CITIES IN EVOLUTION

CHAPTER I

THE EVOLUTION OF CITIES

The evolution of cities is here treated, not as an exposition of origins, but as a study in contemporary social evolution, an inquiry into tendencies in progress. Difficulties of approach to civic studies, and civic betterment. Examples to arouse interest *e.g.* of antiquary and artist, of builder, of housewife and artisan, etc. Needed correction of popular ideas, *e.g.* of medieval towns. The traveller and his need of "synoptic vision." Aristotle to Adam Smith. Defects of current education in delaying needed progress from abstract politics to concrete civics. Criticisms of the former: need of concrete knowledge, *e.g.* of Dublin and Belfast, etc. The political and the civic attitude in London affairs, as concentrating upon election returns and upon town plan respectively.

ALIKE in Europe and in America the problems of the city have come to the front, and are increasingly calling for interpretation and for treatment. Politicians of all parties have to confess their traditional party methods inadequate to cope with them. Their teachers hitherto—the national and general historians, the economists of this school or that—have long been working on very different lines; and though new students of civics are appearing in many cities, no distinct consensus has yet been reached among them, even as to methods of

inquiry, still less as to results. Yet that in our cities — here, there, perhaps everywhere — a new stirring of action, a new arousal of thought, have begun, none will deny; nor that these are alike fraught with new policies and ambitions, fresh outlooks and influences; with which the politician and the thinker have anew to reckon. A new social science is forming, a new social art developing—that much is surely becoming plain to every observer of contemporary social evolution; and what press and parliaments are beginning to see to-day, even the most backward of town councils, the most submissive of their voters, the most indifferent of their taxpayers, will be sharply awakened to to-morrow. Berlin and Boston, London and New York, Manchester and Chicago, Duhlin, smaller cities as well—all till lately, and still no doubt mainly, concentrated upon empire or national politics, upon finance, commerce, or manufactures—is not each awakening towards a new and more intimate self-consciousness? This civic self is still too inarticulate: we cannot give it clear expression: it is as yet mostly in the stage of a strife of feelings, in which pain and pleasure, pride and shame, misgivings and hopes are variously mingling, and from whieh definite ideas and ideals are only beginning here and there to emerge. Of this general fermentation of thought the present volume is a product—one no doubt only too fully retaining its incompleteness. The materials towards this nascent science are thus

not merely being collected by librarians, published in all forms from learned monographs to passionate appealings, and from statistical tables to popular picture-books: they are germinating in our minds, and this even as we walk the streets, as we read our newspapers.

Shall we make our approach, then, to the study of cities, the inquiry into their evolution, beginning with them, as American city students commonly prefer to do, upon their modern lines, taking them as we find them? Or shall we follow the historic and developmental method, to which so many European cities naturally invite us? Or if something of both, in what proportion, what order? And, beyond past and present, must we not seek into our cities' future?

The study of human evolution is not merely a retrospect of origins in the past. That is but a palæontology of man—his Archæology and History. It is not even the analysis of actual social processes in the present—that physiology of social man is, or should be, Economics. Beyond the first question of *Whence?*—Whence have things come? and the second, of *How?*—How do they live and work?—the evolutionist must ask a third. Not, as of old at best, What next?—as if anything might come; but rather Whither?—Whither away? For it is surely of the essence of the evolution concept—hard though it be to realise it, more difficult still to apply it—that it should not only inquire how this of to-day

may have come out of that of yesterday, but be foreseeing and preparing for what the morrow is even now in its turn bringing towards birth. This of course is difficult—so difficult as ever to be throwing us back to inquire into present conditions, and beyond these into earlier ones; yet with the result that in these inquiries, necessary as they are, fascinating as they become, a whole generation of specialists, since the doctrine of evolution came clearly into view, have lost sight or courage to return to its main problem —that of the discernment of present tendency, amid the apparent phantasmagoria of change.

In short, then, to decipher the origins of cities in the past, and to unravel their life-processes in the present, are not only legitimate and attractive inquiries, but indispensable ones for every student of civics—whether he would visit and interpret world-cities, or sit quietly by his window at home. But as the agriculturist, besides his interest in the past pedigrees and present condition of his stock and crops, must not, on pain of ruin, lose sight of his active preparation for next season, but value these studies as he can apply them towards this, so it is with the citizen. For him surely, of all men, evolution is most plainly, swiftly in progress, most manifest, yet most mysterious. Not a building of his city but is sounding as with innumerable looms, each with its manifold warp of circumstance, its changeful weft of life. The patterns here seem simple, there intricate, often mazy beyond our unravelling, and all well-nigh are chang-

ing, even day by day, as we watch. Nay, these very webs are themselves anew caught up to serve as threads again, within new and vaster combinations. Yet within this labyrinthine civicomplex there are no mere spectators. Blind or seeing, inventive or unthinking, joyous or unwilling—each has still to weave

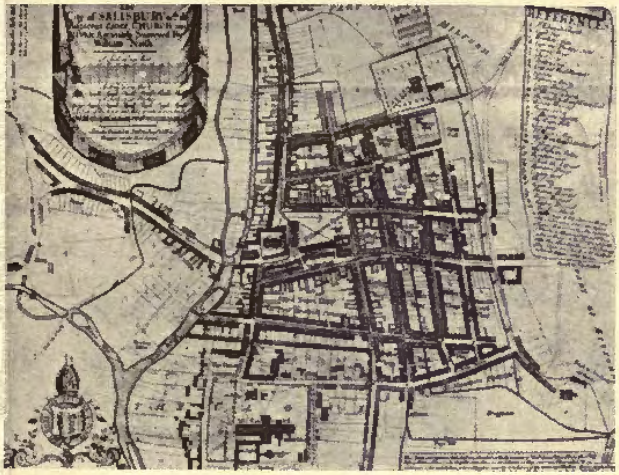

FIG. 1.—Salisbury: Plan in eighteenth century showing survival of original (thirteenth-century) planning.

in, ill or well, and for worse if not for better, the whole thread of his life.

Our task is rendered difficult by the immensity of its materials. What is to be said of cities in general, where your guide-book to Rome, or Paris, or London, is a crowded and small-typed volume? when booksellers' windows are bright with beautifully illustrated volumes, each for a single city? and when each of these is but an introduction to a mass of literature for every city, vast beyond anticipation? Thus,

taking for example one of the smallest of historic cities—one now known to few in Britain, fewer still in America, save in association with the world-famous generosities of one of its children, steeped early in its traditions of patriotism and of literature—Mr Erskine Beveridge's valuable *Bibliography of Dunfermline* fills a bulky crown octavo of closely printed two-columned pages!

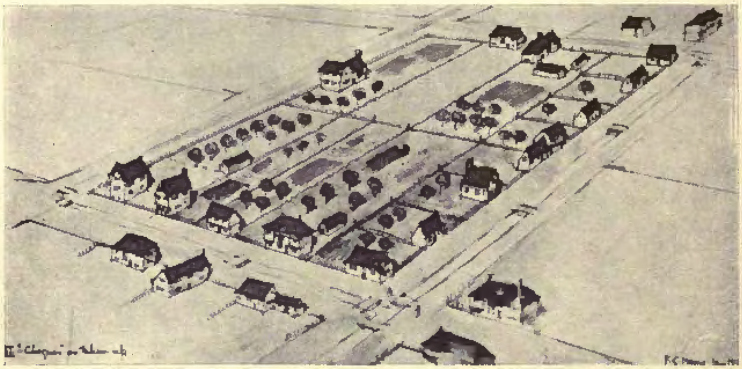

FIG. 2.—Diagram of original lay-out of city blocks.

Again, each specialist, each general reader also, is apt to have his interest limited to the field of his own experience. If we are to interest the antiquary or the tourist, it must be first of all from their own point of view; but we reach this if we can show them, for instance, exactly how one of their favourite cathedral cities—notably Salisbury, for choice—was planned. At the exodus of its Bishop from Old Sarum in 1220, he brought its citizens after him into what he had laid out as a veritable garden city; so that Salisbury at its beginnings six centuries ago was

curiously like Letchworth or Hampstead Suburb to-day, so far as its homes were concerned. Indeed, their architects will be the first to recognise that Salisbury had advantages of greater garden space, of streams carried through the streets; not to speak of the great cathedral arising in its spacious close beyond. Thus interested, the antiquary is now the very man to lead us in traeing out how the present crowded

FIG. 3.—Illustration of modern haphazard building over gardens.

courts and gardenless slums of Salisbury have unmistakably (and comparatively lately) arisen from the deterioration of one old garden-home after another. He rediscovers for himself in detail how curiously and closely medieval town planning and housing, thus recovered, anticipates that of our Garden Cities; and whether he care to renew such things or not, he can next help us with more diffieult cases, even with what is probably the most difficult of all—Old Edinburgh, so long the most overerowded and deteriorated of all the world's cities—yet with its past never

wholly submerged, and thus one of the most richly instructive, most suggestive to the fresh-eyed observer, to the historic student. Hence here the impulse of Scott's reopening of the world-romance of history, and next of Carlyle's tragi-comic rendering of its significance; here is the canvas of Robert Louis Stevenson's subtly embroidered page; and now in turn, in more scientific days, the natural centre for the earliest of British endeavours towards the initiation of a school of sociology with its theories and a school of civics with its surveys and interpretations.

The painter may be at first harder to deal with, for he has as yet too seldom begun to dream how many new subjects for his art the future is here preparing, when our Garden-Suburb avenues have grown and their cottage roofs have mellowed. Yet we shall reach him too—even next spring, for then our young orchard will have its first blossoms, and the children will be at play in it. The builder, again, eager to proceed with more cottages, is impatient of our civic dreams, and will not look at our old-world plans of temples or cathedrals. As yet he is somewhat apt to miss, in church, and still more in the business week, what a certain old-world aphorism concerning the frequency of failures among those who build without an ideal may mean if restated in modern terms. Again, the utilitarian housewife, busy in her compact and convenient, but generally rather small and sunless scullery, may well be incredulous when we tell

her that in what have now become the slums of Old Edinburgh, for instance, this scullery was situated in the porch, or on a covered but open first-floor balcony, until she can be shown the historic evidence, and

FIG. 4.—Edinburgh : Reconstruction of old High Street houses, with open-air galleries.

even the survivals of this. Even then, so strong is habit, she will probably prefer her familiar arrangement; at any rate nntil she realises how, for lack of this medieval and returning open-air treatment, she or her little maid may be on the verge of consumption.

Her husband, the skilled artisan in steady employment, with bigger wages and shorter hours than his Continental rival, may well stare to be told how much more there is that makes life best worth living in many a German working-town as compared with ours; or how, were he a mechanic in Marseilles or Nîmes, or many another French city, he would be

Fig. 5.—Surviving court in Canongate, with outside stairs, etc.

week-ending all summer with his family at their little country property—now looking after his vineyard, or resting under his own fig-tree. Above all, let us end this preliminary unsettling of popular beliefs as we began. Rich man and poor, Conservative and Liberal, Radical and Socialist have all alike to be upset—in most of what they have been all their lives accustomed to hear and to repeat of the poverty and the misery and the degradation of the towns of the Middle Ages,

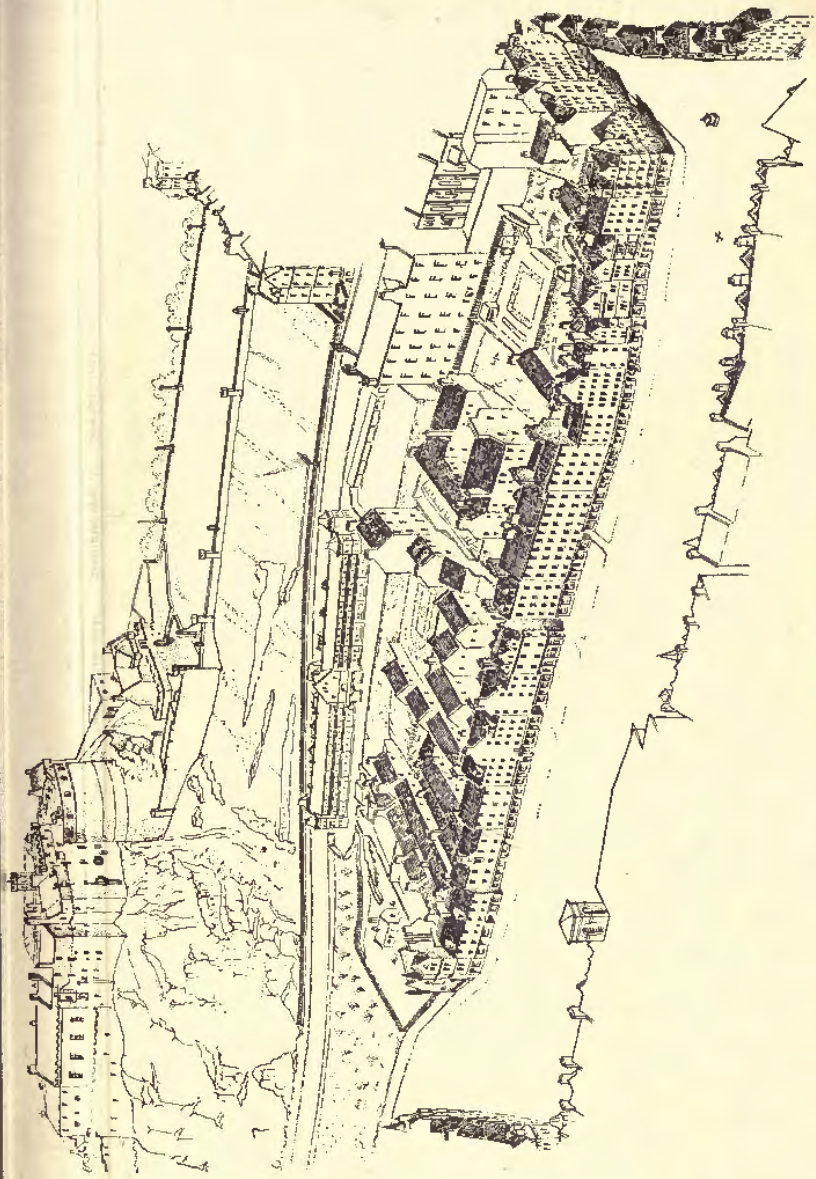

FIG. 6.—Grassmarket of Edinburgh: Old agricultural centre and market-place below Castle-town.

and from which they have been so often told we have in every way progressed so far—by having put before them a few of their old plans and pictures, say from the Cities and Town Planning Exhibition. For there —or indeed in any public library—it is easy to search

FIG. 7.—St Nicolas, old town of Pays de Waes in (Belgian) Netherlands : Large central space for markets, archery butts, maypole, etc.

out the old documents, as in well-nigh every town the actual survivals, which prove how grand and spacious were the market and public places, how ample the gardens, even how broad and magnificent might be the thoroughfares, of many a medieval town. What is to blame in them—and nowadays rightly enough—has mainly been introduced in the centuries since the Middle Ages died—the very worst of it within the

industrial period, and much within our own times. If a concrete instance of this be wanted, the world has none to offer more dramatic and complete than that of the Historic Mile of Old Edinburgh, and especially its old High Street, in which this is being written. For, as we have above indicated, this mass of medieval and renaissance survivals has been, and too nearly is still, the most squalid conglomeration, the most over-crowded area in the old world: even in the new, at most the emigrant quarter of New York or Chicago has rivalled its evil pre-eminence. Yet our "Civic Survey of Edinburgh" shows these evils as mainly modern, and that the town planning of the thirteenth century was conceived—not only relatively, but positively — on lines in their way more spacious than those which have made our "New Town" and its modern boulevard of Princes Street famous.

Aristotle—the founder of civic studies, as of so many others—wisely insisted upon the importance, not only of comparing city constitutions (as he did, a hundred and sixty-three of them), but of seeing our city with our own eyes. He urged that our view be truly *synoptic*, a word which had not then become abstract, but was vividly concrete, as its make-up shows: a seeing of the city, and this as a whole; like Athens from its Acropolis, like city and Acropolis together—the real Athens—from Lycabettos aud from Piræus, from hill-top and from sea. Large views in the abstract, Aristotle knew

FIG. 8.—Plan of Oxford in 1578.

and thus compressedly said, depend upon large views in the concrete. Forgetting thus to base them is the weakness which has so constantly ruined the philosopher, and has left him, despite his marvellous abstract powers, in one age a sophist in spite of Aristotle, in another a schoolman in spite of Albertus Magnus, or again a pedant in spite of Bacon. So also in later times; and with deadly results to civics, and thence to cities. Hence the constitution-makers of the French Revolution; or of most modern politics, still so abstract in spite of Diderot's *Encyclopædia*, of Montesquieu's *Spirit of Laws*, each abounding in wide observation. Hence, too, the long lapse of political economy into a dismal science; although it arose concretely enough, first by generalising the substantial agricultural experience of De Quesnay in France, and then qualifying this by the synoptic urban impressions of Adam Smith. For, as the field-excursions of our Edinburgh School of Sociology are wont to verify, his main life and apparently his abstract work were primarily but the amplification and sound digestion of his own observations—not only in maturity at Glasgow, but in boyhood and youth in his earlier homes. Nowhere more clearly can one realise that superiority to agriculture as a means of wealth, of the manufactures, the shipping and the foreign trade, on which Smith insisted so strongly, than in a ramble through the old-world merchant towns—Kirkcaldy, Dysart, and the rest—which line the coast of Fife. For in Smith's day,

though not in ours, Fife was a "beggar's mantle with a fringe of gold," as King James the Sixth and First so shrewdly and picturesquely described it five or six generations earlier; and with exactly the same economic insight.

So bookish has been our past education, so striet our school drill of the "three R's," and so well-nigh complete our lifelong continuance among them, that nine people out of ten, sometimes even more, understand print better than pictures, and pictures better than reality. Thus, even for the few surviving beautiful cities of the British Isles, their few marvellous streets—for choice the High Street of Oxford and the High Street of Edinburgh—a few well-chosen picture postcards will produce more effect upon most people's minds than does the actual vision of their monumental beauty—there colleges and churches, here palace, castle, and city's crown. Since for the beauty of such streets, and to their best elements of life and heritage, we have become half-blind, so also for their deteriorated ones; especially when, as in such old culture-cities, these may largely be the fossilisation of learning or of religion, and not merely the phenomena of active decay. Yet even these we realise more readily from the newspaper's brief chronicle, than from the weltering misery too often before our eyes.

Happily the more regional outlook of science is beginning to counteract this artificial blindness. The field-naturalist has of course always been working in

(Photo, Inglis.)

FIG. 9.—Edinburgh: Upper High Street. (Narrowed since thirteenth-century lay-out.)

this direction. So also the photographer, the painter, the architect; their public also are following, and may soon lead. Even open-air games have been for the most part too confined and subjective:—it is but yesterday that the campers-out went afield; to-day the boy scouts are abroad; to-morrow our young airmen will be recovering the synoptic vision. Thus education, at all its levels, begins to tear away those blinkers of many print-layers which so long have been strapped over our eyes.

Whether one goes back to the greatest or to the simplest towns, there is little to be learnt of civics by asking their inhabitants. Often they scarcely know who are their own town councillors, or, if they do, they commonly sneer at them; albeit these are generally better citizens than those who elect them. They have forgotten most of the history of their own city; and the very schools, till at any rate the other day, were the last places where you could learn anything about it. They even wish to forget it: it seems to them often something small and petty to be interested in its affairs. The shallow politician's sneer has done deadly work from Shetland to Cornwall; what should have been their best townsfolk have too long felt above meddling with mere local "gas and sewage." Even the few thinking young men and women in each social caste—with exceptions of course, now more and more counting—are not yet citizens, either in thought or deed. If not absorbed by party politics, they more commonly think of be-

coming administrators, and state officialism is far more attractive than the city's; the "civil service" is familiar to all, but civic service a seldom-heard phrase, a still rarer ambition. Do they dabble as political economists? High abstracts and sublimates of all these common types of mind are found in all groups and parties, and are to be diagnosed not by their widely differing party opinions, but by their common blankness to civics. One is all for Tariff Reform, his fellow argues no less convincingly for Free Trade; one stands for Home Rule, and another for Central Government; one is all for peace, another hot for war, and so on. Yet "practical politicians" as they all alike claim to be, to us students of cities they seem alike unpractical, unreal; since unobservant, that is ignorant, of this concrete geographical world around them, uninterested in it. Suppose you venture into the subject of Germany, for instance, and attempt any conversation about particular German cities and their respective activities and interests; you inquire where the interest, say, of Berlin may differ from that of London; where that, say, of Hamburg may partly differ, partly coincide, or where that other may be comparatively indifferent? You soon find how much these cities are all one to them; and you risk seeming "unpatriotic," and this to both alike, if you would have them know more. Such a Tariff Reformer, and his complemental Free Trader, are in agreement in having no suggestions, and even no use, for a Survey of Liverpool and beside

it another of Manchester, though these of all cities should surely help us towards a fuller understanding of such questions. Their neighbours at the next beer-counter or tea-table, hotly discussing Unionism and Home Rule, and thus necessarily bandying "Belfast" and "Dublin," are commonly no less poor in those concrete images of either city, which our civic studies are accumulating; and hence in any verifiable general ideas about them also. "Boston," it is said, "is not a place; it is a state of mind." Does not the same apply to the "Belfast" and the "Dublin" we hear so much of, whether in Parliament or in Press? After spending a single summer (of course a time most insufficient, but more than most of even the leaders of controversy would care to give) upon the study of these two great cities, one becomes deeply impressed by this distrust. Neither city is so simple as it is made out.

To get down to the essential facts and processes of the life of cities, let us take a city where there is no burning political question prominent just now. Say, then, Edinburgh, of which our survey, many years in progress, is least incomplete.

Edinburgh? Edinburgh! A Scottish member would be the first to blush for such provincialism. Is he still a student? Admittedly not. We have roused the politician, and he reproves us in vigorous strain. *He* is not going back to the Heptarchy, that he should be asked to map out its petty provinces, much less survey their constituent boroughs: he is

not going to concern himself with the parish pump! Well, though the very importance of London makes it easier to begin with smaller and more intelligible places, let us return thither and do our best.

Some years ago three or four members of the Sociological Society, including the writer, were honoured by an invitation to take part in a symposium, which agreed to dine at one of the great political clubs and then to discuss "The Possible Future of London Government." We listened meekly and long, gradually learning what this title meant: not, as we innocently had expected, and even imagined we had been promised, a foresight of better organisation for the great city, a discussion of what improvements and expansions this better organisation might realise, and even some vision of Utopia beyond. Not at all. It amounted to nothing, in brief, save the transposition of Ins and Outs, the substitution of Outs for Ins. Only when in the fulness of time this subject was temporarily exhausted, was it remembered that a sociological deputation was in attendance. We were then asked to speak: and now, to do the chairman justice, quite to the point, as we had understood it. So our first spokesman began—"May I have a plan of London?" "Certainly," said the chairman; but there was none forthcoming. "Then an atlas will do" (remembering that the club possesses a not inconsiderable library). "Certainly; what atlas?" "Conveniently the Royal Geographical Society's *Atlas of England and Wales*." The waiter

again returns with the librarian's regrets that they have not got it. "Well, any atlas at all! There will surely be some map of London, on which we can make out its constituent and adjacent boroughs?" Final return of waiter—"Librarian very sorry, sir; he has no atlas in the library." Our spokesman's opening under these circumstances was brief. "That, gentlemen, expresses clearly the difference between your political idea of London and our sociological one. We have understood you perfectly; your point of view was very interesting to us; but only when you have got an atlas, and used it, will you understand ours." However, he drew a rough plan; and we explained our views as best we could—but with scanty discussion—and soon farewells, not followed by reinvitation.

Hence we have to appeal to the reader, their accepted judge, as here ours. Has he an atlas on which cities can be made out? At any rate he has access to one—the Royal Geographical Society's *Atlas of England and Wales* aforesaid (Bartholomew, Edinburgh, 1902)—in the nearest public library. If it be not there, let the librarian have no peace till he gets it. For he will find that it contains the one and only really good map he has ever seen—indeed the only adequate one yet in existence—of the distribution of the population of England; London and its boroughs, and all the towns of England as well; but no longer as the mere dots scattered over the map, which we learned long ago at school before we were

FIGS. 10 and 11.—Population-map of United Kingdom, with inset of Coalfields of same.

interested in them, and so have largely forgotten, like so much of the same kind. By courtesy of its publishers we here supply a reproduction of it; but as this is necessarily greatly reduced, and moreover without colouring, reference should also be made to the large and vivid original. We shall see some of its uses in the next chapter.

CHAPTER II

THE POPULATION-MAP AND ITS MEANING

The Population-Map and its uses. London ("Greater London") as a spreading man-reef. Even its modern form of government, afforded by the L.C.C., is constantly being outgrown. Need of inquiry into smaller cities and city-groups. But here the same growth-process appears, industrial towns and cities uniting into vast city-regions, "conurbations," which the broadest surveys are needed to realise. Conception of urban Lancashire as the vastest of conurbations, exceeding Greater London itself, and yet now demanding comprehensive foresight and civic statesmanship as a whole. Beside this vast "Lancaston" are arising other colossal city-groups, here generalised as "West Riding," "South Riding," "Midlandton," "Southwaleston," and "Tyne-Wear-Tees." Thus is arising a veritable New Heptarchy, whose water supplies and coalfields, and kindred local affairs, are thus the essentials of national existence, no longer negligible as the mere "parish pump" and "coal-cellar" of metropolitan politics. Similar conception of Greater Glasgow and Edinburgh, as "Clyde-Forth." New forms of civic and rural organisation thus becoming needed, yet before these, fuller surveys, deeper diagnoses; and further again, preliminary conferences—representations of all concerned, of all aspects therefore, as well as interests.

GIVEN, then, our population-map, what has it to show us? Starting from the most generally known before proceeding towards the less familiar, observe first the mapping of London—here plainly shown, as it is properly known, as Greater London—with its vast population streaming out in all directions—east, west, north and south—flooding all the levels, flowing up

the main Thames valley and all the minor ones, filling them up, crowded and dark, and leaving only the intervening patches of high ground pale. Here, then, and in the coloured original of course more clearly, we have the first, and (up to the time of its making) the only, fairly accurate picture of the growing of Greater London. This octopus of London, polypus rather, is something curious exceedingly, a vast irregular growth without previous parallel in the world of life—perhaps likest to the spreadings of a great coral reef. Like this, it has a stony skeleton, and living polypes—call it, then, a "man-reef" if you will. Onward it grows, thinly at first, the pale tints spreading further and faster than the others, but the deeper tints of thicker population at every point steadily following on. Within lies a dark and crowded area; of which, however, the daily pulsating centre calls on us to seek some fresh comparison to higher than coralline life. Here, at any rate, all will agree, is an approximation to the real aspect of Greater London as distinguished from Historic London. What matter to us, who look at it for the moment in this detached way from very far above, or even really to the actual citizens themselves to-day, those old boundaries of the counties, which were once traced so painfully and are still so strictly maintained, from use and wont or for purposes other than practical ones? What really matter nowadays the divisions between innumerable constituent villages and minor boroughs whose historic

names are here swallowed up, apparently for ever, like those microscopic plants, those tiny plants and animals, which a big spreading amœba so easily includes, so resistlessly devours? Here for most practical purposes is obviously a vast new unity, long ago well described as "a province covered with

FIG. 12.—Greater London.

houses." Indeed a house-province, spreading over, absorbing, a great part of south-east England. Even the outlying patches of dense population already essentially belong to it; some for practical purposes entirely, like Brighton. Instead of the old lines of division we have new lines of union: the very word "lines" nowadays most readily suggesting the railways, which are the throbbing arteries, the roaring pulses of the intensely living whole; or, again, suggesting the telegraph wires running beside them, so

many nerves, each carrying impulses of idea and action either way. It is interesting, it is necessary even, to make an historic survey of London—an embryology, as it were—of this colossal whole. We should, of course, look first into its two historic cities; we should count in its many boroughs as they grew up before being absorbed; we should take note of, however easily we forget, its innumerable absorbed old villages and hamlets, its ever new and ever spreading dormitory areas—loosely built and distant for the rich, nearer and more crowded for the middle class, and—where shall we seek or put the worker or the poor? We see, we recognise these many corporate or at least associated units of the body politic, all growing more and more fully into one vast agglomerate, and this with its own larger corporate government, its County Council, Yet even this is already far outgrown; but in time, if the growth-process continues, as in every way obviously under present conditions it must, this governing body must overtake the spreading growth, and bring all that is really functional London into its province, with economy and advantage to the vast majority of all concerned. Of course, in a general way, all this is already known to the reader—to Londoners, greater or smaller; but does it not gain a new vividness with such a map before us, a new suggestiveness also? Do we not see, and more and more clearly as we study it, the need of a thorough revision of our traditional ideas and boundaries of country and

town? As historians and topographers we cannot too faithfully conserve the record of all these absorbed elements; but as practical men governing, or being governed, we have practically done with them. Let the Lord Mayor of London and his Corporation survive by all means, as historic monuments and for auld lang syne; let there be for the historic City, and for the neighbouring boroughs—not merely Westminster, but every regional unit that can practically justify it, and so far as may be—local autonomy too. We are making no plea for over-centralisation; on the contrary, we are inclined to think that many ganglia may be needed to maintain the health of so vast and multi-radiate a body politic. But the essential thing is that common arrangements for life and health and efficiency be made in the main according to the present and the opening developments, and not maintained unduly upon the lines of history; otherwise we shall continue to have local friction, overlapping and wastage, arrests and encystments, congestions, paralysis even, instead of the general and local health and economy we surely all of us desire.

Look now at the map of London with any friend, or, if possible, with two—a Progressive and a Moderate. What real difference survives between them when they sit down like plain, open-minded citizens to look at the map—the original, if possible, we again repeat. Do they not agree that both their parties would do well to sit down to it also, to survey the whole

situation afresh? If so, our plea for City Survey is growing intelligible; and even its economy, its positive fruitfulness, would before long begin to appear. As, however, our Progressive and Moderate friends continue these studies, and as the vastness of the problems of London thus increases upon them, they will admit that they are, separately or collectively, unable clearly to realise all that is going on in this vast man-reef, and still more to foresee what the morrow will bring forth. Still, one has this definite bit of knowledge and the other that—now of the part of London where he was brought up or lived as a young man or of the places where he works and lives now. So gradually we piece together in conversation a good deal of useful knowledge, it may be even of practical suggestion, here and there. But as our two type-Londoners' studies go on, as with growing interest they would, they would soon come to new points of difficulty, to problems too vast readily to be grappled with; and one would ask another, "Cannot we learn something as to this from what they are doing in smaller places, in simpler cities than this tremendous London of ours? There is Birmingham, it might help us." The other might agree; and even remember that he had heard from an American friend of an active municipality in Glasgow. Suppose they look them up in the atlas. Alas! these also have spread beyond the simple dots we learned to identify as school-boys; and instead we see great and growing masses, each essentially like another London. Let us

try Lancashire, with its great cities; that will surely help us. There is Manchester, with its great Liberal and Free Trade record; there is Liverpool, with its equally strong Conservatism; they surely must have threshed matters out between them. But behold, upon our map these, too, are fast becoming little more than historic expressions. The fact is that we have

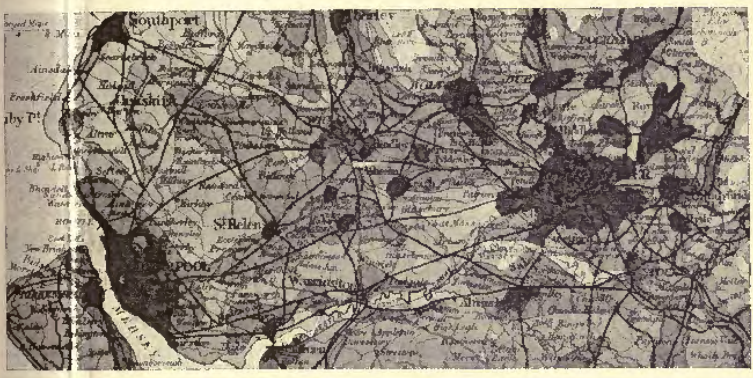

FIG. 13.—Lancashire towns agglomerating as "Lancaston."

here another vast province almost covered with house-groups, swiftly spreading into one, and already connected up at many points, and sometimes by more than sufficient density of population along the main lines of communication. Here, far more than even Lancashire commonly realises, is growing up again another Greater London as it were—a city-region of which Liverpool is the seaport and Manchester the market, now with its canal port also; while Oldham, and the many other factory towns, more accurately called "factory districts," are the workshops. Even

if this process be not in all respects so far advanced as in London, and as yet not organised in practice under any common government, is it not becoming fairly plain, a matter of reasonable foresight, that if growth and progress are to continue much longer as they have long been doing—in some respects of late faster than ever—the separate and detached towns, whose names we learned at school and still for local purposes employ, will become mainly of minor and district usefulness, postal and what not, like the practically unified cities and boroughs of London? Hence, if we are to avoid the many mistakes and misfortunes of London through the past delay and present confusions of its organisation and government, is it not time to be thinking of, and even to be starting, a unified survey of Urban Lancashire? This, as in the case of Greater London, we should consider at every point with the utmost respect to local history and even to administrative autonomy, yet also as part of a greater whole, already only too much consolidated at many points, and still growing together. Is it asked, "Of what use is all this?" Of many uses, hut enough here if we cite two—Public Health and Town Planning. Only a word, then, of each; and first Public Health.

These great communities are already exercised—yet in most cases not nearly exercised enough—about their sanitation and their water supply; and here our peripatetic Health Congresses and their papers have some arousing influence, though not yet sufficient.

Moreover, if better crops of human population (as we are all becoming determined) are to be grown than the present one, the question of a fuller and a far more vital access of youth to the country and to country life and occupations must assume an incomparably greater importance, and correspondingly greater space than that which has yet been given it by municipalities even with the most exemplary of Parks Departments, bright patches though these show amid our vast labyrinths of streets.

Even in the town-planning movement this enlarged way of looking at our enlarging cities is not nearly common enough. The architect is accustomed to single buildings, or to street plans at most; the city engineer is accustomed to streets, or to street-quarters at most; and both are reluctant to enlarge their vision. They still speak as if any such wide outlook and foresight were "ahead of the times" —"might be useful fifty years hence"—and so on through a dozen variants of the grumbling protests which are a main symptom of the senile phase, which fixity to environment may bring on at all ages. But now, returning to Public Health, in each and every one of the Congresses of Health and Sanitation which now meet so anxiously from year to year in one after another of these great cities, is it not obvious to every member of these, as regards the large cities around them, that they are late enough even if they begin forthwith? Their accesses to Nature and natural conditions have already been

three-fourths destroyed; indeed more, so far as the working mother and her children are concerned—that is, the nation of to-morrow. The neighbouring great towns are rapidly linking up by tramways and streets no less than railways; while great open spaces, which might have been not so long ago cheaply secured as unrivalled lungs of life, are already all but irrecoverable.

Here are already solid arguments for our proposed survey, and they might be strengthened and amplified, were not our problem here and in this volume mainly the clearing of ideas before the shaping of policy.

To focus these developments, indeed transformations, of the geographic tradition of town and country in which we were brought up, and express them more sharply, we need some little extension of our vocabulary; for each new idea for which we have not yet a word deserves one. Some name, then, for these city-regions, these town aggregates, is wanted. Constellations we cannot call them; conglomerations is, alas! nearer the mark at present, but it may sound unappreciative; what of "Conurbations?" That perhaps may serve as the necessary word, as an expression of this new form of population-grouping, which is already, as it were subconsciously, developing new forms of social grouping and of definite government and administration by and by also.

For our first conurbation the name of Greater London is obviously already dominant beyond possi-

bility of competition; but we need some name for the Lancashire region also, and for each similar one we may discover. Failing a better name, since we cannot sink Liverpool and other cities in a "Greater Manchester" or the like, let us christen the vast conurbation of the Lancashire millions as "Lancaston." It is this "Survey of Lancaston" which its constituent cities and boroughs most need to realise; and this both in detail and in mass. Imagine it photographed from an aeroplane journey, as well as mapped street by street, like Mr Booth's London Survey, indeed, in some ways, more fully still. Towards the former of these requirements we have little or nothing since Bartholomew's map, already so often referred to; and in all these ways we can gradually accustom ourselves to visualise the region. What are its existing defects? and what its remaining possibilities?—What natural reserves still remain to separate its growing villages and suburbs?—What gardens and allotments are still possible to sanify them?

Leaving Lancaston, we have but to cross the Pennines to see along the foot of their eastward slope another dark galaxy of towns. Huddersfield, Bradford, and their neighbours constitute the world-metropolis of wool no less distinctly than does Lancaston that of cotton. What shall we call this province, this natural city-alliance? Why not, in an urban sense, as of old a rustic one, simply preserve the good name of West Riding? Similarly for

South Riding, as we may call the conurbation centring round the steel and coal of Sheffield. Note, again, the present expansion of Birmingham, which has of late legitimately succeeded in having its overflowing suburbs unified with itself, its extraordinary growth recognised, as now a city rivalling even Manchester

FIG. 14.—Midland towns agglomerating as "Midlandton."

or Glasgow. Invigorated by absorbing its outlying suburbs, Birmingham is already planning new extensions upon that bold and generous scale of civic design not so long ago characteristic of great cities; but lapsed, eclipsed, forgotten with the coming on of the Railway Age. Yet this present expansion is but a step in the old process. A yet fuller recognition of regional facts is what we are here pleading; for the recent Birmingham Extension Act has little if any

adequately natural regional basis, but is only a temporary and makeshift expansion after all, especially if prosperity and growth are to continue, as seems reasonably probable. This larger recognition of regional facts involves the conception of a larger city-region—"Midlandton," as we may perhaps call it: and Greater and growing Birmingham is but the capital of this, though its exact limits may be hard to define. The recent union of the "Five Towns" is thus not only a local event, but a regional pioneering, a noteworthy example of an incipient urban regrouping. And here let us hope that the Duke of Sutherland's generous gift of Trentham may similarly augur a period of better and closer relations of town and country throughout the land than have been those of yesterday.

Pass next to South Wales, where on its magnificent coalfield the same process of development is at work. And, speaking of coalfields, we may conveniently here call attention to the close coincidence of this great centre of population with its magnificent South Wales coalfield, in the small inset map of the national coal-cellars in the top right-hand corner, and thence note the parallelism of each great conurbation to its coalfield, save in the case of London alone. We plainly see the development of a Greater Cardiff, a veritable (South) Waleston, whose exact limits and relation to the metallurgic centre of Swansea are, of course, for its regional geographer to define. Pass next northwards to the Tyne towns, with which we

must plainly also take those of Wear and Tees, as constituting a new regional community, a natural province—Tyne-Wear-Tees, we may perhaps call it. It is interesting in this connection to recall that our British Gallery at the Brussels Exhibition of 1910, unhappily burned down, was adorned with a well-painted perspective of this very region, shown with all its towns connected up by railways and roads, and presented as a bird's-eye view (or, as we may nowadays say, an aeroplane view) from above the sea-coast. For does not this map clearly suggest that the economic and social unity of such new city-regions, such conurbations as are here described, is already becoming conscious to them? The preparation and exhibition of such diagrammatic perspectives would be of no little service in making these ideas clear to all concerned, and in enabling the public and the rulers of each to realise the new situation, the new solidarity which are arising towards a fuller integration, a higher unity of the body politic. The great maps of railway systems, which are at once a convenience and an adornment of German station-halls, have no little value and educational influence: so, and far more intensively, might enlargements of the conurbation-maps, which we are here discussing, bring before the public the needed conception of a local within a more general citizenship.

In conclusion, let us pass to Scotland. Here, again, the history and geography of popular notions, those of the school books on which we were brought up, and

on which our children are still examined, are no longer adequate.

Glasgow, as everybody knows, is the main centre of activity and population in Scotland, far outnumbering and outweighing Edinburgh; it is the real capital in many respects. And Greater Glasgow—in the fullest sense, that in which we speak of Greater London—is something far vaster than the present name and burgh limits at all describe; it includes practically the Clyde ports and watering-places, and runs far into Ayrshire, with inland burghs and villages not a few. It spreads far up the Clyde valley, indeed reaches its strenuous hands across the isthmus to Falkirk and Grangemouth, while its merchants have their villas at Stirling and beyond, as far as Bridge of Allan and even Dunblane. Again, plainly, old thinly-populated provinces are on the way to be covered with houses. Edinburgh has no doubt its marked regional individuality; and in its immediate growth is, more than is commonly realised, with Leith and minor towns and suburbs already approaching half a million: it is perhaps destined, with due development of its not inconsiderable adjacent coalfields, to double this within the century. Though, from historic tradition and from present holiday associations, most people, even in Scotland, still think of the Scots as in the main a nation of hardy rustics, no population in the world is now so predominantly urban, and, as sanitary reformers know, none so ill-housed at that. More than half

the population of Scotland is crowded upon this central isthmus; and, with the approaching construction of the Clyde and Forth Canal (which is so plainly a matter not only of Scottish, but even of national, imperial, and international policy), it is clear that we shall have a linking up of these two great cities and their minor neighbours of Scotland into a new conurbation—a bi-polar city-region indeed,

FIG. 15.—Clyde and Forth towns agglomerating as "Clyde-Forth."

which is more and more uniting into one vast bi-regional capital—Clyde-Forth, as we may soon learn to call it.

Glasgow and Edinburgh are, of course, far remoter in type and spirit than their nowadays small railway distance implies; and this difference, even contrast, is natural, inevitable, and so far permanent, for they are really the respective regional capitals of East and West Scotland, and contrasted in many ways—geographical and meteorological, racial and spiritual. To Glasgow indeed the contrast with Edinburgh may

seem as great as that between Liverpool and York; while a still larger contrast might be made from the Edinburgh point of view, as that between the main cities of Sweden and of Norway, of both of which Scotland in many ways is a condensed miniature; say, a Stockholm with Upsala for Edinburgh, and for Glasgow a greater Bergen and Christiania. Towns so widely distinct in nature and race, in traditions, and in social functioning and structure do not easily recognise that even they are but the poles of a vast and growing conurbation: yet here, too, the growth-process is at work, and tends largely to submerge all differences beneath its rising tide. And, broadly speaking, the main limit of the modern city is that of the hour's journey or thereby, the maximum which busy men can face without too great deduction from their day's work; and hence it is above all with the constant extension and acceleration of the means of communication that each conurbation arises and extends.

It is interesting now to return to the map and make our main conurbations clear, each upon its coalfield. Running downwards, and leaving Clyde-Forth to Scotland, we have in England (1) Tyne-Wear-Tees, (2) Lancaston, (3) West Riding, (4) South Riding, (5) Midlanton, (6) Waleston, each a coalfield with its vast conurbation; while Greater London, without a coalfield, forms the seventh of our series. What is this but a New Heptarchy, which has been growing up naturally, yet almost unconsciously to

politicians, beneath our existing, our traditional political and administrative network: and plainly, not merely to go on as at present, straining and cracking and bursting this old network, but soon surely to evolve some new form of organisation better able to cope with its problems than are the present distinct town and county councils. What are the new forms to be?

Leaving this sphinx-riddle for the present, and turning once more to the map, we recognise plainly enough that our political friend who was "not going back to the Heptarchy" will have to go forward to it, indeed is already in it. Let him now observe closely, in the very middle of our map, a great irregular white patch practically blank of population, and separating Lancaston from South Riding and West Riding, which, indeed, already are well-nigh run together. This white patch represents the heights of the Pennines, and consequently the water supply of these vast and growing populations on either side. Here, in fact, accurately speaking in synoptic vision, is their "Parish Pump," one, however, no longer to be despised; but precisely the most important, the ultimate and determinant condition of population, and the inexorable limit of their growth. Coal will still last a long time, and cotton might expand accordingly; but water is the prime necessity after air itself, aud, unlike it, is limited in quantity. Food can be brought for almost any conceivable population as long as ships can sail the seas, and we have the

wherewithal to buy; famine one can survive for months; total starvation even for weeks; but without water we last barely three days. Parish Pump indeed! the prime necessity of regional statesmanship, since even of bare survival. For life and health, for cleanliness and beauty, for manufactures too, what more need be said? Now, though our politicians are thus behindhand, are thus, as a class, regionally blind, geographically next to null, and for practical purposes well-nigh all mere Londoners, the elements of a real Parliament for these matters are developing. Witness notably the Health Congresses aforesaid. Thus at the Birkenhead Congress of 1910 there was much serious, and even anxious, discussion of the future of sanitation and of water supply for the Lancaston area, and this voiced at once by local experts and by national authorities like Sir William Ramsay; of whom, as also the most eminent of scientific Londoners, even our politicians aforesaid may have heard, and may well stand in some fear of, if they sneer before him at the Parish Pump.

Return now to the question—What are the new social forms to be? It is not yet safe for us to speculate upon this until the needful Regional Survey is far more advanced. One suggestion, however, is practical enough; there should be, and that speedily and increasingly, amicable conference among all the representatives, rustic and urban, of the various cities and county-regions concerned; and, as a matter of fact, various beginnings of this are being forced into

existence by the sheer pressure of their common interests. Such meetings will gradually increase in number, in usefulness, in co-operation, and by-and-by take more permanent form. The old Borough Councils and County Councils can no longer separately cope with what are becoming so plainly yet larger Regional and Inter-Regional tasks, like those of water supply and sanitation for choice, but obviously others also. The growth of London and its County Council, its separate boroughs, is thus repeating itself; and its example merits study, alike for its suggestiveness and for its warnings. While, conversely, to the Londoner such regional excursions may be suggestive. The contrasts of "London and the provinces," as Spending-town and Earning-towns, again of Taxing-town and Paying-towns, and various others, also arise, and might lead him far.

It may not yet be time to press for political rearrangements: this might too readily come to mean premature disputes and frictions, not to speak of legal difficulties and expenses. But it is plainly time for the co-operation of the regional geographer with the hygienist, and of both with the concrete sociologist, the student of country and town, of village and city; and also for the furtherance of their labours, the discussion of them in detail, in friendly conferences representative of all the various groupings and interests concerned.

Since these pages were written, and indeed read at

the Health Congress of 1910, a prominent minister has raised the question of the needed and approaching movement towards decentralisation; and this in largely kindred form: while later events are pointing in the same direction. The preceding argument may, however, best be left unaltered, as on strictly civic grounds and of non-party character. The present co-operation of all the administrative bodies of Greater London towards the preparation of a town-plan may, however, be mentioned as an example which must soon be followed in other conurbations.