

THE CIVIC SURVEY OF EDINBURGH

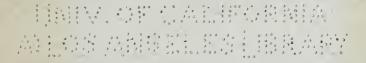
BY

PROFESSOR P. GEDDES

OUTLOOK TOWER, UNIVERSITY HALL, EDINBURGH, AND LABORATORY OF CIVICS, CROSBY HALL, CHELSEA

WITH ILLUSTRATIONS BY F. C. MEARS (ARCHITECT)

EDINBURGH AND CHELSEA



REPRINTED FROM

THE TRANSACTIONS OF THE TOWN PLANNING CONFERENCE

FOR THE

CIVICS DEPARTMENT
OUTLOOK TOWER, EDINBURGH, AND CROSBY HALL, CHELSEA
- 1911

AMBOBLIAC BO MALE YBARRIJCELIEDMAROLIA N 9 0 1 9 0

(I) THE CIVIC SURVEY OF EDINBURGH.

By Prof. P. Geddes, Outlook Tower, University Hall, Edinburgh, and Laboratory of Civics, Crosby Hall, Chelsea. With Illustrations by F. C. Mears, Architect, Edinburgh and Chelsea.

THE survey of Edinburgh and its region is the fundamental purpose and significance of the Outlook Tower, from the collections and work of which the exhibit at the Royal Academy has been selected. I may best describe the Tower as a Civic Observatory; and despite any appearance to the contrary, as primarily concerned with that survey and interpretation of the conditions of the city of the present, of which the Rt. Hon. Charles Booth's classic and initiative map and volumes upon the "Life and Labour of London" are the great example, and Councillor Marr's Survey of Manchester, Miss Walker's of Dundee, or Mr. Rowntree's study of York, later instances. But we seek to go further than these writers have done, and to connect our studies of contemporary conditions with their origins-local, regional, and general. This inquiry we find requires, first, a survey of our geographical environment in its fullest and deepest aspects; secondly, a survey also of the history of the city and region, and of Scotland in particular; with general history so far as bearing on this, and necessarily, therefore, from the earliest beginnings of civilisation. Above all, we are thus learning to view history not as mere archæology, not as mere annals, but as the study of social filiation. That is, the determination of the present by the past; and the tracing of this process in the phases of transformation, progressive or degenerative, which our city has exhibited throughout its various periods—Ancient, Mediæval, Renaissance, and Industrial—with each of these in its earlier and its later developments. We seek thus to interpret our observations of the present, and even at times to discern something of the opening future; for that also is already incipient, as next season's buds are already here.

Now I am well aware that such a detailed and comprehensive survey of a city is necessarily difficult and laborious, though not insuperably so; and I am, therefore, not surprised that there are still students and fellow-workers in the town-planning movement who hesitate to undertake or even encourage such surveys, lest the good and urgent work on which we are here and now so conspicuously engaging should be unduly delayed, if not misled into learned irrelevancies. Let us, however, for the moment, waive this controversy; since your presence grants me that you have some little leisure to look over these outlines from our survey in this Exhibition with an unprejudiced mind, as being, at any rate, of intelligent interest, even if you

are not vet convinced of its obvious and immediate use. With this moderate claim granted, let us now run over some of the main phases of the development of Edinburgh.

[The Catalogue of this Edinburgh Survey may here with advantage be condensed, as a glance over its contents will enable the reader to follow this outline without more of its illustrations than are herewith reproduced.

OUTLINE OF A SURVEY OF EDINBURGH.

By Prof. P. Geddes and F. C. Mears, Outlook Tower, Edinburgh.

Preliminary Note.—This Exhibit is a developed example of the methods of Survey of Cities (Scottish, English, and other) in progress in the Outlook Tower, as applied (a) to the teaching of Civics, (b) to Collegiate developments and City improvements. Its significance in the present Exhibition is as affording evidence of the necessity, practicability, and fruitfulness of a clear understanding for each town and city (a) of its geographical situation, (b) of its development (and corresponding decline) at each important phase of its history from earliest to most recent times. Natural environment is thus never to be neglected without long-enduring penalties. Neither can historic phases be considered as past and done with; their heritage of good, their burden of evil, are each traceable in our complex present City: and each as a momentum, towards betterment, or towards deterioration respectively. As these lines of development and deterioration become disclosed by our survey, the task of practical civics grows correspondingly clear, both for municipal statesmanship and for individual and associated effort. It thus becomes evident that the survey should be adequately thorough, both as regards the needs of City Improvement and the possibilities of City Development. The suburban extensions and the industrial developments so fully illustrated in the Town Planning schemes around us, may thus be aided in many ways, and guarded against many risks of omission or error.

Edinburgh Survey Exhibit: General Map; also Photographic Panorama, and large Frieze, in oil, by Eric Robertson, of "Old Edinburgh from Outlook Tower," showing complex modern development to be surveyed, i.e., analysed and interpreted geographically, historically, socially, etc.

Site of Edinburgh.—Model, by Paul Reclus, in true relief—horizontal and vertical scales the same—showing (1) glaciated surface, (2) ancient tracks avoiding bad ground, (3) extent of walled city, (4) position of New Town.

Relief Model of Edinburgh City, in relation to its site, before advent of railways. Maps of Edinburgh Region—ordnance, orographical, geological, and botanical. Corresponding Relief Model and Botanical Survey of Scotland: with reference maps (also in relief) of larger environment of England and Europe.

Origins of Edinburgh.—Books of photographs and postcards showing primitive cultivation-terraces: also (disappearing or contemporary) shepherd, peasant and fisher-life and conditions.

Perspective of Earliest Edinburgh as Hill-Fort associated with Sca-Port (Leith), and with agricultural plain of Lothian.

Comparison with Athens: Piræus-Acropolis (port-fort) type not infrequent in Europe.

Bird's-eye View of Forth Estuary, showing early advantages and disadvantages of situation of Edinburgh.

Section across head of Old Town, showing necessary sites of walls; thus early origins of congestion of recent (and present) times. Note also deficient water-supply,

Plan of Early Mediæval City: with Plan of Elgin, closely analogous.

Remains of Terraces, their retaining walls adapted to mediaval defence, now being gardened again.

Style of mediæval housing, areaded and galleried with illustrative photographs, etc. ("Open-Air Treatment").
Procession of the History of Scotland, by W. G. Burn Murdoch.

Bird's-eye View about 1450, showing mediaval development of Castle and Royal burgh, with Holyrood Abbey and beginnings of aristocratic burgh of Canon-gait.

Corresponding Plan showing City walls and their extension, development of Loch" as partial moat, also growth of ecclesiastical foundations outside walls. Note also extension of "Flodden Wall" after 1513. To this is directly traceable the long overcrowding and underhousing of Edinburgh, with high rents and land values: a marked influence also in Scotland, and on industrial age therefrom. [Note analogous evil influence now radiating through U.S.A., &c., from narrow site of New York City.}

Castle before siege of 1573, by Bruce J. Home.

Siege of 1573 (old print). Decisive in Annals of Edinburgh (and of Reformation) as main defeat of Party of Queen Mary (Catholic and of French Alliance): victory of Calvinism, with tendencies towards England.

View of Edinburgh, 1647. [Note Gardens of late Renaissance fashion.]

i. Plan of Edinburgh—17th century—after Reformation and the Union of Crowns. [Note crowded insanitary town of high-built stone houses still sheltering behind "Flodden Wall" of 1513. Ecclesiastical properties devoted to secular uses-largely educational. Departure of courtiers and stagnation of trade.]

ii. The West Bow; ancient principal approach to the town from the South and West, destroyed 1820-30. Its peculiar form was probably conditioned by cultivation terraces utilised for strategic use.

Bird's-eye View from Slezer's Theatrum Scotia, 1690. [Note town still confined

to its ridge. Gardens now in Dutch fashion.]

Plans showing developments, 1688-1765. With revival of agriculture and weaving, along with increasing oversea trade, following the Union of Parliaments, there come the first small attempts at formal planning. Small courts are opened up and squares and streets laid out; but mainly within the traditional fortified area.

Decay of Old Edinburgh following the building of suburbs to North and South. This decay began with the removal of the Court to London, and, a century later, of the Parliament

Moray House; as best surviving example of mansions of nobles of Renaissance;

now a Training College.

Greyfriars' Churchyard; (becomes Campo Santo of Presbyterianism) Note

Martyrs' Monument, etc.

The Crown of St. Giles.

The New Town and the Railway Age.—Craig's Plan for New Town, 1765. Map of Edinburgh (1778) showing New Town in course of building. North Bridge and Earthen Mound as exists from Old Town to New.

Stages of development of Formal Town, 1767-1900.

City Plan (1829) showing formal developments as planned; not all executed, owing to breakdown of system, e.g.:-

i, ii, iii, iv, v. Five competitive Plans (1817) for area of Calton Hill and northwards to Leith.

Photo of this area, showing park frontage as designed, with breakdown behind. National Monument, etc., on Calton (unfinished), showing classical taste of

"Battle of the Styles." Calton Monuments arranged as (earlier) Classic and (later) Romantic.

Illustrations of Period of Improvement of Communications: age of Civil Engineering.

Types of Improvement before Railway Period—bridges, viaducts, embankments. Photos of these, culminating in Forth Bridge: this is a natural, i.e. logical as well as regional, development.

Plan for New Communications (1855): a typical example of profuse utilitarian extravagance with corresponding asthetics (e.g. note chimney disguised as pagoda).

Modern (late Victorian) Edinburgh, showing panoramic contrast of Old and New Towns and their respective utilisation of sites. Note combination yet contrast of historic and artistic sentiment with modern and utilitarian practicality. (This apparent paradox of Scottish character is thus but a typical example of the interaction of individual life with history, of citizen and city everywhere.)

Advent of Railway Age.-Map showing present extent of railways, stations, sidings, etc., also tramways

Photos showing modest beginnings, 1837-43, and onwards to present vast developments.

Panorama of station roof ("smoke-hall," "halle à fumée" of M. Rey): cul-minating example of "utilitarian" extravagance and unwholesomeness. The Valley as it might have been. (By Bruce J. Home.)

Map of Industrial Areas. These now surround the formally planned area, having grown up haphazard (yet in vicious circle) with the development of railways. Observe the necessary effect of the prevailing winds. Note also large areas tinted bluedevoted to treatment of disease, poverty, etc.: these in large proportion due to defective (unplanned) environment.

Municipal Report: "Edinburgh as a Site for Factories and Industrial Works

(1908)."

Here return to Railway Map. Note "Innocent Railway," S.W. of Arthur's Seat. This is the oldest line entering Edinburgh direct from the Midlothian Coalfield; and it might well have been developed rather than existing lines had town planning not been lost sight of. It is upon this coalfield, and therefore to east and not west of the present Edinburgh, that the industrial garden villages and towns of the future must arise, and this for every reason of economy, health, and amenity, etc. An indication of this (though unfortunately as yet unplanned) is afforded by the growing brewery village of New Duddingston.

The two ways of looking at old Edinburgh:

Squalor and Romance.

Photographs recording the appalling (still tolerated) squalor of the Old Town buildings, and correspondingly of its slum life This mainly accepted as a permanent supply of material for charity, medicine, anatomy, and religious endeavour.
"Old Edinburgh Street" of International Exhibition of 1886.

Revivals in Religious Architecture.

Restoration of Castle.

Classical Revival revived: e.g. Proposed completion of National Monument.

Strata of Edinburgh, New and Old.—Uppermost row: Superficial, or Tourist

Best of New Town; status and culture, wealth and appearances.

Breakdown of Formal Plan. Unfinished ends; workshops—the latter not pro-

Workshops behind present-day tenements. Old cottages neglected, falling into ruin.

Squalid life of back streets overcrowded and unclean.

Photos of villas of various dates, 1800-1900: corresponding survival or admixture

of classical and romantic traditions, all lapsing alike.

"The long unlovely street"—Photos recording miles of tenement rows with further decadence of rival styles. This essential continuance of the historic overcrowding of Edinburgh has been and still is encouraged and maintained by its educational trusts acting as ground landlords, in the supposed interest of the development of the child life of Edinburgh!

Higher Education Developments.—University Buildings, Extra-Mural Schools, Museums, etc.

University Union, proposed Halls of "Academic Nations"—Indian, Africander, Australasian, Canadian, and West Indian, etc. Each as a needed centre of legitimate individuality and of national dignity, within solidarity of Empire and of Education.

College of Art. Virtually a new Faculty of the University, and this of the highest civic potentiality, as the present Town Planning Exhibition shows.

Edinburgh as a Collegiate City.—While the three other Universities of Scotland are mediæval foundations, Edinburgh University dates from 1582-nearly a generation after the Reformation. Hence no collegiate residences were established, and pious founders—Heriot and others, to Fettes—preferred to erect schools, often palatial. For these reasons the first hostel or Hall of Residence in Edinburgh dates only from 1887, and arose in due continuation of the tradition of student independence and responsibility, as self-governing groups without a Warden.

Outlook Tower, acquired in 1892 as centre of post-graduate studies, experimental

education, civic improvement, etc.

This scheme is not one of collegiate development independently of the existing city and by replacement of its buildings, as in older collegiate systems. On the contrary, it seeks (on grounds alike economic and historic) to conserve and incorporate existing buildings, and is at once conservative as regards Town and constructive as regards Gown. It carries on the preservation and repair of ancient buildings (see Riddle's Court, etc.), and the incorporation and adaptation of historic houses (Allan

Ramsay's Lodge, Ramsay Garden, etc.).
Watercolour Perspectives show extension of scheme from Esplanade to Bank of Scotland and thence eastwards as circumstances permit to Holyrood and Croft-an-Righ. The full scheme of "Town and Gown" may now be understood: in quality and in quantity, from the Map of Historic Buildings of Old Edinburgh, and the

corresponding perspectives ranging from Castle to Holyrood.

Growth of Edinburgh. Nowhere more need of garden villages, yet practical reluctance to abandon crowded tenement habit.

Small Garden Village, erected 1895. Garden Village near Murrayfield (1900).

Open Spaces as Gardens and Playgrounds.—Survey of Open Spaces in Old Town (75 pieces, 10 acres), now being reclaimed into gardens as circumstances allow. Vacant Lands Survey of Environs: about 450 unused acres.

Holyrood and its Environment. Actual and Possible.

The realisation of this scheme is thus well advanced; and in view of the possible renewal of Holyrood as a royal residence, it gains in urgency, especially when compared with schemes less conservative of its historic setting.

Map of City, with emphasis on Natural Site as at starting point; insistence on

its geographic features.

Experimental Sketches towards completion of Survey by corresponding "Report on City Development." This to be in utmost practicable accordance with natural environment as with historic heritage, with economic prosperity, and with social and cultural evolution, at once individual and civic.

Example from Report of suggested Symbol of returning unity and activity, at a main point of Old Edinburgh, midway between churches of all denominations—

Statue of St. Columba.

Model of City Cross. Demolished 1756, partially re-erected by the good offices of Sir Walter Scott, finally re-erected by W. E. Gladstone and again restored to public uses. Hence this Cross is peculiarly fitting as a symbol not only of Citizenship, but of Civic Revivance; and as complementing the Relief Models of Edinburgh, with their expression of the material origins of the Town, by a corresponding expression of the deeper and inner evolution of the City. The many-sided activities of a great city, spiritual and social, educational and hygienic, architectural and industrial—or most simply ideal and material—all these may be fitly symbolised upon the many sides of this characteristic building as aspects of a real unity, and this again, by the shaft of the Cross, as an ascent of life towards expression—civic and national.

Yet as each phase of development of our Survey has come and gone, so in turn may this presentment of it. All surveys need perpetual renewal; and our final exhibit is thus:—

The Outlook Tower—here reduced to its simplest expression: that in which it may be adapted by anyone to the problems and the tasks presented by his own environment, his own region and City.]

Let me recall in outline the general topography of old Edinburgh—a great volcanic rock—the surviving lava-plug of a crater worn away by the Ice Age, and with a long ridge or "tail" running downhill eastwards from the "crag" to low ground at the foot of Salisbury Crags and Arthur's Seat. Thus, from our fairly lofty Outlook Tower, almost at the apex of the ridge, we command a view at once of the rock and its huge castle to the westward, and of the old city running down the ridge to the east. The seaport of Leith is on the coast to northward, and the New Town lies between; while nearer still, betwixt us and the varied façades of Princes Street, lies the valley of the old "Nor' Loch." This valley is now a public garden, intersected longitudinally by a railway, and transversely by the earthen Mound with its Art Galleries, and further east by the North Bridge, under which lies the vast station into which the railway line expands. Southward the city also extends for a couple of miles along each of the main roads to the south and south-west; so that the historic Castle and Old Town remain as a central head and backbone of the irregularly spread modern growth. Thus, while people still think and speak of Edinburgh mainly in terms of its mediæval and renaissance "Old Town," and its eighteenth-century "New Town," the modern Edinburgh and Leith extend far around these in all directions, and include a population which is now nearly approaching half a million, which seems destined to considerable further expansion, and which is thus in need of fuller consideration, economic, hygienic, and civic, than it has yet received. In short, Edinburgh plainly exhibits both the great problems—of central and of suburban developments—which are before the present Conference; we shall see that these require at once forethought as regards their future, and retrospect for their origins; and how each is helped by the other.

From the very outset of our survey of a city, we must observe and understand it in its region. Our Tower overlooks the city both

within its immediate and its greater landscape. The first of these ranges from the Pentland Hills to the Firth of Forth, and shows the city fringed at each level with the appropriate rustic life, from the sportsman's solitudes and pastoral hamlets of the Pentland slopes, as notably R. L. Stevenson's Swanston, through the agricultural and the mining villages of the Lothian plain to the characteristic fishing ones along the coast. Thus the real country is accessible on every hand, and its villages are not yet the mere suburban dormitories into which those around London and other great cities have so largely become transformed. Yet this landscape is but a fraction of the larger visible whole. To north and east we have the widening estuary of the Firth of Forth, with Fife and its towns upon the opposite shore. Westward, the Forth Bridge is seen overleaping the mile of the old Queen's Ferry; beyond this lies the old yet renewing city of Dunfermline, just now adding to itself what we trust may soon be the paragon of town planning, the great Naval Base of Rosyth. spacious anchorage of the Upper Forth has also its mercantile ports. Finally, far beyond Stirling, the great Highland Hills rise against the sunset. Thus one readily realises the situation of Edinburgh as making it a convenient metropolis of its region; and were this primarily a company of geographers, of historians, or politicians, I might show the bearing upon the past life and present influence of our city of every detail I have mentioned, and of far more.

For town planning we naturally wish to concentrate upon our essential and central outlook of the city itself. Yet we cannot trace our city from its early beginnings upon the castle rock without understanding it as a hill-fort associated with a sea-port, as well as with the agricultural plain of Lothian; and as arising after the departure of the Romans, as a defence against the incursions of the Northmen. Indeed, to understand a city of this type we must go further afield than ever. Hence the comparison, side by side, of Edinburgh and Athens—each plainly a hill-fort associated at once with a sea-port, and with an agricultural plain. This combination of an Acropolis with its Piræus and its Attica, is common throughout Mediterranean Europe, though less frequent in the north; and such a threefold cooperation is conducive alike to agricultural efficiency, to maritime enterprise and commerce, and to regional as well as civic culture. Thus we see the traditional comparison of Edinburgh with Athens has really little to do with our eighteenth and nineteenth-century imitations of Greek temples or Greek sophistries, but lies far deeper, in geographical and historical origins. [See figs. 1, 2, 3, 4, 5.]

The Roman occupation had no use for Edinburgh, though its defences and monuments are not far to seek around. Yet at least one far older, indeed pre-historic, survival remains significant through the ages, and is even beginning to renew its old-world life in these present years. Every rambler round Arthur's Seat must notice the long range and succession of pre-historic cultivation terraces which rise like a gigantic stairway upon its gentle and sheltered eastward slope—terraces unmistakably of the same essential build as those which line the Mediterranean coasts from Spain and Portugal to Palestine, and thence run eastward through Persia to Korea. Traces of what are plainly kindred terraces, and better situated ones, are still





Fig. 2. - View of Athens.

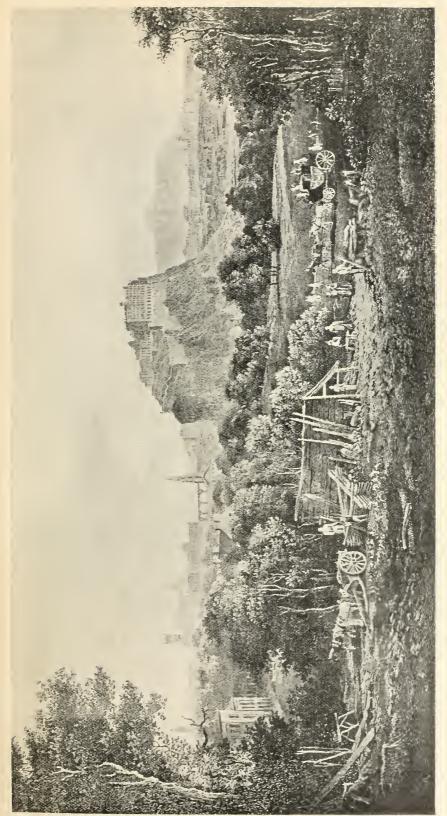
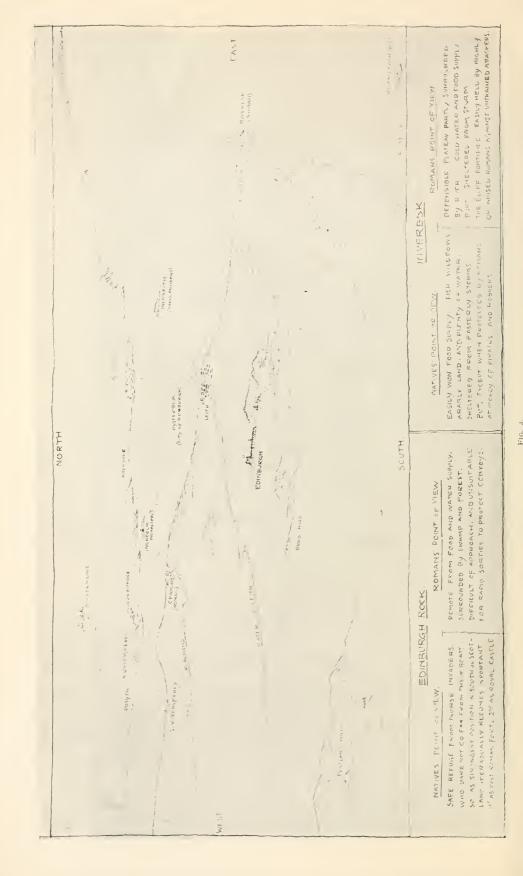


FIG. 3.-VIEW OF EDINBURGH FROM N.W.



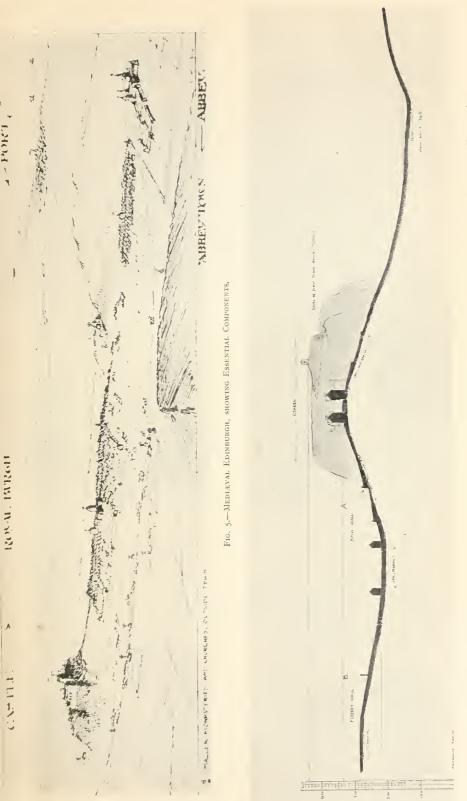


FIG. 6.—SECTION FROM S. TO N. ACROSS HEAD OF OLD TOWN, SHOWING GENERAL CONTOURS AND SITUATION OF WALLS (ON OLD CULTIVATION TERRACES)

discernible upon the southward slope of old Edinburgh; and the architect of historic interests need hardly be reminded how, as our survey illustrates, these old terraces have constantly furnished the base-line for fortress walls in the middle age; yet how they also developed into the stately Renaissance terrace-gardens of the succeeding and more pleasure-loving time. Our survey shows these terraces taken from their immemorial peaceful use to afford the lines and bases for successive city walls [fig. 6], with at least one great defensive bastion-that of the West Bow. We find them next becoming built over, or, where surviving at all, largely deteriorating into slum areas, sometimes even derelict, their very ownership forgotten; yet at length, as we shall see on one of the later sheets of this survey, becoming once more renewed as gardens for the people [fig. 17]. Thus, after long ages of warlike history, our women and children are returning to their gentle tasks of old, their setting of herb and tending of flower. This is but a small example, yet, I venture to say, a vital one, of the renewing modern life and use of even what may have been a forgotten past: in this case, the very longest forgotten. We shall see, as we proceed, that one survival after another becomes in its turn similarly significant, and thus learn how the soil of the past teems with its dormant seeds, each ready to leap into life anew, be this as weed or flower.

My able colleague, Mr. F. C. Mears, has here reconstructed, by help of surviving fragments as well as of tradition, the type of dwelling of Edinburgh in the Middle Ages—long before the days of its high-piled tenements—as a dwelling with arcaded ground-level and galleried first floor. Such a house plainly exceeds, in its facilities for outdoor work and open-air treatment, the cottages of any garden suburb to-day, and will encourage those who, in these days of camping out, are beginning to do the like at home. Of late years the eminent medical history of Edinburgh has been renewing itself as regards consumption. Long an extreme centre of this disease, it has become a correspondingly eminent centre for its treatment; and my architect-collaborator, an expert in open-air schools, is thus deriving fresh inspiration from the long libelled Middle Ages. [See fig. 7, A.B.]

Next, our section across the head of the old town [fig. 6] shows the terraces as the necessary sites of successive walls, and thus explains the early origins of that congestion of recent and even present times, which is still so serious a difficulty for Edinburgh. For though the walls are forgotten, the resultant land-values remain not a little prohibitive. It explains, again, that deficient water-supply which was so long an efficient cause of the historic dirt of old Edinburgh; while this dirt and that overcrowding, with their accompanying intensity and increasing variety of disease, have been prime factors in the development of Edinburgh as once and again the metropolis of medicine, just as the fire calls out the fireman's powers, the wreck the sailor's. It is by no mere accident that Pasteur, and his foremost disciple Lister, should have been aroused to their cleansing tasks in the midst of cities so pre-eminent in their overcrowding, their dirt and disease, as old Paris and old Edinburgh. Thus our city surveys are continually bringing out the strange alternation and interaction of good and evil, evil and good.



FIG. 7 A, B.

A, EARLY TYPE OF HOUSE IN EDINBURGH WITH ARCADED AND GALLERIED FRONT
("Open-AIR TREATMENT").

B, View showing a Surviving Later Example: Whitehorse Close, Canongate.

Take, now, our later perspective [fig. 8] and views of Edinburgh at the conclusion of the Middle Ages and the coming on of the Reformation. Just as the Reformation in England was a generation later than in Germany, so in Scotland it was a generation later still; and hence an intensification of the wars between England and Scotland. Recall, now, what to an Englishman seems a well-nigh forgotten incident, the battle of Flodden in 1513, so disastrous to Edinburgh that traditionally only one survivor returned; and then see, on the remains of the Flodden Wall, thereafter hastily pushed out beyond the then existing ones, the marks of hurried and unskilled building against the threatened invasion by the victor. This invasion, however, did not come off for another generation; then note what follows in our survey, with its reproduction of the drawing, presumably by the war correspondent accompanying the Earl of Hertford's invasion of 1544, and showing his advance to the taking and destruction of Edinburgh. Now realise the immediate consequence of such repeated calamities (and there were far more)—a community twice denuded of its active



Fig. 8.—View showing Mediæval Development of Castle and Royal Burgh, c. 1450, with Holyrood Abbey and Beginnings of Burgh of Canongate.

men—fathers and sons swept away in two successive generations, with few save women, children, and old men left, and with unnumbered fugitives from the devastated country crowding in, time after time, to take shelter behind the walls. Here, then, are conditions, among the most intense in history, for that evolution of overcrowding and squalor, with their attendant and complicating evils, which to this day are the reproach of old Edinburgh. I am only too well aware that in peaceful England, with its mostly unwalled cities. and above all here in London, which has known no such tragedies, not even at the Conquest, her people are honestly incredulous that such far-away incidents can continue to matter. Here let me appeal to our foreign visitors. What Frenchman, what German here does not know how terrific and enduring have been the effects of war? Who does not know it as a commonplace of German history that the prosperity and growth of cities in the past generation are often but their first substantial recovery, since the widespread ruin and calamities of the Thirty Years' War, of the Burning of the Palatinate, of even older as well as newer tragedies.

The complex strife and civil wars of the Reformation are recalled in other battle-pictures. Little more than a generation later we have again a largely ruinous disaster to Edinburgh as the metropolis, in the accession of King James VI. to the English crown. In less than another generation and a half begin the new calamities of civil war, of Cromwellian defeats and occupation; then, again, after the Restoration, the ruthless persecution of the Covenanters, with practically a renewing of the Civil Wars under Charles II. and James II. Next, the difficulties of the Revolution of 1688; and yet again a ruin of Edinburgh as the centre of Parliament (and its expenditures) by the Union of the Parliaments in 1707, while following upon this came successively the collapse of Scottish Imperialism in the Darien scheme, and the Civil Wars of 1715 and 1745. Each of these events, at the time tragic enough, is more or less recorded in the monuments and buildings of our survey, or in the ruins and dilapidations of these; and the conception thus grows clearer of one of the most distressful of old countries, in which each and all the evils destructive of historic cities have raged by turns, if not together, and that repeatedly, seldom sparing a generation from the thirteenth century to well on in the eighteenth. The impassioned and adventurous Scot, colonising or militant, political and ruling, and the canny Scot, cautious and reserved to an extravagant degree, who by turns appear to the romantic or the practical Englishman as the essential and predominant Scottish type, have thus both been developed in such a troubled environment, the one by facing it among his fellows, the other by shrinking into his own small affairs; and the strange yet constant alternations of our Edinburgh architecture—here of picturesqueness, there of utilitarian plainness—thus appear as the natural and necessary expressions in architecture of these contrasted social types. Architecture and town planning in such a city, we thus plainly see, are not the mere products of the quiet drawing-office some here would have them; they are the expressions of the local history, the civic and national changes of mood and contrasts of mind. Here, indeed, I submit is an answer to those town planners who design a shell, and then pack their snail of a would-be progressive city into it, not discerning that the only real and well-fitting shell is that which the creature at its growing periods throws out from its own life. This is no doctrine of laissez faire; it is simply the recognition that each generation, and in this, each essential type and group of it, must express its own life, and thus make its contribution to its city in its own characteristic way.

Returning to the elementary standpoint of town planning, the growth of our mediæval town may now be traced downwards, from the Castle and its vacant space—the military zone of a bow-shot distance—beyond which we descend by the steep Castle Wynd, now a staircase, to the spacious old Grassmarket, from the earliest times the agricultural import centre of the city until the removal of our cattlemarkets this very autumn [figs. 4, 5, 6, 8, 9]. At the same point begins the narrow Castlehill, the earliest suburb, and evidently at the outset a mean one. This soon widens, however, into the spacious Lawnmarket and High Street, 100 feet broad, formerly arcaded on either side—in its day, as the letters of French or Venetian Ambassadors in Scotland show, the stateliest street in Europe [fig. 9]. To

meet the gate of this Old Edinburgh midway down the ridge, there begins, uphill from Holyrood Abbey, the Canon-gait—from the first a garden suburb, and after the plunder of the Reformation especially largely made up of the mansions of the nobles, a few of which survive to this day [figs. 8 and 9].



Fig. 9.—Bird's Eye View from above Salisbury Craigs, showing Essentials of Medlæval Topography.

Note, next, outside the wall zone to the south, the situations taken up by the various orders of Friars. Then, as students of history, see how their old preaching intensity renews in that of the Reformation



First beginnings of Edinburgh as Hill-Fort. Defending Port iunfortunately cut away atright) at extremity of road to upper right-hand corner. Fig. 10.

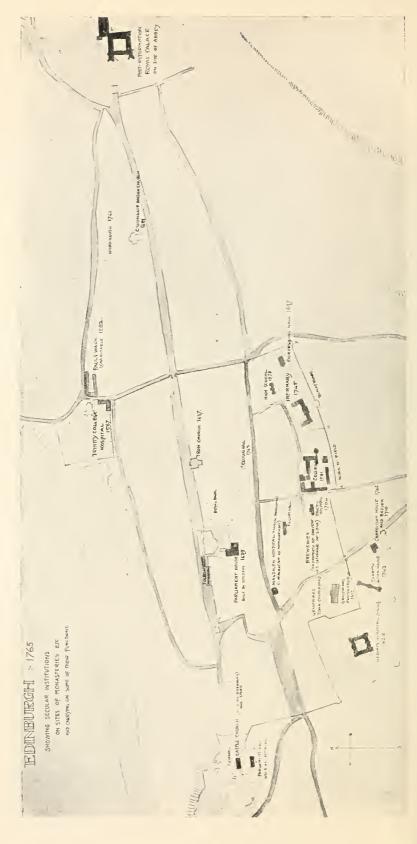


FIG. 11.-Modern Culture-Institutions, &c., arising on Sites of Ecclesiastical Foundations.

and the Covenant once and again in later times. For to this day the "Old Greyfriars" Churchyard is the Campo Santo of Scotland; and this again has made Edinburgh the successor of Geneva as the central and sacred city of the Calvinist world. And of more than Calvinism: this very year even London has heard of the "World's Missionary Congress," with its five thousand pilgrims in conclave from well-nigh all lands and denominations.

Note, again, how it is in this very area we trace the beginnings and still possess the development of the University, of hospitals, and great schools [fig. 11]. Compare this now with the plan of Oxford, and see how colleges arose in the exactly corresponding sites vacated by the Friars outside the walls. Thence go back to a plan of earlier type still—that of Florence—and note its two great poles of tradition in religion and culture, and thus in art and architecture, afforded by the same Friars, grey and black, at Santa Maria and Santa Croce. As before, in comparison with ancient Athens, so now with notable

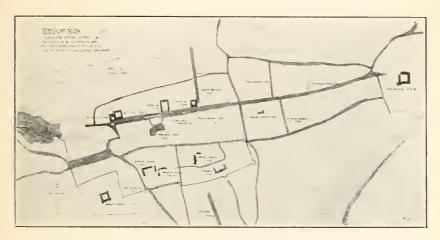


Fig. 12.—Plan showing Developments previous to New Town Plan, 1688-1765.

(With revival of industry and trade following the Union of Parliaments came the first small attempts at planning on "Classic" lines. Small courts were opened up and squares and streets laid out. Still no serious attempt is made to extend beyond the traditional fortified area).

mediæval cities, British and foreign, we see how our town studies throw light upon their ancient plans. Their apparent medley is more orderly than we knew; their unique physiognomy but the individual variant of some general type.

Enough, now, of Mediaval and Renaissance Edinburgh. Let us come to the Modern world, in the main, as we know it, Utilitarian and Industrial; this, as elsewhere in Great Britain, comes into power with the Revolution of 1688. See how our photographs of old Edinburgh show the new type of modern utilitarian building at once arising amid the mediæval timber-work and the Renaissance stone mansions, as the tall block proudly inscribed by its builder-architect, the seventh King's master-mason of his family, as "Milne's Court, 1690." With the revival of agriculture consequent upon peace, and the increase of commerce helped by the rise of the new trading class upon the ruins of the Cavaliers, the improvement of the old town begins more rapidly a generation later, and by-and-by with small beginnings

of formal planning; for after the opening up of James Court (1726) [fig. 12] we venture next to build a New John Street, off Canongate, the small Brown Square, and at length lay out the spacious George Square. The Jacobite wars of 1715 and 1745 are, after all, but minor interruptions of this growing prosperity; and half a generation later the increasingly prosperous Edinburgh community, stirred, no doubt, by the contemporary improvement of London, then beginning to lay out its spacious and dignified squares, resolved, under the leadership of a really great edile, Lord Provost Drummond, upon city development and town planning proper. Hence Craig's "Plan of the New Town" of 1765, which was realised in the generation ending with 1800 [figs. 13 and 14]. The original New Town had next its northern extension by 1822, and thence to 1830. As examples of the high state of town planning in 1817, let me cite the series of plans selected as best from a competition held by the Corporation of Edinburgh in 1817,

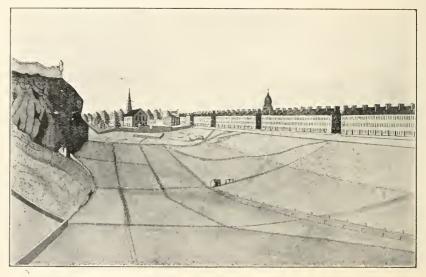


Fig. 13.—View of Princes Street (1816) as originally built on monotonous lines.

(The last surviving front of this type is now being altered.)

for the area northward of Calton Hill, and now lent the Exhibition by their successors.* Here, then, we have a period of town planning and of architectural execution surpassing even the lesson of London; yet breaking down, also, in its turn.

Our photographs and maps are arranged so as to show this progress of design and construction, yet also to bring out the reason of their arrest and breakdown, with abandonment of their unused spaces to the contemporary squalor or confusion. These town-planners, with all their merits, made various grave mistakes. First, they omitted adequate consideration of relief and contour, and thus their office-made schemes broke down wherever the ground became scriously irregular, so demanding unforeseen outlays for foundations—here upon cliffs, or there on marshy hollows. They failed

^{*} These are figured by Mr. Thomas Adams, of the L.G.B. Town Planning Department, in the Architectural Review of October 1910.

then, very largely for want of a proper topographical survey and its contour-models; but also, and even more seriously, for want of any adequate social survey. These competitive plans show plainly that designers-clients and corporations alike-assumed a practically indefinitely increasing population of the well-to-do—the lawyers, country gentlemen, merchants, and others for whom the new town was designed, and forgot entirely, after the New Town Plan of 1765, with its first instalment of three rich streets and two poor ones, to provide for cheaper burgher dwellings, much less for workmen's homes. Thirdly, they omitted from consideration any provision for anything so vulgar as workshops, for any industry whatsoever; and, consequently, the formal beauty for which they had laboured was soon broken in upon and at many places destroyed by the necessary and inevitable filling up of any and every vacant space with any and every sort of irregular and utilitarian factory and workshop, as our photographs again plainly show, as, for instance, the dramatic contrast of stately residential order and planless squalor on opposite sides of the same street, e.g. Fettes Row, of the same monument even witness St. Stephen's church.

Does not, then, our survey bring its gentle but decided criticism to bear upon much of the town planning of our time, which, with all its specialising upon communications here, or comfortable dwellings there, there forgets the industrial development, and here the popular well-being upon which every town essentially depends? I venture deliberately to say that this Exhibition has too many plans of this kind showing various lack of foresight, though happily not all too late for correction.

Turn now to our aesthetic town planning. The builders of the new town at first cared little for the romantic old one they had deserted. Their ideas and tastes were classic, as were those of their time throughout Europe; and hence the classic High School, still one of the best examples of its Neo-Grecian style. Hence, too, the various classic monuments of the Calton Hill, culminating in the too colossal and unfinished colonnade of the National Monument, and more temperately continued in the Art Galleries of the Mound.

Yet the dramatic contrast of the picturesque castle and hill town with the regular and utilitarian modern new town, which is to this day the most striking of the many panoramic features of Edinburgh, was a great factor in the Romantic Movement, of which Sir Walter Scott made Edinburgh for a time the veritable capital. This new idealisation of the mediæval past, both in its temporal and its spiritual manifestations, so natural to a generation rebounding against the severe republicanism of the Revolution days and the formal classicism of the Empire style which succeeded it, produced its speedy effect in the next generation. Hence that efflorescence of castellated gaols and "Scottish baronial" tenements or villas with which the next generation followed the architectural well-nigh as fully as the romantic inspiration of Abbotsford.

This Calton Hill, with its strange medley of monuments, is thus a vast museum of the battle of the styles, and a permanent evidence showing how the town planners of one generation cannot safely count upon continuance of those of the next. This is not an argument

against town planning; but it brings out clearly the proposition that we shall do best by supplying the needs and expressing the ideas of our opening generation, without too great expectation of agreement from the next one, much less attempt to dominate it.

New churches, too, arose for all denominations—bad, good, or mostly at best indifferent—culminating in magnitude at least in St. Mary's Cathedral by Sir Gilbert Scott, which was, till Truro Cathedral surpassed it, the largest and most ambitious ecclesiastical edifice since the Reformation.

The romantic planners are now left behind by their successors. A period of new communications had been already opening, with its new and wider roads, its embankments, bridges, and viaduets. There is more civil engineering of this kind in Edinburgh than in any other city I know of. Our series of photographs again bring out notable consequences of this development, yet equally unforeseen. On one side a disastrous increase in the social separation of classes, who had been in old Edinburgh so peculiarly mingled, so that the upper and middle classes have been wont to traverse Edinburgh by viaducts high above the festering squalor below, and to live and die in practical indifference to it, and thus maintain that practical indifference to deplorable conditions which strikes every Continental visitor, even every American tourist, with an outspoken astonishment far from flattering to Edinburgh, yet for the same reason with too little effect upon it. Yet note also how this series of achievements of civil engineering culminates, for the city itself, in the beautiful Dean Bridge, which is one of Telford's masterpieces; while a few miles further on we come to the natural outlet and main highway of Edinburgh-that of the Forth Bridge, which but replaces its old Queen's Ferry. This most colossal of engineering achievements appears in its true light as a regional and therefore normal and natural product, when we consider the immediate civic environment of civil engineering achievements, each a triumph in its day, in which its promoters and its first designers grew up from boyhood. In an analogous connection the Forth and Clyde Canal, once of small barges, then of incipient steamships, and through the Railway Age in comparative insignificance, is now likely to give place to a Forth and Clyde Canal upon the oceanic scale, necessarily with unseen future transformations for Edinburgh. Almost since its foundation, and for many years before the present public interest, the alternative routes for this canal have been on exhibition in our Outlook Tower, with a suggestion of their future Garden City, stretching from sea to sea.

From the great civil engineers of roads and bridges to the Railway Age which followed them is, however, not so distinct a progress—in fact much otherwise, as our map of the development of the railway system of Edinburgh so tragically shows [fig. 15]. This development of the old carrier system of Edinburgh by the "new firm of carriers," as Lord Cockburn called it, naturally established its depôts as near as possible to the old places of departure for east and west (north, too, and south respectively); and these have then grown by sheer force of circumstances to their modern dimensions. Thus, too, their depôts at each side of the city naturally, almost inevitably, became linked up by the railway through the gardens. Hence our exhibition of the railway

Fig. 14.—Edinburgh, Old and New, in 1829.

age appropriately begins with the statue of Lord Provost Adam Black, uttering his dictum that "Providence had plainly designed the valley of Princes Street Gardens for a railway." Hence, naturally, our two contrasted plans—one of the valley as it is, its eastern half filled with the most gigantic of stations, the other of "the valley as it might have been "-the most magnificent of public gardens between the sister cities, old and new. The practical question, of course, here arises: "Where better could the railway have been arranged for? Would you arrest all industry and progress, and dry up the very sources of wealth from which gardens can be obtained?" No doubt there have been such æsthetes; but here we are planners. See therefore upon our plan the "Innocent Railway"—the oldest line entering Edinburgh, and direct from the great Midlothian coalfield; and we venture to submit it is plain that it is this practically designed railway line which should have been developed rather than the existing mere following up of the old horse-carrier roads and depôts, had not this latter railway planning been incompetent through lack of grasp and foresight, and had not the town-planning interest and experience of the previous generation been totally lost sight of by a generation hastening to be rich and smitten with railway mania.

Observe in detail the weltering confusion of the railway lines of competitive companies which have invaded and well-nigh destroyed the regions between Edinburgh and Leith, which were being so care-

fully planned only one generation before!

Next consider the far simpler net of the railway system as it might and should have been, and note in this the economy in space and in time, with gain, not loss, of efficiency, time, and convenience, and with saving of the city's beauty to boot. Of course this is but a sketch, inviting criticism by the expert, with no doubt modifications in detail. It is the general principle which is here boldly affirmed, that this railway system has not been the utilitarian success it still pretends itself, but has been, not merely half-ruinous to the beauty of Edinburgh, but is structurally bungled and economically wasteful to all concerned—so much so, in fact, that I again venture to suggest that it may not be a merely utopian or academic question whether it may not yet pay some day to transform the railway system more or less as here suggested! Be this as it may, I trust this illustration will be sufficiently clear on general lines to warrant my pressing the townplanner boldly to confront and scrutinise the railway system of his own town and of every other town. Let him criticise this, not on any grounds of antiquarian piety or wayward æstheticism (as he will be of course misrepresented on all hands as doing), but from his more extensive and more clear-headed grasp of the topography and the economics of the town and region, which the railway directors and their engineers have as yet so astonishingly little time to inquire into. He will thus discover that the "utilitarian" here, as so often elsewhere, has been the futilitarian; and that he too frequently to this day remains so. If this be doubted, let us glance for a change at the map of North London with its railway termini, and their mazes behind the scenes, or at the Thames with its adjacent stations and railway bridges; the same through outer and suburban Paris, and so on, even to the

FIG. 15.—EDINBURGH; RAILWAY AND TRAMWAY DEVELOPMEN

newest capitals, like Berlin and Chicago. All this will surely be sufficient to warrant the present attack upon most railway planning, whether in Edinburgh or beyond, as the most fortuitous bungle in the long history of cities, and as far exceeding in its present disorder and waste of space, time, and energy (to say nothing of natural beauty or human life), anything that has been or can be alleged against the decay of the Mediæval, the Renaissance or the eighteenth-century cities and city plans, defective though we have seen each and all of these to have been in its turn, and disastrous in its decay. I labour this point, not as vituperation, but to bring out the essential origins and tasks of our present town-planning movement; it is the necessary rebound of a new generation against the ideas, and the lack of ideas, of our elders of the railway and industrial age, and the practical endeayour now to mitigate the material confusion and the social deterioration in which their lapse of well-nigh all sense of civic responsibility and well-being has plunged us.

Turning now from communications to population, our later maps of Edinburgh show it growing rapidly, after all much like other more obviously industrial cities in this railway age. They show how readily and completely, even in this city so peculiarly inspired by the tradition of the three great preceding culture-periods, all alike for practical purposes become lost so far as city development is concerned. For newer districts this has arisen from the lower and more squalid types in the main, largely that of the West Port quarter, which each succeeding town plan unhappily neglected. Witness the wretchedly unplanned industrial suburb of Dalry, &c., which chokes the western exit; witness, too, the confusion, stretching far and near, round Holyrood, or that on the eastern and northerly quarters of Leith.

This zone of sordid industrial districts surrounding—say, indeed, immersing—the old fown and the planned new town alike, has thus grown in a vicious circle with the misgrowth of the railway system, and our plans show plainly how Edinburgh has become, as far as it could, an ordinary manufacturing town—at many points now able to match Dundee, Glasgow, or Lancashire towns in their characteristic perspectives of squalor and dreariness of homes, of monotonous confusion of mean streets.

Yet we must not merely blame the early railway age or its continuators; nor do we forget the efforts of the prosperous community meantime to the lay-out of villa quarters, of the poorer middle-class towards more or less improved tenements. Nor can we simply follow our present town-planners, central or suburban, to the laying out of boulevards within or of dormitories without. For what is this industrial confusion but the Nemesis of that forgetfulness of workshops and workers' homes which we noted in eighteenth-century planning?

We are thus coming plainly abreast of the modern situation, and this as we see it in less obviously historic cities than Edinburgh; and we are now ready to criticise, not merely the apathetic standpoint of yesterday, but the well-intentioned efforts of to-day, with old communities and municipalities beginning to look towards the problem of redressing the disorder which has thus thoughtlessly grown up, and even with new communities, like Letchworth or Rosyth, seeking how, if possible, to avoid failure in their turn. Here, then, the views

of the Edinburgh Municipality, which has pioneered in town-planning progress even oftener than our Survey has sufficed to show, are surely worthy of careful consideration. Note, then, our exhibit of the "Preliminary Memorandum to the Town Council of Edinburgh on the Further Development of Industries (1908)." In this document, after a preamble duly appreciative of the historic interest and picturesque beauty of Edinburgh, and of the economic value of its consequent tourist attractiveness, after due recognition of its educational, governmental, religious, and other importance as the Scottish metropolis, there is no suggestion at all as to the development of the existing industries of Edinburgh-much less of that possible further association of these with the educational and other advantages of the city. But these, it would be easy to prove to the most sceptical critic, give it potential advantages similar to those which it has partly utilised, as in the printing and paper-making industries, those of pharmacy, brewing, &c.; and all these in a degree probably, on the whole, not inferior to any other cities, British or foreign. There is merely a lengthy, and in itself, so far as it goes, not unpersuasive, argument as to the suitability of Edinburgh, by virtue of its low rates especially, for new industries of any kind; but notably those which are being, or may be, attracted to Great Britain by Mr. Lloyd George's recent law on Patents. Moreover, this document also proposes—and here is its main interest as a town-planning suggestion—that these industries should be developed, as mainly at present, to the south-west. But so long as the earth continues to rotate that will be the direction of our prevailing wind. The new town is already gravely depreciated by the smoke and smell of this new quarter-even its central and most famous view is "So like Pittsburg!" as the American tourist now frankly tells you; and to extend all this is, surely, not likely to benefit or even maintain the interests so politely recognised at the outset of the memorandum.

Are, then, industrial developments to be discouraged, and the city to be left to its lawyers and parsons, its doctors and professors, to its retired villas and its conspicuous slums? Not so. Our initial Survey, with its general and geological maps, shows exactly where the future industrial development of Edinburgh should be, and therefore will be, because it will pay to be—pay in energy and efficiency, in health and beauty, and therefore in money also. It will be upon that "Innocent Railway" [fig. 15] which we saw for urban reasons should have been developed from the first, and now should be for regional reasons also. And it will be upon and beside the Midlothian coalfield, which, happily, lies east, not west of the city, and has its smoke mainly blown out to sea. Smoke, of course, is mere waste, soon to be suppressed by a more economic and more truly utilitarian civilisation, while, with this, an adequate development of electrical power, lighting and heating systems must naturally also arise, and this not only for its own uses, but also improving existing Edinburgh in ways for which a volume is required. Our survey, in fact, points straight towards its sequel, in a Report with Plans of this possible Newer Edinburgh—an industrial city and a garden city in one, and this realisable within a reasonable period, which our friend Mr. Ebenezer Howard may, I trust, live to see.

An indication of this growth, as already in instructive and unconscious progress—though for that reason unfortunately as vet quite unplanned—is afforded by the growing brewery village of New Duddingston. This exodus of the breweries from Central Edinburgh next begins to raise the question of the reorganisation of the present industrial confusion, and, with this, of the working-class quarters within the old town—in short, we have to supplement our incipient scheme of a newer Edinburgh by a better older Edinburgh also. We are, in fact, entering upon a period like that of 1765, upon a new spiral, of course; let us hope a less defective one. Does not, then, this Survey unmistakably bring out, not only the interest and the possibility of our Survey of a City, but its direct practical use—the way in which retrospect, rightly interpreted, not only illuminates the present, but sweeps through this, and forward again into intelligent foresight? With our greater populations and resources, our graver problems, our more anxious responsibilities, we are compelled to still greater magnitude of design than were our predecessors; but surely also to fuller reflection, to completer provision for all the many needs of life. Of course it may fairly be contended by the municipal authorities, whose "Preliminary Report" we have been so severely criticising, that their proposed south-westward development is for their own area, while ours are outside their present municipal boundary. Yet the answer to this also is plain. Municipal boundaries exist for the sake of cities, and not cities for municipal boundaries; and in Edinburgh, with what is believed to be proportionately the largest legal and political population of any city in the world, or in history, it should not be impossible to enlarge at once its area and its powers to an extent worthy alike of the opening social future, and of the continued place of Scotland as one of the Great Powers—of Culture, if no longer of material forces and alliances: of Edinburgh as one of the Great Cities—for in history those alone are great whose spiritual forces and influences are most out of proportion to their mere numbers.

H.

The preceding criticism of the recent industrial order, or rather lack of order, together with the complemental indication of a policy of improvement within the city, and of expansion without, has brought us more fully up to the contemporary interests of town planners than our far-away manner of opening seemed to promise. Yet, instead of now presenting plans of industrial and garden villages without, or of new clearances or thoroughfares within, as the prevalent custom is, let us simply return to our Survey, still far from ended—indeed, really only beginning for truly modern purposes—with our disillusionment with the "progress" of the industrial and railway age.

Let us resort rather to that form of mental relief common to all save the poorest classes of our industrial world—that of taking the tourist and holiday view of Edinburgh, from which indeed our city largely derives its wealth, like Scotland generally.

This explains our exhibit of the two ways of looking at Old Edinburgh—as a centre, indeed a very metropolis—of Squalor, yet likewise of Romance. Our series of photographs, therefore, records

this appalling and still tolerated squalor of the old town in its buildings and courts, and correspondingly of its slum life. Throughout the nineteenth century, as already indicated, this state of things has been mainly accepted by the middle and governing classes as a permanent supply of human material for its confused charities, for its vast schools of medicine and anatomy, and for its manifold religious endeavours. Yet, as the medical school has its long roll of heroes, of whom Simpson and Lister are but the chief, so the philanthropists and divines have also largely justified themselves in types like Dr. Guthrie, the organiser of ragged schools, and Dr. Chalmers, the originator of the Elberfeld system, or Dr. Begg, a pioneer in housing many years ago; while the too sweeping would-be sanitary clearances, like those of Provost William Chambers and most of his successors, are also seen to be not entirely inexcusable, despite their inevitable resultants of transferred pressure in higher local rents and general taxes, &c.

For Romance, on the other hand, we have a selection of Mr. Bruce Home's admirable drawings [fig. 16], while our photographs culminate in those of the "Old Edinburgh Street" of the International Exhibition of 1886, probably the most admirable reconstruction of an ancient city yet effected, and a suggestion of what may yet be done in some of our old quarters in permanent form. Beginnings of this domestic revival have, in fact, since been made at Dean Village, in High Street, &c., as notably in the buildings of University Hall.

The exact coincidence, both in time and space, of such work as this of Messrs. Sydney Mitchell and Wilson, Capper, and other architeets, towards this revival in domestic architecture, with the romantic tales and admirable "Edinburgh" of Robert Louis Stevenson, is of interest as once more showing how the mental attitude of a generation and its expression in material and literary art are normally at one. In this ease all are plainly derived from Scott, and arise by the revival of his spirit in presence of the broken survivals of his picturesque environment before the inroad of the railway and full onset of the industrial and financial age. The restoration of the interior of St. Giles and that of Edinburgh Castle are similar and contemporary examples of the work of the past generation at its best. This connection is still more plain when we note that both these great works were carried out at the initiative and expense of Robert Chambers and of William Nelson respectively, two of our leading printers and publishers—a group among whom there still reappear, perhaps more naturally than in any other class, the combined virtues of scholar and of citizen.

Once more we return in fresh series of exhibits to that ever-recurring deterioration of the work of each generation, which seems well-nigh as sternly inevitable as the death and decay of its once living bodies; and this involves a corresponding rebuke of the vanity of the town planners who so boldly provide for a morrow they naïvely imagine "shall be as this day and much more abundant." We show, then, the character of our "eligible villas," but these have already been sufficiently criticised in Stevenson's "Edinburgh." We show, too, the type of "long, unlovely street," unending miles of tenement rows, upon which a past generation of builders, of speculators rather, made their transient gains, each an enduring injury to its community,

once more—like the villas, the Calton monuments, the two towns, old and new—in further decadence of rival styles, the classic and romantic, in their latest variations of decay.

It is important to note how that essential continuance of the historic overcrowding of Edinburgh by the habitual preference of even moderately well-to-do and otherwise intelligent people for the tenement, as distinguished from the cottage, has been and still is encouraged and maintained by the great Educational Trusts, which are the largest ground landlords of Edinburgh, and which stoutly continue to press in and pile up a population far denser than that which can be found upon the estates of any of the ordinary types of ground landlords of whom English town-planners so often grievously complain—and yet all this with the best intentions, in the supposed interest of the up-bringing of the child-life of Edinburgh! Thus the question of ground landlords is not so merely political as people suppose. Like every other abuse or evil around us, it needs a fuller study than either politicians or reformers are yet accustomed to give—for lack of city surveys!

Our survey made, shall we then turn to political agitation? Not I, at least, for one. Our Civic Observatory of an Outlook Tower can but leave its Surveys to leaven gradually as they may, the thought of ground landlords, City Fathers, Parliamentary representatives, and other personages too high for easy access, like our tenements themselves. Our Survey turns next to what can be done here and there meanwhile with moderate means and ordinary folk, with such labour and time as they can spare. Hence our "Open Spaces Committee," with its survey of every open space amid the slums; and these within the "Historic Mile," despite its overcrowding, amount to no less than seventy-five pieces, measuring about ten acres in all. This Survey again leads to "Report"—that is to plan, to action; and ten or a dozen of these have already been reclaimed within the past two or three years into gardens, accessible to school and street children and to women, to the people generally, whilst others are in preparation as circumstances and scanty funds allow. Our photographs and water-colour perspectives here explain themselves—save that in these I may bring out the principle and point of view of the whole historic survey by once more calling attention to these as a veritable renewal of the cultivation terraces of our initial and prehistoric survey [fig. 17]. As a practical point it may be added that, despite all that is too commonly said of rough population and the rest, no mischief worth mentioning is ever done. Quite the contrary. The gardens are thoroughly appreciated, and their educating, civilising influence already plain, and spreading in ways too varied and complex for consideration here.

Closely kindred to the work of this Open Spaces Committee is the corresponding larger survey lately suggested by Mr. Joseph Fels on behalf of his well-known "Vacant Lands Cultivation scheme," now flourishing in London as well as in Philadelphia. Our map shows that about 450 unused acres on the outskirts of Edinburgh might be utilised as in these so far more progressive cities. It should not be necessary to argue for this method of relief, though as yet its adoption is hard to begin in so keenly critical a community as ours:

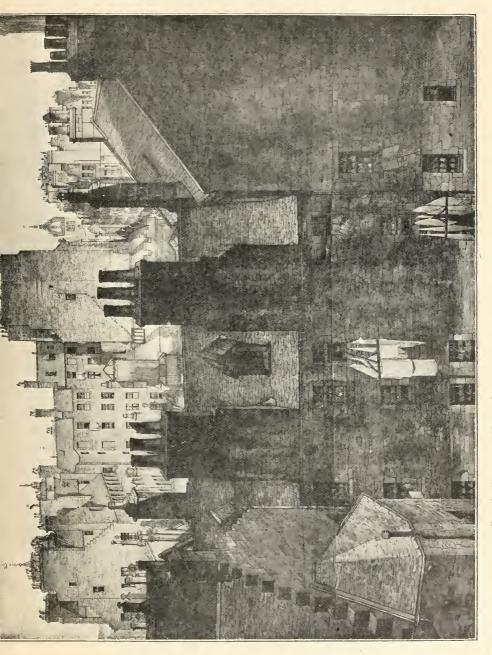


Fig. 16.—Edinburgh: Milnes Court, Lawnmarket. (From a Drawing by Mr. Bruce J. Home.)

hence this little survey also awaits its natural application and development, like other and larger ones.

From the standpoint of the historic survey, however, note how this vacant land cultivation just outside the town limits throws light upon the origin of the spacious gardens of the old-world friars upon our medieval town-maps; and these, not only in Edinburgh, but



Fig. 17.—" King's Wall Garden," an example of the Reclamation of Neglected Areas

in Oxford, in Florence, and other old cities. Hence—the speculation is at least harmless—might not this similarly useful and re-educational type of cultivation again lead us towards some other new and unexpected development of town-growth, in its way also beautiful, as did that of old? May it not have some latent part in that next evolution of our city for the better, which is the happier side of that

judgment-day which our historic and sociological survey shows is always going on? May it not even again be said by the Ideal of Progress—" Inasmuch as ye did it unto the least of these, ye did it unto Me?"

Leave now our small gardens in progress, and our waste lands still unutilised. We leave undescribed also our little beginnings of Garden Villages in Edinburgh, though the oldest in Scotland and among the earliest in Britain. For a higher outlook and a larger future, let us return to the ancient heart and focus of our city, the ridge of Old Edinburgh. Once more we have to promote an exodus like that to the New Town, yet in a different way—the relief of its again largely over-crowded population, seriously under-housed even when contented—not by further destruction of insanitary areas, as some desire, nor by the erection of masses of new tenements for the poorer classes, as another school of city reformers everywhere desires; but aiming rather at that gentle yet real uplift throughout all classes which is afforded by better housing generally, and by normal civic expansion and improvement.

Notice in this connection the survey by our foremost Edinburgh antiquary and civic artist, Mr. Bruce Home, showing every historic building still surviving: yet let us frankly recognise that interesting though these old buildings may be, their survival must essentially depend upon such possibilities of utilisation as they can show.

Here, then, the significance of our next exhibit—that outlining the constructive work of the Town and Gown Association, Limited. Here I shall only speak of its Gown side—that of collegiate residence, and sum up its development and growth in twenty years without eleemosynary aid, from one house and seven residents, involving a capital of £400, to 140 residents, plus additional accommodation for married residents and others, representing upwards of £50,000. This scheme has also extended to London, and there initiated—with considerable outlay and not without sacrifice—the University Hall of Residence in Chelsea, now conducted under the ægis of the University of London, by a kindred but independent "University and City Association, Ltd.," which has in its turn lately succeeded in re-erecting Crosby Hall. Here, then, we have a new principle and method of town planning—and, indeed, of city design. It is the combination, in each city, of its antiquarian piety, and its conservative artistic purpose, with architectural ability and business management: this towards a two-fold purpose—on one side that of collegiate efficiency; on the other, that of civic betterment. With the accompanying Outlook Tower of Edinburgh, or the corresponding survey of Chelsea and other boroughs beginning in London, this combined collegiate and civic scheme is gradually becoming intelligible as a centre not merely of civic survey, but also of civic improvement. Education and post-graduate study and effort thus tend to develop upon a somewhat different, yet not altogether less social plane than that of the University Settlements, which may in turn adapt themselves to the more unified civic and educational policy of the University Halls.

These are, in fact, the gradual working-out of a scheme of collegiate development, especially adapted to our larger University

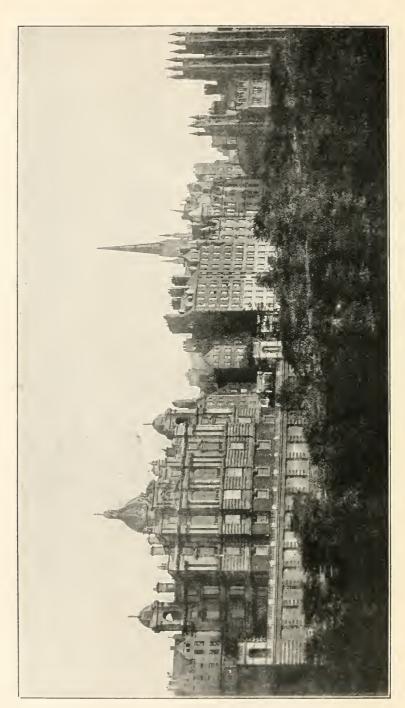


FIG. 18 -OLD EDINBURGH FROM BANK OF SCOTLAND TO NEW COLLEGE,



FIG. 19.- PERSPECTIVE (BY G. S. AITKEN) OF OLD TOWN FROM BANK WESTWARDS SHOWING UNIVERSITY HALL IMPROVEMENT SCHEME (IN PROGRESS SINCE 1887),

cities, and not, as too much in older types, independently of the existing city and by mere destruction and replacement of its buildings. On the contrary, it seeks, on grounds alike economical and social, to conserve and incorporate existing buildings. Hence our large perspectives [figs. 18 and 19] of the upper third of the ridge of Old Edinburgh now become intelligible as a definite and gradually unifying scheme. This is not simply for the cleansing and conservation of the historic remnants of Old Edinburgh, but for the development of this into a collegiate street and city comparable in its way with the magnificent High Street of Oxford and its noble surroundings. Not, of course, comparable in the same forms of collegiate splendour; but none the less in the definite and practical way, of ultimate student numbers, and in excellent and, in their way, not less educative conditions. Historic houses have thus been renewed; old courts cleansed, repaired, and modestly re-beautified; and City and University, too long dissociated, begin to find themselves entering into renewing contacts, in which that tradition of culture in democracy, which is the peculiar heritage and glory of Scottish education, may be not only maintained, but developed towards new and higher issues. Thus, then, the long discord of antiquarian sentiment and utilitarian realism is beginning to find a renewed harmony; and our studious Survey has risen once more towards practical purpose and unwearying activity.

In this renewal of Old Edinburgh other agencies have, of course, also been long at work, both municipal and private; witness the admirable application of Miss Octavia Hill's system by the Social Union. At present most hopeful, yet as some fear also most dangerous to the future of Old Edinburgh is that possible improvement of Holyrood Palace now being considered in association with the memorial of the late King and the welcome to the new. Here town-planning schemes at this point are actually being called for, and towards these our survey and its conservative suggestions, our constructive beginnings also, are respectfully submitted, especially to any to whom the present principle—that of survey before action—carries a serious appeal.

At the outset we noted the fear that our surveys might delay action. But has it not been shown in practice how our survey with its interpretation illuminates the path for action, and this alike as regards its dangerous and its hopeful possibilities? Our survey, in short, leads inevitably towards a corresponding "Report on City Development;" and this is actually in preparation, and on lines not less, but more, comprehensive than those of my "City Development" with regard to the small yet deeply interesting and significant City of Dunfermline.

Here, however, it is sufficient to give some simple indication alike of the method and spirit of the Report which arises necessarily from the Survey. First, as regards the method; this we briefly express by our juxtaposition of two plans of the city. The first is the ordinary Directory map of the city, tinted here and there to show how it has grown upon its physical contour and geographical situation. The second is a sample of our rough experimental sketches towards the bettered city of the opening generation. For the past it shows the utmost practicable acceptance of the natural

^{*} Edinburgh: Geddes and Colleagues, Outlook Tower, 1904.

environment with the conservation of the historic heritage—the best word of each and every generation. As regards the present, we seek at once social betterment and economic efficiency; while as regards the opening future, we venture more and more boldly upon that social and cultural evolution, at once civic and educational, which surely expresses the best tradition and the highest hope of Edinburgh Old and New. Our suggested Report on Edinburgh Town Planning, then, is no mere matter of street-making, or housebuilding, however respectably improved upon conditions present or past. It is a City Design; and this not only of material process, but of idealistic progress, for except the ideal plan the city they labour in vain that build it. Hence our verses from the scriptorium of the Art College; hence our suggested statue, one of the most needed symbols of returning unity and activity at the main point of Old Edinburgh, midway between its warring churches and assemblies, its colleges of all denominations—the statue of St. Columba the Civiliser, in whom all religious traditions—Catholic, Episcopal, Presbyterian of all denominations and all interpretations—legendary, historic, and sociological—actually for once agree.

Beyond this even, as our survey began with the Castle upon the Rock, so it ends appropriately with a Castle in the Air. Let our successors materialise this in their turn.

Our Civic Survey thus has ranged through wide limits: from the fullest civic idealism on the one hand, to the most direct and ruthless realism on the other. For there is no real incompatibility between the power of seeing the thing as it is—the Town as Place, as Work, as Folk—and the power of seeing things as they may be—the City of Etho-Polity, Culture and Art. Our city surveys, in fact, descend throughout their veritable inferno, yet ascend towards corresponding circles of higher life. What are these circles of ascent or of decline? The needful stereoscopic device of thought—the analyses of a strangely mingled and ever-changing ebb and flow, the rise and fall of historic and individual evolution.

As final expressions, then, of our survey and of its practical purpose, our exhibit ends with two symbols: First, Mr. Gibson's well-carved model of the City Cross, in itself summing up the vicissitudes of Old Edinburgh for centuries past, built in mediæval times, transformed at the Reformation, demolished in the utilitarian period, partly re-erected—thanks to Sir Walter Scott—in the romantic age, and finally re-erected and restored to civic uses. Hence this Cross is peculiarly fitting as a symbol not only of Citizenship, but of Civic Revivance; and as complementing that initial Relief Model of Edinburgh, with which we started as conditioning the material origins of the town, by a corresponding expression of the deeper and inner evolution of the city. The many-sided activities of a great city, spiritual and social, educational and hygienic, architectural and industrial—or most simply ideal and material—all these may be fitly symbolised upon the many sides of this characteristic building as aspects of a real unity; and this unity again, by the shaft of the Cross, as an ascent of life towards fitting expression—pointedly individual because also civic and national. Yet as each phase of development of our survey has come and gone, so in turn may this presentment of it. All surveys, we have seen, need perpetual

renewal; and our final exhibit is thus a plain office-model of the Outlook Tower—reduced to its simplest expression—that in which it may be adapted by anyone to the problems and the tasks presented by his own immediate environment, his own region and neighbourhood, quarter and city. Hence, beside this, we lay our indications and beginnings of other surveys of cities, e.g. of Dunfermline, of Perth and Dundee, of Chelsea, of Paris. These at least may serve as further evidence of the practicability of city surveys; and of these, not only as the essential local and public Inquiry needed before town planning and city improvement schemes can be safely or sufficiently undertaken, but as helpful to municipal work of all kinds, and to eivic betterment in its endless details. In conclusion then, here is my thesis and challenge: City surveys are urgent, practicable, and useful, so useful that they must before long become for civic statesmanship and local administration what charts now are to Admiralty and to pilot.

NOTES.

Note I.—Any who are desirous of entering upon a survey of their city are invited to communicate with the writer at Outlook Tower, Edinburgh, or University Hall, Chelsea, or with the Secretary of the Sociological Society, 24 Buckingham Street, Strand, who will furnish a copy of a Memorandum on the need of "City Survey preparatory to Town Planning," prepared by the Cities Committee of the Sociological Society. This Memorandum includes a summary of the Committee's work and recommendations; an indication of the dangers of town planning before survey and of the method and use of the preliminary survey; and an outline scheme for City Survey and its associated local Exhibition, corresponding to that of Edinburgh above.

Note 11.—The cordial thanks of both editors of this survey are due and tendered (a) for loans of original drawings to Mr. Bruce Home, and of many valuable photographs to the Photographic Society of Edinburgh, and to Mr. Frank C. Inglis; (b) to their assistants Mr. Robert Dykes, Miss Geddes, and Mr. Alastair Geddes.

Note III.—The success of the Town Planning Exhibition justifies the suggestion of a further "Cities Exhibition," which should be a graphic presentment of the Development of Cities and of their historic and sociological Interpretation, as well as be more fully and systematically representative of the best methods of Town Planning and of the possibilities of City Development.

Elements towards such a Cities Exhibition are at present being collected and provisionally arranged at Crosby Hall, Chelsea. These include (a) a selection of typical plans, &c., of city improvements, garden villages, &c., from the recent Exhibition, and others not there exhibited, usually upon a smaller scale, more convenient for study and comparison; (b) the survey of Edinburgh, improved as to arrangement, &c.; (c) surveys (in various stages of progress) of other cities and boroughs, e.g. Salisbury, Chelsea, &c.; (d) other matters of interest towards the study and interpretation of cities.

This Type-collection is being arranged with the view to exhibition in other cities. Particulars can be obtained on application to its Secretary (Crosby Hall, Chelsea, or Outlook Tower, Edinburgh).

