden - - - - -	5,474	Shrewsbury - - - - -	22,163
SUFFOLK.		Wenlock - - - - -	19,699
Beccles - - - - -	4,266	STAFFORDSHIRE.	
Bury St. Edmunds - - - - -	13,318	Hanley (Charter 1851-61) - - - - -	31,953
Eye - - - - -	2,430	Lichfield - - - - -	6,893
Ipswich - - - - -	37,950	Newcastle-under-Lyme - - - - -	12,938
Southwold - - - - -	2,032	Stafford - - - - -	12,532
Sudbury - - - - -	6,879	Tamworth - - - - -	4,326
NORFOLK.		Walsall - - - - -	37,760
Great Yarmouth - - - - -	34,810	Wolverhampton (Charter 1835-51) - - - - -	60,860
Kings Lynn - - - - -	16,170	WORCESTERSHIRE.	
Norwich - - - - -	74,891	Bewdley - - - - -	2,905
Thetford - - - - -	4,208	Droitwich - - - - -	3,124
DIVISION V.		Evesham - - - - -	4,680
WILTSHIRE.		Kidderminster - - - - -	15,399
Calne - - - - -	2,494	Worcester - - - - -	31,227
Chippenham - - - - -	1,603	WARWICKSHIRE.	
Devizes - - - - -	6,638	Birmingham (Charter 1835-51) - - - - -	296,076
Marlborough - - - - -	3,684	Coventry - - - - -	40,936
Salisbury - - - - -	12,278	Stratford-on-Avon - - - - -	3,672
DORSETSHIRE.		Warwick - - - - -	10,570
Blandford - - - - -	1,521	DIVISION VII.	
Bridport - - - - -	7,719	LEICESTERSHIRE.	
Dorchester - - - - -	6,823	Leicester - - - - -	68,056
Lyme Regis - - - - -	2,318	RUTLANDSHIRE.	
Poole - - - - -	9,759	NIL.	
Shaftesbury - - - - -	2,497	LINCOLNSHIRE.	
Weymouth and Melcombe Regis - - - - -	11,383	Boston - - - - -	14,712
DEVONSHIRE.		Grantham - - - - -	4,954
Barnstaple - - - - -	10,743	Great Grimsby - - - - -	11,067
Bideford - - - - -	5,742	Lincoln - - - - -	20,999
		Louth - - - - -	10,560
		Stamford - - - - -	8,047

Name of Municipal Borough.	Population, 1861.	Name of Municipal Borough.	Population, 1861.
NOTTINGHAMSHIRE.		PEMBROKESHIRE.	
East Retford - - - - -	2,982	Haverfordwest - - - - -	7,019
Newark - - - - -	11,515	Pembroke - - - - -	15,071
Nottingham - - - - -	74,693	Tenby - - - - -	2,982
DERBYSHIRE.		CARDIGANSHIRE.	
Chesterfield - - - - -	9,836	Aberystwith - - - - -	5,641
Derby - - - - -	43,091	Cardigan - - - - -	3,543
DIVISION VIII.		BRECKNOCKSHIRE.	
CHESHIRE.		Brecknock - - - - -	5,235
Chester - - - - -	31,110	RADNORSHIRE.	
Congleton - - - - -	12,344	NIL.	
Macclesfield - - - - -	36,101	NORTH WALES.	
Stalybridge (Charter 1851-61) - - - - -	24,921	MONTGOMERYSHIRE.	
Stockport - - - - -	54,681	Llanidloes - - - - -	3,127
LANCASHIRE.		Welsphool - - - - -	7,304
Ashton-under-Lyne (Charter 1835-51) - - - - -	34,886	FLINTSHIRE.	
Blackburn (Charter 1835-51) - - - - -	63,126	Flint - - - - -	3,428
Bolton (Charter 1835-51) - - - - -	70,395	DENBIGHSHIRE.	
Burnley (Charter 1851-61) - - - - -	28,700	Denbigh - - - - -	5,946
Clitheroe - - - - -	7,000	Ruthin - - - - -	3,372
Lancaster - - - - -	14,487	Wrexham, Charter 1851-61. - - - - -	7,562
Liverpool - - - - -	443,938	MERIONETHSHIRE.	
Manchester (Charter 1835-51) - - - - -	338,722	NIL.	
Oldham (Charter 1835-51) - - - - -	72,333	CARNARVONSHIRE.	
Preston - - - - -	82,985	Carnarvon - - - - -	8,512
Rochdale (Charter 1851-61) - - - - -	38,114	Pwllheli - - - - -	2,818
Salford (Charter 1835-51) - - - - -	102,449	ANGLESEY.	
Warrington (Charter 1835-51) - - - - -	26,431	Beaumaris - - - - -	2,558
Wigan - - - - -	7,3658	TOWNS WITH LARGE POPULATIONS not regulated by MUNICIPAL CORPORATIONS ACT.	
DIVISION IX.		Population.	
YORKSHIRE, WEST RIDING.		Towns.	1851.
Bradford (Charter 1835-51) - - - - -	106,218		1861.
Devsbury (Charter after 1861) - - - - -	18,148	Accrington - - - - -	7,481
Doncaster - - - - -	16,406	Barnsley - - - - -	13,437
Halifax (Charter 1835-51) - - - - -	37,014	Belper - - - - -	10,082
Leeds - - - - -	207,165	Birkenhead - - - - -	37,513
Pontefract - - - - -	5,346	Erenfora - - - - -	8,870
Ripon - - - - -	6,172	Burton-upon-Trent - - - - -	7,934
Sheffield (Charter 1835-51) - - - - -	185,172	Bury - - - - -	31,262
Wakefield (Charter 1835-51) - - - - -	23,350	Chatham - - - - -	28,242
YORKSHIRE, EAST RIDING.		Cheltenham - - - - -	35,051
Beverley - - - - -	9,654	Chorley - - - - -	8,907
Hull - - - - -	97,661	Croydon - - - - -	10,260
YORKSHIRE, NORTH RIDING.		Darlington - - - - -	11,228
Middlesborough (Charter 1851-61) - - - - -	18,992	Darwen, Over - - - - -	7,020
Richmond - - - - -	4,290	Dukinfield - - - - -	12,132
Scarborough - - - - -	18,377	Frome - - - - -	10,148
York - - - - -	40,433	Glossop - - - - -	17,454
DIVISION X.		Heywood - - - - -	12,824
DURHAM.		Huddersfield - - - - -	30,880
Durham - - - - -	14,088	Hyde - - - - -	10,051
Gateshead - - - - -	33,587	Keighley - - - - -	13,050
Hartlepool (Charter 1835-51) - - - - -	12,245	Leamington - - - - -	15,692
South Shields (Charter 1835-51) - - - - -	35,239	Lewes - - - - -	9,533
Stockton - - - - -	13,357	Loughborough - - - - -	10,900
Sunderland - - - - -	78,211	Lowestoft - - - - -	6,580
NORTHUMBERLAND.		Luton - - - - -	10,648
Berwick-upon-Tweed - - - - -	13,265	Merthyr Tydfil - - - - -	63,080
Morpeth - - - - -	4,296	Middleton - - - - -	5,740
Newcastle-upon-Tyne - - - - -	109,108	Oldbury - - - - -	5,114
Tynemouth (Charter 1835-51) - - - - -	34,021	Peterborough - - - - -	8,672
CUMBERLAND.		Ramsgate - - - - -	11,838
Carlisle - - - - -	29,417	Runcorn - - - - -	8,049
WESTMORELAND.		Ryde - - - - -	7,147
Kendal - - - - -	12,029	St. Helens - - - - -	14,866
DIVISION XI.		Sheerness - - - - -	8,549
MONMOUTHSHIRE.		Taunton - - - - -	14,176
Monmouth - - - - -	5,783	Todmorden - - - - -	4,532
Newport - - - - -	22,249	Tunbridge Wells - - - - -	10,587
SOUTH WALES.		Wednesbury - - - - -	11,914
GLAMORGANSHIRE.		West Hartlepool - - - - -	12,603
Aberavon (Charter 1851-61) - - - - -	2,916	Whitby - - - - -	10,989
Cardiff - - - - -	32,954	Whitehaven - - - - -	18,842
Neath - - - - -	6,810		
Swansea - - - - -	41,606		
CARMARTHENSHIRE.			
Carmarthen - - - - -	9,993		
Llanoverly - - - - -	1,855		

(S.) EXTRACT from the APPENDIX to the REGISTRAR-GENERAL'S 27th ANNUAL REPORT, 1866, (Wm. FARR, Esq., M.D., F.R.S.)

See Questions 4469 and 5193.

In the earliest dawn of the nation the English inquired into the causes of death with a view to discovery and prevention. The protection of life was a fundamental principle of their laws. It was as much an object of their political organization as national defence or war. And the dead body, it was held, called for the coroner's inquest whenever death was sudden or violent or in prison; that is, whenever it was the result, or appeared to be the result, of any discoverable cause. The plagues of the 16th century proved that human life is exposed to invisible enemies, more deadly than the mechanical forces of nature, the ferocity of animals, or the malignity of manslayers; and towards the end of Queen Elizabeth's reign the London bills of mortality were commenced (1592). It was part of the general measures of her able government, by which abstracts of burials, baptisms, and marriages were directed to be compiled in each parish; and persons were appointed to view the bodies of all that died before they were suffered to be buried, and to certify of what probable disease each individual died, in statements of which it was the duty of the minister to make a weekly return. The deaths by plague and by all other diseases in the aggregate were published in the London bills so early as 1603; and in 1629 the several casualties were set forth weekly. Graunt gives a complete return for the year 1632 of the causes of 9,535 deaths in London, whereof eight were of the plague.* He says, that though not published, "the original entries in the *Hall-books* were as exact in the very first year as to all particulars as now; and the specifying of casualties and "diseases was probably more."

Graunt thus describes the mechanism by which the observations in this remarkable series of tables were collected:

"When anyone dies, then, either by tolling or ringing of a bell, or by bespeaking of a grave of the *sexton*, the same is known to the *searchers*, corresponding with the said *sexton*."

"The *searchers* hercupon (who are ancient matrons sworn to their office) repair to the place where the dead corpse lies, and by view of the same, and by other enquiries, they examine by what *disease* or *casualty* the corpse died. Hereupon they make their report to the *parish clerk*, and he, every *Tuesday* night, carries in an account of all the *burials* and *christenings* happening that week to the Clerk of the Hall. On *Wednesday* the general account is made up and printed, and on *Thursday* published and dispersed to the several families who will pay four shillings *per annum* for it."

Graunt discusses the value of the bills, and shows what "corrections upon the, perhaps, ignorant and careless "searchers' reports," were required; at the same time he says, as "many of the casualties were but matter of sense," the searchers' reports might be sufficient in such cases. In many of the more intricate cases "the searchers are able "to report the opinion of the *physician* who was with the "patient, as they receive the same from the friends of the "defunct;" and in very many cases, such as drowning, small-pox, dropsy, falling sickness, palsy, ague, rickets, their own senses were, in his opinion, sufficient.

Many of Graunt's judicious observations on the casualties of the bills are applicable to the reported casualties of the remotest parts of the country in the present day; for some districts still represent the ignorance of the cities of ages gone by. And Graunt was essentially right, for there can be no doubt of the value of even the imperfect reports of facts in the early bills directly concerning the life and death of Englishmen. They had on them in Graunt's book the approving stamp of the Royal Society. Sydenham, it is evident, had the London bills before him in writing his imperishable commentaries. Arbuthnot used them in an argument on Divine Providence and in the interests of morality;† Heberden in a masterly paper illustrated the use of the weekly observations, and deduced from them an important law;‡ Simpson and Price constructed life tables from the London bills.

* Natural and political observations upon the London Bills of Mortality. By Capt. John Graunt, Fellow of the Royal Society. Tuesday June 20, 1665. At a meeting of the Council of the Royal Society ordered to be printed. 5th ed. 1676.

† An argument for Divine Providence taken from the constant regularity in the births of both sexes. By Dr. John Arbuthnot, Trans. of Royal Society. Vol. xxvii. p. 136. He shows by the London bills that males always exceed females in the yearly births, but that external accidents make a great havoc among males. He concludes that "polygamy is contrary to the law of nature and justice."
‡ See Influence of Cold upon Health. By W. Heberden, junior, M.D. Phil. Trans. 1744, p.

The parish clerks of London deserve our gratitude for their perseverance in publishing the bills, which the citizens took in weekly for "no other reason" that Graunt could discover than curiosity about increase and decrease of burials or rare casualties, "so as they might take the "same as a text to talk upon in the next company;" and in the plague time, "that so the rich might judge of the "necessity of their removal, and that tradesmen might "conjecture what doings they were like to have in their "respective dealings." Similar bills were commenced in some other English and continental cities, but they were allowed to drop, leaving the series incomplete.

While medical science advanced, the weekly bills remained stationary; their interest was not kept up by eruptions of plague; dissenters' burials were not included; and the clerks of many parishes made no returns, or only made them irregularly. And even when complete, the bills gave no information about the population of the towns and counties of the whole kingdom.

It was only in 1837, five years after the first epidemic of cholera, that under the Registration Act provision was made for the inquiry into the cause of nearly every person's death. The column of the schedule headed "Cause of Death" was introduced in the House of Lords. There has then since July 1st, 1837, been two kinds of inquests into the cause of death,—the coroner's inquest and your inquiry.

The latter measure appears to have been looked upon as experimental. There was no view of the body, no arrangement for obtaining evidence, no machinery for instituting inquiry; and where there had been no medical attendant, or where the medical attendant refused to supply the information in his possession, no means of getting the required facts, except by making the medical man the legal informant. The imperfect information of the coroners was expressed in rude, vague, antiquated language, and was less satisfactory than that supplied from other sources. The heads of the medical profession supported the Registrar General's efforts to overcome the first difficulties; you circulated medical certificate books with a *Nosology* freely among the profession all over the country. You addressed coroners, and since the office has been strengthened by the Act authorizing the payment of medical witnesses, their information is much more valuable than it ever was before. The result is apparent in the returns of the present year. You succeeded in providing in medical men frequent substitutes for uneducated jurymen and "ancient matrons sworn." Under the present administrative arrangements little further progress can be made.

It is notorious that the registration of the cause of death in its present form has contributed to bring crime to light, and has facilitated the conviction of the guilty. The trials of Palmer, Pritchard, and other criminals afford illustrations. Enough has been done since the passing of the Registration Act to establish the utility of general inquiry into the causes of all deaths, and to justify the employment of the machinery necessary to make the inquiry as complete as possible for accuracy of record, for protection of life, and for the furtherance of medical science.

It will be borne in mind that the coroner and his jury can only conduct the inquiry on view of the body (*super visum corporis*); by the first statute (4 Ed. 1. stat. 2. A.D. 1276) it is enacted, that on being commanded by the king's bailiff or other honest men of the country the coroner of our Lord the King "shall go to the *PLACES* where any be slain, "or suddenly dead or wounded * * * and shall forthwith command four of the next towns, or five or six, to "appear before him in such a place." The coroner inquired upon oath, and his information was based upon actual examination of the body, the place, and the surrounding persons. The searchers of the London bills were also instructed "to repair to the *place* where the dead corps "lies, and by view of the same, and by other inquiries, to "examine by what *disease* or *casualty* death was caused." The registry of burial in the Established Church is a public act; the coffin and several witnesses are before the clerical registrar; but the identification of the body in the place of death is lost. And in a large city anybody may be buried under any name. By the code Napoleon the Registrar is bound to see the body, and to register the death on the information of two men of full age (21), and without his certificate the body cannot be interred. (Code Civil, Livre 1. tit. 1. s. 77.)

77. "Aucune inhumation ne sera faite sans une autorisation, sur papier libre et sans frais, de l'officier de l'état civil, qui ne pourra la délivrer qu'après s'être transporté auprès de la personne décédée, pour s'assurer du décès, et que vingt-quatre heures après le décès, hors les cas prévus par les réglemens de police." See also s. 37.

Should any signs of death by violence be discovered, or any suspicions be aroused, the body can only be buried

after the circumstances of the death have been inquired into and reported on by a police officer, aided by a physician or surgeon. (s. 81.)

This is the spirit of the registration law on the continent. The inspector of the dead in Austria is called *Todbeschauer*. In Brussels notice of every death is sent to the Town Hall, with the address, and a medical inspector inquires into the circumstances and registers every death.*

In England under the Act 6 & 7 Will. 4. c. 86, death registration is a simpler process. A person present at the death, or in attendance during the last illness, of the deceased person, goes to or sends for the registrar of the district in which the death happens, gives the requisite information,† and signs the register book as the informant either in writing or by mark. The qualification implies that the informant has seen the deceased person alive during the last illness, but beyond that there is no restriction in the Act as to capacity, character, sex, or age.

The table in next page shows the sex and qualification of informants in certain districts.

The informant and the registrar are usually alone during the act of registration; no witness is required; and, if present, no witness is allowed to sign the book.‡ If the persons qualified to give information do not come to the registrar, he is directed to go to the house where the death occurred, "or wherever such person qualified to give information can be found, and ask for it." When found, informants "by refusal to give information, and to sign "the register books, render themselves liable to be "indicted for a misdemeanor." The inducement to take the initiative turns on the use of the registrar's certificate, which given after registration is authority for the burial of the body. Any person burying a dead body without the certificate of the registrar or the coroner, and neglecting to give notice of the burial within seven days, incurs a penalty not exceeding 10*l.* for every such offence.§

Registration is thus performed without any expense to

the parties, and with as little trouble and expense to the public as possible. Copies of the entries in the register books made by the registrars, and verified by the superintendent registrars, are sent every three months to the General Register Office, where they serve for statistical and other important purposes. A certified copy of an entry, sealed at the General Register Office,* says the Act, shall be received as evidence of the death to which the same relates, without any further or other proof of such entry.

Now it is reported † that in the case of *Leach v. Leach* the Vice-Chancellor observed, that he could not be satisfied with the sealed certificate; "all the registry proved," he is made to say, "was this, that some one called at a particular "house, and was told by some one that a man named so- "and-so was dead. Although such evidence was parlia- "mentary he did not consider it sufficient here." Commenting upon the case in which Fletcher during her life registered the death of a lady of the name of Slack, and with the help of the registrar's certificate and a forged will took consols to the amount of 5,000*l.* from the Bank of England, the *Times* thus criticised the act: "The registrar "receives information of the death at his office; he does "not go to the house and scene of death. He is thus "necessarily liable, more than could have been the case "before, to impostures. A party calls at his office, gives "information of the death, and receives the certificate."

The Vice-Chancellor can scarcely be correctly reported; for the Act distinctly states that the register is invalid unless the informant has signed in it his name, description, and place of abode,‡ thereby rendering himself subject to the pains and penalties of perjury if he has wilfully made any false statement touching any of the particulars to be registered.§ And Fletcher not only got a false certificate, but procured probate of a forged will.

It must, however, be admitted that in a large city the registrar sitting in his office has no means, or very imperfect means, of knowing and identifying informants, or of

NUMBER OF MALE AND FEMALE INFORMANTS WHO SIGNED WITH MARKS IN A DISTRICT OR SUB-DISTRICT IN EACH OF THE 11 DIVISIONS OF THE KINGDOM, AND IN THE COUNTY OF NORTHAMPTON, DURING A PORTION OF THE YEAR 1864.

DISTRICTS, &c.	Total Deaths.	Number of Inquests and Deaths in Institutions.	Deaths, exclusive of Inquests and Institutions.	Informants to Deaths in Col. 3.			
				Total Number.		Number who made a Mark.	
				Males.	Females.	Males.	Females.
Cols. - - -	1	2	3	4	5	6	7
Chelsea - - - District	461	127	334	61	273	7	88
Reading - - - District	143	20	123	31	92	5	38
Peterborough - - - District	184	9	175	26	149	12	105
Romford - - - District	166	11	155	21	134	7	91
Highworth - - - District	84	12	72	8	64	1	47
Rugby - - - District	141	13	128	23	105	4	59
Derby - - - District	307	39	268	113	155	15	80
St. Martin, Liverpool - - - Sub-district	656	40	616	207	409	68	299
Halifax - - - District	830	66	764	444	320	105	242
Durham - - - District	401	29	372	165	207	43	108
Carnarvon - - - District	195	6	189	109	80	45	68
COUNTY OF NORTHAMPTON - - -	1,305	88	1,217	181	1,036	52	784

verifying the accuracy of the various particulars which he enters on the national registers. The Bank of England refuses to accept the death certificate as a proof of death.

The registrars, appointed generally by boards of guardians, before their appointment is confirmed by you, answer questions in writing, and their competency is proved by their copies sent to the office, and by the state of their registers, which are periodically examined by inspectors. The registrars are a highly respectable body of men of all the various classes of society, and as they are only paid

small fees they are necessarily engaged in other professions, in trades, or in some branch or other of industry. The work requires integrity, accuracy, sound sense, good writing, and close attention to all the minute provisions of the Act end of the regulations. The clerical part of their duty is checked by the inspectors by the superintendents, and by the central record department; but there is at present no means of checking the registered facts, or of determining the degree of accuracy with which informants report and registrars record the particulars of each entry. Wdare the informant is educated and interested, he naturally reads before signing the entry, and thus to some extent checks the work. Unfortunately it happens that in a large proportion of cases the informants sign by a mark, and as they cannot write their names they cannot read the record which they sign alone in the presence of the registrar. They cannot check the record. This has given occasion to cases of fraud which could scarcely have been anticipated.

* Early one morning after the annual fêtes in which the Belgians so much delight, I accompanied Dr. Verstraten on his pilgrimage to the chambers of the dead scattered over the city, and it was a very striking and varied spectacle. At one hour we stood in the midst of lights and incense by the body of a lady of rank, at another in a wretched attic by the corpse of a father of a family of sleeping children, and finally, after traversing many streets, finished our course at the Lying-in Hospital. He inquired into the circumstances and causes of every death.

† In default of the qualified informant as above described, it is incumbent on the occupier of the house to give information upon being requested so to do by the registrar. Of the occupier's death an inmate may be the informant.

‡ See Regulations for Duties of Registrars, and Act 6 & 7 Will. 4. c. 86. 1836.

§ Registration Act, Section XXVII. 24145.

* Section XXXVIII.
† *Times*, March 6th, 1844.
‡ Section XXVIII.
§ Section XLII.

In the course of twenty-nine years, out of a body of 2,200 officers, four, for the sake of the shilling an entry, inserted long series of fictitious entries of deaths which never occurred. They invented all the particulars of hundreds of deaths. The first case was that of a registrar of All Souls, Marylebone, who died before the discovery; he served under a most acute superintendent registrar. The second case was that of a registrar of Howard-street sub-district, Liverpool, of respectable connexions, who for fictitious entries was dismissed, convicted of felony, and sentenced to six months' imprisonment with hard labour. These two cases, and another at South Shields, are referred to in your reports,* and the required corrections are made in the calculations of the mortality of Marylebone, of South Shields, and of Liverpool. This offence, it may be mentioned, was first distinctly defined in the Forgery Act of 1861 (24th & 25th Victoria), under which the wilful insertion of any "false entry of any matter relating to any death" renders the offender liable, on conviction, to penal servitude for life (s. 36); yet a registrar of Howden, who began registering fictitious entries about ten years ago, continued the practice up to a recent date under the eye of his superintendent, and subject to the periodical visitation of intelligent inspectors. The causes of death were copied, with slight variations, from medical certificates, and his imaginary informants were represented as signing with marks. This a man of ordinary capacity dared and was able to do, because while there is a check on the handwriting and the form of entry, there is no check whatever on the accuracy of record, or on the veracity of informants. The facility of signing with marks of single informants tempted four men into the commission of these extraordinary crimes for the sake of small sums of money. For money the same criminals might, it is to be feared, with the hope of impunity before them, have falsified the record of important facts affecting vast amounts of property in insurances and successions. Fictitious entries embarrass statistical inquirers, and they were first brought to light in this office by the exorbitancy of the results. The Howden fraud was kept within narrower limits; it was discovered through the clergyman of a parish where the mortality was exaggerated.

It is deplorable that a single case of fictitious entry by a registrar, or of deliberate fraud by informants, should have occurred during 27 years; but it must be borne in mind that few registrars among many thousands, and few informants among many millions exposed to temptation, have criminally falsified the public records. The wilful falsifications are insignificant in number in comparison with the errors in 11,011,291 entries on the death registers.

I have referred to such defects of registration as vitiate the evidence that the registers afford affecting property, and the use of the records for scientific induction. I have now to refer to the imperfect security afforded by incomplete as compared with complete registration against murder and attempts on life. The following death was thus registered: "Died 11th June 1843, at Wix (Manningtree), William Constable, aged 38 years, labourer decline (3 months). Not certified.

* X The mark of Mary Faint, present at the death, Wix."

This was one of the Essex poisonings. The man, it was afterwards discovered, was poisoned with arsenic by his half-sister, Mary May, aged 28. She was tried at Chelmsford, found guilty, and executed.

The facility of registration in this easy way does not discourage the criminals. They go on with greater confidence. And this was only the first discovered case of a series of similar murders of husbands and children by wives and others, who could make their marks and administer arsenic in the Essex villages of Wix, Bradfield, Ramsay, Dovercourt, Tendring, Thorpe, Kirby, Mistley, Great Oakley, and Great Holland.† Sir James Graham, in the House of Commons, in June 1846, referring to another series—the Norfolk poisonings—said: "There was reason to believe " that in the county of Norfolk no fewer than 20 persons " had died from poison administered by one individual, " and in none of these cases had an inquest been held." I may cite other instances.‡ One murder successfully registered without detection led to the commission of more

* See Report IX, pp. 177 and 238-9. Report XIII, p. 294.

† These cases are well described in the letter of a barrister in the Morning Chronicle, April 11th, 1849.

‡ In one case it happened that Mr. Hitchins, who was coroner for Kesteven and Parts of Lindsey, was also a Registrar of Deaths in Lincoln. He assigned the following reasons for wishing to retain the latter office:—"My object in desiring to retain office is not for the emolument, but because I have found it to assist me essentially in my office of coroner. By its means " of information three murderers, and one for manslaughter, have been " transported; and at the present time two murderers, and one for man- " slaughter, are for trial at the next assizes, from being unable to obtain cer- " tificates."—Letter dated Lincoln, 3d February 1849. The murders in another district might have escaped, as the deaths might have been registered without a certificate.

murders, and murder became epidemic by imitation. It is probable that the number of such cases was exaggerated, but the terror they inspire is in itself an evil, and by crimes of the kind the country is dishonoured in the eyes of the world.

These deaths occurred in country villages among ignorant people, but in towns the detection of crime is rendered in certain cases much more difficult than it is in the country. The body can be buried in any churchyard or cemetery without a registrar's certificate; and the clergyman or burying officer, though bound to give the registrar notice (which he sometimes forgets), can only give such particulars as the parties conducting the funeral supply. The notice, if written, may be addressed to the wrong registrar, or be so vague or perhaps erroneous that the registrar of a large district, like Islington in London, cannot find the house in which the death occurred. Bodies are sometimes removed unregistered to other districts for burial, and all traces of them are lost. As still-born children are not registered at all, and are buried with little difficulty, there is a great temptation to inter the bodies of children living only a short time as still-born. This opens another gate to crime.

By forbidding, as in France, the burial of any body without the registrar's certificate, the latter class of evils will be obviated; and although inconvenience must occasionally arise from the absolute prohibition of the burial of the uncertified dead, that inconvenience should be encountered for the sake of many compensating advantages.

There is another defect in the Act: some old women and men, like hermits of old, live in solitary dwellings; in their last illness terminating suddenly they may have no person in attendance, and no witness present at their death. In these cases there is no legally qualified informant, and the deaths are not registered; the causes of death remain for ever unknown. The coroners are now paid by fixed salaries, and in many cases of violent deaths they do not hold inquests, unless they are led to suspect crime. This saves the county expense, but it has resulted in the absolute non-registration of deaths.*

Such are some of the defects by which the registration of the causes of death, and of the fact of death itself, is rendered less useful than it might be made for the purposes of science, for sanitary administration, for evidence affecting successions of property, and for the protection of life. To remedy these defects amendments of the Act are required; families must take more trouble to find qualified informants, and the country must consent to pay the necessary expenses of fuller inquiry.

It is now sufficient to send to the register office one informant, such as a nurse, and although a medical certificate is asked for, it is not indispensable by law, and is often not produced. That is all the trouble families are put to in registering their dead; and the registrar gets a shilling from the poor rate for recording, and making copies of the entry to be transmitted to the central office. The superintendent registrar gets 2d. for examining the copy of the entry with the original entry. Each death costs the country twenty pence for registration, including pay of officers, cost of books, ink, copying, custody of records (which it is expected will last for centuries), indexing, analysing statistically, and administration.

The inquiry into the cause of death might be made sufficient for all its great and useful purposes by a simple extension of the system of medical certificates which you introduced, and which has for many years been in partial use. And as I am not disposed, in imitation of foreign practice, to relinquish the principle of confidence in the medical attendants on families, I submit that having been in attendance up to the date of death, their certificates should still be received, provided they have seen the deceased on the day of death, or have seen the body subsequently for identification. It would be undesirable to enforce the grant of the certificate by any penalty; and under this arrangement the medical attendant should charge the family a fee in proportion to his ordinary charges. For pauper patient the poor law medical officer should be entitled for the certificate of death to a fee fixed by the commissioners.

Under these circumstances many deaths which are now "certified" would be "uncertified" by medical attendants,

* I subjoin an illustrative case:—

(Copy.) Superintendent Registrar's District, Chepstow, Registrar's District, Lydney, May 17th, 1866.

Sir, On Tuesday last, the 15th day of May, a lad named George Morgan, aged 16 years, accidentally fell into Lydney Basin and was drowned; he was never seen alive after falling into the water. The sergeant of police informed the coroner for the district of the accident, and the coroner informed the police there would not be any occasion for an inquest in such a case, as there was not any doubt as to how the lad came by his death. I should be glad to be informed of the proper way for me to make the entry in the Register Book of Deaths, and also as to the party to be the informant.

I remain, Sir,

Your obedient servant,

WILLIAM PACKER, Registrar, Lydney District.

To The Registrar General.

as the friends of out-patients of hospitals and dispensaries, as well as others, often get certificates to which they are not entitled through the kindness of the medical officers, who have sometimes no means of identification or verification. In all such cases, and in every case of death without medical attendance up to the date of death, in which the certificate could not be obtained from a legally qualified medical attendant—an informant, or the occupier of the house, or in his default an inmate, should be bound to give notice to a medical officer specially appointed for the duty in each of the districts of the kingdom. The registration medical officer would thereupon visit the body, and if all was clear, and admitted of satisfactory determination, send his medical certificate of the probable cause of death by the informant or by post to the registrar, who would upon its receipt register the death, and issue his certificate for burial in the usual course. The registration medical officer would, if the case was enveloped in any suspicion or obscurity, refuse his certificate until an inquest had been held or refused by the coroner, whose inquiry should by no means be superseded. The registration medical officer should be specially qualified to conduct post-mortem examination, and, on being summoned, might appear as the medical witness at the inquest. By practice he would acquire aptitude in the investigation of the obscurer causes of death, and in the detection of crime. Under this system every death, and the cause of every death, would be certified; and poisonings and criminal attempts on the life of children or adults would be less frequent, as they would with difficulty escape detection. Expected impunity would not invite men or women into the commission of fearful crimes. And human life would be under a new safeguard.

It is necessary to alter slightly on the above plan the present form of medical certificate, and three specimens of the requisite altered forms are subjoined. If the still-born deaths are to be certified, a special form would be required.

To the REGISTRAR of the SUB-DISTRICT in which the DEATH took place.

I hereby certify that I attended John Jones, carpenter, aged 21 years last birthday; that I saw him alive on January 11th, 1866; that he died on that day, at 7, King Street, Marylebone; and that the cause of his death was—

	Cause of Death. (In case of Autopsy write P.M.)	Time from Attack till Death.	Certified by—
(a) First.	Typhus	19 days.*	Edward Lawrence.
(b) Second.	Pneumonia, P.M.	3 days.*	Prof. Title, M.D. Address, 37, Soho Square. Date, January 13th, 1866.

To the REGISTRAR of the SUB-DISTRICT in which the DEATH took place.

I hereby certify that I attended Jonathan Williams, aged 32 years last birthday; that I saw his body on January 26th, 1866; that he died on January 24th, at 211, Oxford Street; and that the cause of his death was—

	Cause of Death. (In case of Autopsy write P.M.)	Time from Attack till Death.	Certified by—
(a) First.	Small-pox (confluent) (first attack).	21 days.	Robert Wilson.
(b) Second.	Not vaccinated.		Prof. Title, M.R.C.S. Address, 19, Duke Street, W. Date, January 25th, 1866.

* Each form of disease, or symptom, is reckoned from its commencement till death.

N.B.—This certificate is intended solely for the use of THE REGISTRAR, to whom it should be delivered by the person giving information to him of the particulars required by law to be registered concerning the death.

Note.—(1) The certificate of death should be procured from the MEDICAL ATTENDANT who has either seen the deceased on the day of death or has afterwards seen the body. In the absence of such certificate the body must be inspected and the certificate given by the REGISTRATION MEDICAL OFFICER of the district or by the CORONER.

(2) The registrar will in all cases register the name of the medical man who signs the certificate.

(3) No death can be registered and no burial take place until the death is certified.

The persons who are qualified to act as informants, and to sign the register as such, are:—

- (1) Some relative or other person present at the death.
- (2) Some person in attendance during the last illness of the deceased; Or, in case of the death, illness, inability, or default of all such persons,
- (3) The occupier of the house or premises; Or, if the occupier be the person who shall have died,
- (4) Some inmate of the house in which the death shall have happened.

To the REGISTRAR of the SUB-DISTRICT in which the DEATH took place.

I hereby certify that I visited the body of Richard Johnson, a mason, aged 25 years last birthday, on March 21st, 1866; that he died on March 19th, at 19, Waterloo Road, S.; and that the cause of his death was—

	Cause of Death. (In case of Autopsy write P.M.)	Time from Attack till Death.	Certified by—
(a) First.	Phthisis	3 years.	Robert Jackson.
(b) Second.			Prof. Title, M.R.C.S. REGISTRATION MEDICAL OFFICER. Address, West Sq., Lambeth. Date, March 22nd, 1866.

The registrar invariably to write "certified by" in his register book, adding the name and title, and if out of the district the address of the medical attendant or of the registration medical officer, as the case may be. The registrar to file the certificates, and to produce them for examination with the certified copies by the superintendent registrar, who would certify the accuracy of the copied entry of the cause of death.

It would increase the value of the evidence if the certifying physician himself signed the entry in the register. But this would be a complication; it would increase the expense, give much trouble, and produce delay, so that I do not propose it. It was tried in the case of the coroners, and failed.

The advantages of the proposed amendments may be briefly enumerated:

(1.) The cause of death would in all cases be certified by one professional witness, and would be recorded as correctly as is practicable in the present state of science.

(2.) The fact that a given person died at a given place would be attested by the informant as at present, and the evidence would be enormously strengthened by an educated witness. While so large a portion of our informants cannot even write their names, this is of great importance.

(3.) Secret murders and attempts on life, and deaths of children, or of old people, from neglect, could rarely escape detection; they would, other things being equal, be less frequent than they have been in past times. Life would become more secure. The public solicitude, like a Providence watching over all, would cherish the reverence of all classes for human life.

(4.) The frauds of informants would be less common, and no registrar would again manufacture fictitious entries, thereby throwing discredit on the whole of the national registers.

(5.) Much trouble would be saved to the public, who are now put to expense in getting corroborative certificates, as it is felt that the present certified copy of an entry is most imperfect evidence of the death and identity of deceased persons.*

(6.) The registration medical officer visiting the dwellings of people in unfavourable sanitary conditions would discover and point out the consequences of those conditions to the families themselves, and to the authorities in seasons of cholera, of fever, or other epidemics. The authorities would find it convenient to make him the health officer of the district; and often where such an officer already exists he might discharge the medical registration duties. The Post Office would employ the registration medical officer in insurance business, and so would insurance offices, to whom he could render essential service in putting a stop to the numerous frauds which are every day committed at their expense.

You have appointed two inspectors with great advantage, as they instruct registrars, and inspect the books on the

* The following letter supplies an illustration of the expense and trouble to the public to which imperfections of registration give rise:—

Astwood Bank, Bromsgrove, May 22d, 1867.
Sir, A sum of money is invested in the 3 per cents. in the names of trustees. The survivor wishes to effect a transfer. The directors of the Bank of England refuse to receive any certificate but that of burial. These have been forwarded, but now returned with a printed form of declaration to be made before a magistrate that these certificates have been compared with the register book of the cemeteries, and are found a true and faithful copy. This must be done by some one who personally knew the deceased.

This will occasion us considerable trouble and expense, as we shall have to send a person a long distance. I always understood a certified copy of the register of death bearing the seal of the office was to be received in law without any further proof.

(Signed) JOHN PHILLIPS, Baptist Minister.

To mention a case of fraud:—In November 1844, Elizabeth Mason, married, residing at Walsall, registered the pretended death of her brother, John Hodson, and by means of the certified copy of the register obtained from the executors of one Drinkwater payment of a legacy which, by his will, he had bequeathed to John Hodson on his attaining 21, and to the said Elizabeth Mason in the event of Hodson dying under that age. In February 1848 Hodson appeared and claimed the legacy which had been received by Elizabeth Mason. She was tried and convicted at Stafford Lent Assizes, 1848.

spot in periodical visits. But they proceed no further than the books; and, unless the books themselves supply evidence of inaccuracy, no inaccuracy is discovered. They do not institute any comparison between the actual or the ascertainable facts and the records of those facts. Here many errors must occur. At this office no important work is allowed to pass unchecked; and after selecting the clearest headed men, the calculations are all made in duplicate, and carefully compared. Experience has shown that this is necessary to ensure accuracy. It provides against errors of human fallibility, and errors of negligence. Now the registration records need not be made in duplicate by two separate officers and compared; but by periodical inquiries into the actual facts of cases where the informants sign with marks every registrar would work under a sense of responsibility, and would do his work better than he does it now. I beg to suggest that you should be allowed to appoint an inspector to be especially employed on this duty, with a medical inspector to be especially employed in looking after the registration of the causes of death in such districts as you might be pleased to direct.

Medical men have to learn the difficult duty of returning fatal diseases on a uniform system and under the same names. Their attention might be called in a friendly way to any imperfections in their returns. This is found to work well in Geneva, where it was performed for many years by my friend Dr. Marc d'Espine with the best possible result, both in the interests of science and of justice.

This improvement in our system of registration would be quite in accordance with English habits, which must ever be religiously respected in a matter so solemn as death. The public medical officer would only intervene when the family had no physician in attendance, and wherever he attended it would be confidentially, for the comfort and satisfaction alike of friends and of the community.

This system, I submit, would be more efficacious than the registration now in use in France, where the death can be registered by declaration, without assigning the cause of death. The inspection of the body by the *Officier de l'état civil* would be superseded by the certificate of the medical attendant, or of the registration medical officer; the inquiry into the cause of death would be universal; and the evidence of the certificate of registry would be valid. The French explicitly reject women as informants,* and thus must in many cases forego the best possible testimony. Women are as truthful as men; and their evidence is as trustworthy where they have equal opportunities for the observation of facts within the scope of their knowledge.† Women are almost always, except on the field of battle, in attendance or present at death. The wife does not forsake the husband, the mother the child, in the last moments. In marriage and in birth, the two great acts of registration, the woman is indissolubly associated with the other sex, and from men in death they are not divided. On what ground then is the woman rejected peremptorily as a witness? The French principle is inapplicable to English women. But in England we may well avoid rushing to the other extreme. Why should a majority of the informants of some districts be ignorant women who sign the registers with marks, and cannot read and check the entry to which their signature is attached in the national records?‡ The medical certificate is indispensable under such circumstances.

* Code Civil, livre 1, sec. 37.: Les témoins produits aux actes de l'état civil ne pourront être que du sexe masculin âgés de vingt-un ans au moins et ils seront choisis par les personnes intéressées.
 † Criminal returns of England, 1861. The number of men committed for foraging and uttering forged instruments was 140, of women 4; for uttering and having in possession counterfeit coin, 330 men, 98 women, were committed in the same year.
 ‡ NUMBER and PROPORTIONS per cent. of Persons who were Informants of Deaths, and of Persons married, who signed the register with Marks in 11 Districts or Sub-districts of England and Wales in a portion of the year 1861.

	INFORMANTS AT DEATH (exclusive of Coroners and Informants in Institutions).			PERSONS MARRIED.		
	Total Number of Deaths.	Informants signing with Marks.	Proportion per cent. signing with Marks.	Total Number.	Number signing with Marks.	Proportion per cent. signing with Marks.
PERSONS	3,196	1,537	48	10,864	2,902	27
Males	1,298	312	24	5,432	1,142	21
Females	1,898	1,225	62	5,432	1,760	32

The facts are compiled from the registers of the districts of Chelsea, Reading, Fenchurch, Romford, Highworth, Rugby, Derby, Halifax, Durham, and Carnarvon, and the sub-district of St. Martin, Liverpool. Of 160 informants, 88 were males and 72 were females.
 NOTE.—Exclusive of coroners and informants of institutions, of 1,217 informants at death in the county of Northampton, 181 were men, of whom 52

The improvements in registration cannot be carried out without expense. The medical certificate will cost the public from a florin to a guinea an entry; only the portion of the pay for the registration medical officer and for inspectors will come out of poor rate and out of consolidated fund. It is desirable to make the fee of the registration officer sufficiently high to command the services of a good class of the profession; and the tariff must, therefore, necessarily vary in country and town districts with the distances to be travelled, and the variable local medical charges. The fixing of the fee might be left to you, subject to the approval of the Treasury. The cost of registration medical officers and of inspectors would not exceed in the aggregate 50,000L.*

If we compare this sum, and the value of the services for which it is to be paid, with the costs of inquests and the cost of funerals, it does not appear to be great or extravagant.

The cost of registering the particulars and the causes of the deaths of the 495,531 persons who died in England and Wales was about 41,350L. in the year 1864; in 1867, under the improved plan, it would be about 91,350L.† Instead of 1s. 8d. it would be about 3s. 8d. on each death. This sum would be amply recouped in the additional security to life and property. It is computed from the legacy duty returns on 495,531 deaths that about 93,500,000L. passes by death to successors. On this sum 92,000L. is less than a farthing in the 1L. (See Registrar-General's 22d Report, p. 1.)

The coroners of counties and boroughs held inquests on 24,787 bodies, at a total cost, including coroners' salaries, travelling expenses, and medical witnesses, of 72,598L. This sum is paid out of the rates. It amounts on an average to 2l. 18s. 7d. on each inquest. The jurymen are not paid for their services, but they are summoned, and if they do not attend render themselves liable to a penalty. The value of their time cannot be estimated at less than 1l. 5s. 5d. This will make the cost of an inquest four guineas, or 24,787 inquests cost 104,105L. in the year. The value of this ancient institution cannot be questioned, but the inconvenience and cost to families left out of account in this estimate is not inconsiderable.

If the inquiry by inquest had been extended to the whole of the deaths, the cost in coroners and in medical witnesses only in the year 1864 would have amounted to 1,451,345L., without allowing anything for the time lost by jurymen, and for the inconvenience of families.

The cost of 66,748 funerals in the metropolis was estimated by Mr. Chadwick‡ for the year 1839 at 626,604L.; and his "proximate estimate of the expense for the total number of funerals in England and Wales," was 4,871,493L. He shows that the expense of pauper funerals in London was 13s., of artisans 5l., tradesmen of second class, &c., 27l. 10s., tradesmen of first class 50l., gentry and the higher classes of people 100l.; while the expenditure on the funerals of children under 10 years of age of the corresponding classes, excluding paupers, ranged from 30s. to 30l. The average cost of funerals of persons of every rank above paupers in London he takes at 14l. 19s. 9d., and including paupers at rather less than 10l. I am aware that the cost of funerals of persons of rank runs up to 1,000l. or 1,500l., and that workmen's clubs pay commonly 10l. for burial, but I am disposed to think that Mr. Chadwick's estimate is too high for the whole population, in town and country. Instead of his figures I take the average cost at 6l., and then the amount that the nation expends annually on the burial of its dead is 2,973,186l. This includes only expenses that figure in undertakers' bills. It neither comprises the extra cost of mourning, nor the expenditure in memory of the dead on monuments, or friable stones, which will be obliterated or crumbled into dust long ere the national lists of the dead in the custody of the State have perished.§

signed with marks, and 1,036 were women, of whom 784 signed with marks. Of 1,843 persons married, 447 men and 499 women signed with marks, or of 100 informants at death 69 signed with marks, and of 100 persons married 26 signed with marks. The ignorance of the informants at death was to the ignorance of the ordinary run of people marrying in Northamptonshire as 69 to 26. Of 100 informants, 15 were males and 85 were females.
 * Take the annual deaths at 500,000, and the uncertified cases in the proportions above given as 17 per cent., then 85,000 cases would be visited annually. The cases would be almost exclusively in the poorer classes, and at 10s. each the cost would be 42,500L.

† I have not brought into account the cost of the apartments in which the records are kept at Somerset House. The conservation of inaccurate documents, it is worthy of note, is as costly as the custody of the most authentic records; and the State in the former case is in the condition of a bird wasting its care on addled eggs.
 ‡ Supplementary Report on the Results of a Special Inquiry into the Practice of Intermat in Towns, by Edwin Chadwick, Esq., pp. 70-1.
 § The expense of an inscription on a common tombstone has been estimated by Mr. Wyatt, the Superintendent Registrar of Islington, as below. It far exceeds the cost of the most efficient and authentic registration of all the essential dates and facts of a man's birth, marriage, and death.

Sworn to the memory of William Matthews, of this parish, died 25th December 1865, in the 72nd year of his age. 81 letters at 3d. each — 1l. 1s. I think it will be about the average to take 3d. per letter for engraving and painting on tombstones, as it is sometimes done as low as 10s. per 100 letters, if the tombstone has been erected by the same mason. The engraving on marble or granite is very expensive. [As

It is well to attach solemnity to funerals, but no one can doubt that it would be wiser on the part of the nation to give a florin or a guinea as a fee to a registration medical officer for the benefit of the living and of generations to come than to squander guineas lavishly on stones, or on lids of feathers, rich silk hands, porters, pages, feathermen,* and mutes.

The registration medical officer would stand in nearly the same relation to you, who direct the inquiry into the cause of death for the purposes of registration, as the medical witness stands (under 6 & 7 Will. 4. c. 89) to the coroner, but it might be desirable to leave his first appointment, and pay to the same bodies as appoint the registrars and superintendent registrars, subject to your approval, and to such rules as you may lay down as to qualification.

Sir, I submit these considerations to you with confidence, as it will be admitted generally that you have administered the present Registration Act so as to make it in its imperfect state useful as regards public health, as regards life, as regards the science of insurance, and as regards the collection of evidence affecting the transmission of names, titles, and property to successive generations. Far from justifying inaction, it is a ground for further improvement. Your great experience will give Her Majesty's Government confidence in any useful measure you suggest for rendering the national records worthy of England, and I know that it will be a satisfaction to you not only to have administered but to have perfected the law.

Satisfaction in good work was pronounced by the inventor of the word "statistics" to be characteristic of the English workman,† and I trust that I may without presumption say that while the department of which you are the chief shares the feeling, it is anxious to deserve Achenwall's praise of the English workman.

The following is an analysis of the particulars of which evidence is found in the death registers. I take the example given in the schedule:

1. That a person is dead.
2. That the name of that person is—William Green.
3. That the said person died at a certain date—at 5 o'clock, 4th February 1865.
4. That the said person died in a certain place—31, Strand, London.
5. That the said person was by profession—a carpenter.

Note.—All these particulars are recorded on the evidence of the informant, who, if he has witnessed the death, bears direct testimony to particulars 1, 3, 4; the testimony as to 2 and 5 may be direct or indirect. If he was merely in attendance, and has not seen the body, all the evidence is indirect. He gets it at second hand.

As one stone may record the deaths of four or five persons, I consider it would be a fair estimate to set down:—
 For tombstone — 1l. 1s. for each person.
 „ engraving same — 1l. 1s.
 2l. 2s. G. WYATT.

Gravestones endure a very variable time; Sir Thomas Brown (Urns Burial) sets down the time they stand at 40 years. There are pauper registers in this office dating from 1567 in excellent condition. I annex two extracts from the register of French Protestants at Southampton.

Extracts translated by Mr. Shorell from the register of the French church at Southampton, now in the custody of the Registrar General.
 James de Ceau de Valenciennes was buried on the 26th of November 1567. Philippe de St. Leger from France was buried in the said place, outside the church, the 21st day of January one thousand five hundred and sixty-nine.

Bernard Matien, a lad, native of Bordeaux in France, and abandoned by his father (and through poverty), at the house of William Harsens, died the 10th day of April 1572, and was buried in the evening of the same day.

In the same register is recorded (25th September 1572), a fast on account both of the persecutions by the Duke of Alva in the Netherlands, and the massacre on St. Bartholomew's day (24th August 1572). On the occasion of her visit to Southampton, 4th September 1591, these persecuted Protestants heard from Queen Elizabeth consolatory words, which they record with gratitude.

Mr. Rickman made a special inquiry into the parish registers existing at the date of the Census, A.D. 1831.* The result of this inquiry is thus stated.

* Population of Great Britain, 1831. Preface to Enumeration Abstract, vol. 1, p. xxix.
 "No person will be surprised that one-half of the registers anterior to A.D. 1660 should have disappeared. If any other nation possesses similar registers of that date (a valuable proof of uninterrupted civilization), a comparison might be instituted, and the preservation of such records through three hundred years would not prove to have been of frequent occurrence; but in point of fact examination shows that 812 English parish registers commence in the year 1538, about 40 of which contain entries (copied probably from family bibles and tombstones) anterior to the date of Cromwell's injunction: 1222 parish registers commence from A.D. 1538 to 1558, when Queen Elizabeth required a protestation from the clergy; 2448 parish registers commence from A.D. 1558 to 1603, when the canons authorized by King James directed a copy of all extant parish registers to be made and preserved, and nearly one half of them (502) have been preserved accordingly, and are now extant. Parish registers, to the number of 969, commence between that time to the year 1650; 2757 from A.D. 1650 to 1700; 1476 parish registers from A.D. 1700 to the year 1760; the rest (six or seven hundred) since that time."
 How many tombstones of these earlier dates existed in the churchyards when Mr. Rickman wrote?
 Without these registers, some of the dates of the birth, marriage, and death of some of the greatest men the country has produced—Shakespeare for instance—could not be determined.

* See examples of ordinary undertakers' bills in Mr. Chadwick's Report to Sir James Graham, Her Majesty's Principal Secretary of State for the Home Department, 1843, pp. 287-9.

† The Englishman is the best workman in the world, for he works so as to satisfy his own mind, and always gives his work that degree of perfection

6. That the said person was a male or a female—Male.
7. That the said person was of the age—43.
Of the sex and age the evidence is always indirect; it would be strengthened, as would all the other evidence, by the production of the certificate of birth at the time of the registry of death.
8. That the cause of death of said person was—small-pox.

Note.—Sometimes the cause of death is easily distinguished by unskilled observers; in others it can be discovered after death by a skillful inspector from the testimony of surrounding persons; in others it can only be distinguished by medical men who have observed the symptoms during life. In many obscure cases inspection of internal organs (autopsy) and chemical analysis are required to enable the medical expert to divine the cause of death. In some cases, particularly of infants and old people, the cause of death cannot be discovered in the present state of medical science.

9. That the signature, description, and residence of informant was—Rebecca Green, Widow, 17, North-street, Marylebone.

Note.—Under "Description," when in attendance is added, it would be well to add "nurse," "wife," "mother," &c. &c., and the profession of informant. So also when "present at death." This concludes the information; the two other columns relate to the registrar.

10. That the registrar registered the said particulars on a given day—5th February.
11. Witness, his name and title—John Cox, Registrar.

It would tend very much to promote the accuracy of registration if every family kept a register of births, marriages, and deaths. The register in the family Bible has often been found of great use, and the family register would be good corroborative evidence, although it would not, even when preserved, supersede the official register by a public officer.‡ I found on trial that in London many particulars respecting the great majority of the deceased, except in public institutions, are known to the people around them at death.† The following is one among many instances. It is a specimen of what I held then and still think would be a complete schedule. If it be ever adopted it will be necessary to pay the Registrar 1s. 6d. instead of 1s. an entry, and the superintendent 3d. instead of 2d. for examination, as the labour will be increased. It is evident that the additional particulars as to birth-place, residence in district, parents' names, marriage, and issue would have the same value as some of the particulars now registered; they would depend on indirect evidence, and, if required, every year such evidence would increase in value:—

District, Poplar.—William Canty, male, aged 62, died 28th February, at half-past six o'clock a.m., at 16, Cottage Row, of Pneumonia, 2 months, as certified by H. Bloomfield, M.D.; born in Cork, Ireland; 36 years in Poplar; father Timothy Canty, deceased, mother Mary Canty, maiden name Nicolas, deceased; married in Scirl parish, Ireland, at age 22, to Honora Al'Carty; left issue Timothy, age 31, William 30, Mary 20, John deceased, age 27 in 1846, Catherine deceased, age 1 in 1820, Stephen 21; witness, Honora Canty her X mark, widow, informant; Mary Canty, daughter, witness; T. W. Gagen, Registrar, March 3, 1847.

I do not venture to complicate the proposal as to the medical registration certificate with these or any other alterations of the schedule and the Act, as I know that you are better able than I am to deal with such general improvements.

To secure the registration of the causes of death it would be necessary to alter some clauses of the Act (6 & 7 W. 4. c. 86), and to insert a new clause to the following effect. It is slightly altered from the Registration Act for Ireland (26 Vict. c. 11. s. 46).

"Medical Certificate of Death.

"Whereas it is expedient to establish an authentic registration of the causes of death: be it therefore enacted, that the registrar shall furnish from time to time, gratis, to every duly qualified medical practitioner within his district which he has once learnt to appreciate and attain; and as the Frenchman seeks to enhance the value of his manufactures by all kinds of external ornament, so the Englishman seeks to give his productions in exactitude, usefulness, and durability a less fleeting worth."

* Statsverfassung der heutigen vornehmsten Europäischen Reiche und Völker im Grundrisse von Gottfried Achenwall Weyland, Hofrath und Professor der Rechte und der Politik zu Göttingen. 1781. (p. 324.)

* Entries in a family Bible are admissible in evidence in matters of pedigree; they are considered to derive credit from the circumstance of their being entered in a book which is kept as the ordinary register of families, and on account of their publicity in the family. (By Lord Ellenborough, C.J., and Lord Redesdale, C., in the Berkeley Peerage Case, 4 Camp. 421; and see other authorities cited in the text books on the Law of Evidence.)
 † See Journal of Statistical Society, Vol. XI., pp. 252-5.

the necessary forms of certificates of death in the form (—) hereunto annexed, which certificates the registrar general shall cause to be printed and forwarded from time to time to every registrar for that purpose; and the medical practitioner who shall have been in attendance during the last illness and until the death of any person dying after the 31st December 1866 shall within three days after the death of such person transmit to the registrar of the district in which the death occurred, or deliver to the relatives of the deceased, or to a person legally qualified to sign the register as informant of the death, a certificate of the cause of death in the form mentioned, the particulars of which shall be entered by the registrar in the register. In case such certificate shall not be so transmitted or delivered, the registrar shall give notice of the death to the registration medical officer, who shall within two days after the receipt thereof return a certificate duly filled up to such registrar, who shall enter the particulars relating to the cause of death in the proper column of the death register; provided that the registration medical officer shall, if he see fit, refuse to give his certificate until an inquest has been held.*

Certain amendments would be required in the Act to secure the complete registration of deaths. The task of giving notice of death to the registrar, and in the case of deaths without medical attendance to the registration medical officer, should be enforced by penalty (see sect. 38 of 17 & 18 Vict. cap. 80, Scotch Act), so as to make it the duty of the parties concerned to procure from the medical attendant, or in his default forthwith from the registration medical officer, the certificate of the cause of death authorizing the issue of the burial certificate by the registrar. It is evident that if the body can be interred before the inquiry, it will open a door to crime by rendering detection difficult if not impossible. The body is seen at once and is often buried in France on the second day; in England the people cling to the presence of their dead, and thus inquiry is easier. Decent dead-houses should be provided for poor families in towns.

Still-born children should be seen by the registration medical officer, whose certificate to the effect that they were still-born would authorize their burial without funeral rites. They would be entered in his books, and would not appear in the registrar's accounts, which should embrace only all those born alive.

(9.) EXTRACT FROM THE APPENDIX TO THE REGISTRAR-GENERAL'S 30th ANNUAL REPORT, 1869, (Wm. FARR, Esq., M.D., F.R.S.)

See Question 4457.

What are Causes of Death.

The human organism, although the force with which it is animated is indestructible, dies inevitably under a great variety of conditions. In one instance death is the direct effect of mechanical violence; a mere shock of arrested motion converts the life force into a new form: in another instance blood is lost and the processes of nutrition are stayed: then agents like fire or frost disintegrate the parts, or chemical forces like opium still for ever the living action in sleep. Submersion under water or stoppage of the airways shuts out oxygen, and with the cessation of the supply of this element life is extinguished as suddenly as the light of a lamp; so also life slowly goes out when the supply of food is insufficient, as the flame of a lamp dies when oil is withheld.

Adverse living molecular forms too assert their powers over the structure, and, as in small-pox, syphilis, glanders, cholera, and the other zymotic diseases, transform the body into their own substance and habitation, so that it can live no longer its own life, but is transformed first into multitudes of organic particles, and then mayhap, after many transmutations, into air, water, and earth. What was a living nature of the highest form becomes a dull cloud of matter, again after cycles of changes to be incarnated.

The constitution of the tissues undergoes transformations in cancer and tubercle and other analogous diseases, as the blood does apparently in diabetes.

The most common form of disease is inflammation and its results in the several organs of which the body is a confederation; and upon taking up these organs singly each is found to have its well-characterized diseases: the brain, no longer the seat of intelligence, sensibility, and reason, becomes the seat of madness; the heart loses its wonderful hydraulic precision; the lungs neither drink up nor discharge breath; the stomach transmutes its aliments no longer, or transmutes them amiss; the liver and the kidneys fail to supply their specific distillations; the joints decay; the muscular system, once finely adjusted in its movements, is paralysed; the skin loses its fresh colour, and changes

into ulcer and leprosy. The formative forces in some cases go wrong, or stop and leave organs unfinished. The reproductive system, too, which creates and perpetuates generations in endless succession, itself kills the parent and the child in one flood—one throes of agony.

Now, when it is considered how multitudinous and complex the causes are, not of the one phenomenon, but of the many phenomena of death, for death has its many phases as well as life, it can scarcely be surprising to find that out of nearly half a million of deaths no causes were assigned in 8,000 or more instances. In 4,630 cases no causes were specified; in 3,506 cases it is only inferred that the deaths were sudden, as in them inquests were usually held.

Through the co-operation of the medical practitioners of England and Wales the majority of cases are certified on forms supplied by the Registrar General. In London about 93 per cent. of the deaths are certified, as far as the causes are concerned, by the medical attendants, five by the coroners, leaving only two in 100 uncertified. Out of 1,578 deaths in London recently analyzed 26 were uncertified, of which four only are recorded where the deceased had no medical attendant. One of the counties, Northampton, taken at hazard, yielded this result: out of every 100 deaths 91 were certified, seven were uncertified; two died without medical attendance. In some few counties many of the people get no qualified medical advice during life; the medical man lives at great distances, or the people, ignorant themselves, apply for relief to irregular practitioners, men sometimes of natural ability, but often possessing no claim to confidence, except that founded on boundless faith in their own nostrums, which perform the same amazing miracles now as were performed in the dark ages by relics, charms, and exorcisms.

It must be stated, moreover, that the causes of death assigned are often inadequate, and frequently erroneous. A person is dead. What was the cause of his death? is the question addressed to the medical attendant. He has all the information to guide him in his answer that he employed during life in the treatment; but that may be insufficient. Some few years ago "dropsy" would have been returned, and was accepted in medical science as a disease, a cause of death. It is still used rightly in some cases. But many cases are traced back further; the dropsy is found (1) to be associated with albuminous urine, and affections of the kidney, such as Bright's disease; or (2) it is the result of retarded circulation from organic disease of the heart; or (3) it is ascites, an effusion into the peritoneal sac from obstructed circulation through the liver; or (4) it is hydrocele, perhaps from injury; or (5) it is ovarian dropsy; or (6) it is a consequence of scarlet fever; or (7) it is anæmic; or (8) it comes on suddenly with fever; or (9) it is general and associated with scurvy. Now after the first step is made in defining the seat and source of the "dropsy" we have got at one link of the chain of causes. The dropsy of scurvy, or anæmia, may be traced to famine, or to insufficiency of some elements of diet; that cause is primary. Then the scarlet fever is the cause of the dropsy; but what is the cause of the first disease? how was the dead child infected? Ascites, the cirrhosis of the liver, may be traced to alcoholism as its primary cause; or the heart disease may be derived from rheumatic fever. And the rheumatic fever may be the result of exposure to malaria of a specific kind. Now in many cases the primary cause can, but in many cases it cannot, be discovered. Yet to be able to prevent death the primary cause is of first importance, as it sets the rest in motion.

There are affections of the brain, of the chest, and of other internal parts, which can be distinguished by the pathologist on actual inspection, but not otherwise; while other fatal functional derangements cannot, under the most favourable conditions, in some cases, be connected with any changes in the material structure of organs, even with the help of the best available instruments.

Observers, with excellent intentions, are not always competent, or do not devote the required time to their investigations. Their means of observation are sometimes restricted; they only see the patient for a few moments in his last hours, or for a few minutes at a public dispensary; while from children the subjective symptoms cannot be gathered.

Where the organic injury is evident in the dead body and is the proximate cause of death, the inquiry after the first cause only commences. Thus a man is found dead in the road in blood, with a wound through his head; that was lethal; but with what instrument was the wound inflicted? A pistol. Who fired the pistol? The man now dead, or another man? Himself. Then was it an accident or a suicide? What were the motives of suicide? Another man. Is the manslayer a soldier fighting, or a duellist? or is he guilty of murder, manslaughter, or justifiable homicide?

In a railway accident the question "who is to blame?" involves "what was the cause," what were the circumstances of the overthrow or collision?

On inquiries into the causes of this class the great tribunals of European justice are occupied. To these causes of death by the violence or malice or recklessness of men importance is everywhere attached. But the causes of the whole deaths of a nation partially inquired into everywhere have nowhere been published, except in England. Your returns are at present, it is to be regretted, unique. And while they are avowedly incomplete, as the chain of causes is not always traced, and the true cause is sometimes mistaken, I hope to be able to show that the returns are of use in their imperfect state, that they require improvement in the present day, and that they are of incalculable interest to mankind.

It is true that 48,634 persons died at the age of 75 and upwards in the year, and thus attained advanced ages; 650 lived to the age of 95 and upwards; of whom 70 lived 100 years and upwards, which is the term of human life. But how fared it with the multitude? 134,187 persons died in ripe manhood at the age of 25 and under 65 years; while 242,325, under the age of 25, were cut off and perished in childhood and youth! Of the total recorded deaths only 392 were referred to homicide; and paramourly important as the deaths from this cause unquestionably are, occupying too so large a portion of our juridical force, and testifying as the reduced number does to law and police efficiency, it brings out with still greater force the magnitude of the sacrifices of life from other agencies. What these agencies are is assuredly well worth careful inquiry. Death is inevitable, but why is life cut short? Why do the people of England live only a mean lifetime of 41 years?

Biology includes in its sphere of research death, which like birth is common to man and to every living thing; so the extension of that science will shed light on the causes of death. The laws of life involve the laws of death; and every forward step of the biologist will open new fields in vital statistics. In the meantime the existing knowledge admits of so many practicable applications as to justify us in asking for its extension by all the means of accurate observation. It places at the disposal of men now an incalculable control over the duration and happiness of their lives; and it opens to the future a prospect of discovering not indeed elixirs of life, but secrets of earthly immortality to any individual, but protection against many of the dangers which beset the human race.

Science will naturally advance, and the extension of skilful practitioners to the remotest parts of the country will supply good observers. To them we must trust. Where death happens in such circumstances as render it impossible to obtain a satisfactory certificate from a medical man in attendance, the cause, I submit, in the interests of science and of human safety should be investigated by a medical officer specially appointed in each registration district.*

One important step has been taken by a committee nominated by the Royal College of Physicians, who have drawn up a complete nomenclature of the pathological causes of death. This will be distributed among the practitioners of the United Kingdom, and will thus facilitate the identification of that great class of causes. Synonyms are given in the Latin, French, Italian, and German languages.

(10.) MEMORANDUM AS TO DRAINAGE AND WATER SUPPLY FOR SMALL TOWNS, VILLAGES, AND RURAL DISTRICTS, (JOHN BAILEY DENTON, Esq.)

See Question 4867.

Any general code of sanitary byelaws should apply to all towns and villages, and should set forth where the combined action of a community for sanitary works shall commence and the individual action of private owners cease.

Combined action should extend to districts comprising several towns and villages, where the cost would be reduced by such combination, and it should be left to the determination of the central local authorities whether such united districts should exist or not.

The code should include regulations as to the minimum accommodation to be afforded in the dwellings of the labouring classes in both "towns" and "villages," and should specify the size (breathing spaces) of living and sleeping rooms. On the ground floors of all new buildings there should be one room at least with a boarded floor, and all walls should be built with a damp course above the

ground line, to prevent the rising of moisture within the walls above ground.

All local executive authorities should be compelled to provide a public water supply, at constant service, where it can be secured at a cost not exceeding 2d. per dwelling per week, and in case of inability to do this, pumps for general use or a stored supply to meet seasons of drought, should be provided.

A standard of purity of drinking water by chemical test should be given on Government authority, by which the local central authority could at all times determine whether the quality of supply is properly maintained by the executive.

In the absence of a public water supply the owners of all dwellings occupied by the labouring classes should be obliged to sink a well where spring water can be readily obtained, or to collect the rain from the roofs into underground tanks, where such may not be the case.

Where a constant supply of water or a certain provision during times of drought is secured at public expense, the owners of dwellings of the labouring classes should be compelled to lay on, at their private expense, the water from the public main, instead of sinking a private well or collecting the roof water in a private tank.

Every local executive authority in villages, as well as in towns, should be compelled to construct and maintain an underground sewer of a size to meet the requirements of the place to discharge all liquid refuse, and no open sewer should be permitted to exist between the point where dwellings commence and end.

The owners of existing as well as future dwellings of the labouring classes should be compelled to construct privies for the application of earth or water, and to discontinue the use of cesspits altogether, where, from their proximity of position or the porosity of the soil, neighbouring wells may become tainted by the percolation of sewage into them.

The owners of all dwellings occupied by the labouring classes should be obliged to connect the drainage of each dwelling with the common sewer, so that liquid refuse which must exist under any and all systems of sewage treatment, may go directly into it.

All public sewers should be perfectly ventilated by means distinct from street gully holes, and should be periodically flushed.

A standard of quality (on Government authority) should be adopted as a test of all refuse liquid discharged into streams or ditches, and no effluent water from irrigated lands should pass into streams below the standard of quality.

All lands to be irrigated with sewage should be first under-drained, if not naturally drained; and in the case of small village populations the sewage should be devoted to gardens for the labouring poor, by some arrangement admitting of the land being irrigated for two or three years together, and growing rye grass and other sewage crops alternatively, with its use for the same period as garden land, to be cultivated by spade husbandry.

Lands irrigated, and burial grounds, should not be permitted to exist within a distance which will admit of the percolation of effluent water through the soil into wells.

All lands and grounds within the inhabited districts which are wet in the subsoil, should be perfectly under-drained, as a part of the sewerage system essential to health.

All turnpike roads and public roads in towns and villages under which sewers may be laid, should be placed under the control of the executive authority, and any difference between that authority and the surveyor of highways should be decided by the central local authority.

Special powers should be given to central local authorities, to deal with canals and railways which interfere with the drainage of towns and districts and with water supply.

Individual ratepayers should be enabled to lodge a formal complaint of nuisance with the inspector or acknowledged representative of the executive authority, who should be obliged to represent to such authority such complaint at once; and if no notice be taken of it within a fortnight of the time of making it, the complainant should be authorized to make direct application to the central local authority, who should then depute their own officer to investigate it.

The code should render the executive authorities liable to penalties for neglect of duty as severe as those against private individuals, who fail to remove a nuisance after notice to do so. It should also make the inspectors themselves liable to a small fine for neglect of complaint, if convicted before justices of such neglect; and all parties who are reported by the central local authority to have made an unjustifiable complaint should be made liable to a small fine, to be collected by the rate collector, and recoverable in the same way as parochial rates.

* See 27th Annual Report of Reg. Gen., App.

(11.) CORRESPONDENCE AS TO EMIGRANTS,
(WM. S. TRENCH, Esq., M.D.)

See Question 7819.

GENTLEMEN, Liverpool, May 31, 1869.

I AM directed by the select vestry of this parish to direct your attention to the position in which intending emigrants are placed in when in consequence of their own health or the health of any member of their families they are rejected by the emigration officer at this port under the 45th Section of the Passengers Act, 1855.

At present, when a family is thus rejected upon account of infectious sickness, they are refused admission to the better conducted lodging houses for foreign emigrants, and are ordinarily sent direct to the workhouse; the agents, or the owners of the vessel in which they had embarked or were about to embark, undertaking to pay the cost of their maintenance therein. During the last 10 weeks, no fewer than 395 foreign emigrants have been received into the workhouse under the circumstances, and many others who had been brought to the workhouse gate under the impression that they were on their way to an hotel, refused to enter.

The select vestry are fully aware that in by far the great majority of these cases, the emigrants are not paupers in a legal sense, inasmuch as they have a claim which is readily admitted for detention money from the master of the ship, but they can only be refused admission to the workhouse at the risk of forcing them to take refuge in the lowest class of lodging-houses in the town, with the certainty of imperilling the health, if not the lives of the other inmates, and of disseminating to an indefinite extent the seeds of disease in the most thickly populated district of the town.

Although it is true that no direct pecuniary loss results to the ratepayers in consequence of the reception of these cases into the workhouse, yet it is productive of very serious inconvenience. The workhouse has rarely sufficient accommodation to allow of their reception without interfering very prejudicially with the ordinary arrangements of the house, and it is found to be practically impossible to enforce amongst this class the regulations, classification and discipline which are found to be necessary in the management of an institution of some 3,000 inmates. Then as regards the emigrants themselves, it cannot be right that they should be subjected to the indignity of being sent to a pauper establishment; and to the incidental hardships and inconveniences which the taking of such a course involves.

The select vestry desire to urge upon the commissioners the necessity for some alteration in the law by which the responsibility of the parties primarily interested in the passenger traffic, instead of being as now limited to a payment of one shilling and sixpence per day as subsistence money, should, in such cases as that of Liverpool, be so extended as to compel them to provide suitable accommodation and treatment for such persons as have been induced by the representations of themselves or their agents to come here, and, when here, have been prevented by the Government officer from proceeding on their journey.

In connexion with this subject the select vestry direct me to point out to you also, that intending emigrants frequently reach Liverpool through the agency of the emigration houses, in whose cases the shipowners and masters disclaim all responsibility. The class referred to is that of persons whose passages are prepaid by their friends in America. When such cases are rejected by the emigration officer there is no alternative but to admit them to the workhouse, and occasionally they remain for a considerable period a burden upon the parish. In this respect also the law requires amendment.

The select vestry feeling that this state of things urgently demands a remedy, and believing that the difficulties surrounding the question admit of a practicable solution, will be happy to send a deputation to place their views more fully before the Commissioners, should the Commissioners consider such a step desirable.

I have the honour to be, &c.
(Signed) H. J. HAGGER.

The Colonial Land and Emigration Commissioners,
8, Park Place, Westminster.

Government Emigration Board,
9 Park Street, Westminster, S.W.
June 1, 1869.

SIR,

I AM directed by the Emigration Commissioners to acknowledge your letter of the 31st ultimo, conveying to them

the views of the select vestry of Liverpool in respect to the operation of certain provisions of the existing Passengers Acts.

First, in respect to emigrants who are prevented by the emigration office from proceeding to their destination on account of sickness in themselves, or their families, you point out that the more respectable class of lodging-house keepers refuse to receive them, and that they have no choice, therefore, except between a low class of lodging-houses or the workhouse; that if they go to the former they run the risk of spreading disease in the most thickly populated parts of the town, while if they are received into the latter, although no expense is thereby thrown on the ratepayers, yet that serious inconvenience is occasioned, both by the crowding of the house, and by the increased difficulty of enforcing discipline. The vestry, in consequence, propose that the law should be so altered as to compel those interested in the passenger traffic to provide suitable accommodation and treatment for emigrants, whose embarkation, the emigration officers are required by the 45th section of the Passengers Acts to prohibit.

It is, of course, unnecessary to say that the law as it at present stands, gives the commissioners no power in the matter, and that, even if it were decided that the proposed alteration were desirable, it would be impossible to obtain the necessary power during the present session. But the commissioners, without expressing any opinion on the abstract justice of the proposition, feel bound to add that they see great difficulty in giving it a practical shape.

If the law merely imposed the obligation on the ship owner or agents, without defining how it was to be carried out, the result would probably be that sick emigrant would be placed in existing lodging-houses and the dissemination of disease, the risk of which the vestry apprehend under the present system, would become certain. If a general hospital were proposed, it would be necessary to provide funds for its erection and maintenance for which the existing subsistence money would certainly not be sufficient. The commissioners do not see how such funds could be provided except by a tax on emigrants or emigrant ships; but they feel great doubt whether Parliament would be willing for that purpose to impose an exceptional tax on emigrants or emigrant ships proceeding from Liverpool, and, at all events, they can have no doubt that the shipowners of Liverpool, and probably the general community would strongly object to a measure the effect of which would be to divert emigration from that to other ports.

The commissioners think it unnecessary to advert to other difficulties connected with the management and discipline of such an establishment, although these would be by no means unimportant. The conclusion to which they come upon this subject is that, as at present advised, they do not see in what way the proposition of the select vestry could be carried out.

Second. In respect to those whose passages are prepaid in America, but who, when rejected by the emigration officer are thrown on the parish, and having no claim to detention money, require to be supported out of the rates, the Commissioners desire me to say that they are quite alive to their unsatisfactory position. But the difficulty of dealing with these cases arises from the fact that though the objects of the contract made for their passages, they are no parties to it, that the contracting parties are beyond the jurisdiction of this country, and that the contract is almost necessarily of an indefinite character. There is, therefore, not only the difficulty of proving the contract, and of fixing some person in the United Kingdom with its obligations, but if this could be done, of defining what those obligations are, as regards emigrants who engage their passages in this country all that is necessary is done by the contract ticket, but no similar ticket, nor as far as the commissioners know, anything beyond a mere acknowledgment of the payment of passage money is given for passages prepaid in America.

The commissioners have thought it right to explain fully the impediments to adopting the alterations of the law suggested by the select vestry of Liverpool; at the same time, if, as you intimate, the select vestry wish to send a deputation to confer with them on the subject they will be happy to receive such a deputation on any day you may fix between 12 and 4 o'clock.

I have, &c.

(Signed) RICHD. B. COOPER,
Assistant Secretary.

H. J. Hagger, Esq.

RETURN CONCERNING EMIGRANTS.

	12 years old and upwards.	Under 12 years of Age.
1. Number of emigrants admitted to Liverpool Workhouse, from 1st April to 8th June 1869.	181	294
2. Of the above number there were admitted as sick.	27	161
3. The number of emigrants (including sick) now in the workhouse is	*26	82
4. The number of emigrants now sick in the hospital is	*5	70

* N.B. Twelve emigrants now in Dr. Gee's hospital not included in either of these columns.

NUMBER OF EMIGRANTS admitted to Workhouse from 1st April 1869 to 8th June 1869, showing the Firm to whom chargeable.

	12 years old and upwards.	Under 12 years of Age.
5. Messrs. D. C. MacIver & Co., Liverpool	14	22
6. Messrs. Guion & Co. "	8	11
7. Messrs. Allen Brothers & Co. "	73	143
8. The National Steamship Co. "	44	65
9. Messrs. Inman & Co. "	42	53
Total	181	294

APPENDIX III.

CIRCULAR QUESTIONS ISSUED BY THE COMMISSIONERS.

A.—QUESTIONS to be answered by the CHAIRMEN or CLERKS of LOCAL BOARDS constituted under the PUBLIC HEALTH ACT or the LOCAL GOVERNMENT ACT, and of IMPROVEMENT COMMISSIONERS, TRUSTEES, or other local authority under LOCAL ACTS for sanitary purposes.

1. What is the name or title of the local board or other local authority?
2. Of what parishes or places does the district consist?
3. Is the district coterminous with poor law parishes or townships?
4. What is the area in acres of the district?
5. The rateable value?
6. (a) The population?
(b) Number of houses in the district by last census? Any remarkable change in their number since 1861?
7. What has been the rate of mortality per thousand of the population during each of the last three years?
8. Does the district of your local government consist of a municipal borough?
Or of a place or places under improvement commissioners.
Or of a place or places not having defined boundaries before the application of the Act?
Or, if the district do not fall under any of the above heads, explain the nature of the district?
9. Has the Public Health Act or the Local Government Act, or any part, and if so, what part, been applied to the district?
10. Was the Act applied by Order in Council upon petition of the inhabitants, or by provisional order confirmed by Parliament, or by adoption under 12th section of 21 & 22 Vict. c. 98, or how otherwise; and has any provisional order been made respecting the district under 77th section of the same Act.
11. What is the date of (1) the application of the Act if wholly adopted, (2) of successive adoptions in case different parts have been adopted at different times?
12. If the local board is constituted under a Local Act, what is the date and title of the Act? (*Annex, if practicable, a copy of the Act, and any Acts amending the same.*)
13. What officers are employed by the local authority for any purposes in connexion with the execution or exercise of sanitary powers? State the name of each office, and the salary and the duties attached to each. Is there in your district a health officer? Was he appointed under the Artizans and Labourers Dwellings Acts, 1863? Does an inspector under the Factory Acts or the Workshops Act, 1867, act in your district? Does a certifying surgeon?
14. Does the local authority in any way receive advice and assistance in the discharge of sanitary duties from any medical source?
15. Is there any regular system of inspection of your district for the purpose of ascertaining unhealthiness or the reverse of its several parts?
16. Have you contributed from the rates to hospitals or erected them provisionally? If there is a hospital in your district, are infectious cases admitted readily; by payment or otherwise.
17. Have you any public disinfecting apparatus? Under what regulations is it used? Have you ever used any plan for disinfecting sewers? If so, what plan?
18. How are patients suffering under infectious diseases conveyed?
19. Are the powers for inspecting food efficient?
20. Is the coroner of your district also a sanitary officer or a medical practitioner, or originally educated as one?
21. Have the guardians obtained sanitary reports of their districts, and at what cost?
22. Has registration of disease been attempted?
23. What means exist for immediately ascertaining the presence of any epidemic disease in your district?
24. Do these means seem to you sufficient?
25. Is the information given respecting the existence of such disease immediately acted on?
26. Is any record made or published of (1) death, (2) disease which does not end in death, in any of the public institutions of your district?
27. If you have had any special outbreaks of disease since 1853, explain shortly the nature of the disease, and give the date. Had you any difficulty, legal or other, in meeting those outbreaks?
28. Are there any districts specially affected by fever, diarrhoea, rheumatism, or consumption, or in which cholera specially prevailed during its visitations in this country? If so, is the cause known?
29. Is the public sewerage and drainage of the district generally sufficient; and if not, in what respect is it deficient? Is the subsoil waterlogged, if so, is there power of draining? Can you restrain house-building on waterlogged soil, and, if so, what depth do you require the water to be from the lowest floor?
30. Explain the mode by which your sewers are ventilated. Are they or the house drains ventilated wholly or in part by rain pipes? Are—
(1.) The sewers,
(2.) The house drains, carefully trapped.
31. In what manner is the sewage disposed of,—by sale of the solid excrement to farmers, gardeners, and others; or by drainage into neighbouring stream, by irrigation with liquid sewage, or how otherwise? Has any change been made in your method; and have any legal or other difficulties been experienced in disposing of the sewage, or in carrying sewers or drains beyond the district, or through private property? If so, state the nature of such difficulties, and how, in your opinion, they may be removed.
32. What amount has been realized by the sale or disposal of the solid or liquid sewage during each of the last three years?
33. Are the houses generally supplied with waterclosets or privies capable of being flushed with water; or with cesspools, ashpits, earth closets, or earth privies? If cesspools or ashpits, are they deodorized, and how?
34. (1) Do the houses generally drain into the public sewers? (2) And if not, what proportion of the houses are still without the requisite means of communication?
35. (1) In what manner is the district supplied with

water? (2) If from a stream or river, does any drainage run into it above or at the point at which the water for use is drawn? (3) In case of there being a system of water-works, is water laid on to each house, and is there a constant supply? (4) Is the rainfall utilized directly by (1) public reservoirs or (2) tanks or the like in private houses, and is the supply generally sufficient and of good quality?

36. Are there tenements in your district without water supply and needing it? And have the 76th section of the Public Health Act, 1848, and 51st section of the Local Government Act, 1858, been acted upon in correction of such cases; and have they been found sufficient or otherwise?

37. Have any works undertaken by the local authority been afterwards abandoned? If so, state why they were abandoned, and the amount of expenditure incurred in respect of them?

38. Have any works of water supply or drainage constructed by the local authority been found imperfectly constructed, and insufficient for the purpose for which they were intended. If so, what amount was expended upon them?

39. What powers are vested in the local authority for the regulation of streets or buildings, and are those powers sufficient? Do they refer exclusively to buildings constructed after a certain date, or do they affect all buildings? Are they actually exercised especially as regards drainage, ventilation, and other sanitary conditions of new houses?

40. Have you reason to believe that overcrowding has arisen from the operation of your building byelaws, &c., and consequently increased cost or scarcity of cottages?

41. Have any measures been taken by the local authority to prevent overcrowding in dwellings, and have those measures been successful?

42. What are the powers of the local authority with respect to the making of byelaws, and have you found any, and, if so, what difficulties in enforcing such byelaws.

43. Have any byelaws been made by the local authority defining or regulating the duties of the clerk or surveyor?

44. Annex a copy of your byelaws.

45. Have the existing powers for the abatement and removal of nuisances been found sufficient, and, if not, what further powers are needed?

46. Have any defects been found in the law with respect to enforcing the execution of private improvement works, and obtaining repayment for the outlay? If so, state the nature of such defects.

47. If extensive works have been undertaken and executed by the local board, has there been any marked improvement in the sanitary condition of the population? If so, state the grounds for arriving at this conclusion.

48. Has there been much, if any, local opposition to the execution of any public works by the local authority, and if so, to what works, and on what grounds?

49. Is there any district under a local board adjoining the district which might be advantageously incorporated with it? If so, state the reasons why such incorporation appears desirable?

50. Is there any populous place adjoining the district, and not under a local board, forming part of the town population of the district which ought to be annexed to it? If so, state the area, population, and rateable value of such place, and the reasons in favour of such annexation?

51. Have you any suggestion as to what should be the local authority for sanitary matters in neighbouring rural districts?

52. What is the total amount of local rates levied during each of the last three years, for which the accounts have been made up, specifying the total and the rate in the pound of each rate separately? viz.,

- (a.) General district rate.
- (b.) Special district rate.

- (c.) Private improvement rates.
- (d.) Water rates.
- (e.) Gas rates (if any).
- (f.) Other rates (not poor rates), if any, specifying them.

53. What have the poor rates amounted to in each of the same three years? What has been the rate in the pound for each of the three years?

54. How many separate rates for separate purposes are levied by the local authority?

55. What is the amount received by the local authority during the same period on account of loans and repayments for private improvement works?

56. What is the total amount of expenditure, and amount of work executed during the same period (viz. the last three years), under the following heads:—

- (a.) Constructing and repairing sewers and drains.
- (b.) Constructing streets and road.
- (c.) Constructing works of water supply.
- (d.) Constructing other public works.
- (e.) Constructing private improvement works.
- (f.) Salaries of officers.
- (g.) Repayment of (1) principal on loans, (2) interest.
- (h.) Law charges.
- (i.) Other expenses.
- (k.) Has any difficulty been experienced in making or levying the rates required for all or any of these purposes? If so, explain the nature of the difficulty.

57. What has been the entire expenditure for permanent works of water supply, and what districts (if any) beyond the boundaries of your district are thus supplied? Are the waterworks within the area under the jurisdiction of the local authority?

58. What is the extent of the borrowing powers possessed by the authority, and are they sufficient. Have any legal or other difficulties been experienced in obtaining loans for the works executed and to be executed?

And has any reluctance been shown by the local authority in borrowing money in consequence of being unable to obtain the same at a low rate of interest.

59. What is the total amount borrowed by the local authority since its formation, specifying the amount of each loan, the purpose for which it was raised, and the rate of interest; and stating, also, whether the loan was obtained from the Public Works Loan Commissioners, from a public company, or from private persons?

60. By whom are the accounts of the local authority audited?

What is the amount which has been paid off in respect of each loan, and how much still remains due?

61. (a.) Has a sinking fund been established for repayment of any loans?

(b.) What is its present amount including interest?

(c.) On what securities is it invested, and at what rate of interest?

62. How far does the auditor reside from the district of the local authority, and what is the amount annually paid to him for his services and expenses?

63. How many surcharges or disallowances have been made by him during each of the last three years? State the total amount surcharged or disallowed in each year, and the number and total amount of such surcharges and disallowances reversed on appeal.

64. Have any defects not above mentioned been brought under your notice in carrying into execution the existing laws relating to public health in the district? If so, you are requested to specify such defects.

The Commissioners will feel much obliged if you will furnish them with any suggestions you may be able to offer for improving the present state of the law or the constitution of authorities with respect to any of the matters before referred to or, other matters affecting public health in your district.

B.—QUESTIONS to be answered by OFFICERS of LOCAL AUTHORITIES in DISTRICTS where there is not in operation the PUBLIC HEALTH ACT or the LOCAL GOVERNMENT ACT, nor any LOCAL ACT constituting IMPROVEMENT COMMISSIONERS, TRUSTEES, or other local authority.

1. What is the name or title of the local authority to which your answers refer?
2. Of what parishes or places does the district consist?
3. Is the district coterminous with poor law parishes or townships?
4. What is the area in acres of the district?
5. The rateable value?

6. (a.) The population?
- (b.) Number of houses in the district by last census? Any remarkable change in their number since 1861?

7. If local rates other than poor rates have been levied, what is the total amount of such rates levied during each of the last three years, for which the accounts have been

made up, specifying the total and the rate in the pound of each rate separately? viz.,

- (a.) Rates for constructing and repairing sewers and drains.
- (b.) Private improvement rates.
- (c.) Water rates.
- (d.) Other rates, not poor rates, if any, specifying them.

8. What have the poor rates amounted to in each of the same three years? What has been the rate in the pound for each of the three years?

9. By whom are the accounts of the local authority audited?

10. How far does the auditor reside from the district of the local authority, and what is the amount annually paid to him for his services and expenses?

11. What is the total amount of expenditure, and amount of work executed during the same period (viz., each of the last three years), under any or all of the following heads:—

- (a.) Constructing and repairing sewers and drains.
- (b.) Constructing streets and road.
- (c.) Constructing works of water supply.
- (d.) Constructing private improvement works.
- (e.) Salaries of officers.
- (f.) Repayment of loans.
- (g.) Law charges.
- (h.) Other expenses.
- (k.) Has any difficulty been experienced in making or levying the rates required for all or any of these purposes? If so, explain the nature of the difficulty.

12. What has been the rate of mortality per thousand of the population during each of the last three years?

13. What officers are employed by the local authority for any purposes in connexion with the execution or exercise of sanitary powers? State the name of each office, and the salary and the duties attached to each especially? Is there in your district a health officer? Does an inspector under the Factory Acts or the Workshops Act act in your district? Does a certifying surgeon?

14. Does the local authority in any way receive advice and assistance in the discharge of sanitary duties from any medical source?

15. Is there any regular system of inspection of your district for the purpose of ascertaining unhealthiness or the reverse of its several parts?

16. Have you contributed from the rates to hospitals or erected them provisionally? If there is a hospital in your district, are infectious cases admitted readily; by payment or otherwise?

17. Have you any public disinfecting apparatus? Under what regulations is it used? Have you ever used any plan for disinfecting sewers? If so, what plan?

18. How are patients suffering under infectious diseases conveyed?

19. Are the powers for inspecting food efficient?

20. Is the coroner of your district also a sanitary officer or a medical practitioner, or originally educated as one?

21. Have the Guardians obtained sanitary reports of their districts, and at what cost?

22. Has registration of disease been attempted?

23. What means exist for immediately ascertaining the presence of any epidemic disease in your district? And, do these means seem to you sufficient?

24. Is the information given respecting the existence of such disease immediately acted on?

25. Is any record made or published of—

- (1.) Deaths,
- (2.) Disease which does not end in death in any of the public institutions of your district?

26. If you have had any special outbreaks of disease since 1853, explain shortly the nature of the disease, and give the date. Had you any difficulty, legal or otherwise, in meeting those outbreaks?

27. Are there any districts specially affected by fever, diarrhoea, rheumatism, or consumption, or in which cholera specially prevailed during its visitations in this country? If so, is the cause known?

28. Is the public sewerage and drainage of the district generally sufficient; and if not, in what respect is it deficient? Is the subsoil waterlogged; if so, is there power of draining? Can you restrain housebuilding on waterlogged soil, and if so, what depth do you require the water to be from the lowest floor?

29. Explain the mode by which your sewers are ventilated. Are they or the house drains ventilated wholly or in part by rain pipes? Are—

- (1.) The sewers,
- (2.) The house drains, carefully trapped?

30. In what manner is the sewage disposed of,—by sale of the solid excrement to farmers, gardeners, and others; or by drainage into neighbouring stream, by irrigation with

liquid sewage, or how otherwise? Has any change been made in your method; and have any legal or other difficulties been experienced in disposing of the sewage, or in carrying sewers or drains beyond the district, or through private property? If so, state the nature of such difficulties, and how, in your opinion, they may be removed.

31. What amount has been realized by the sale or disposal of the solid or liquid sewage during each of the last three years?

32. Are the houses generally supplied with waterclosets or privies capable of being flushed with water; or with cesspools, ashpits, earth closets, or earth privies? If cesspools or ashpits, are they deodorized, and how?

33. (1) Do the houses generally drain into the public sewers? (2) And if not, what proportion of the houses are still without the requisite means of communication?

34. (1.) In what manner is the district supplied with water? (2.) If from a stream or river, does any drainage run into it above or at the point at which the water for use is drawn? (3.) In case of there being a system of water-works, is water laid on to each house, and is there a constant supply? (4.) Is the rainfall utilized directly by (1) public reservoirs or (2) tanks or the like in private houses, and is the supply generally sufficient and of good quality?

35. Are there tenements in your district without water supply and needing it, and have the 76th section of the Public Health Act, 1848, and 51st section of the Local Government Act, 1858, been acted upon in correction of such cases; and have they been found sufficient or otherwise?

36. Have any works of water supply or drainage constructed by the local authority been found imperfectly constructed, and insufficient for the purpose for which they were intended. If so, what amount was expended upon them.

37. Have any measures been taken by the local authority to prevent overcrowding in dwellings, and have those measures been successful?

38. What powers (if any) are vested in the local authority for the regulation of streets or buildings, and are those powers sufficient? Do they refer exclusively to buildings constructed after a certain date, or do they affect all buildings? If any such powers are vested in the local authority, do you practically exercise any control over houses about to be built in respect of drainage, ventilation, or other sanitary conditions?

39. Have you reason to believe that overcrowding has arisen from the exercise of this control, and that increased cost or scarcity of cottages has resulted therefrom?

40. Have the existing powers for the abatement and removal of nuisances been found sufficient; if not, what further powers are needed.

41. If extensive works have been undertaken and executed by the local board, has there been any marked improvement in the sanitary condition of the population? If so, state the grounds for arriving at this conclusion.

42. Is there any district under a local board or not adjoining your district which might be advantageously combined with it for purposes of local government or sanitary purposes? If so, state the reasons.

43. Have you any suggestions as to what should be the local authority for sanitary matters in rural districts.

44. Has anything been done in your district under the Sewage Utilization Acts, 1865, 1867, Part I. of Sanitary Act, 1866, or the Sanitary Act, 1868?

45. Have any defects not mentioned in any other answer been brought under your notice, in carrying into execution the existing laws relating to the public health in the district? If so, you are requested to specify such defects.

The Commissioners will feel much obliged if you furnish them with any suggestions you may be able to offer for improving the present state of the law or the constitution of authorities with respect to any of the matters before referred to, or other matters affecting public health in your district.

If nothing has been done under any of the statutes mentioned in question 45, the following questions will probably not apply to your District.

46. What is the amount received by the local authority during each of the last three years on account of loans and repayments for private improvement works?

47. What is the entire expenditure for works of water supply, and what districts (if any) beyond the boundaries of your district are thus supplied? Are the waterworks within the area under the jurisdiction of the local authority?

48. What is the extent of the borrowing powers possessed by the authority, and are they sufficient?

49. Have any legal or other difficulties been experienced in obtaining loans for the works executed and to be executed?

And has any reluctance been shown by the local authority in borrowing money in consequence of being unable to obtain the same at a low rate of interest?

50. What is the total amount borrowed by the authority since its formation, specifying the amount of each loan, the purpose for which it was raised, and the rate of interest; and stating, also, whether the loan was obtained from the Public Works Loan Commissioners, from a public company, or from private persons?

51. What is the amount which has been paid off in respect of each loan, and how much still remains due?

52. (a.) Has a sinking fund been established for repayment of any loans?

(b.) What is its present amount, including interest?
(c.) On what securities is it invested, and at what rate of interest?

53. Have any works undertaken by the local authority been afterwards abandoned? If so, state why they were abandoned, and the amount of expenditure incurred in respect of them?

54. Has there been much, if any, local opposition to the execution of any public works by the local authority, and if so, to what works, and on what grounds?

55. Have any defects been found in the law with respect to enforcing the execution of private improvement works, and obtaining repayment for the outlay? If so, state the nature of such defects.

C.—QUESTIONS FOR RURAL DISTRICTS.

1. What is the name of your parish?
2. In what county is it situate?
3. In what union?
4. How many acres does the parish contain?
5. What is the rateable value?
6. (a.) The population?

(b.) Number of houses in the district by last census? Any remarkable change in their number since 1861?

7. If local rates other than poor rates have been levied, what is the total amount of such rates levied during each of the last three years, for which the accounts have been made up, specifying (1) the total, and (2) the rate in the pound of each of such rates separately? viz.,

(a.) Highway rates.

(b.) Other rates, not poor rates, if any, specifying them.

8. What have the poor rates amounted to in each of the same three years? What has been the rate in the pound for each of the three years?

9. What is the total amount of expenditure, and amount of work executed during the same period (viz., each of the last three years), under any or all of the following heads:—

(a.) Constructing and repairing sewers and drains.

(b.) Constructing streets and road.

(c.) Constructing works of water supply.

(d.) Law charges.

(e.) Other expenses, such as law charges.

10. Has any money been borrowed? If any, how much?

11. What has been the rate of mortality per thousand of the population during each of the last three years?

12. What officers are employed by the guardians and the sewer authority, i.e., the vestry, for any purposes in connexion with matters affecting public health? State the name of each office, and the salary and the duties attached to each? State especially whether there is a nuisance inspector appointed by the guardians? Does the medical officer of the guardians do anything in matters affecting the public health? If you have any factories or workshops, are they inspected?

13. Does the board of guardians or the vestry in any way receive advice and assistance in the discharge of sanitary duties from any medical source?

14. Is there any regular system of inspection of your district for the purpose of ascertaining unhealthiness or the reverse of its several parts? Is a report published?

15. If you have had any special outbreaks of disease since 1853, explain shortly the nature of the disease, and give the date. Had you any difficulty, legal or otherwise, in meeting those outbreaks?

16. Are there any districts specially affected by fever, diarrhoea, rheumatism, or consumption, or in which cholera specially prevailed during its visitations in this country? If so, is the cause known? Are any of these diseases specially prevalent during certain months? If so, give the disease and the months?

17. Is the public sewerage and drainage of the district generally sufficient; and if not, in what respect is it deficient? Is the subsoil waterlogged, if so, is there power of draining? Do the houses drain into the sewers?

18. In what manner is the sewage disposed of,—by sale of the solid excrement to farmers, gardeners, and others; or by drainage into neighbouring stream, by irrigation with liquid sewage, or how otherwise? Has any change been made in your method; and have any legal or other difficulties been experienced in disposing of the sewage, or in carrying sewers or drains beyond the district, or through private property? If so, state the nature of such difficulties, and how, in your opinion, they may be removed.

19. Are the houses generally supplied with privies and ashpits? Are there cesspools? How are they drained?

If they are deodorized, how is that operation effected? Have you earth closets or ash closets?

20. (1.) In what manner is the district supplied with water? (2.) If from a stream or river, does any drainage run into it above or at the point at which the water for use is drawn? (3.) In case of there being a system of water-works, is water laid on to each house, and is there a constant supply? (4.) Is the rainfall utilized directly by (1) public reservoirs or (2) tanks or the like in private houses, and is the supply generally sufficient and of good quality? Is any stream or river liable to pollution from graveyards, as, for instance, by ordinary drains, or drains from vaults discharging into it?

21. Are there cottages or other houses in your district without water supply and needing it?

22. Have any attempts to improve the drainage of houses, &c., in your parish failed from some defect in the law, or any other cause? If so, explain the cause of failure.

23. Are there any crowded clusters of cottages?

24. Have any measures been taken by the guardians or the vestry to prevent overcrowding in dwellings, and have those measures been successful?

25. What powers (if any) are vested in the guardians or the vestry for the regulation of streets or buildings, and are those powers sufficient? Do they refer exclusively to buildings constructed after a certain date, or do they affect all buildings? If any such powers are vested in the local authority, do you practically exercise any control over houses about to be built in respect of drainage, ventilation, or other sanitary conditions?

26. Have you reason to believe that overcrowding has arisen from the exercise of this control over cottages, and that increased cost or scarcity of cottages has resulted therefrom?

27. Are there inhabited houses new or old in your district which are unfitted for human occupation, and in what particulars are they deficient?

28. Have the existing powers for the abatement and removal of nuisances been found sufficient; if not, what further powers are needed?

29. If considerable improvements in matters affecting public health have been carried out by the board of guardians or the vestry, has there been any marked improvement in the sanitary condition of the population? If so, state the grounds for arriving at this conclusion. Are the Vaccination Acts attended to?

30. Is there any district adjoining your district which might be advantageously combined with it for purposes of local government or sanitary purposes? If so, state the reasons.

31. Have you any suggestions as to what should be the local authority for sanitary matters in rural districts?

32. Do you think that the police might be employed with advantage as inspectors of nuisances and otherwise in carrying out laws to promote public health?

33. Has anything been done in your district under the Sewage Utilization Acts, 1865, 1867, Part 1. of Sanitary Act, 1866, or the Sanitary Act, 1868? If so, explain anything not above referred to which has been so done.

34. Have any defects not mentioned in any other answer been brought under your notice, in carrying into execution the existing laws relating to the public health in the district? If so, you are requested to specify such defects.

The Commissioners will feel much obliged if you furnish them with any suggestions you may be able to offer for improving the present state of the law or the constitution of authorities with respect to any of the matters before referred to, or other matters affecting public health in your district.

D.—GENERAL QUESTIONS.

1. Have your answers special reference to the circumstances of any particular counties, or are they to be taken as applicable to all rural districts?

2. By the existing law such matters as drainage, water supply, privy accommodation, &c., are placed under the vestry, while the removal of nuisances, including remedies against infection, overcrowding, &c., is under boards of guardians. If all matters of local government in rural towns and villages are placed under one authority, what authority should you think the best? If one of the above authorities, which? Should a new authority be constituted, what authority would you suggest?

3. It has been suggested, that entire watersheds might be placed under control of conservancy boards intrusted with duties as to (1) pollution of rivers and estuaries and agricultural drainage, especially arterial drainage, and (2) all matters of local government in rural districts, such as drainage, water supply, nuisance removal, provisions against defective ventilation, and improper construction of dwellings. What is your opinion of this suggestion? If conservancy boards are formed, (1) would you give them authority in all matters of local government in rural districts? (2) would you recommend that tributaries be placed under their own boards, either independent of the larger board or subordinate thereto?

4. There are other suggestions, that (1) highway board districts, which are usually petty sessional divisions, or (2) unions, or (3) parishes, might be the unit of area for local governments, groups of highway board districts, or of unions, or of parishes (as the case may be), being formed, if thought desirable. Which of these suggestions should you think in the best direction?

5. Is local rating for sanitary purposes already excessive? How far do you think that the concentration of powers, and consequent simplification, would save expenses and render it possible to reduce the rates?

6. How could rating for any sanitary works be conducted

if the areas of authority did not coincide with old rating areas? By distribution, or apportionment, or how otherwise?

7. Could small rural parishes be combined for purposes affecting more than one of them, e.g., water supply, either by tanks, wells, or conduit pipes.

8. Could small country towns and rural parishes, connected or adjoining, be sometimes combined under one local authority for all purposes of sanitary administration?

9. Could unions or highway board districts be sometimes united (1) for large undertakings, e.g., water supply or drainage, (2) all purposes of sanitary administration?

10. Should any such combinations be effected, what will form the most efficient authority for the combined districts?

11. Do you think that rural districts which are rapidly becoming urban present any special difficulties of sanitary administration while passing through that transition state?

12. Can you suggest any improvements in appointment and duties of (1) inspectors of nuisances, (2) surveyors, (3) medical officers in country districts?

13. Is the mode of bringing nuisances before magistrates satisfactory?

14. Do you think that the law should be put in force by a simpler process? If so, can you suggest any?

15. What control over the local authority, by inspection, or power to set in motion an inactive authority, would you give to a central authority, such as the Home Office? Can you suggest any better control than that which now resides in the Home Office?

16. Would county financial boards, if constituted, be a good intermediate authority between local and central authorities, supposing such an intermediate authority were thought desirable?

17. Should you recommend such an intermediate authority, or would you prefer direct relations in all cases between the central and the local authority?

E.—QUESTIONS to be addressed to MEDICAL OFFICERS OF HEALTH or REGISTERED MEDICAL PRACTITIONERS known to be interested in Public Medicine.

I.
You have had opportunities of observing the working of various Acts affecting public health, would you be so good as to state very briefly, a. What these opportunities have been? b. Where? c. Over what area? d. In what extent of population?

II.
Can you state, under the following heads, objections you may have to Acts bearing on public health?
a. In respect of deficiency of power.
b. In respect of inconvenient modes of exerting power.
c. In respect of objects which you think should fall within their scope, and do not.

III.
What is your opinion on the following points:
A.
a. The best constitution of central authority.
b. Power of central authority, whether of originating *ex proprio motu* or on appeal merely.
c. Points in regard to which the central authority should have compulsory powers.
d. Way in which central authority should be set in motion.

B.
a. The best constitution of local authority for districts, urban and rural, with which you are acquainted.
b. Points which should be optional with the local authority.

IV.
A.
What kind of sanitary inspection you should wish established through the country—
a. By the central authority.
b. By local authority.

B.
a. For what area should you recommend inspectors of the first class (central)?
b. For what area or number of population should you recommend local inspectors?

C.
What duties (engineering, chemical, medical, statistical, forensic) should you assign to inspectors? What powers should they have?
a. Central.
b. Local.

D.
What educational qualification should you recommend for sanitary inspectors or for health officers, either now or at some future period? Should they be debarred from practice, (1) private, (2) in hospitals?
a. Central.
b. Local.

E.
Have you any opinion as to the possible amalgamation or redistribution of the functions discharged by officers connected with public health under the—

1. Local Government Office.
2. Privy Council.
3. Burial Acts, so far as connected with our subject.
4. Lunacy Commissioners.
5. Registration Office.
6. Poor Law Board.
7. Common Lodging House Acts.
8. Artizans' or Labourers' Dwellings; Mines.
9. Factory Acts.
10. Workshops Acts.
11. Adulteration of Food Acts.
12. Markets or Bakehouses, &c.
13. Vaccination Act.
14. Pharmacy Acts.
15. Emigration or Shipping Acts; or,
16. As to the mode of inquiry into cases of death by poisoning, or other mode of death requiring judicial investigation?

V.
How far do you think that the sanitary administration of the country can be combined with the Poor Law Board in suburban and rural districts?

VI.
Will you be so good as to state any matters which, in respect of sanitary organization, you desire to have altered in your district or in districts with which you are acquainted?

VII.
What improvements can you suggest for the better registration of deaths? Do you recommend registration of sickness, (1) for hospitals, dispensaries, workhouses, or (2) from private practitioners.

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