

CHAPTER XII.

DEAD MEAT INSPECTION.

THE DETECTIVE SYSTEM V. THE CLEARING-HOUSE SYSTEM.¹

THE question of the day is tuberculosis. It is uppermost in the minds of local authorities and their officials, of the farmer and his landlord, of the cattle dealer, the meat salesman and the butcher, of the medical man and the veterinary man. It is before Royal Commissions. It claims the attention of Parliament in clauses of public and private bills and in questions to the heads of Government departments. It is the subject of conference and discussion, deputation and petition. The press is full of it, especially those periodicals which represent the material interests directly or indirectly affected. Indeed, when I say that the question of the day is tuberculosis, I have not so much in my mind the quiet, ceaseless, ever-widening flow of observation and research regarding tuberculosis which began with Villemin in 1864, and has grown beyond estimation in volume and in practical value since Koch's discovery of the bacillus in 1882. In that aspect the question of the day in the bacteriological laboratory and in the pages of periodicals and the proceedings of societies which preserve microscopic and biological results is doubtless this minute but mischievous bacillus. What I wish to point out is the influence of the modern doctrine of tuberculosis upon agriculture and commerce, in the market place and in the butcher's shop, upon the landlord's rent roll and the food of the people. It is always the case. The patient toil of the laboratory is pursued in secret, and the precious items of its results are summed up and carried forward day after day to new pages without noise or excitement. It is the application of these results to the affairs of men which produce conferences and

¹ Address as President of the Sanitary Association of Scotland, at the Annual Congress held at Dumfries, September, 1896.

discussions and depositions, which furnish war cries to political parties, and complicate still more the tangled forecasts of expediency in the deliberations of statesmen.

There can be no doubt that the current agitation among those who breed and feed and sell animals destined for human food, who slaughter them and distribute them to the consumer, as to the where and the when and the how of meat inspection, is one of the manifestations of the interference of the modern doctrine of tuberculosis with the material interests of classes of men. I have not a word to say in deprecation of the agitation of the question of meat inspection with all its numerous side issues, but every party in the discussion speaks from his own point of view. He is more or less a special pleader. This is no disparagement to any body. It is human nature. The farmer wishes to pay his rent, the landlord wishes to get it; the meat salesman desires as big a commission on as large a turn-over as he can obtain; the butcher sees certain meat confiscated which he could sell. These are the common motives which actuate the most righteous and law-abiding of men; but inside every class there are with certainty to be found the few who are not righteous and not law-abiding. The rogues in all trades and callings may not unfairly be described as the parasites of the honest. Their mode of life is to rouse the suspicions and trade upon the good reputation of the majority. You never hear of them or see them at conferences or on deputations. They get the honest men to shout. They convince them that the proposed law or the suggested interference will kill the legitimate trade, whereas the fact is it will only render some nefarious practice of their own impossible. In this matter of meat inspection sanitary authorities speak from the point of view of the consumer. They have no private interest whatever to serve. I represent a sanitary authority which has the misfortune to have adopted a policy and advocated views both as to meat and milk inspection which are very distasteful to each and all of the private interests concerned. From my reading of the evidence given before Royal Commissions of leaders in agricultural journals and veterinary magazines, of reports of speeches made at conferences on clearing-houses, and deputations to Secretaries of State, I have come to think that Glasgow occupies, in the suspicions of some gentlemen, in a small way, much the same position as Lord Salisbury does in the dreams of the statesmen of Europe. They discover Glasgow everywhere mining and countermining, adding a deeper tinge of black to the cloud of agricultural depression, ruining the trade of the meat salesman, thwarting the speculations of the butcher, invading the professional perquisites of the veterinary surgeon. Gentlemen,

I am not concerned to rebut those charges on behalf of Glasgow. Those who make them represent their own interest. The sanitary authority of Glasgow represents the interests of the consumer. Since 1882 it has in those interests shaped out definite policy with reference to meat inspection. It has successfully defended and enforced it in the law courts at enormous cost. It has accumulated information in support of it by deputations sent over the principal markets of Great Britain and the continent. It has incorporated it in local Acts. Glasgow is satisfied with this policy, and intends to stick to it. I have not come here to enter into controversy with anyone. It is very necessary that amid those more or less selfish disputants the consumer should keep his eyes open, and that those eyes should be intelligent, well-informed eyes. It occurred to me that I could not have a better opportunity of educating the consumer as to the necessities of the conditions under which meat inspection falls to be carried out than under the auspices of the Sanitary Association of Scotland, and on the occasion afforded me by your kindness in elevating me to the position of your President. I am sure there will be absolute unanimity among us in accepting this proposition, that in the interests of the consumer all butcher meat, at some period between the time when the meat derived from it is distributed to the user, ought to be inspected and passed by a competent public inspector. There is no need to support this proposition by argument. It is fair and reasonable and, in fact, as we shall see, necessary, because the whole philosophy of meat inspection is this, that the further removed from the entirety of the animal to which it originally belonged, the more difficult it is to determine the wholesomeness of the part. In the case of the morsels which are retailed to the consumer this difficulty amounts to an impossibility. The supreme question therefore is, when can an inspection of butcher meat in the interests of the consumer most effectively be made? To which my reply is that the only time when effective inspection can be made is at the place and at the time of slaughter. My next proposition is but a corollary to this, and for the convenience of discussion I state it now. It is this. If an animal is not inspected in the interests of the consumer at the time of slaughter, but comes for the first time under inspection as dead meat in whole carcass or in parts, the whole risk is taken by the consumer, *i.e.* all the chances are in favour of the person who submits the carcass. These propositions stand or fall together. We are here at the very heart of the controversy regarding meat inspection. The physiologist and pathologist never lose sight of the fact that the portion of meat was part of a living animal, that if the animal was diseased either constitutionally to begin

with, or constitutionally as a sequence of some condition which was primarily local, then every part of the animal was diseased. The physiologist and pathologist say: "Show us the animal when it is alive and its whole organs and parts when it has been slaughtered, and we will pronounce judgment on the wholesomeness of the whole animal." The butcher says: "Allow me to kill the animal and 'dress' the carcass, and then I shall draw aside the curtain and admit you to the contemplation of a work of art." The fact is so thoroughly artificial is the butcher's conception of the structure and constitution of a carcass that he will confidently submit it in detachments—tongues and sirloins, rumps and quarters, for the matter of that, chops and steaks, just as a man might submit fossils to the geologist or pebbles to the mineralogist, taking to himself credit all the while for frankness to the Inspector, and fair play to the consumer. To the butchers, tongues and sirloins, rumps and quarters, chops and steaks are things which are knocking about the world as God made them. The meat inspector must pick them up where he can, or contemplate them with wonder and surmise when put into his hands. Their face is their fortune. They are self-contained. They have no historian. Professor Owen built up the skeleton of a fossil animal by a 'cute reasoning from his observation of a single bone, and from a tooth he worked out a fair idea of its habits and manner of life. Well, it has pleased providence, in order to keep men out of mischief, to fill the world with interesting puzzles and problems. It is quite unnecessary for the butcher to add to their number. I am sure Professor Owen would have much preferred to see his animal in life and to have dissected it at leisure, and he would have been the last to deny that if he had, he would have been able to make many corrections in the animal which he built up by reasoning from a bone or a tooth. In like manner the meat inspector may be able from a "dressed" carcass, or even from a fragment of it, to reason out and build up a conception of the living animal; but it would be much easier for him to begin at the other end, and, without disparagement to his abilities, whether he be an experienced butcher or a veterinary expert, it would be much safer in the interests of the consumer.

Here I beg you to observe that I have not expressly, or by insinuation, deprecated this process of dressing as in its intent necessarily dishonest or in its nature improper. On the contrary, I explicitly admit that, to a certain extent, it is a legitimate trade process which is necessary for convenience and for that propriety in the preparation and presentment of food of all kinds which is not merely of commercial but of physiological importance. But in what exactly does this process

consist? It consists, speaking generally, in the skinning of the animal, the removal of the head and feet, the sweeping out from the cavities of the chest and abdomen of all the organs and viscera (except the kidneys) with their attached glands, and the diaphragm or partition which separates those cavities. A very rudimentary acquaintance with pathology enables one to understand that in doing this the butcher removes from the body the parts most likely to contain evidences of disease. It is sometimes of importance not merely to determine whether in general the animal has been diseased, but what precisely the disease has been. Without the viscera this may be absolutely impossible. I should like to see what the professor of pathology in any of our universities would make of a human body deprived of its head and all its viscera, and placed before him without a clinical history of the case, in order to discover of what disease the person had died. Every carcass dressed in the ordinary way and then submitted to inspection is exactly in the same position, only the problem is more puzzling in the animal, because veterinary surgeons do not allow their patients to die. They may be killed before the disease of which the viscera might show unmistakable signs has produced marked changes in flesh, and if the disease should happen to be one which in itself involves danger to the consumer, then any judgment which turns on the condition of the flesh alone must be to the prejudice of the consumer. It is an article in the creed of every butcher that a carcass thus dressed, and every several part of a carcass, ought to be taken and judged on its merits; that it contains within its dimensions all the information which can reasonably be asked. In fact, an operative butcher will not hesitate to show his proficiency by sundry parings and trimmings and deft uses of his knife in the scooping out of tell-tale glands or the closer cutting of "the skirt" or attachment of the diaphragm or the stripping of the pleura from the ribs or bits of the peritoneum from the walls of the abdomen.

These deviations from normal trade practices readily catch the eye of an experienced inspector and rouse his suspicion. But when he comes to attempt to make his suspicion into a case for submission to a Court, he must produce positive proof of a precise allegation. The absence of bits of the dressed carcass is only good as evidence of a guilty knowledge of the nature and effect of a diseased condition after the existence of that condition has been otherwise proved. Any such marks on a carcass undoubtedly depreciate its value in the wholesale market. Every retailer knows what they mean, though they may make no difference in the retail prices. I note the facts at the present time because they emphasise the effect of the whole process of dressing, which is to deprive the inspector

of evidence as to the condition of the animal at the time of slaughter, and to make of every carcass of "dead meat" a possible case of trial of a suspicion by circumstantial evidence in place of direct proof. It is well known that all over the country there are butchers of the class referred to in Walley's "Practical Guide to Meat Inspection," where we find two pages headed—"The Carrion Butcher and his Traffic." He might be even more appropriately styled the "salvage butcher," for in all the misfortunes in the shape of accident or disease which befall live stock, he turns up with his offer to take the carcass and do the best he can for the owner, or pay a few shillings for it and do the best he can for himself. The more reckless of these gentlemen try to reach low-class shops in towns clandestinely. There, just as stolen plate is cast into the melting pot by the resetter, the smuggled carcass is speedily boned and minced. But if they know of a market where their wares can be submitted to inspection without risk of a fine or imprisonment in case of detection, they willingly face the arbitrament. They know the chances are all in their favour. If the carcass is seized they lose nothing but the carriage. If it passes the profit is considerable. I quote the words of a distinguished writer on veterinary subjects. Dr. George Fleming—"The inspection of flesh after the carcass has been cut up is not very satisfactory; hence the necessity for examining it while the carcass is intact or in process of dressing, and also examining the animal before it is killed. The organs in the chest and abdomen should be seen; for when these are removed and the body quartered in the usual way, it is often most difficult to distinguish the flesh of a diseased from that of a healthy animal in some cases; though generally there are physical differences, sometimes very slight it is true. The difficulty is, of course, greatly increased by the butchers who resort to every artifice to conceal diseased meat, and sell it as sound."¹

It comes to this, then, that the inspection of dead meat as compared with the inspection of animals and their carcasses at the place and time of slaughter is analogous, as regards ease, efficiency, and certainty, to the process of bringing home a crime to a suspected criminal by circumstantial evidence as compared with the positive evidence of eye-witnesses. Nothing brings this so forcibly before one's mind as reading a book on meat inspection. One cannot but be struck with the fact that all those minute and interesting details as to the colour of flesh, the odour of medicines administered during life adhering to the flesh after death, the taste, the consistency, and other physical properties of flesh are merely indirect methods of

¹ *A Manual of Veterinary Science and Police*, Vol. ii., p. 569.

arriving, by circumstantial evidence, at knowledge which is actually in the possession of somebody. All the diseased conditions of living animals are gone over; much information as to their pathology is imparted; and we are told that the meat is marketable or unmarketable, wholesome or unwholesome. But in the case of dead-meat we are thrown back upon circumstantial evidence for proof of the disease. Often we are informed that, if the inspector happens positively to know that the disease was so-and-so, then he must condemn the carcase; but if he does not then he must be guided by the condition of the meat. In the case of Anthrax, the most dreadful disease which is common to man and animals, Walley says: "No matter what condition the carcase of an animal may present, or however firm and good it may appear, it should be unhesitatingly condemned and destroyed, if indubitable evidence of the existence of Anthrax is forthcoming" (3rd ed., p. 108). But we again turn to the works of the well-known veterinary surgeon, Dr. Fleming, and we read, "From what we have said as to the necroscopical appearances in this disease, there is no difficulty in arriving at a decision *if the animal is not dressed*, and still retains its internal organs. The characteristic alterations will then be readily recognised. But when the carcase has been dressed and prepared for sale, it is difficult though not impossible perhaps, to arrive at a satisfactory conclusion" (Vol. II., p. 109). We also find in the French Meat Inspectors' Manual, which emanates from the veterinary staff of the Central Markets of Paris, the statement that "Anthrax is frequently detected among the carcasses forwarded from without to the Parisian Meat Market. It is always difficult to recognise this disease in carcasses deprived of their viscera, and originating in animals killed on the first appearance of symptoms" (p. 208¹).

There is no occasion on which the meat inspector is put to a greater disadvantage by the process of dressing than in the examination of the carcasses of animals affected with the much-talked-of tuberculosis. I am not now concerned in the least with the burning question of total or partial condemnation, or, if partial seizure, by what criteria we are to be guided. What I assert and wish the consumer to understand is that, whatever method of dealing with tuberculous meat is adopted, it must be based upon a knowledge of the whole facts. If total condemnation is required, then the carcase of every tuberculous animal must be seized. Before it can be seized, it must be recognised, and we know that the viscera often contain the sole evidences and always the principal evidences. If, on the

¹ *Manuel de l'Inspecteur des Viandes*, par L. Villain et V. Bascon, Meds. Vets., Chef et Controleur du Service d'Inspection de la Boucherie de Paris, &c., 2ieme ed. Paris. 1890.

other hand, partial condemnation is thought to be sufficient, then the criteria laid down always turn upon the condition of the viscera. This, in fact, is the essence of the distinction between generalised and localised tuberculosis. Take, for instance, the famous French decree of July, 1888. No animal suspected to be tuberculous is to be removed except for slaughter under inspection, and article 11 reads thus—

"The flesh of tuberculous animals is excluded from use as food.

"1. If the lesions are generalised, *i.e.* not exclusively limited to the visceral organs and their lymphatic glands.

"2. If the lesions, although localised, have involved the greater part of a viscus or are manifest in an eruption on the walls of the chest or abdominal cavity."

How, possibly, could such criteria be applied to a dressed carcase, or to a fragment of a carcase? Let us hear what the Parisian veterinary staff have to say. "It is a matter of observation that, when tubercle has involved the lymphatic glands then the animal is generally emaciated and the flesh watery, so that it is unnecessary to raise the question of tubercle to justify seizure. But this is not always so. Cases of generalisation in animals of first quality are far from rare. . . . When one, for the first time, sees the enormous amount of tubercle found in the viscera, and on the serous membranes of both cavities, and when, on the other hand, we also note in the same animal, bulky muscles, the flesh of a fine red colour well mixed with fat, the masses of suet about the kidneys, and the thick folds of mesenteric fat one is truly astounded." Yet, they add, such a carcase they totally condemn. I do not now express either approval or disapproval of their decision; but I say it was based upon a knowledge of the whole facts, which not even those experienced French veterinary surgeons could have obtained by the minutest scrutiny of a dressed carcase, still less of isolated fragments. In the "Report of the Royal Commission appointed to inquire into the effect of food derived from tuberculous animals on human health," the Commissioners, in the same paragraph (49) in which they report that Dr. Martin "sees no objection to the sale of meat substance from carcasses which have shown only localised tuberculosis under sundry stringent and exacting conditions, give prominence to the statement that he advocates" as a principle that the operations of slaughter and dressing should be done under skilled supervision." In a subsequent paragraph (51) they give their own opinion in these words—"It is hardly necessary to point out that little evidence about the more serious degrees of tuberculosis would be discoverable in carcasses from which the organs had been

removed; and that this is habitually the case in 'so-called dead-meat,' whether English or foreign." The Commissioners found that, though their scientific and practical witnesses differed as to the treatment a tuberculous carcase ought to receive when detected, they were agreed in this opinion. The President of the Glasgow United Fleshers' Society, in answering this question with reference to foreign dead meat, "in such a case you say that the opportunity is lost of seeing whether the animals from which the carcasses came were tuberculous or otherwise?" (1777), Replied—"I think it would be very difficult in any case to tell from dressed carcasses what the original condition of the animals was, or whether they were infected with tuberculosis or not." This was only a corollary to a previous answer. The question was—"Then, does it come to this, that the evidence of the existence of tuberculosis is only to be ascertained at the place of slaughter?" (1721.) The reply was—"I think it can be ascertained there with greater certainty than afterwards." In this respect, then, there is but one voice from veterinary experts, medical experts, Royal Commissioners, and the intelligent and fair-minded butcher. Whatever be the principle adopted in adjudicating upon the destination of the flesh of a tuberculous animal, it must rest upon a full knowledge of the facts, and this cannot be obtained from a dressed carcase, still less from isolated parts of carcasses, and can only be obtained with certainty in the slaughter-house.

Gentlemen, you will remember that I have been speaking throughout in the interests of the consumer. The breeder, the feeder, the salesman, the butcher have each, no doubt, more or less important interests in the quality of the roast, but surely the man who is about to eat it has the most serious interest of all. It is only at the time and place of slaughter that the secrets which so gravely touch the interests of the consumer are fully revealed. Those interests, therefore, can be best protected by measures which secure in the first place, the abolition of private and the substitution of public slaughter houses, and, in the second place, the establishment in connection therewith of an efficient system of inspection. From the consumers' point of view, the broadest description we can get of a perfect system of protection is one which results in the largest proportion of the total meat supply, whether it is native or foreign in origin, being efficiently inspected at the time and place of slaughter.

From the point of view which is *not* that of the consumer the most perfect system for convenience in the prosecution of an opposed interest is one which results in the largest proportion of the total meat supply being either not inspected at all,

or inspected as dead meat at what has been named a "clearing-house." Bearing these propositions in mind, let us as consumers consider the character and effect of the proceedings at a recent conference of Local Authorities¹ on the inspection of dead meat held in Edinburgh, at which Glasgow, by the way, was not represented. It being admitted that the general law is defective, and that something requires to be done to enable Local Authorities to protect themselves more efficiently—two courses were, from our point of view, open to this Conference. It might either have seized the opportunity of a new Public Health Act to have impressed upon the Local Government Board the necessity of public slaughter houses being substituted for private in all boroughs, and enabling District Councils, where expedient, to provide abattoirs, in both cases with efficient inspection, or if, for whatever reason, not prepared to interfere with the present system of private slaughtering, it might have been expected to adapt its recommendations to that system so as to secure the greatest amount of protection for the consumer possible under the circumstances. This Conference took neither of these courses. It took a third course which was not the tempting and proverbial compromise, but absolutely in favour of every interest which is *not* that of the consumer. I do not believe that the representatives of local authorities were knowingly promoting those interests, but they certainly were misled by those who were, and were guided to a resolution most mischievous to the consumer. The theory of a clearing-house is simple, specious, and attractive, yet in the light of the facts which I have endeavoured to make clear to you in this address, I commend this extract from the chairman's opening speech to your consideration. He is reported in the *Scotsman* to have said, "As a rule, feeders sold the carcasses of animals to a class of men who took the risk of selling them in town, and thereby rendered themselves liable to prosecution. What was wanted was simply this, that a legitimate way could be obtained whereby these feeders could dispose of these carcasses, get them inspected, and, if unfit for food, taken and destroyed. They in the counties had not the least desire to try and enforce the sale of unsound meat. On the contrary, it was their desire that their food should be wholesome and good, and it was with that object that they sought assistance in having a clearing-house, so that a legitimate mode of inspecting carcasses and sound meat should be opened up." Now, although the word tuberculosis was never mentioned in the course of this meeting, so far as reported, there is no doubt whatever it was uppermost in the minds of those who promoted it. Observe the pitiful

¹Under the Contagious Diseases (Animals) Acts, not the Public Health (Scotland) Act.

case which it is sought to befriend—that of “a class of men who took the risk of selling carcasses in town.” They took the risk, and, it seems, occasionally found themselves prosecuted. There is no risk in offering a healthy, wholesome carcase for sale either in town or country. It is to be supposed that this “class of men” knew their business, and would therefore see when they bought the carcase from the feeders that a risk would attend the sale of it, and no doubt an allowance was made for this risk in the price at which they bought. Why should they not bear their risk to the end? There is a case which has always had my sympathy—that of the man who buys a good-looking animal at a fair price in the public market, who drives it to a public slaughter-house, and in ten minutes finds his purchase worth no more than its value for boiling down. That is a case of pure misfortune. But I have no sympathy whatever for the pets of the Edinburgh conference. You are not to imagine them submitting their carcasses to the “qualified veterinary inspector” who is to preside over the clearing-house, with authenticated information as to the original owner and the slaughterer, with certified notes of the condition of the viscera, and, generally speaking, with an ingenuous and obliging endeavour to supply the gaps which exist in the knowledge of the inspector because he was not present when the animal was slaughtered. You are not even to think of whole carcasses being submitted, but also of halves and quarters and smaller segments of carcasses, the remainder of which it has been thought would increase the risk too much if also submitted. Observe, I do not say that all the dead meat from the counties represented at this conference would be of a doubtful quality, nor that all the persons who constitute the “class of men” referred to are capable of such practices; but I say that it is among this “class of men” that the carrion or salvage butcher would be found, that no inconsiderable proportion of the total meat submitted at this clearing-house would be the dubious rubbish in which he speculates, and in every case the unlucky consumer would have the whole risk, for you will observe that the main object of the suggestion is to abolish the risk of prosecution. The worst that could follow a seizure in a clearing-house would be the confiscation of the meat.

In the absence of a system of public slaughter-houses with efficient inspection over the country, such as prevails in most European countries, the best method of dealing with this dead meat trade is by detective inspection by a staff of experienced officers, who will watch railway stations, wharves, carriers' quarters, &c.; intercept lorries, suspicious looking butchers' carts, &c., on the street; visit the shops where low-class meat is

sold; and who can be sent to the country to interview the owner, see the butcher who slaughtered the animal, the veterinary surgeon who attended it, and otherwise get up to the best advantage all the information necessary for a prosecution if the circumstances require it. This is the system of controlling the dead meat trade which has been pursued in Glasgow since, under our 1890 Police (Amendment) Act, we obtained enlarged powers of seizure and prosecution. A short history of our experiences may prove entertaining and instructive.

Glasgow was rudely wakened up in 1882 to the possibilities of dead meat inspection, by the discovery that over 60 cows from a suburban dairy had been slaughtered in various stages of Anthrax, and, with cognisance of the veterinary practitioner in attendance dressed and sent into the dead meat market. All passed inspection except one, and had been sold before the facts became known. It is unnecessary to trouble you with the stories of difficulties, partly administrative, such as impede new departures in all communities, which are not kept fully overcome; partly legal, which are now wholly removed. In 1889 we had our famous tuberculosis trial, which established a standard for both the Police and the Sanitary department. In 1890 came the Act already referred to. The first case under the detective system arose out of the seizure of half a tuberculous cow in a butcher's shop, and resulted in the exaction of ten pounds each from the butcher and the man in the suburbs from whom he bought it. The next case led to the discovery in the dung hill of another suburban butcher of the missing fourth quarter of a cow seized in Glasgow. He had obtained the animal from a farmer, and was therefore one of that “class of men who take the risk of selling in town.” In this case the speculation landed him in a penalty of £20. These two prosecutions effectually stopped this trade in the suburbs. Since then, the investigations of the officers had led them far afield. They have been in twenty-five of the counties of Scotland, from Dornoch Firth in the North to the Solway in the South. On one occasion they crossed the Border into Cumberland. A chief inspector, Mr. Warnock, has given me notes of his adventures and discoveries in the course of these expeditions. They read like a chapter from Conan Doyle. The story of two portions of beef (they could not be called quarters, they were cut so irregularly) forwarded from a small town in Elginshire, and seized in a lorry in George Square, Glasgow, in 1892, may be taken as a sample.

“I was instructed to go north and discover, if possible, what had been done with the portions retained at home. I was aware from my examination of the parts seized that they had

been cut, trimmed, and dressed from a tuberculous carcase. The consigner was a butcher. I found him in his shop, but he declined to answer questions. A telegram from Glasgow had preceded me. I looked over the meat hanging in the shop, and saw that none of my carcase was there. After a little conversation he let fall the name of another butcher to whom he had given the missing half. When he saw that I was going to interview this butcher, he said he gave part away for pigs' meat, and that he was feeding his own pigs with the portion retained. I went to his piggery, in which were two newly-weaned pigs, and in a sleeping compartment under some straw found a fore-quarter of beef. The butcher then admitted that he had hidden this portion in the piggery, and had given the other quarter to his friend to do the same. Neither of these quarters had been trimmed or stripped. They showed that the animal had suffered from generalised tuberculosis. From the forwarding clerk at the station I learned that special instructions had been given to send on the meat by Elgin down to the Highland line, not by the usual route, *via* Aberdeen, where there is a very active surveillance over dead meat in transit." The witnesses were brought down to Glasgow, the case was strenuously defended, but the Stipendiary found the man guilty of sending the meat for human consumption, dressed with intent to conceal the facts, that it was diseased, and imposed a penalty of £20. An appeal was taken to the High Court, where it was dismissed.

I have no desire to revive the bitterness of a fight in which the Local Authority was victorious all along the line. But the facts of history, though they may be forgotten, remain on record, and if the lessons are likely to be missed, these facts must be revived. The facts, which are recorded regarding the application of the detective system of inspection to the dead meat trade of Glasgow, are that it was contested foot by foot not merely in the local Courts, but in the Higher Courts on appeal; that the actual defendants could not possibly sustain this expenditure, that the business advertisements of meat salesmen in Glasgow inserted in country newspapers, contained from time to time warnings and instructions "to butchers, cattle-dealers, and farmers," as to risk attendant on Glasgow consignments, and how to obviate them; and that these were backed up by legal arguments in Court, and by the evidence of meat salesmen called in defence. There was some preliminary skirmishing over the fact that in 1882 the Authorities had seriously considered the idea of a clearing-house, and had even gone so far as to insert a clause in a draft Bill to enable them to carry it out; but the logic of events between that date and 1890 convinced them of their mistake, and converted them

to the detective system. Thus also they discovered the remarkable but not unnatural difference between the retail butchers and the wholesale meat salesmen as to this clearing-house. The former opposed it. In fact, the statements of a deputation of the Glasgow United Fleshers' Society confirmed the judgments of the Local Authority against the system. The next line of defence was indicated by the warning—"Please note that all carcases forwarded to Gasgow, which are unfit for human food, must be labelled for *boiling-down purposes*, and a letter of instructions must be sent to that effect. If this is not complied with, senders will be liable to a penalty of £20." Surely the most remarkable guise under which to conduct a trade in butchers' meat which it ever entered the mind of man to contrive. This method was exposed in its naked absurdity by a case in which roasting pieces, evidently cut from an unsound carcase, were labelled "*for boiling-down purposes*." The case was defended as usual, and the defence produced evidence from the usual quarters; but the Stipendiary said that he was satisfied, upon careful consideration of the whole evidence that the labelling of the meat was a mere device for the purpose of trying to prevent it being seized. He had no doubt that the meat was intended and might have been used for the purpose of sale for human consumption. He imposed a penalty of £10. The case was as usual appealed, and the appeal was as usual dismissed.

The next line of defence was labelling the consignment "for inspection." The first case concerned the carcase of a cow which, after local inquiry, was found to have died of puerperal fever. The deliverance of the late Stipendiary Gemmell, whose lucid and discerning line familiar with every point in such cases, was of the greatest service to the public, clearly shows the lines followed by the prosecution in combating this defence. Something more was required, he said, than a label marked "for inspection." The accused should have intimated to the consignee the whole circumstances connected with the death of the cow and that the carcase was sent on specially to see whether there was really any ground for allowing it to be sold for human food. Externally the meat might have passed; but if the accused had sent word to the inspector that the animal had died of puerperal fever, it would never have passed inspection. This device seemed to take the fancy of consigners, as it was extensively adopted, but in no case did it avert success in prosecution.

The last ditch in the contest with the dead meat trade was inspection and certification by a veterinary surgeon prior to despatch. In the course of local investigations, we occasionally found that the consigner, usually a farmer, had been advised by

the veterinary practitioner in attendance, in which case the ends of justice seemed to be satisfied by a surrender of the carcase. It is startling, however, to observe what veterinary practitioners will do. There, for instance, was the case of two rumps of beef, sent from Forfarshire, the remainder of the carcase and viscera being buried in the farmer's garden. The inspector had them exhumed, and found the lungs and abdominal organs stuffed with tubercle, and the serous membranes covered with tuberculous vegetations. The case was reported to the Fiscal, and the veterinary surgeon was summoned as one of the witnesses; but after repeated postponement on account of the defendant's illness, a pledge was accepted and forfeited. So we lost the pleasure of hearing this gentleman's views explained from the witness box. There, also, was the case of an emaciated and jaundiced bullock, which the veterinary excused himself for passing by the circumstance that he examined it by candle light. It is but occasionally that a veterinary certificate is attached to the carcase, and if the carcase bears on the face, and in the history of it, a certificate to the opposite effect, we pay no respect to the written document. Indeed, in the last case of this sort, after the usual local inquiry, we summoned the certifying veterinary surgeon as a valuable witness for the prosecution. The owner was one of that "class of men who take the risk of selling in town." He bought the carcase of a cow which had its throat cut when on the verge of death from "stomach-staggers," and was not disembowelled for four hours thereafter. He paid 50s. for it, with a young beast with a broken leg thrown in to the bargain. His veterinary certificate did not save him from "the risk of selling in town," as he was fined £5 and lost his cow.

Manifestly the veterinary practitioner is placed in a most unenviable position by these requests for a professional opinion in matters where the public interest and the private interest of his client may be opposed. I speak as a member of a profession which, in matters of public health *v.* private interest, frequently occupies the same position as the veterinary surgeon. I am very anxious to avoid giving offence, and none can be taken if I apply the same standard in these respects to the veterinary surgeon and the medical man. It is acknowledged both by the Sanitary Authorities and by the common sense of my profession that it is more than the average man can be expected to do to condemn the property of his patients and to do many public acts which must be done, but which are unpleasant to individuals. I see that the veterinary profession abroad does not affect to be above the common frailties of mankind. At the third Session of the Congress for the Study

of Tuberculosis, which meets periodically in Paris, and is attended by the most notable members of the profession from all parts of Europe, one of the subjects discussed was, "the advantages of a general system of meat inspection," in the course of which Dr. Stubbs, chief Veterinary Inspector of the Belgian Board of Agriculture, described the Belgian system, which provides a veterinary inspector in each province, and either a veterinary or non-veterinary inspector in each Commune; all withdrawn from private interests which might interfere with their official independence. Some animadversions were made on the selection of non-veterinary inspectors. In his reply Dr. Stubbs pointed out that in some communes it was the only way of avoiding the appointment of a man in practice. "The veterinary practitioner," he said, "has frequently to report on the flesh of an animal he has treated. You see, then, what may happen. As a matter of fact, however honest he is, he is tempted not to be too hard; or, if he is, what happens? His client will say, 'I shall call in Mr. So-and-so, who is not so strict.' It is therefore necessary that the expert should be independent of the owner of the meat he inspects." Professor Nocard, of the famous Alfort Veterinary School, spoke in the same sense; and on his motion a sentence was added to a resolution before the Congress in favour of a general system of meat inspection, in villages and towns alike to this effect, "The inspecting staff ought to be organised more or less on the model of the Belgian system." It is of interest, as confirmatory of the position for which I have been contending, to that that, like all continental meat inspection, the Belgian system rests upon inspection at the time and place of slaughter, and is so worked that the flesh of animals so inspected shall be premiated in the market, being marked as such. Article 5 of the Belgian regulations of the trade in meat refers to the home trade:—

"After the slaughter, and before the carcase is cut up, the skin or hide still adhering thereto, the inspector shall inspect the carcase and the internal organs. While awaiting the arrival of the inspector, the abdominal viscera shall be extracted *en masse* and preserved, so as to maintain their natural proportions. The organs of the chest shall be left adherent to the carcase, and in the case of solipedes, the trachea and larynx shall also be left intact."

The conditions under which dead meat is permitted to be imported sustain, as far as possible, the same principle. Still such meat is specially marked. Article 13 refers to this branch of the trade:—

"Fresh meat imported from abroad will not be admitted except in the form of whole carcasses, half-carcasses, or fore-

quarters, and on conditions that the lungs are adherent thereto."

You can have no difficulty, in remembrance of the experiences of the detective inspectors, in reading the significance of the exclusion of hind-quarters, unless attached to their corresponding fore-quarters, which must retain the lungs. This is much better than hunting for the lungs and missing quarters in piggeries or in farmers' dunghills and gardens.

Just one word as to the effect of the detective system on the meat supply of Glasgow. Nothing shows this better than the decrease in the number of seizures. Whereas at the outset these were numerous, and the inspectors were constantly on the rail following up their seizures to the consigners in the country, now a seizure is a rare event. Weeks may pass without a find among the hundreds of consignments overhauled. All over the country Glasgow used to be looked upon as a promising market for the salvage of the farmers' casualties and the speculations of the "carrion butcher." Now it is everywhere known as a place to be avoided. Even the character of the rare cases investigated is different. They are generally consignments made by farmers in remote parts of the country, without any attempt at concealment by special dressing, following the traditions of their calling more in thoughtlessness and ignorance than with criminal intent. The ends of justice are met by the surrender of the carcase and a warning not to do it again. The combined result is that meat cases, instead of being called in Court every other day, are now the rarest of events.

Now, gentlemen, let me in conclusion, even at the risk of "damnable iteration," once more clearly set forth my main thesis—that, no matter how you organise your system of meat inspection, no matter by what principles you are guided in the disposal of the abnormal meat when you have detected and detained it, whether you think the flesh of an animal, suffering from this disease or from that, is wholesome or unwholesome, whether you stamp or do not stamp, whether you adopt the German *Freibank* or the British dipping-tank and digester, whether you compensate or confiscate, whether you go in for the "clearing-house" and plenary absolution for the "class of men to take the risk of selling in towns," or the detective system and criminal prosecution; as regards the interests of the consumer, the inspection of dead meat is only what is vulgarly called making the best of a bad job. In proof that it is so, I have called evidence from every quarter, scientific and practical.

In the course of this address I have unavoidably touched upon many matters of controversy which are quite worthy of

separate treatment, but I beg of you, whether you are officials or representatives of local authorities, not to allow your minds to be shunted off from the main thesis to any of these side issues: and I deprecate on the part of my critics any attempt to obscure the discussion of the main question by raising these side issues. As to the practical application of this thesis, whether by general legislation or local administration, that must be left to time to settle after the slow fashion of this old country. Meanwhile, however, and now, it dictates to us on behalf of the consumer, an attitude towards the home dead meat trade, as we know it in our towns, at least of suspicion if not of active hostility, and above all things not of credulous confidence.

INDEX.

- Air, 143, 157, 368.
 Air, purity tested by smell, 169.
 Air space of a room, 514.
 Air space and mortality, 522.
 Adelphi Hair Factory, outbreak of
 Anthrax, 412.
 Alcohol, deteriorating effect of, 311.
 Alcohol, in typhus fever, 444.
 Alcohol as a food, 445.
 Alcohol as a stimulant, 446.
 Anthrax, 412.
 Arnott, Dr. Neil, Report to Poor
 Law Commissioners, 9, 41.
- Baths and Washhouses, 42.
 Blackie, Lord Provost, 26.
 Bridgegate, 10, 12, 179, 209, 215, 260,
 273.
 Bright, Right Hon. John—Rectorial
 address, 189.
 Brown, Dr., state of New Vennel,
 Havannah, etc., 11.
 Building Regulations, 14, 102-113,
 183.
- Chadwick, Mr., 10, 290.
 Chalmers, Rev. Dr. Thos., 31.
 Chickenpox, 366.
 Child father of the man, physically,
 311.
 Children of the city, 301.
 Children, death-rate among, 309.
 Cholera, 3, 14, 18, 22, 259, 356.
 Cities, growth of, at the expense of
 the country, 303-308.
 Cities, attempts at limitation of, 301.
 Cornet, Dr., protection from con-
 sumption, 551.
 Cowan, Dr., 7, 79.
- Dairy farm, sanitary requirements
 of, 405.
 Dead meat inspection, 592.
- Deaths, uncertified, 485 (note), 502,
 524.
 Density of population in relation to
 health, 138, 171-172, 287, 494.
 Density of population in relation to
 air, 143.
 Density of population, increase of,
 281-284.
 Diarrhoeal diseases, 356.
 "Dirty neighbour?" "What am I to
 do with my," 257.
 Diphtheria, 352.
 Disinfection, 571.
 Disinfection and washing-house, 21,
 22, 56, 59.
 Drain testing, 55.
- Editorial notes, 1-3, 27, 54, 65, 95,
 147-153, 324, 444, 481.
 Engel, 295.
 Enteric fever, 335.
 Enteric fever and milk epidemics,
 22, 55, 325, 336.
 Erysipelas, 364.
 Extension Acts, 3, 17.
- Farr, Dr., 138, 170, 254, 287.
 "Fever," 4, 5, 15, 16.
 Fever hospitals—
 Parliamentary Road, 21, 22, 43.
 Belvidere, 22, 24, 58, 339.
 Ruchill, 24, 59.
 Fever hospitals, History of, 66-99,
 73, 76, 83, 325.
 Fever hospital statistics, 71.
 Flatted tenements, 135.
 Fog in Glasgow, 371.
- Gairdner, Dr. W. T., 19, 20, 21, 25,
 27, 28, 32, 82, 83, 358.
 Gairdner, Dr. W. T., on alcohol in
 fevers, 446.
 "Ginx's Baby," 314.

INDEX

611

- Glasgow, "a semi-asphyxiated city,"
 142.
 Glasgow, former state of, 284.
 " population of, 481.
 " population in the districts,
 485-490.
Glasgow Herald, feus on Milton
 Estate, 14.
 Graham, Dr. Robert, condition
 amidst which fever spreads, 5,
 24, 25.
- Hannah, Dr., description of High
 Street, 12.
 "Hawkie," 243.
 "Health Committee, formation of,
 22, 24.
 Height of ceiling of room, 516.
 Hospital construction, 50.
 Hospital reports, 43.
 House, the, 153.
 " construction, 39.
 " in relation to public health,
 the, 170.
 " in relation to mortality, the,
 177, 210.
 Houses "made down," 222.
 " ticketed, 27, 160, 185, 206,
 271, 277, 514.
 " uninhabitable, 224, 228.
 " inhabitants of,
 234.
 " owners of, 239.
- Ideal commonwealth, 293.
 Improvement Acts, 22, 24, 26,
 57.
 Improvement Trust, 57.
 Results of operations, 96, 113,
 122, 126.
 Size of house occupied by per-
 sons displaced before and
 after operations, 98, 115, 124,
 127.
 Rental before and after opera-
 tions, 98, 118, 124, 128.
 Number of inmates before and
 after operations, 99, 118.
 Distance from centre of city
 before and after operations,
 100, 120, 130.
 Social status of inhabitants,
 123.
 Provision of dwellings for people
 displaced, 132.
 Infection, physical laws which govern
 the distribution of, 582.
- Infectious diseases, municipal policy
 as to, 69-70, 71.
 Arrangement with School Board,
 55, 88, 343.
 Endemicity of, 254-257.
 History of, in Glasgow—
 Typhus, 327.
 Smallpox, 329.
 Enteric fever, 335.
 Relapsing fever, 339.
 Scarlet fever, 344.
 Measles, 346.
 Whooping-cough, 349.
 Diphtheria and croup, 352.
 Diarrhoeal diseases, 356.
 of children, 340.
- Influenza, 366.
 Insurance in friendly societies, 503,
 526.
- Kennedy, Dr., condition of Bridge-
 gate, 10.
 Koch, Dr., 529.
- Life in one room, 189.
 Limitation of cities, attempt at, 301.
 Lodging-houses, 14, 15, 243.
 Lungs, diseases of, 370.
- Measles, 94.
 Medical Officer of Health, 19, 20,
 23.
 Milk and the dairy farm, 405.
 Milk and infectious diseases, 22, 55,
 325, 336, 346.
 Miller, Captain, condition of High
 Street and Wynd, 8.
 Mortality Bills, 4, 8.
- Nageli, Dr., 591.
 Nursing, 44-50.
- Ogle, Dr., 181.
 Overcrowding, 5-13, 28-31, 33-38,
 103-113.
- Paul, Henry, lanes and closes, 8.
 Perry, Dr., 10, 25, 79.
 Phthisis, 366.
 Play, necessity of, 316.
 Police and Health Acts, 3, 15, 17, 19,
 20, 22, 58, 59.
 Political meetings, absence of interest
 in public health at, 320.
 Poor Law Commissioners, 10, 17.
 Price, Dr., 170.
 Puerperal fever, 365.

- Recreation spaces, 43, 60.
 Reception houses, 22, 30, 58, 329, 330.
 Refuse despatch works, 56.
 Registration Act, 18.
 Relapsing fever, 3, 22, 339.
 Rental of houses in Glasgow, 98, 118, 124, 128, 154, 218, 232, 268.
 Royal Infirmary, 16, 66.
 Revaccination, 333.
 Revaccination in lodging-houses, 334.
- "Salvation Sal," 237.
 Sanitary Department, growth of, 23 (note).
 Sanitary Inspector, 23.
 Sanitary Inspector, report for year 1886, 216.
 Sanitary progress in Glasgow (statistical summary), 3, 19, 22, 55, 58.
 Scarlet fever, 93, 344.
 Scarlet fever and milk, 58, 346.
 Sociological aspects of sanitation, 249, 259.
 Small-pox, 19, 22, 329.
 Smith, Dr. D., 10, 41.
 Spencer, Herbert, 249-252.
 Statistics, vital, 484 *et seq.*
 " " arguments for local, 491.
 " " of four groups of districts, 517.
 " " of the community of Glasgow, 519.
- Steam, development of Glasgow due to, 278.
 Strachan, Dr., 316.
 Strang, Dr., 12.
 Sunlight, 164.
 Sutherland, Dr., 12, 358.
 Symons, J. C., Assistant Commissioner on Condition of Handloom Weavers, 7.
 St. Mary's Roman Catholic School, outbreak of disease in, 375.
 Post-mortem examinations by Prof. Coats, 376.
- Symptoms, 379.
 Distribution in institution, 381.
 Condition of school, 387.
 Dr. Gairdner, Dr. Finlayson, and Dr. Gemmell on, 396.
 Similar outbreaks, 399.
- Ticketed houses, 27, 160, 185, 206, 271, 277, 514.
 Todd, Dr., on alcohol as a food, 445.
 Tuberculosis, 366 *et seq.*, 529 *et seq.*
 Memorial from Glasgow Medical-Chirurgical Society, 529, 568.
 Bacillus, 531.
 Infection of, by sputum, 534.
 Infection of, by milk and flesh, 537.
 Infection of, general conditions, 538.
 Measures of control, 454.
 Notification, 547.
 Isolation, 547.
 Disinfection, 548.
 Popular instruction, 549.
 Foreign methods, 551 *et seq.*
 General hygiene in prevention of, 559.
 Summary of suggestions, 564.
 Meat, 58, 593, 598 *et seq.*
- Tyndall, 592.
 Typhus fever, 3, 19, 20, 22, 29, 81, 92, 326, 327.
 Typhus fever, stimulation in, 444.
- Ure, Mr. John, 18, 19.
- Vaccination, 19, 265, 332.
 Tracing defaulters, 89.
 In relation to smallpox, 465.
 Act, 19, 89.
- Wallace, Dr., 207.
 Water supply, 3, 18, 19, 360.
 Watson, Sir James, 24.
 Watt, Dr., 341, 352.
 Watt, James, 278.
 Wynds, the, 6, 8, 10, 11, 12, 24, 170, 215, 260, 273.



