ADDRESS

ON

THE ACTION OF THE BRITISH MEDICAL ASSOCIATION TOWARDS IMPROVING SANITARY ORGANISATION.

Delivered at the Annual Sanitary Conference of the Society of Arts, June 10th, 1880.

BY ERNEST HART,

Chairman of the Parliamentary Bills Committee of the British Medical Association, and Chairman of the National Health Society.

THE Society of Arts, in my opinion most opportunely, has decided to propose, as one of the questions to be discussed at its Annual Public Health Conference of this year, the constitution and attributes of County Boards. No debate on this subject would be complete without a reference to the arduous and long-sustained labours in this regard of the Joint-Committee of the British Medical Association and Social Science Association, under the guiding care of Dr. A. P. Stewart. I propose, therefore, as briefly as I may, to indicate the opinions at which that Committee, after a most careful and laborious study of the subject, has arrived on the subject of County Boards.

Probably most of those here present are aware that it was mainly at the instance of this Committee (the original formation of which was the happy idea of Mr. G. W. Hastings, M.P.) that the Government of the day was induced to recommend to Her Majesty the appointment of the Royal Sanitary Commission. This being matter of history, I need not dwell upon it at length; nor need I refer to the valuable assistance which was confessedly given to the Royal Commission by the Committee. I may proceed at once to the extremely interesting and exhaustive paper commenting on the report of that Commission, which was drawn by the Joint-Committee for presentation to the annual meeting of the British Medical Association in 1871. In this report I find the following instructive and weighty passages, which, read by the light of the occurrences of the last nine years, are amply proved to have been true prophecies of evil.

"We observe that the Commission proposes to preserve and confirm—nay, even to augment the number of—existing *local board* districts, under what are called 'urban' authorities; the minimum population of these districts being fixed at 3,000. Now, it is well known that petty elective authorities in small separate districts are apt to obstruct rather than forward sanitary improvement, and that for the most part they render any uniform and efficient system of administration almost impossible. This fact would, we believe, have been established indisputably by proper local inquiry. Estimating the number of local board districts from parliamentary returns, we may reasonably conclude that the surface of the country would soon be, if it be not now, honeycombed by not fewer than one thousand limited and isolated areas under 'urban' authorities.* *Against such a project of local government we strongly and earnestly protest.*

"We infer, not only from the evidence taken in this inquiry, but from well known facts, that 'intermediate authorities', consisting of members not liable to be swayed by petty interests and sordid views, would be essential, on social, sanitary, and economical grounds, for the higher purposes of sanitary administration. And, inasmuch as the authorities of counties have already to administer and enforce the law, to control institutions, to appoint officers, and to execute functions connected more or less with the health and safety of the people, we deem it highly desirable either that the powers of the magistracy (an existing authority) should be extended so as to comprehend the care of the public health, or that boards representing the magistracy and ratepayers in due proportion should be constituted for the direction and control of local sanitary administration. The magistrates would, of course, continue to sit as *ex officio* members of the board in 'rural' districts. It is no less reasonable and desirable that, if the division into 'urban' and 'rural' is to be maintained, they should take the same position on the future boards for the sanitary management of urban districts. *We believe that the constitution, mode of election, and duties of local boards, whether for urban, suburban, or rural districts, should be uniform throughout the provinces of England.*

"There is no question of graver import, or requiring greater atten-

tion, than that of the compulsory acquirement of land by local authorities for certain purposes essential to the improvement of the public health. In what manner and on what conditions local authorities—whether those of large towns or those which might act over larger areas—should be empowered to provide *sites* for dwellings of labourers and artisans where densely populated parts of towns have been or may be demolished for purposes of public health (*e.g.*, under Mr. Torrens' Act)—whether such authorities should be empowered to acquire land for burial-grounds and mortuaries, for hospitals for fevers and other pestilences, for disinfecting establishments, for public slaughter-houses, for recreation-grounds, as well as for water-supply and for sewage utilisation—these and other like questions require the most careful consideration.

"For all these purposes and many others, involving both appeal and compulsion, an intermediate authority to consider and report on applications of local authorities would be invaluable. And, moreover, we cannot too strongly urge on the legislature the necessity of limiting the powers and functions of the central authority within the narrowest bounds consistent with effective action. Not only should local impatience of interference be considered and obviated by constitutional means, but a suitable authority, intermediate between the local and central, should be constituted in every county or sufficiently large area, as likely to be more cognisant of the wants and circumstances of every smaller district, and better able to judge of minute details inseparable from the daily working of local boards, than a Government inspector."

The last important reason adduced by the Committee for wider administrative areas was, that they would supply a superior machinery for the appointment of scientific officers, whether medical or engineering, of high and special qualifications.

The Committee then proceeded to argue with great force against the illogical and unsatisfactory method in which the Commission proposed to provide for the appointment of health-officers (a policy since carried out with aggravated evils by the Local Government Board), and insisted upon the importance of the duties of such officers. They adopted the opinion of the General Board of Health, that "the occupation of a medical officer of health will not usually be inconsistent with his devoting a portion of his time to certain other professional engagements; but, where possible, it will be well to debar him from the private practice of his profession: first, because the claims of such practice would be constantly adverse to those of his public appointment, the duties of which (especially at times of epidemic disease, when his official activity would be most needed) private practice could scarcely fail to interrupt and embarrass; secondly, because the personal relations of private practice might render it difficult for him to fulfil with impartiality his frequent functions of complainant; and thirdly, because, with a view to the cordial goodwill and co-operation of his medical brethren, it is of paramount importance that the officer of health should not be their rival in practice, and that his opportunities of admonitory intercourse with sick families should not even be liable to abuse for the purposes of professional competition."

For these reasons, and for several others which will be found in their report, the Committee proposed, "that the right of separate appointment, by municipalities, of chief health-officers should be limited to large cities and towns, the authorities of which might be willing (as in Liverpool) to render their health adviser independent of private practice by a salary which shall, in the judgment of the central authority, suffice to secure the devotion of his entire time and thought to his public duties. All other towns would enjoy the advantage of superintendence by an officer of the same high class, appointed by a county or other intermediate authority. *The system should be uniform throughout the country.*"

Another important reason for the appointment of county health superintendents, equally independent of private practice and of local caprice, may be here incidentally referred to. It cannot be doubted that a grave difficulty in the way of the complete registration of infectious disease throughout the country is the fact that, in the majority of sanitary districts, as at present constituted, the medical officer of health, to whom all notifications of the existence of infectious cases must of necessity be referred, is a practising physician, as dependent upon local patients as those practitioners who would have to report their cases to him. The reluctance of these latter to assent to such an officer becoming acquainted with the nature and extent of their practice can easily be imagined; and it would seem worthy of consideration whether the compulsory appointment of independent medical officers of health should not proceed *pari passu* with the compulsory registration of infectious sickness.

On this point, the Joint-Committee reported, "While we perceive with satisfaction that the Commission recommends the registration of sickness, we doubt whether the method thereof should be wholly left, as proposed, to the Registrar-General, without insisting upon the necessity of considering in the first place the sanitary needs of the locali-

* This estimate has been proved to be singularly accurate. There are now as nearly as possible a thousand urban sanitary districts in England and Wales.—E. H.

ties from which the returns are collected, and in which they ought to be promptly applied to local sanitary action. It is in regard of this function that a skilled and comparatively independent officer of health becomes indispensable. A proper machinery for the local revision of mortuary and sickness returns, by a skilled and independent officer, would be provided by vesting the appointment of the chief health officers, debarred from private practice, in intermediate authorities; and to county justices, it may be observed, the legislature has committed the appointment of public analysts."

Another subject proposed for discussion by the Society of Arts, viz., that of the advisability of strengthening the administrative organisation of the Local Government Board, was dealt with by the Committee. They reported:

"It is obvious that, with a sufficient corps of chief health-officers, the inspecting staff in immediate connection with the central authority need not materially, if at all, exceed the number now actually employed by the various central departments, which are to be consolidated, we hope, under one Minister of Health. Without a body of superior health-officers, either many necessary duties of superintendence and inspection must remain unperformed, or an equally numerous body of district inspectors, under the central authority, must be appointed to execute them, at a great national cost.

"Confining our remarks to the existing inspectorates, we heartily agree with the Sanitary Commission that simplicity and economy alike demand their union under one chief, and their redistribution in *circuits*, analogous to the registration divisions, or the districts of Poor-law inspectors, which circuits might constitute the larger public health areas, except for any special purpose, as the control of river-basins. In every such circuit, it may be advisable, for efficient administration, that the central authority should act through *three* inspectors, with different qualifications—one legal, one engineering, and one medical or scientific.

"What seems to us the fatal objection to the scheme of sanitary administration proposed by the Commission [which was, it is to be noted, carried out almost in its entirety by Mr. Stansfeld], is that it presupposes the frequent intervention of the central authority and its officials, not only in the great movements of the sanitary system, but in many minute local details. It is to be worked—or at least regulated—from the centre, by inspectors who, not necessarily residing in the districts which they superintend, cannot know more of local circumstances and peculiarities than they can glean during brief and hasty visits. This mode of administration has the threefold disadvantage of being costly, of being inefficient, and of keeping the country in a state of perpetual tutelage. If, on the other hand, the inspectors, or rather chief officers of health, highly trained in all the departments of public medicine, were resident in their districts, each one of them would be a centre of instruction whence sound and enlightened views on all sanitary matters would emanate, so as gradually to enlighten the public mind, stimulate local action, and reduce to a minimum the need of interference by the central authority."

When the Public Health Bill was introduced into the House of Commons by Mr. Stansfeld in 1872, the Joint-Committee made strenuous efforts to get recognised the important points dealt with in their report for 1871, but unfortunately with but little effect. On April 8th, 1872, a large and influential deputation waited upon Mr. Stansfeld to present a memorial expressing the views of the Joint-Committee on the subject. In this memorial, the establishment of County Boards was forcibly urged; and in the subsequent addresses to Mr. Stansfeld of the late Dr. Rumsey, Mr. Michael, and Dr. Stewart, this point was strongly brought out. Mr. Stansfeld, however, was not convinced, and the Bill became law without any of the desirable amendments of the Committee being adopted. No opportunity occurred for the useful interference of the Committee until 1876, when it was thought expedient to convene a Sanitary Conference to consider the subject of the necessity for furthering sanitary legislation. This Conference was held on the 11th and 12th of May, 1876, under the presidency of Lord Aberdare, when much important information and many valuable suggestions were elicited. The Committee reported, in their Annual Report for 1876, that "the general agreement manifested as to the propriety of abolishing the distinction between urban and rural districts; the expediency of having one law for the whole area, and only one authority clothed with sufficient powers for all purposes of local government in each subdivision of the country; the necessity of large areas; the appointment of County Boards; and the importance of weekly returns of sickness; and of having, for the large towns and for the larger areas of counties, officers entirely devoted to their public duties,—was as remarkable as it was satisfactory and encouraging."

At this Conference, a series of resolutions were passed; and, as they are of a very important and suggestive nature, I reproduce them here in full.

"1. That the existing division of the country into urban and rural districts does not enable local authorities to fulfil their obligations in the most effective manner.

"2. That the same sanitary laws should be applied to the whole area of the country without distinction.

"3. That in any reconstruction of local areas, it is desirable to keep in view the advisability of securing one subdivision of the country for sanitary and other purposes of local government, such subdivision to be, as far as possible, on the lines of the existing municipalities, unions, and counties.

"4. That, in the opinion of this Conference, it is desirable that a Commission be appointed to consider and readjust, with the concurrence of the Local Government Board, the boundaries of the existing districts, or any new districts to be hereafter formed.

"5. That the appointment of a County Board, consisting partly of elected members and partly of others nominated by the Court of Quarter Sessions, is desirable.

"6. That the duty of such County Boards, so far as they relate to sanitary matters, should be to exercise a control over the salaries and dismissals of the officers of local boards not being municipal boroughs; to hear appeals from one portion of a district against the decision of their board as to the incidence of expenditure for works of only partial advantage; and to undertake the conduct and supervision of such works as from their nature and expense cannot be undertaken by separate local boards.

"7. That the powers and machinery at present possessed by local sanitary authorities are inadequate to the purposes for which they are intended; especially, but not solely, in respect of means for preventing the spread of disease, from the want both of early information of its existence, and also of the means of checking its progress; from want of power to prevent the erection of houses on unhealthy and improper sites, and to secure in certain cases due provision of water; and from want of means to acquire with sufficient facility and economy land for public purposes.

"8. That the incidence of taxation for sanitary and other purposes of local government should, as nearly as possible, be proportional to the direct benefit accruing to the several parts of the districts.

"9. That the officers of sanitary authorities should, so far as is practicable, be restricted from other than the official duties for which they are specially engaged; and that in order to promote this object, it is essential that the area of supervision should be made as large as can be efficiently worked.

"10. That a health-officer or assistant should, where it is practicable, be appointed (*a*) to every Local Government District, or combination of districts, such districts to be constituted, as to area and population, as already suggested; and (*b*) to every county.

"11. That the several officers should be in communication with each other, and with the health-officer especially attached to the County Board.

"12. That the salaries be such as to ensure the services of first-class members of the medical profession, devoting themselves entirely to the health-service of the country.

"13. That it is desirable in future to appoint, at least to the higher offices, men who have passed an examination in State Medicine.

"14. That the above regulations are equally desirable in the cases of surveyors and inspectors of nuisances, so far as they are applicable.

"15. That, in the opinion of this meeting, the powers of the Public Health and other sanitary Acts which are of a permissive character should, as far as practicable, be made compulsory."

A memorial embodying these views was prepared for presentation to the then Prime Minister; but Lord Beaconsfield expressed his inability, on account of the pressure of business, to receive the deputation that proposed to present it. In 1878, however, when the County Boards Bill was introduced by the Government, the Joint-Committee made another attempt to revive the subject by preparing a memorial with a view to its presentation by an influential deputation to Mr. Sclater-Booth. The great opposition in the House, and also throughout the country, to the details of the measure, led to its withdrawal, and the Committee contented themselves therefore with forwarding a memorial in which their views on the subject were expressed.

During the Session of 1879, public interest was so engrossed with other questions that there was no opportunity for profitably discussing this important matter; but now that a new Government, pledged to improvement in domestic legislation, has come into power, it cannot but be regarded as most opportune that the Society of Arts should revive the question of County Boards. In thus giving a sketch of the labours of our Joint-Committee of the British Medical and Social Science Associations, I have been desirous to bring forward points upon which the Committee, which comprises amongst its members men of the highest rank and attainments in the sanitary world, has come to a deliberate

decision after most carefully weighing the evidence on the subject. I cannot but think that the discussion which we shall be privileged to hear on this occasion will tend very greatly to strengthen the hands of the Committee, and to expedite in a marked degree the reforms for which it has so long and earnestly striven.

LECTURES ON THE RELATIONS OF SARCOMA TO CARCINOMA.

*Delivered at the Royal College of Surgeons of England,
June 1880.*

By HENRY TRENTHAM BUTLIN, F.R.C.S.,

Erasmus Wilson Professor of Pathology to the College; Assistant-Surgeon to St. Bartholomew's Hospital; etc.

LECTURE II (*Abstract*).—SUBPERIOSTEAL SARCOMA OF BONE.

In the consideration of sarcoma of the bones, I shall include all bones with the exception of the upper jaw, the tumours of which are often of uncertain origin; and shall differ from most authors who have written on the subject, in referring the various tumours collected together under the generic term osteoid each to the group in which the cell-growth which forms its basis appears naturally to place it. Since no epithelial structures exist naturally in bone, no primary malignant tumour of bone can be a carcinoma. This simplifies the study of these tumours; and fortunately the subject is capable of still further division by a separate consideration of the tumours of central and of subperiosteal origin. Of most tumours the origin is easy to decide; but, where doubt exists, the case had best be laid aside as useless or unsafe for comparison.

The subperiosteal sarcomata may be all arranged in three groups: 1. Round-celled; 2. Spindle-celled; 3. Mixed-celled. The round- and spindle-celled sarcomata require no further definition than that which applies to such tumours wherever they occur. The mixed-celled tumours consist of cells of various forms and characters, which are mingled in different proportions even in different parts of the same tumours. These tumours often contain bone, or earthy salts, or cartilage; but the presence of these does not constitute a mixed-celled tumour. Nor is there any reason why tumours which are partly calcified or ossified should on this account be classed together as osteoid or osteo-sarcomata, or osteoid cancers, or osteoid chondromata. The same objection applies to all these terms. They are not always employed in the same sense; they are inconsistently used, and may mislead.

I have no intention of proposing a new nomenclature of bone-sarcomata, but merely desire that, as the soft tumours are classed according to the nature of the cells of which they are composed, and as little difficulty is experienced in assigning to each its place, so may the more complex tumours, which contain bone or earthy salts or cartilage, be classed according to the nature of the cells which compose their softer parts. Where only tiny particles of bone or of earthy salts or of cartilage are scattered through the substance of a tumour, no modification of its name seems necessary; but where these tissues occur in quantity so large that they alter the characters of a tumour, there is no reason why this alteration should not be expressed by some fitting term, preceding that which applies to the growth on account of the form of the cells of which its soft parts are composed. A nomenclature such as this is sufficiently simple and easy of application.

Of fifty-six cases of subperiosteal sarcoma of which the accounts are sufficiently complete, twenty-two were round-celled, eighteen spindle-celled, and sixteen mixed-celled. The bones affected were: femur, twenty-one; skull, nine; tibia, nine; humerus, five; pelvis, three; lower jaw, three; clavicle, two; fibula, two; ulna, one; ribs, one. These relative proportions are probably approximately correct for all bones except the pelvis, the tumours of which are often of uncertain origin. In considering these tumours, I shall adopt a different method from that generally employed, and shall consider their characters and the conditions of their existence in each particular bone which they affect. The accompanying tables exhibit many of their more important characters; and I shall, therefore, content myself with explaining what may seem to need explanation, with pointing out distinctions and analogies, and with supplying deficiencies.

The femur is of all bones most frequently affected by subperiosteal sarcoma, and apparently by all three forms in tolerably equal proportion. Of the round-celled cases, only No. 1 was not operated on. In eight months, the patient died; but the tumour never ulcerated.

Several of the secondary growths were calcified like the primary disease. In No. 2, the death from wide-spread generalisation, which followed seven weeks after amputation, renders it probable that the operation did not materially influence the course of the disease. Of these five cases, three would generally be termed osteoid; but, from a study of their course, there appears no reason for classing them apart.

Of the eight cases of spindle-celled sarcoma, the growth of all was rapid, the issue fatal; but three died from causes connected directly with operation. In No. 9, life could scarcely have been much prolonged even had the patient survived the operation, for the lungs already contained secondary growths. In No. 11, many characters of the disease are well exhibited. The tumour had commenced a year before admission to the hospital. It grew slowly at first; then with great rapidity. The whole thigh was occupied from the groin almost to the knee. During the two months before her death, the tumour continued to grow; the groin-glands became enlarged; but the skin remained unbroken to the end. At the necropsy, the tumour, a brain-like mass, infiltrated the surrounding muscles and passed up beneath the pelvic arch into the pelvis and abdomen, where it attacked the bladder and the iliac veins. The inguinal, pelvic, and lumbar glands were enlarged and sarcomatous; and both lungs were filled with growths. Only in one important feature does this tumour differ from the others of the same subgroup—in its affection of the lymphatic glands. This may have been due to continuous infiltration of some of the inguinal or pelvic glands, from which the disease spread along the lymphatic channels. In two cases, there was recurrence after amputation (Nos. 7 and 13). In the former case, the tumour was soft, broken down, and filled with semiclotting blood: a good example of one of the old forms of fungus hæmatodes. Recurrence rapidly occurred, and disarticulation of the hip was practised; but three weeks later the patient died, apparently from affection of the lungs. In the second case, the tumour was calcifying and chondrifying, and had already existed for a year when amputation was performed. A year later, the hip was amputated for recurrence of the growth; and again a year later the patient died with huge masses in both lungs and three small tumours of the lining membrane of the heart. At first, it appears probable that the much longer duration of this case, and its slow recurrence, were due to the density and hardness of the primary disease; but this impression is corrected by the instance of another tumour equally dense and hard with this (No. 9), for which amputation was performed at the end of a year; and when the patient died, a few days later, both lungs were partly filled with secondary growths.

Only two of the cases of mixed-celled sarcoma were permitted to pursue an uninterrupted course. In one of them, the popliteal, lumbar, bronchial, and tracheal glands were affected by the disease. The healthy condition of the glands of the groin and pelvis, and the diseased condition of those of the abdomen and more distant parts, render it probable that in this case, as in most cases of sarcoma, the blood- and not the lymph-vessels were the channels through which the affection was conveyed. Recurrence after operation occurred only in one patient, whose tumour, hollowed out with cysts or cystoid cavities, extended almost to the hip-joint, where amputation was performed. The first four of these mixed-celled tumours contained similar cystoid cavities, and each of these tumours was partly cartilaginous—two facts which are mentioned together because the second may help to explain the first, for the tendency of cartilage to soften down into fluid has long been recognised. The frequency of the occurrence of bone or earthy salts and cartilage in these mixed-celled tumours should be noticed, and the fact that the cases in which these tissues occurred presented no other characters in common which entitle them to be classed separately.

The characters common to most of these tumours of the femur are first their deadly nature and rapid course. Eighteen of the subjects are dead, and of the remaining three, only of one is it known that he was still alive a year after operation. But of the eighteen who died, five lost their lives from causes connected with operation. In three of these five cases, the operation was practised very early in the course of the disease, and no secondary affection was observed. The nine *post mortem* examinations of other cases showed affection of the lungs in every one. Glandular affection occurred so rarely that it is more difficult to explain those cases in which it was absent than those in which it was present. Affection of more than a single organ occurred only in the round-celled sarcomata. Recurrence of the primary disease was rare. Ossification, calcification, chondrification, were present in almost half the cases. Ulceration of the integument was almost unknown; even those tumours which were permitted to pursue their course without interruption to death did not break through the skin. The duration of disease was in most cases from nine to twelve or fourteen months; but two died with affection of the viscera within four months, and one lived for three years. Of the age at which these tumours of the femur grew, I can