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MEN AND BUILDINGS

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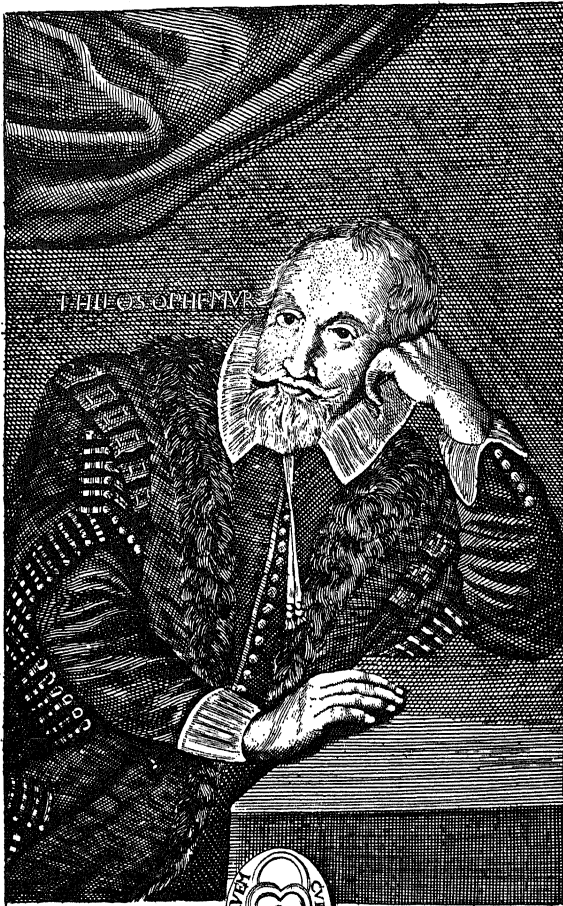
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IT MAKES A NICE CHANGE
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W-Dolle-F

Sir Henry Wotton (1568–1639), author of *The Elements of Architecture*, which was published in 1624. The book opens with a statement of basic principles :

“ In architecture as in all other Operative Arts, the end must direct the Operation.

“ The End is to build well.

“ Well-building hath three Conditions, Commodity, Firmness and Delight.”

This portrait is from the engraving that forms the frontispiece to Izaak Walton's *Reliquiae Wottonianae*, and appears to be based upon a painting by an unknown artist, which is in the National Portrait Gallery, and is reproduced on Plate 42 of this book.

MEN AND BUILDINGS

by
JOHN GLOAG

“ . . . there being between *Arts* and *Sciences*, as well as between *Men*,
a kind of good fellowship, and communication of their *Principles*.”
The Elements of Architecture,
by Sir Henry Wotton



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1950

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Chantry Publications Limited

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and
SINCLAIR WOOD

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PREFACE TO THE SECOND EDITION

This book was written during 1930, and when Mr Kenneth Street of Chantry Publications suggested publishing a new edition of it, with illustrations, I decided to leave its structure undisturbed. As it was written mid-way between the world wars, many of the views and conclusions in the earlier chapters were related to the First War, and various changes were necessary in the wording. The whole book has been revised; many things have been cut out; a few sentences have been added; and the changed nature of patronage for architecture has been duly recorded.

June, 1949.

J. G.

PREFACE TO THE FIRST EDITION

Few people read prefaces, and those who do may be irritated if the plan of the book is disclosed and the bubble of the plot is pricked before the reader is led to the last chapter. This preface is here to suggest to readers who may be daunted or bored by the final sentence of the first chapter, that this is neither a technical book nor an academic history. It does not pretend to contain original thoughts; but it does attempt to sort out the tangle of ideas, prejudices and sentimental associations that surround the subject of architecture, with the aim of rendering intelligible to the layman what has happened and what is happening in the making of buildings.

The author must acknowledge his indebtedness not only to the books of Mr A. Trystan Edwards, but to many discussions with that able critic. In Mr Christian Barman's work he has also found both inspiration and example.

January, 1931.

J. G.

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J. G.

NOTE ON THE ILLUSTRATIONS

Many of the illustrations in the text and in the plates have been selected from engravings and books published in the eighteenth and early nineteenth centuries. Such contemporary illustrations show the influences that were affecting architectural taste, and how a sentimental regard for picturesque views of Gothic ruins undermined respect for the discipline of classical architecture. The interest in Gothic architecture which characterised the nineteenth century produced a large and varied literature on the subject and provided employment for many talented draughtsmen. Their work has been used in several chapters, and some of it—chiefly that drawn from Bloxam's *Principles of Gothic Ecclesiastical Architecture* (1849)—records examples of Romano-British and mediaeval building which have since been mutilated or destroyed.

J. G.

CHAPTER I

MEN AND BUILDINGS

THREE THOUSAND years hence a few voices only may have survived to tell posterity about the twentieth century, and their immortality may be due to the chance discovery of the metal plates from which their books were printed. Paper perishes: unlike the ancient Egyptians, we do not make enduring museums of our tombs so that books and documents are preserved with our dead, though occasionally some selected records of our way of life are put in sealed boxes and buried in the foundations of new buildings.

Students of history in the fiftieth century may have such mixed misguidance to the character of our stimulating and chaotic world as the works of Marie Corelli, Henry James and G. K. Chesterton may afford. Collectively, writers may suggest the social and intellectual atmosphere and the physical conditions of a period of history; but from individual works it is difficult, and often impossible, to gain either an accurate or a comprehensive picture of contemporary life. The three authors mentioned could convey to futurity only the most confused impressions, because their own individualities have been so variously projected into their works. They have shown the world as they thought it was, and occasionally as they would have liked it to be. The gift of invention and the habit of adapting facts to suit the needs of their creative work make novelists unreliable in reflecting the life of their own time. The mirror of literature is always a little distorted, especially when writers use their art to propagate improvements on current morality.

William Richard Lethaby once said, "Civilisation has to externalise itself in disciplined arts, which become the registers and indices of the quality of life." Although printed words may be lost or may fail to convey to posterity a clear picture of the commercial machine age, significant remains in brick and concrete may survive to suggest the vast scale of our wealth and our civic and social casualness. Even destructive wars conducted with all the "drive" that science and industrial technique have put into warfare, would

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hardly efface all evidence of the oddly varied architecture of our cities and industrial areas. It should be possible for the fiftieth century archaeologist to learn something of the industrial age from the ruins of carpet factories built in imitation of Venetian palaces, railway stations in the Tudor style, self-consciously Gothic university buildings and churches, and the innumerable classic columns, for the orders of architecture are as ubiquitous in the British as they were in the Roman Empire. There may be other examples of twentieth century work to show that the powers of imagination were not dormant in our time, and that some architects were not prepared to make exaggerated copies in concrete and steel of perfections their forefathers had attained in brick and stone.

If we examine our architectural achievements, we shall see what a flawless mirror they provide for the hurried thoughts of that most harassed of all God's creatures—modern man.

The true architecture of today, though as experimental as early Gothic, lacks the salutary discipline that stone imposes upon an innovating and inventive architect. Concrete, steel, light alloys, chemically produced synthetic materials, and glass, afford possibilities that are unlimited by any tradition of constructional craft. An easy mastery of strong and docile materials may be gained on a drawing-board, while the men who work the cranes, drive in the rivets and pour the concrete contribute standardised mechanical skill—nothing more. Such limitless control of materials has produced many blankly utilitarian buildings. Utility untrammelled by an imagined need for some disguising "style" is not lacking in beneficial effect upon the form of a building; but some utilitarian forms arise from nervousness, because the architect is playing for safety and failing to comprehend or fearing to exploit the new power conferred by a new material. An air of blankness afflicts a building only when the architect's imagination is in abeyance.

There are other causes for the production of purely utilitarian buildings. During the nineteen twenties there was a reaction against needless complexity imposed upon buildings in the interests of some spurious style. In architecture, in its allied crafts, and in that large, diversified field of activity known as industrial design, there arose an urgent movement for "fitness." In England, this movement became partly articulate through such organisations as the Design and Industries Association which popularised the phrase "fitness for purpose"; but as a movement it was and is negative. It enlisted help and created societies for aesthetic sanitary work;

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it sought to clean up and simplify design and to reinstate the respect for function that a century of increasing mechanical facilities had diminished. In any balanced and orderly civilisation, in almost any previous civilisation, the existence of such a movement is unthinkable. But no previous age had been faced with the results of mass production by mechanised industry, though repetitive work by organised gangs of slave artificers had foreshadowed the nature of those results in the Roman Empire. In architecture, despite our new materials, it was and is a weakness of our time to take refuge in the past and to seek sustenance for inspiration in some long dead period. Occasionally, sincere creative design is expressed in terms that belong to the past: for example, the new buildings of Bristol University, which must, presumably, be labelled as twentieth century Gothic. This group of buildings illustrates not only the difficulty but the futility of attempting to resurrect dead architectural forms in an age when the spiritual fervour to which they owed their original inception is no longer generated. Sir George Oatley, the architect, has given his lofty Gothic halls and slender fretted stonework life of a sort—he has provided a background for a form of life that has almost perished—the sedate, calm existence of a great scholarly community, secure from ruffling contacts with the outer world.

These buildings are late Gothic in general character; there is no slavish copying of any particular phase of Gothic architecture; and they indicate the same informed sympathy with the spirit of Gothic architecture that pervades the work of Sir Giles Gilbert Scott in Liverpool Cathedral. But informed sympathy is not enough: it is a pallid substitute for the fire of life. Obvious temptations have been resisted, and no painstaking effort has been made to reproduce exactly the characteristic embellishments beloved by mediaeval masons. Instead, modern subjects have been chosen upon the rather naïve assumption that Gothic forms can be made expressive of the twentieth century by the addition of carved grotesques of soldiers in shrapnel helmets and professors in horn-rimmed spectacles. You cannot turn a stage coach into a railway train by dressing the coachman in dungarees and giving the guard a whistle instead of a post horn.

The entrance hall of the tower has an almost theatrical air. The echoing vastness of the hall has a proper solemnity. The severity of its ascending lines; the subdued richness of its fan vaulting; and the cool spaciousness of the place are components of a background that belongs to the Middle Ages.

MEN AND BUILDINGS

Students in the clothes of today mounting the staircase look hopelessly out of time and place.

Attempts to revive Gothic architecture fail to make great buildings; but the failures are sometimes noble. Cologne Cathedral is an example of such chance nobility. This cathedral was completed when the unbridled romanticism of the nineteenth century made the reverential appreciation of Gothic architecture almost obligatory to architects who wished to succeed. It is a massive building that manages to retain an air of frail complexity as though it has been knitted from some dowdy worsted rather than built of stone. The exterior suffers from a disturbing duality. The twin spires are individually tolerable when seen from a distance; but such filigree in stone loses all dignity when seen at close quarters. Like some gigantic Victorian cruet stand, it shares with Eaton Hall at Chester and the former "Star and Garter" hotel building on Richmond Hill, Surrey, the appearance of having been enlarged from some small and intolerably fussy article of tableware.

The interior has all the grave splendour of a great Christian church. Zwirner, who conceived the idea of completing Cologne Cathedral, had parts of an ancient fabric on which to base his work, and perhaps that helped him to recall, so far as the interior was concerned, a little of the mediaeval spirit.

The cathedral was finished between 1842 and 1880, and Zwirner died in 1861, his work being carried on by Richard Voigtel. So the work of restoration and completion was undertaken in the worst period of architectural taste. Yet with all its grotesque complexity and lumbering imitativeness, it is a building of emphatic character that in some of its aspects does not escape the beauty and mystery of mediaeval churches—more than can be said for many of the sham-Gothic churches that were built in England during that period.

When forms and ideas from an age alien to our own are adapted for a modern building, it is difficult to escape from the impression that we are looking at stage scenery. Lethaby once minted a splendid phrase: "the Architecture of Adventure." Gothic architecture in mediaeval times was essentially an adventure, a succession of bold and glorious experiments. Could the men who made those soaring shapes in stone be brought into our century and confronted with our opportunities and materials, it is conceivable that there would be adventures in steel and concrete transcending the pedestrian utilitarianism of the so-called "modern movement" in design. Gothic architecture in the twentieth century, even when it is more than an antiquarian study, like Bristol University, can

MEN AND BUILDINGS



“Bristol is a city of fine churches and gracious Georgian buildings.” Here is a view from the Avon, looking north east, with the towers of All Saints, Christ Church, and St. Nicholas. From a drawing by Thomas H. Shepherd, published in John Britton’s *Bath and Bristol* (1830).

never be an adventure. It satisfies a bloodless romanticism. By capitulating to the sentimental charm of “old world” effects Bristol rejected a great opportunity.

Bristol is a city of fine churches and gracious Georgian buildings. Much of it is still the same as it was when Jim Hawkins strolled along the quays to find Long John Silver at the sign of the “Spy-glass.” The eighteenth century is embalmed in its streets, and in Bristol we may imagine ourselves back in a period that Dr. Inge has described as one “of stability, and relative contentment, when

MEN AND BUILDINGS



“Much of it is still the same as it was when Jim Hawkins strolled along the quays, to find Long John Silver at the sign of the ‘Spy Glass.’” The quay, drawn by Thomas H. Shepherd for John Britton’s *Bath and Bristol*.

literature, architecture, furniture, and even religion, reflected a civilisation which had found itself and desired no drastic changes.” If the new university buildings had been erected in that age of good taste, we should have had some well-mannered expression of the architectural genius of the Georgians, for in the eighteenth century people built to express the taste of their own time.

But even twentieth century Gothic reflects contemporary life. It shows how confused we are by the facility with which we may reproduce any of the styles that have distinguished previous periods; and the widespread desire to employ that facility for the purpose of imitation explains the reforming zeal of the “back to utility”

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movement of the nineteen twenties. The creed of "fitness for purpose" certainly has a corrosive effect on many book-bred ideas of architectural style; but a movement instigated by a handful of enthusiasts does not always achieve notable or desirable results. The first world war made Britain, and other countries, receptive of utilitarian ideas. In France "la loi de la conception rationnelle" became the actuating motive of a progressive group of architects, artist-craftsmen and designers concerned with various departments of industry. Germany, released from the florid traditional taste imposed by her royal house, took the same road in design; even impoverished Austria adopted the architecture of experiment in the great socialistic housing schemes that were developed in Vienna.

Utilitarian architecture was encouraged by post-war conditions in Britain. Big or protracted wars are usually followed by a period of makeshift reconstruction. The arts of peace need restoratives; so for a time people accept crude substitutes for the things that normally command intelligent direction and a high standard of skill for their production. In 1919 lorribuses ran on the streets of London until coach building could be resumed. Only people with raw memories of wartime discomforts would have tolerated those draughty, canvas roofed vehicles. Only people in sheer despair of getting anything else would have accepted converted army huts as substitutes for houses; but in those immediate post war years, 1919 to 1923, it was known that the building trade was badly out of gear, and the limited comfort of such temporary structures compared well with trenches, dugouts and camps.

Apart from the industrialising of large tracts of what had formerly been open country, there was no direct devastation in Britain during the 1914-18 war; no ruined towns and villages in the sense of material destruction—nothing but the effects of a four years' check on urban development. This was serious enough in the housing shortage it produced, and sufficiently exasperating to men and women who wanted to make homes for themselves; but there was no finality of hopelessness in the situation. Warfare had ceased. The delay in returning to civilised conditions was patiently regarded as a passing phase. And then came a wave of utilitarian building. The subsidised building schemes were started, and included many well-planned houses when they were under the control of architects. "No trimmings" was the rule; and innumerable comely boxes were erected, indicating the regard for economy that dominated the time quite as vividly as the leading articles of the newspapers that were clamouring for reduced state expenditure.

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Architecture is an inescapable record of the ideas of any age and of the stresses and strains put upon any social structure.

We passed out of the period of makeshift reconstruction following the first war. Architectural thought was purged of some follies and lost a few refinements by an enforced regard for utility and economy. The stage was set for a new renaissance. But although an immense amount of building was done, and Britain led the world in slum-clearance, all that happened was a bleak cult of "functionalism," which hideous word was allowed to excuse the deficient imagination of many a chapped soul.

CHAPTER II

CAMPS AMONG RUINS

IF THE 1914-18 war had lasted longer or had become too widely destructive, it is conceivable that, owing to lack of skilled workmen and expert direction, building might have remained in an emergency stage for half a century or more.

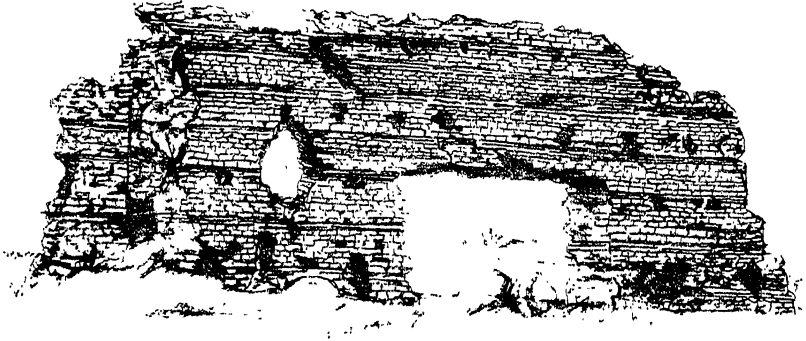
When those words were written in 1930 they recalled two bleak and forbidding scenes. The first, a French village named St. Leger, as it looked on a Sunday morning early in August, 1918. It was in a part of France that had been fought over for a long time, and it was being fought over again—for the last time so far as that particular war was concerned. Seen through the clouded goggles of a box-respirator, the place seemed just an ankle-deep rubbish heap, bits of which were jerked into the air every few minutes by bursting shells. The distended bodies of two dead horses made a dark patch on the white main street: everything else in St. Leger was shapeless.

When it became necessary to pass through the village, one could see at close quarters the dim ghosts of houses, inn, church and bypaths. Nothing over a foot or so in height was standing; but the main walls of buildings were sketched out amidst the pounded rubble, like bones lying on sand.

The other is a level Shropshire field by the Severn, from which rises a humped mass of masonry. Beside this, exposed by careful excavation, is a group of buildings. Sturdy foundations have preserved their plan. Brick walls, bound in the iron grip of Roman mortar, are still standing. The baths and the basilica have been identified, and there are hints in the ruins which enable something of the architectural character of the place to be reconstructed. There are fragments of tessellated pavement; the remains of central heating systems; scraps of pottery—altogether a promising assortment of wreckage. Once this was a Romano-British city called Viroconium; but it has been dead for fourteen hundred years and buried for perhaps a thousand.

The destruction of St. Leger and of hundreds of other villages and towns in the battle area during the four years of the Great War (as we used to call it before the second and greater war which has

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The north side of the wall that is still standing at Wroxeter in Shropshire, where, fifteen hundred years ago, the Romano-British city of Viroconium flourished. Compare this with the mass of brickwork known as the Jewry Wall at Leicester which is shown on Plate 1. (From *The Ruins of the Roman City of Uriconium*, by Thomas Wright, F.S.A. 1868.)

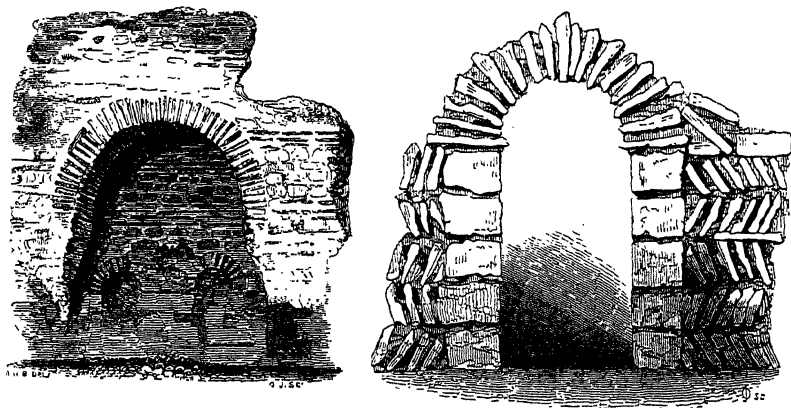
since occurred) was more sweeping and apparently irreparable than that in which Viroconium ceased to be a living city. But because the Great War was short and the area of its devastation was restricted, it was possible to repair in detail a tract of exhaustively smashed countryside, many miles deep and hundreds of miles long.

The devastation inflicted upon the Roman province of Britain in the fifth and sixth centuries was rendered permanent because intermittent warfare drained the Romano-British civilisation of its men and wealth, generation after generation, so that the period of makeshift reconstruction was indefinitely prolonged. Meanwhile, the crafts decayed, and young men grew up untaught and untrained, except as fighting men. Even if ground was recovered from the Saxon invaders, who were always pressing westwards, the repair of wrecked houses and ruined towns was in time beyond the skill of those defending what remained of Roman order. There was a gradual increase in the devastated area. City after city disappeared, until finally Corinium (Cirencester), Aquae Sulis (Bath) and Glevum (Gloucester) were conquered, late in the sixth century, and little was left in Britain of Roman influence save a network of fine roads.

If modern people had to camp among ruins after a big war had caused an almost universal destruction of cities and houses, it might be many centuries before they would re-learn the craft of building, even though they were surrounded by the shattered evidence of

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architectural achievement. The scientific, commercial civilisation of the twentieth century is too complex, and craftsmen, and particularly master craftsmen, are too rare, for straightforward reconstruction to be possible after modern warfare had been relentlessly carried to its logical and disastrous conclusion, and the whole commercial, productive and social fabric torn and scattered like a thatch in a hurricane. Also it is doubtful whether train-catching and car-driving man has the adaptability or the knowledge to make a success of conditions that are crudely natural. How many modern English or American families could emulate the Swiss Family Robinson if they were dumped upon an uninhabited island, with a fortuitous assortment of stores, salvaged from a wreck? An objective attempt to answer such a question immediately discloses the separation of modern life from the most elementary forms of handicraft, and suggests that, although many individuals today have far more specialised and general knowledge than their mediæval forefathers, man for man they are less capable of directly productive work in the two activities that make civilisation possible—growing food and building shelters.



Some Romano-British ruins have survived: for example, the Jewry Wall at Leicester, of which the drawing to the left shows details of the brickwork (see also Plate 1); but many have been casually destroyed, like the arch and masonry at Castor, Northamptonshire, shown to the right. (From *The Principles of Gothic Ecclesiastical Architecture*, by Matthew Holbeche Bloxam. Ninth edition, 1849.)

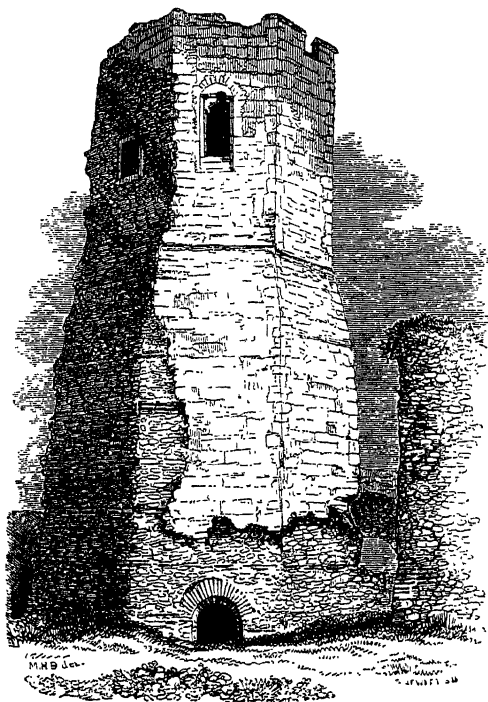
MEN AND BUILDINGS

A modern population, attempting to patch up some sort of civilised life after another and a longer war, might count on having their ruined country and wrecked cities to themselves. Permanent invasions have gone out of fashion in Europe. There are annexations, and paper-made boundaries are shifted about to please politicians; but there is no fierce outrush of surplus population from a war-making state into conquered territory, no warrior emigrants who expropriate the conquered. (That, at least, was a plausible assumption between the world wars: new techniques of expropriation have since been invented and practised.) When, in the fifth century, the Roman Province of Britain began its independent and intermittent fight for civilised security, there was always the terrible penalty of barbarian invasion for failure to defeat the enemy. Success for the invaders meant fresh settlements, fresh fortified bases; and the dim glimpses we have of British history from the middle of the fifth century to the close of the sixth indicate a determined struggle on the part of the Romanised Britons to check the flood of Saxon and Jutish barbarians, until, after the year 577, it burst through all defences and poured westwards until it reached the Welsh mountains. A civilisation was destroyed with casual indifference by fighting men who wanted cities to loot and land to farm.

No architecture marks the first generations of their possession of Britain: the uncreative mind seldom leaves enduring traces.

The civilisation that the Saxon barbarians ruined was singularly complete. The Roman Province of Britain enjoyed for over three centuries a secluded calm, in every way favourable to the creation of wealth and the development of architecture and the crafts. That calm was disturbed only by one serious native rebellion in the first century, when Colchester and London were destroyed by Boudicca, and by sporadic outbreaks of war with the unsubdued tribes in the north of the island. Towards the end of the third century the activity of Saxon sea raiders necessitated a system of coastal defences, and a chain of forts was built and the garrisons put under the charge of a special officer, the Count of the Saxon Shore (*Comes Litoris Saxonici*). In the fourth century the long peace was broken by invasions from the north. Security ended, and cities that had not worried about war for two or three hundred years, strengthened their walls. Professor Haverfield, discussing the walls of Roman London, said ". . . the large area included by the wall, and the scarcity of dwellings outside it, and the need of some historical cause for wall-building, combine to make me think that

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M. H. Bloxam describes this as "The Roman polygonal tower, near the ruined Anglo-Saxon church within the precincts of Dover Castle," and records that despite an exterior casing of flint and other alterations made in the fifteenth century it still retained "many visible features of its original construction of tufa and flint bonded with bricks at intervals." In a footnote to this description Bloxam states that after this drawing was made "the ancient Roman doorway on the south side, forming the entrance into this tower, has been blocked up by a mass of masonry, so that access to the interior of the structure is cut off, and the constructive features of the doorway are hidden. A wanton act of vandalism it is impossible too strongly to condemn!" (*The Principles of Gothic Ecclesiastical Architecture*, pages 40-41.)

perhaps the end rather than the beginning of the third century is the more probable date. The bastions might easily have been added in the course of the fourth century, when the dangers from Saxon pirates became even more acute." (*Journal of Roman Studies*, I,158). The bastions of Roman London are described in the fullest detail in Volume III of the Inventory of London's Historical Monuments, which has been prepared by the Royal Commission on Historical Monuments. Their structure suggests haste in building; for instance, the bastion in Camomile Street contained (to quote from the work referred to, page 103): "large blocks of reused pink cement and masonry—fluted pilasters, shafts of half-columns, portions of canopies, cornices, door-jambes, etc.—together with the sculptured figures of a soldier and a lion, and a human head of colossal size. . . ."

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Before this unsettled time, when military adventurers appeared and trade began to dwindle, the Province afforded a spectacle of ordered prosperity with standards of living that were far in advance of those attained in Saxon, Norman and mediaeval times—standards that were not re-established until the eighteenth century, and unsurpassed until the twentieth.

The Roman citizens of Britain understood domestic architecture, and the luxury of their houses was satisfying, although they were probably unable to command the services of gifted and fashionable architects. The stock patterns of orders and ornament were spread over the exterior and interior of their buildings. The Corinthian columns, symbolic of the Roman love of code, everywhere uplifted stiff crowns of acanthus to support the eternal frieze, cornice and pediment of eternal Rome.

These conquerors of Britain did not impose their culture upon a race of savages. Pre-Roman Britain had, according to Sir Charles Reed Peers, "an art of really high decorative value, with a sense of line and balance which need not fear comparison with anything which has succeeded it."¹ Upon this art of Celtic civilisation Professor F. G. Parsons, in his book, *The Earlier Inhabitants of London*,² made this significant comment: "That their artistic taste was excellent there can be no doubt; for they made beautiful pottery and metal work, ornamented with flowing lines and graceful curves, evidently copied from plants. One of the most striking points about their art is that so often they knew exactly where to stop; for some of their most telling pieces of metal work have only a few bold lines of ornament, yet so arranged as to give the greatest pleasure to the eye. In other words, the Celtic Cymry were artists and craftsmen who did not suffer from that dread of blank space, which so often led to an overloading with unnecessary ornamentation of the work of their Teutonic successors."

The flashing freedoms and vigour of Celtic art made no appeal to Roman taste. The stuff was barbarian, and to the Roman that term epitomised all things and ways uncivilised. Yet, in the art that developed in Roman Britain, native talent was occasionally liberated; something that transcended the conventional forms and mechanical ornamentation laid down by Roman architects; something that came alive and peeped out fancifully from among the

¹In the second of a series of three Cantor Lectures on "Ornament in Britain" delivered before the Royal Society of Arts, April 26, 1926.

²Chapter III, p. 96. (London: Cecil Palmer, 1927).

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classic columns; enlivening sedate, established architectural settings with the spirit of decoration.

In sculpture the Romano-Briton occasionally escaped altogether from the limitations of stereotyped classic ideas, and attained a spiritual liberty of expression that is quite mediaeval in its force. Writing of that piece of Romano-British sculpture, the Corbridge lion, Professor Haverfield said: "Fantastic and even grotesque, it possesses a wholly unclassical fierceness and vigour, and not a few observers have remarked that it recalls not the Roman world, but the Middle Ages." The Corbridge lion might well be a piece of thirteenth century work, enriching a monument in some cathedral. The bearded Gorgon head on the tympanum of a pediment that once adorned the temple of Sul at Bath has a ferocity that turns a stone mask into a thing of terror. The Romano-Britons retained a fluent independence of expression in sculpture that gave even to their cruder work an emotional significance.

In other directions an enterprising competence in decoration is observable. Lethaby said that "Provincial Roman painting is not fine as compared with the great things in either Greek or Gothic art, but we must remember, in comparing it with anything we can obtain to-day, that it was the ordinary journeyman decorator's work of the time. It is certainly far beyond the standard of common work we reach to-day; and Roman London, on the testimony of the arts, must have been quite a civilised place."¹

The country was carefully cultivated, and the pleasant country houses of the landowners were built in brick and tile and in local materials. There are hundreds of these "villa" houses dotted about England to-day, and an examination of the magnificent Ordnance Survey map of Roman Britain² will show how thickly their remains are distributed in the western and southern counties. The road system was a tribute to the skill of Roman engineers. There were many well-planned but by no means fully built up towns and cities. The whole Province reflected in its buildings the prosperity and security it enjoyed, and showed by an unmistakable touch of artistic independence that it was an outlying Province that had adopted Rome's ways and comforts, but had not succumbed to the disease of bureaucracy that demanded fixity of outlook, rigid reliance upon codes, and a slavish uniformity.

When official contact with Rome was weakened and at length

¹*Londinium*, Chapter VIII, p. 173. (London: Duckworth, 1923.)

²Second revised edition, 1928. (H.M. Stationery Office.)

MEN AND BUILDINGS

cut off indefinitely, there was a Celtic revival in Britain. But it produced nothing save discord. The disruption of the civil organisation of the Province, the depletion of the garrison, and the disastrous habit acquired by the legions early in the fifth century of setting up puppet Emperors of their own choosing and murdering them casually when they grew unpopular, gave native princes an opportunity to display the mental instability and natural shiftlessness of the Celt. The state of the country became chaotic, and all opportunity to cultivate the arts and crafts was removed. Even the growing menace of barbarian invasion and the extension of barbarian settlements in Britain could not bring the British princes to work together under one leader. But that miracle of domination was apparently achieved by Ambrosius Aurelianus in the latter part of the fifth century, and he was followed by Artorius, who also succeeded in imposing unity upon Roman Britain, and until his death early in the sixth century he prevented the wasted Province from dissolving into a number of petty Celtic states. His deeds form the foundations of Arthurian romance, and in legend he is presented to us as King Arthur, instead of as a harassed Roman general trying to save a deplorable situation in the approved, efficient Roman way.

Whenever the Saxon and Jutish armies bought fresh territory with their swords they camped amid the ruins of the civilisation they were instrumental in destroying. Even after they had established a permanent settlement in Britain and had finally beaten the Romano-Britons back into Wales, they were content to put in the place of Roman order the simple agricultural routine of primitive peasants. They scorned town life, and it is probable that they avoided with superstitious dread the brick shells of the dead Roman cities. But they could not escape from the evidence of the ability of the Roman builders, and presently those farmer-warriors began to make experiments in building—mere essays in the adaptation of existing and partially ruined structures at first perhaps; but it was a beginning, the beginning of a great tradition of English thought and English character expressed in wood and stone. And presently there mingled with it something of the spirit that had informed the work of the Romano-British sculptors and artists.

CHAPTER III

ADAPTIVE ARCHITECTURE

WHETHER THE surviving Romano-Britons contributed anything to the architectural and artistic progress of the Saxon and Anglian kingdoms remains conjectural. Nobody now knows what actually happened in Britain during those darkened centuries of intermittent warfare, when the Roman cities were destroyed and deserted and civilisation sank to the crudest levels. There is a typical Celtic wail from the Welsh ecclesiastic, Saint Gildas, who lived between 516 and 570, and whose preaching and views were apparently uncongenial to his fellow-countrymen. He composed the work that has come down to us, abroad, somewhere about the year 560. Entitled *Gildae Sapientis de excidio Britanniae liber querulus*, it gives a few glimpses of the condition of Britain in the fifth and sixth centuries, but its main object is to catalogue and condemn the shortcomings of the Welsh and their rulers, and it was only common prudence on the part of its author to leave the country and write it elsewhere.

There is also the *Historia Britonum*, by Nennius, another Welsh writer, who lived in Brecknock or Radnor and wrote early in the ninth century. A section of the *Historia*, which is known as the *Genealogiae Saxonum*, was composed by some unknown Briton of Strathclyde in the last quarter of the seventh century. Flickers of light in the murk of the period come from a few other sources, from an Irish chronicle and from a life of St. Patrick. Then there is *The Anglo-Saxon Chronicle*, which has provoked doubts and generated controversies innumerable. Mr. Dayrell Reed, in *The Battle for Britain in the Fifth Century*,¹ has related archaeological evidence to the *Chronicle*, and has argued a case for the acceptance of early writers whose views are usually accepted with reserve. Mr. Reed is plausible and persuasive, and his book appears to throw new light on the dark ages. It certainly invalidates the assumption, which used to be made, that there was a comprehensive massacre of Britons by the Saxons, and that the traditions of Roman Britain

¹London: Methuen, 1944.

and the gifts of its inhabitants made no contribution to the civilisation that was gradually built up by the pirate ancestors of the English.

The rapidity with which the early English kingdoms developed artistic ability cannot be attributed entirely to the importation of foreign craftsmen and to the influence of Irish art. The repressive conventions of Rome did not stifle although they curbed artistic nationalism in Britain; but after the release from Roman standardisation, two centuries of war and general insecurity had to be endured before there could be any aesthetic profit from such freedom. When Christianity was re-established by Saint Augustine late in the sixth century, and its ideals began to irrigate the minds of the Saxon conquerors, interest in building was revived. The architectural needs of the early Saxon kings were neither extensive nor exacting. It was religion that demanded a setting appropriate to its pomp and mystery. The Augustine mission was charged to attend to the provision of adequate buildings for their converts to worship in, and the adaptation and consecration of existing temples was recommended.¹ The period of makeshift reconstruction had begun.

The reconquest of the old lost Province by St. Augustine's holy legionaries re-established more than Christianity. There was still a British Church, which kept alive a feeble sense of cultural superiority among the surviving Romano-Britons. This Church, intent on preserving a costly nationalism, refused to co-operate with the missionaries from Rome in the task of converting the Saxons. Obsessed by memories, it had nothing to offer men but the routine of creed, and even that routine was somewhat deranged by long lack of direct contact with Rome. Augustine's Christianity was not only a light to conduct and a magnanimous influence that fashioned morality from the most primitive material; it represented all the knowledge and art that had been salvaged from the wreck of Roman culture. Its churches became sanctuaries where the arts could be practised; in the brains of its priests resided all the learning that was left to the world; its language was universal; and its vigour was such that it planted its outposts in nearly all the old Roman provinces, converting the barbarians who had overthrown the Western Empire, and once more and in a most enduring and subtle manner causing Rome to be regarded as the foremost city on earth.

At first the architecture that served the early Christian English

¹Bede, *Historia Ecclesiastica*, Book I, Chapter XXX.

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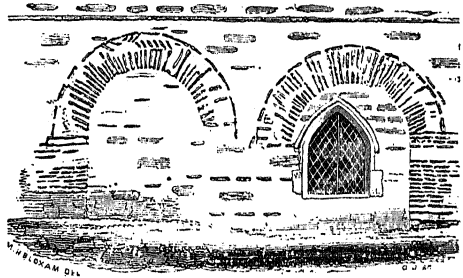
was adaptive and temporary. The Church needed craftsmen, and occasionally imported them from France and Italy. Wooden buildings were erected in various cities; and although we have no means of guessing at their form, we may imagine that they were crude by comparison with the big, well-built remains of official Roman architecture. Probably they were as unimpressive as the corrugated iron tabernacles erected by poor but earnest Non-conformist sects to-day. In 627 at Eoforwic (as York was then called) Paulinus had built a wooden church. Mellitus, who had been ordained by Augustine as Bishop of London in 604, was to see the founding of a church dedicated to St. Paul upon the crest of Ludgate Hill, although that was probably a converted Roman building, like the one at Canterbury, which, even before the coming of Augustine, Queen Bercta, the Frankish and Christian consort of Aethelberht King of Kent, had dedicated to St. Martin of Tours.

The wooden buildings provided an excellent school for craftsmen. The business of adapting partly ruinous Roman buildings brought this new race of experimental builders into contact with forgotten laws and methods, worked out in materials that were no longer available, for brickmaking had become a lost craft.

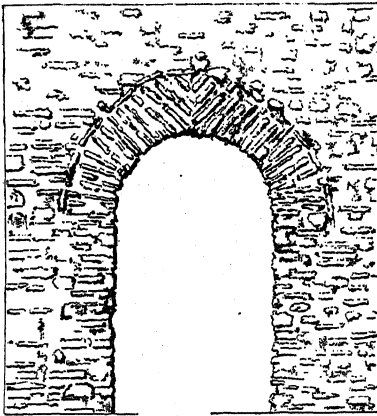
Roman architecture was standardised in all its parts with the relentless monotony of a mass-produced motor car. The amphitheatres of places as far apart as Fiesole and Caerleon, and the temples, baths and public buildings which are excavated in Italy, and the countries that were once provinces of the Empire, all have the same forms, the same inflexible patterns for their embellishment, the same competent drainage and heating systems. In the face of this tremendous and universal scheme of standardised architecture, and with the memory of Rome's power and dominion still fresh in men's minds, imitation became the most obvious of impulses. The wooden buildings that recorded the earliest essays of that impulse perished. They were hopelessly impermanent. Fire was their great enemy, and the overwhelming importance of strong, enduring materials was quickly recognised. An extract from the life of Ceolfrid, Abbot in Wearmouth and Jarrow, records that "they began to build their monastery at the mouth of the Wear in the year 764, and the year after Benedict went over sea and sought master builders by whose labour he might erect a church of stone, and he brought them from Gaul to Britain."¹

¹This condensed extract is quoted by Lethaby in "Italian Art and Britain," *The Anglo-Italian Review*, 1918.

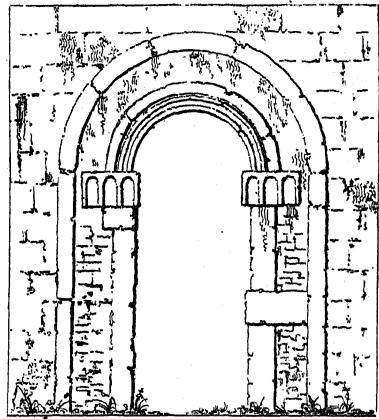
MEN AND BUILDINGS



The evidence for any architectural continuity between the Roman Province of Britain and the Saxon and Anglian kingdoms is scanty. The Roman arch persisted, and the church at Brixworth, Northamptonshire affords some examples, which are shown above (after Bloxam), and the arch of the doorway at Earls Barton may be compared with that of the Saxon church at Earls Barton, shown below. (From *A Dictionary of the Architecture and Archaeology of the Middle Ages*, by John Britton, 1838.)



Brixworth.



Earls Barton.

The latter part of the seventh century witnessed a growing enthusiasm for the building and endowing of monasteries, cathedrals, and churches, for the whole country was now converted to official Christianity. It was the beginning of a brilliant period that was centred chiefly in Northumbria. In the middle years of the century that particular English kingdom benefitted by a strong

injection of Irish influence, because the Irish mission to Scotland at Iona had reintroduced Christianity to Northumbria after the work of Paulinus at York had been obliterated in 633. This influence declined when the Northumbrian Christians decided to conform to Roman observances, and many of the Irish clergy in consequence withdrew from the kingdom. But Celtic feeling persisted in the decorative art of Northumbria for some time.

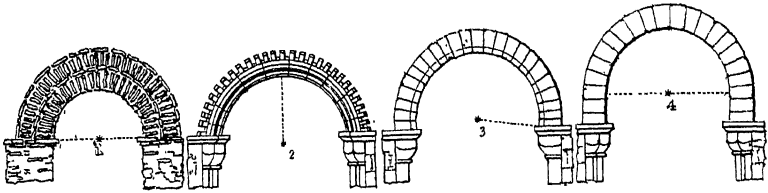
In building, the Roman example was dominant, though a fresh material, stone, in the hands of craftsmen unguided, and indeed uninhibited, by traditional methods, produced a fresh technique. To a simple regard for function they added a concern for stability which they expressed by massive forms. There must have been many instances of stone being supplemented with bricks and tiles taken from Roman buildings—a habit which survived until Norman times.

The architecture of this period is represented by very few buildings, because secular structures could seldom command the skill or the attention that were given to ecclesiastical architecture: such evidence as contemporary manuscripts afford suggests that the remains of Roman houses, somewhat clumsily adapted, were in use even as late as the ninth and tenth centuries. Illustrations in these manuscripts depict clusters of tiled dwellings, pierced by indubitable Roman arches, single-storied places, with here and there a hint of some classic feature, such as columns supporting a caricature of a pediment—a jumble of forms whose significance has been forgotten. It is conceivable that the artists were showing what they thought houses ought to look like; and were copying drawings they had seen of European buildings, rejecting their native buildings as being too squalid or uninteresting.

The great principle of Roman building, which the Romans themselves never appreciated and only employed as a constructional convenience, dominated the ideas of the Saxon builders and of the Normans who followed them. In adopting the arch they took the substance of Roman architecture and missed the shadow of the orders.

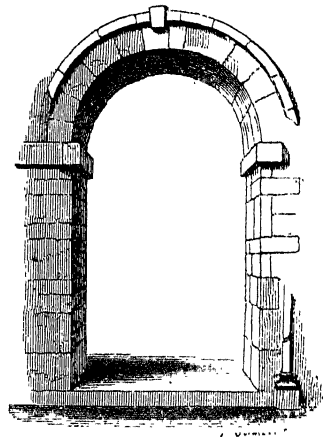
Perhaps the finest example of adaptive architecture in England is the early Norman portion of the Abbey Church of St. Albans. According to tradition, a Christian Church has stood on the site of the Abbey since the prosperous days of Roman Britain; but it was not until the eighth century that the Abbey was founded. The Abbey Church was rebuilt in 1077, and it perpetuates the memory of the Roman city of Verulamium that lay in ruins near by.

MEN AND BUILDINGS



The simple semi-circular arch, which to the Romans was a structural convenience, did not survive: it changed. Here are four examples of progressive change: 1. Brixworth Church. 2. Norwich Cathedral. 3. Canterbury Cathedral, an arch from the crypt. 4. Winchester Cathedral. (From Britton's *Dictionary*.)

There is a classical purity of form about the chancel arch of Corhampton Church, Hampshire. The builder probably had some Romano-British prototype in mind. (After Bloxam.)



The square central tower of the Abbey has the look of a Roman fortress tower: perhaps it was copied from one. Its arches are Roman; its red bricks were taken from the walls and buildings of Verulamium. It represents a link between the makeshift adaptive architecture of the Saxons and the calm stability of Norman stonework. Inside, the nave has six bays of original Norman work on the north flank, and this might well be the flank of some Roman public building, shorn of its mechanical decoration. Here arches are piled upon each other, with vertical members ascending the face of the piers—a dim reminiscence of pilasters.

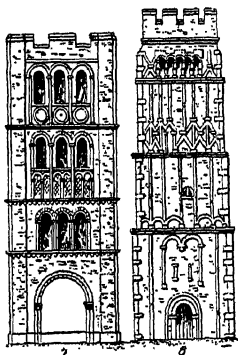
The transepts are Norman save for the modern windows at either end; and the shafts of turned stone which support the triforium arches are survivals of the original Saxon building. On the east

ADAPTIVE ARCHITECTURE

wall of the south transept the plaster has been removed from the triforium arches, leaving bare the Roman bricks, which in some places are laid in a sort of herringbone pattern—a clumsy anticipation of a much later English practice. Brick was, of course, a “dead” material to those Norman buildings; it was looted from ruins, not manufactured, and although it was employed with some skill when St. Albans Abbey was built, it was generally regarded merely as filling, only appearing on the surface of walls when economies in stone became desirable.

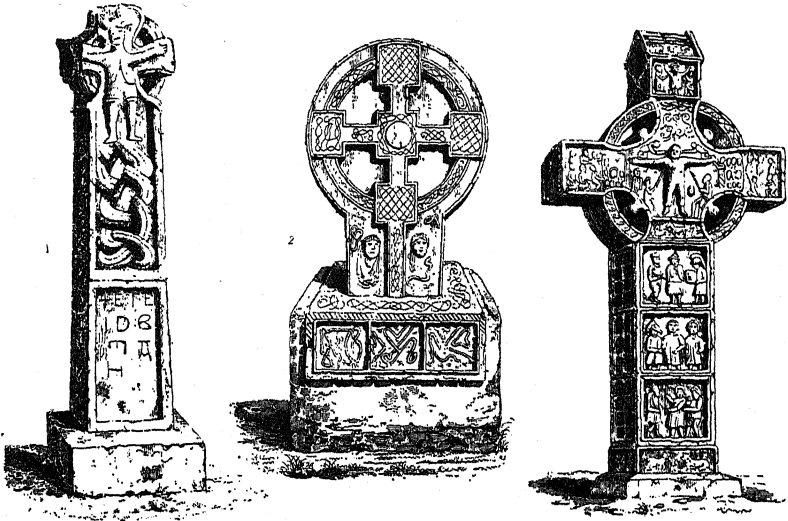
The piers that support the tower rise with a fine, austere verticality to the clean Roman arches. All the Norman parts of the interior suggest what majesty Roman architecture might have possessed if its splendid arches had not always been subordinated to the standardised orders. In Roman provincial building the orders often became quite meaningless, not because they were devoid of functional significance, but because they degenerated into a habit of ornament instead of being the visible symbols of a great system of composition.

The Norman civilisation, which was introduced into England several decades before the actual military conquest of the country, really marked the end of adaptive architecture. Saxon England had never been a thoroughly peaceful place. There was no political or social unity, in spite of Christianity. There were centres of culture that flourished and blossomed astonishingly; but education seldom touched anybody outside the priesthood, and art was enclosed in a number of beautifully embellished caskets of stone—the churches of the greater monasteries. The Danish invasions did



Left : The tower gateway at Bury St. Edmunds, built at the beginning of the twelfth century. It has a distinct affinity with Roman work, and may have been inspired by some existing gateway, which had survived from the days of the Roman province. Right : The tower of Earls Barton church, Northamptonshire. The battlements at the top have been restored. An example of Saxon church architecture, with a sturdy severity of form which may owe something to Roman military architecture. (From Britton's *Dictionary*.)

MEN AND BUILDINGS



The Celtic civilisation, which had blossomed in Northumbria during the seventh and eighth centuries, has left few legacies : here and there a broken cross may record the widespread influence of the artistic achievements of that period. Here are three examples, all from localities where Celtic influence has persisted to this day. Left : cross at Lanherne, Cornwall. Centre : Margam, South Wales. Right : St. Patrick's, Louth. (From Britton's *Dictionary*.)

the most disheartening damage to material and cultural progress, and destroyed the work of those hard centuries of makeshift reconstruction that had followed the Augustine mission.

In the opinion of Dr. Inge, the Norman Conquest "was probably an almost unmitigated misfortune for England." But architecture records that the Conquest caused a magnificent resurgence of creative energy, for thereafter stone came to life in the hands of builders, and building became adventurous.

CHAPTER IV

STONE COMES TO LIFE

THE FASHION of glorifying the Middle Ages, which developed into the "Merrie England" legend, began with William Cobbett's *History of the Protestant Reformation*, published in 1824; and it was amplified, in a purely secular way, by Washington Irving, whose *Bracebridge Hall*, and *Old Christmas*, show how agreeably misleading a sentimental American man of letters can be. Pugin, Ruskin, and William Morris also made their various contributions to the legend, and in our century, G. K. Chesterton and Hilaire Belloc have continued the entertaining work.

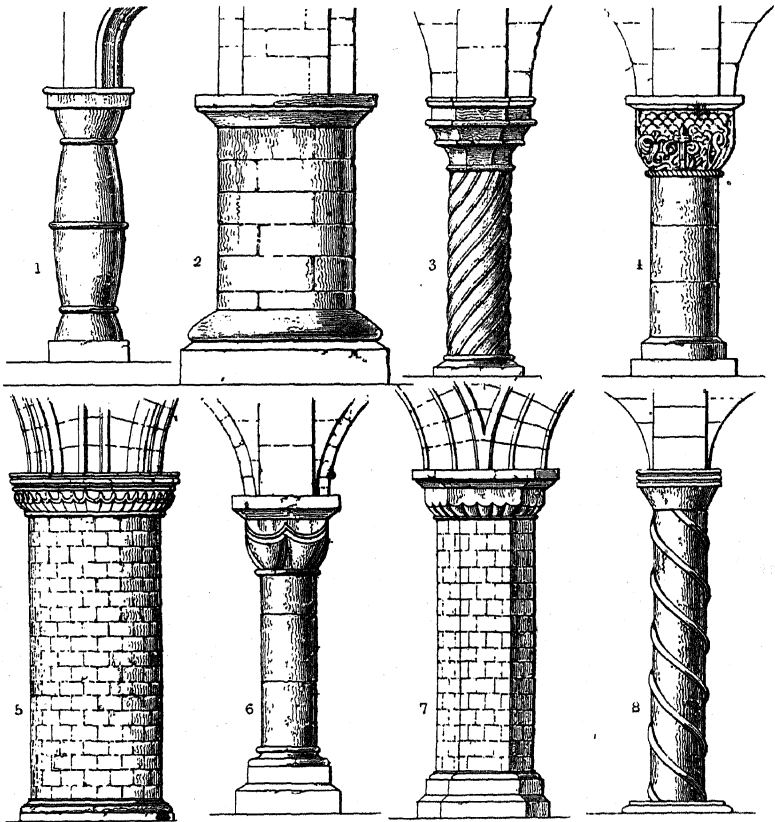
Chesterton was responsible for making many people think in a kindly, half-regretful fashion about the Middle Ages. Belloc helped to burnish certain high lights which divert our attention from the deep shadows that are flecked over the engaging composition he has called social history; be that as it may, Chesterton's gifts as a writer are too great for us to feel ill-used when we discover that, like the provincial Roman architects, he is often wholly concerned with superficial decoration.

H. G. Wells, representing an entirely opposite school of thought, believes in historical truth, as naked and squalid as possible, with all the shadows emphasised and everything well tarnished. He scolds the Chesterton type of mind in words such as these: "And this fellow, blind as a bat to facts that scream aloud at us from every thick-walled, windowless, medieval ruin, from every museum with its instruments of torture and its girdles of chastity, from the stunted suits of armour in the old armouries, and from the flaws and indecisions in the fabric of the patched, unfinished cathedrals that were the chief achievements of that age, talked of his Manors and Guilds and seemed to think a kind of Paradise might be restored by setting back the clocks of history."¹

The evidence in stone up and down England does not allow us to agree either with the Chesterton vision or the Wells exposure.

¹The World of William Clissold, Book II. (Ernest Benn Ltd., 1926.)

MEN AND BUILDINGS



Eight columns, Saxon and Norman. Left to right : 1. From the window in the tower of Earl's Barton Church (see illustration on page 23). 2. From the crypt at Winchester Cathedral. 3. From the crypt at Canterbury Cathedral. 4. From the crypt of St. Peter's Church, Oxford. 5. Malmesbury Abbey Church (see Plates 40 and 41). 6. St. Peter's Church crypt, Oxford. 7. The Conventual Church at Ely. (The remains of this church exist, though by the early nineteenth century they had been filled up with prebendal houses : the fabric may be of pre-Norman date.) 8. From the crypt of Repton Church, Derbyshire. (From Britton's *Dictionary*.)

STONE COMES TO LIFE

Church building was in progress all over the country at the end of the eleventh century. The Normans proved themselves incomparably superior in architectural ability to the Saxons. The latter had fumbled with a mixture of ideas: sometimes vaguely recalling Roman ways and occasionally incorporating features and even fragments of Roman buildings; sometimes imitating in stone construction proper to woodwork, such lapses being described as "stone carpentry", maintaining throughout their work an unenterprising simplicity.

The Normans retained simple forms and expressed their ambition by scale. They built their churches and monasteries with a grandeur of conception that eclipsed the ideas of the conquered Saxon-English; and although their massive masonry often indicated an imperfect knowledge of constructional principles and represented waste both in materials and labour, their mistakes inspired experiments and their enthusiasm encouraged them to rebuild churches everywhere. They were concerned with covering large spaces and were as daring as the American architects of the late nineteenth and early twentieth centuries, and with materials far less conducive to courage. A great church like Ely Cathedral was just as stupendous an achievement in the late eleventh and early twelfth centuries as any skyscraper of steel, glass, and concrete was seven hundred years later. Nothing in Saxon England could match it; and as such cathedrals, many of them vast in size, were year by year completed, they liberated among the craftsmen who built them an eager adventurousness. They were praising God in stone; fashioning an instrument of worship; and their thought was concentrated always upon the purpose of their work. That the end was mightier than the means was never in question, for the shaping of lives as well as stones was governed by the need of making them acceptable to the guardians of the mediaeval Heaven. In a more sophisticated and mentally unrestful age, means in architecture, as in industry and everyday life, have either obscured ends or have moderated or even abolished their significance. To-day there are few people who have a definite goal for their spiritual aims and whose work is a benign material reflection of those aims.

The mediaeval craftsmen built their churches as brothers together, their work impelled by the virility of collective intention, which gave the stones they set and carved an emotional unity. Exalted by the holy purpose of the things they made, they were released from the traditional reverence for the Roman builders that had still lingered in Saxon times, perhaps to the detriment of inventiveness.

MEN AND BUILDINGS

The power of their faith and the glory of their work armed them against the superstitious restraints that had been instrumental in preserving the remains of Romano-British cities. It seems likely that those legend-haunted ruins were now subjected to extensive and systematic spoliation. Verulamium had already provided bricks for St. Albans Abbey in the early days of Norman-English building. Calleva Atrebatum (Silchester) and Viroconium (Wroxeter) may still have been standing, roofless and deserted, in the Conqueror's lifetime, for unlike most of the towns of Roman Britain they died for ever after they fell to the barbarians: we know that late in the twelfth century the Roman city of Caerleon was still standing in South Wales. Gerald de Barri (Giraldus Cambrensis) describes its surviving splendours in his *Itinerarium Kambriae*.¹ "This city," he writes, "was of undoubted antiquity, and handsomely built of masonry, with courses of bricks, by the Romans. Many vestiges of its former splendour may yet be seen; immense palaces, formerly ornamented with gilded roofs, in imitation of Roman magnificence, inasmuch as they were first raised by the Roman princes, and embellished with splendid buildings; a tower of prodigious size, remarkable hot baths, relics of temples, and theatres, all enclosed within fine walls, parts of which remain standing."

There was no long tradition of building behind the Normans, and their early work erred on the side of strength. Some of the smaller churches give an impression of being tunnelled out of solid masses of stone. Yet that ponderous stonework could create an air of calm and security, so that a church became in form as well as in fact a refuge where peace dwelt and where the promise of an ultimate and holy peace was reinforced.

The cathedrals enclosed an area large enough to modify the massive effect of the piers from which the rounded arches sprang. The nave of Ely Cathedral, for instance, has a loftiness that emphasises the clean simplicity of the arches, lending graciousness to their purpose, and, in the triforium and clerestory, endowing them with a sober delicacy of form that only a discerning use of the arch principle could achieve.

On the threshold of new discoveries in stonework, the Norman builders allowed the attainment of stability for a time to absorb their whole attention. Their semi-circular arches continued to distribute the weight of the masonry that climbed for ever skyward.

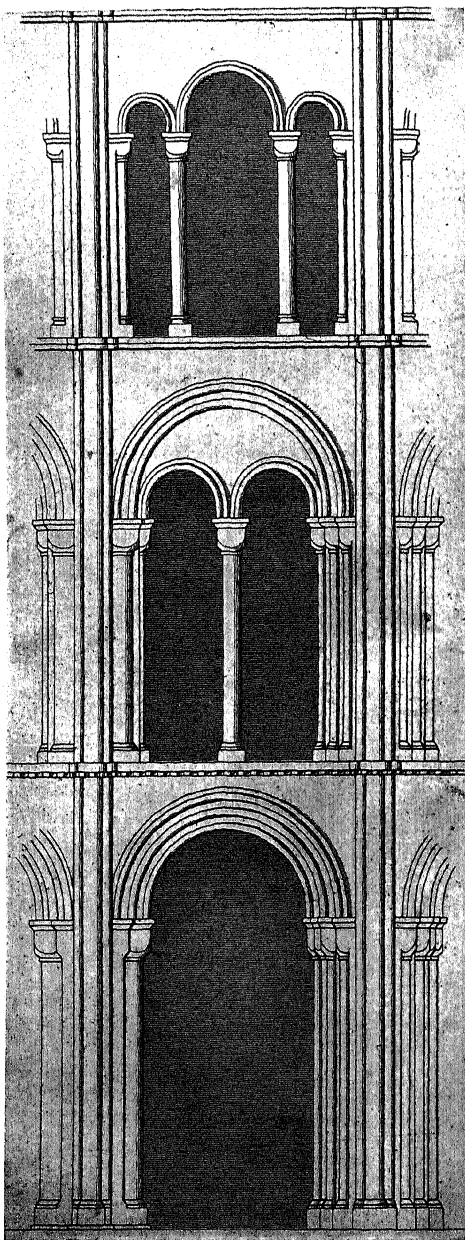
¹Book I, Chapter V, Sir Richard Colt Hoare's translation. (Everyman Library edition, 1908.)



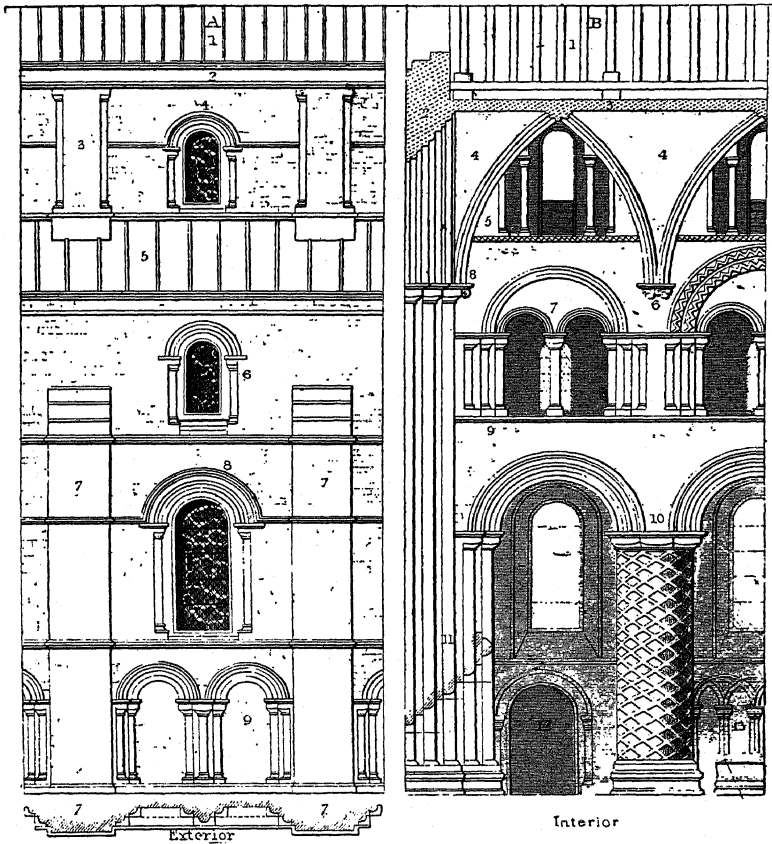
The robust stability of the Norman work dominates all subsequent additions to the fabric of Ely Cathedral. The west front is shown here : on the next page part of the nave is illustrated. The building of the cathedral was begun in 1083 by Simeon, who was appointed Abbot of Ely by William I in 1081. The galilee porch is a later addition, built some time between 1200 and 1215. (From Winkles's *Architectural and Picturesque Illustrations of the Cathedral Churches of England and Wales.*)

Portion of the nave of Ely Cathedral. Archdeacon Seiriol Evans in *A Short History of Ely Cathedral* states that most of the nave was built in the reign of Henry II. "It was complete, with the lower stages of the Western Tower, and probably its Western Transepts, and probably its Western Transepts, in 1189." This short history was published in 1927 for the Dean and Chapter of Ely Cathedral by the Cambridge University Press: it is illustrated with woodcuts by John F. Greenwood, and is an example of excellent typography.

The illustration on this page is from Lysons' *Magna Britannia*, Volume II. (Published in 1810.)

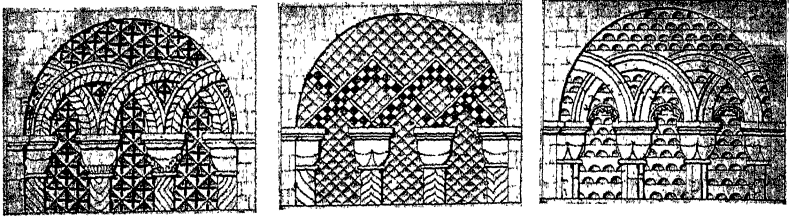


STONE COMES TO LIFE

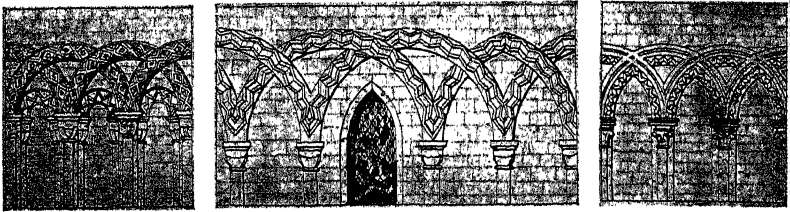


Portions of the exterior and interior of the nave of Durham Cathedral. Within, the nave has, like that of Ely Cathedral, a cool spaciousness : the rounded arches, piled upon each other have a sturdy simplicity, demonstrating that "the Norman builders allowed the attainment of stability for a time to absorb their whole attention." (See page 28.) Compare this with portion of the nave of Ely on the opposite page, and with the Saxon arches illustrated on pages 20 and 22. (From Britton's *Dictionary*.)

MEN AND BUILDINGS



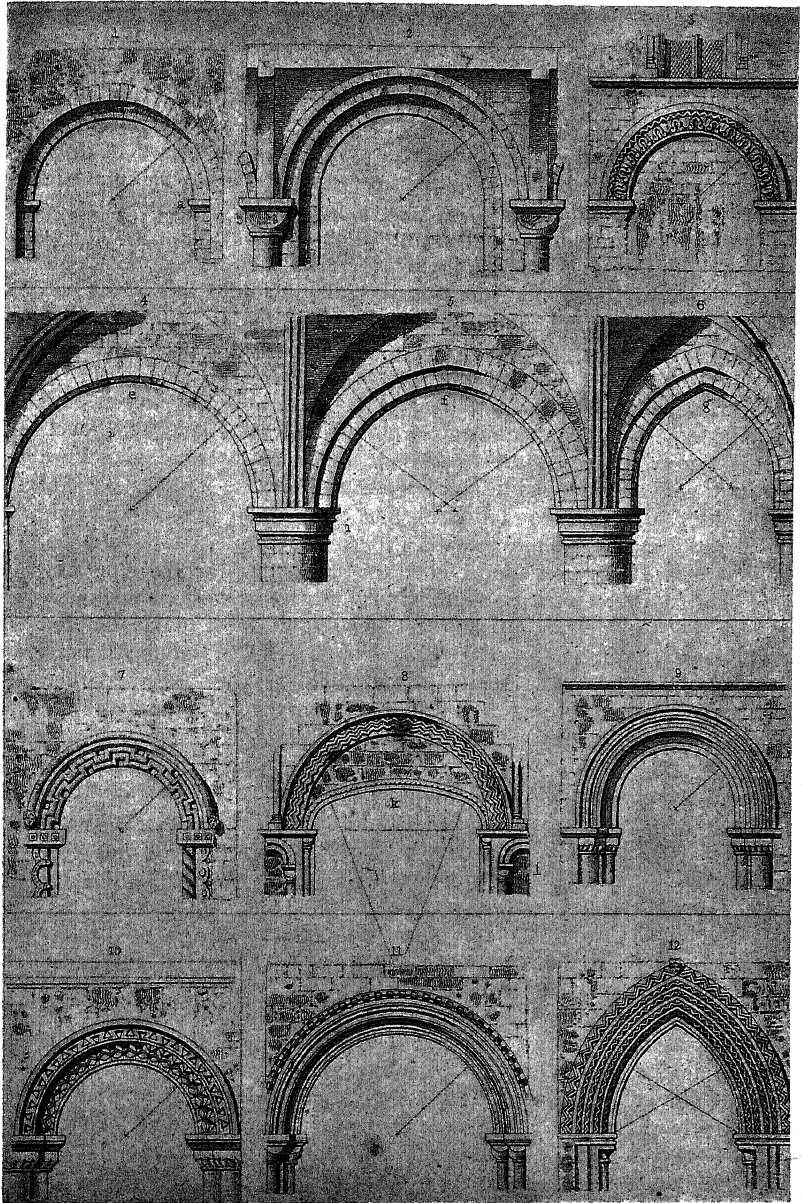
Arcades of interlaced mouldings from a ruined tower at Canterbury, that, according to Rickman, was "generally called Ethelbert's" Tower. Thomas Rickman (1776-1841) wrote a standard work entitled *An Attempt to Discriminate the Styles of Architecture in England from the Conquest to the Reformation* in which he said that few ornaments surpassed those of Ethelbert's Tower : it was, of course, pulled down after this was written. (Illustrations from Britton's *Dictionary*.)



Arcades of interlaced mouldings. Left to right : From the west end of the church at Castle Rising, Norfolk. From the western wall of St. James's church, Bristol. From the Chapel of St. Joseph, Glastonbury Abbey. (From Britton's *Dictionary*.)

At first they embellished their work with great restraint, but the late Norman buildings were richly ornamented. This ornamental work was disciplined; following and accentuating structural lines; and often borrowing motifs from Byzantine and Arabic sources, freezing into stone something of the luxurious richness of the East, but taming its extravagance by orderly simplification and a temperate indulgence in repetition.

While the churches and cathedrals symbolise the beauty and blessedness of the Paradise to come, the only secular buildings grimly reveal the ferocity of earthly life during the time of military settlement following the Conquest. The harshest utility predominates in the castles and fortresses. A chapel and a great hall and



Rounded, horseshoe and pointed arches, showing the transition from the semi-circular Roman form. The characteristic changes in the pointed arch, from the Early English style to the Perpendicular are shown on page 56. (From Britton's Dictionary.)

MEN AND BUILDINGS

one or two small rooms, excavated like gloomy caves in the huge stone mass, give service to the lord and his family; and for many years after the Conquest the life of the castle is orientated by military needs. Nowhere in England are pleasant houses and gardens to be found except within the walls of monasteries. The well-planned homes of the old Roman Province of Britain, with their centrally-heated rooms, glazed windows, and luxurious baths, are no longer remembered. The heating arrangements of such houses, the hypocausts and their flues, seem wonderful to Gerald de Barri, who inspected them at Caerleon and describes as "worthy of notice, stoves contrived with wonderful art, to transmit the heat insensibly through narrow tubes passing up the side walls."¹

There is no domestic architecture. The castle, the church, and the monastery are the limits of architectural expansion. The hovels of the peasants and the wood-built houses of the townsmen have not endured, although there were attempts to render London houses permanent and fire-resisting by making the use of stone compulsory in the latter part of the twelfth century. Fitz-Ailwyne, the first Mayor of London, gave the city its earliest Building Act, whereby thatch was prohibited and the construction of stone party walls was made compulsory. This provision was, of course, ignored for some centuries. Since the days when it was Londinium Augusta, and, in Lethaby's phrase, "a little Rome in the west,"² London had been sacked and burnt and rebuilt so that the original street plan had been blurred and the Roman foundations disregarded and forgotten. The city became a fortuitous cluster of traders' shops and warehouses and dwellings, ennobled by a few architectural landmarks, military or ecclesiastical: St. Paul's on Ludgate Hill, the Tower guarding the river approach—all enclosed by the walls that Roman legionaries had first marked out and erected.

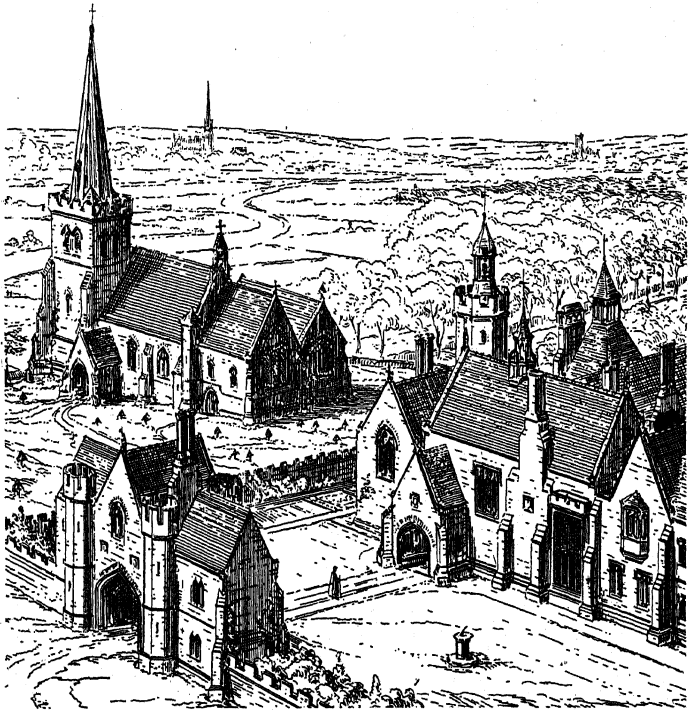
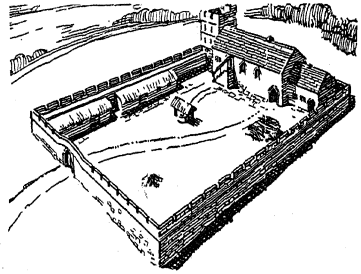
Towns had not yet regained the importance they enjoyed in the Roman Province. Wealth might be created by their citizens; kings might condescend to recognise their trading and to grant protective charters; but they were of small account in the pattern of political life, for it was the land and the shifts and schemes for the possession of land that absorbed the energy of the rulers. The landlord was the symbol of power, and the maintenance of his rights and the enlargement of his possessions, carried even to the length of private warfare, were activities proper to his caste, however

¹*Itinerarium Cambriae*, Book I, Chapter V.

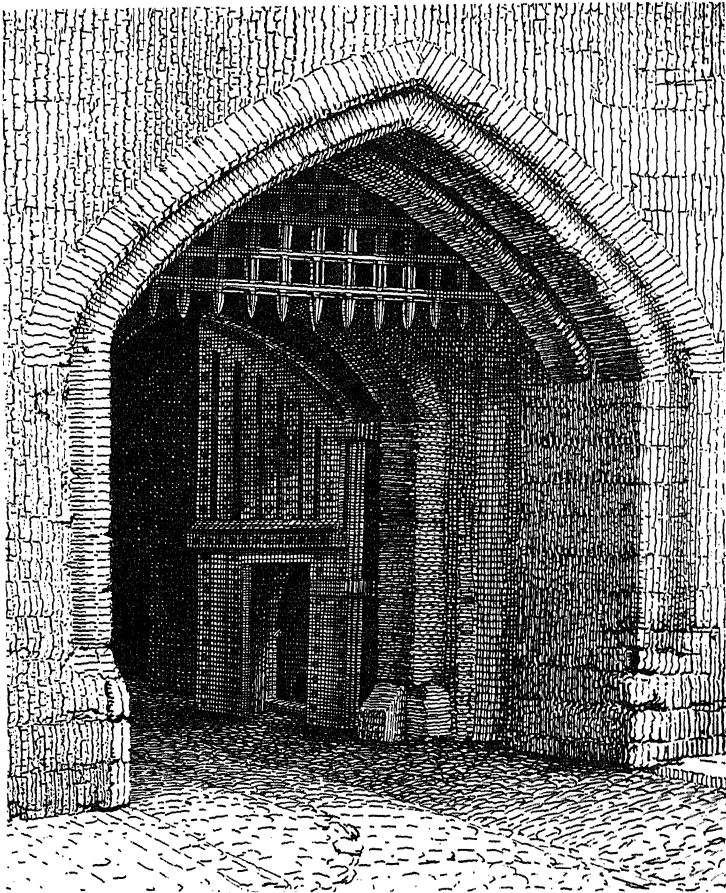
²W. R. Lethaby, *Londinium*, Chapter III, p. 83.

STONE COMES TO LIFE

Throughout the Middle Ages, the need for fortification haunted and severely limited domestic architecture. The wall and the watch tower were as important as the house itself: without them the house had a poor chance of survival.



These architectural facts of mediaeval life were forgotten or minimised by the enthusiastic antiquaries and Gothic revivalists of the early nineteenth century. Here, for example, is an idealised representation of an old English mansion, drawn by Pugin and included in his book, *The True Principles of Pointed or Christian Architecture*, which was published in 1841.



Secular buildings were symbols of the might of the ruling powers of king and nobles. "Enormous strength was the chief need ; and the Norman castle was simply a stone extension of the armour that covered the body of its lord." This is part of the south face of the Bloody Tower, within the Tower of London. (From J. T. Smith's *Antiquities of London*.)

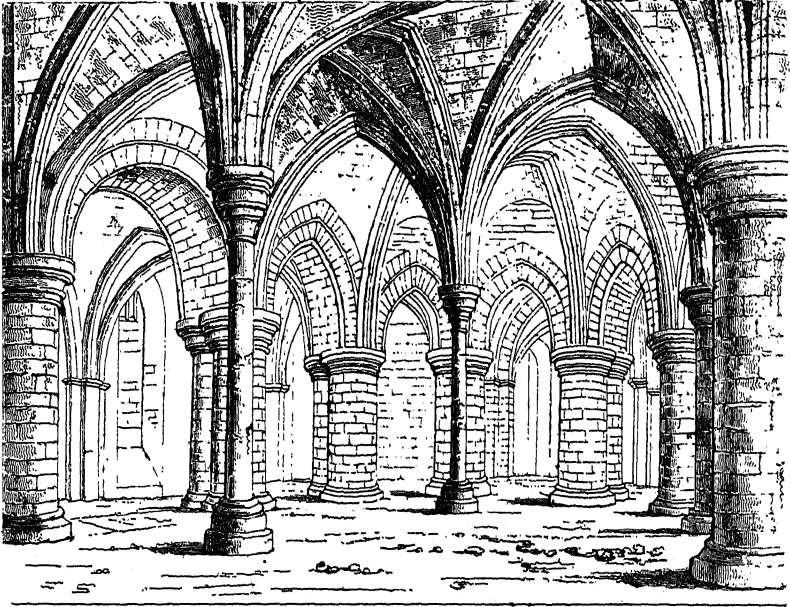
STONE COMES TO LIFE

disastrous they may have been for the prosperity of the country. Trade became a furtive and fearful business in such a wilderness of insecurity, and towns were mere bolt-holes for traders in this clamorous age of chivalry and easy-going bloodshed. So it came about that when the builder was not working for the glory of the Church, he worked for the safety, though certainly not for the comfort, of the governing class.

There was little to subdue the bleakness of surroundings in the home of the Norman noble. The site of his castle was determined by strategic considerations. It was encircled by a moat into which filth of every kind was drained. The interior was lit by narrow, unglazed slits in the thick walls. The smoke of an open fire coated the place with grime and only heated a limited area of the hall. Such barbaric retreats withheld opportunity from architects. Enormous strength was the chief need; and the Norman castle was simply a stone extension of the armour that covered the body of its lord. "Safety first," that anaesthetic for adventure, dulled the thoughts of those who built for Reginald Front-de-Boeuf and his savage contemporaries. Scott has pictured it all in *Ioanhoe*; and although he has romantically tinted and gilded the composition—using scores of words in place of the winged dozen that Chesterton would employ for his mediaeval misrepresentation—the stark lawlessness and aching disorder of the period are occasionally written red in his pages. For example: "... the multitude of outlaws, who, driven to despair by the oppression of the feudal nobility, and the severe exercise of the forest laws, banded together in large gangs, and, keeping possession of the forests and wastes, set at defiance the justice and magistracy of the country. The nobles themselves, each fortified within his own castle, and playing the petty sovereign over his own dominions, were the leaders of bands scarce less lawless and oppressive than those of the avowed depre-dators."

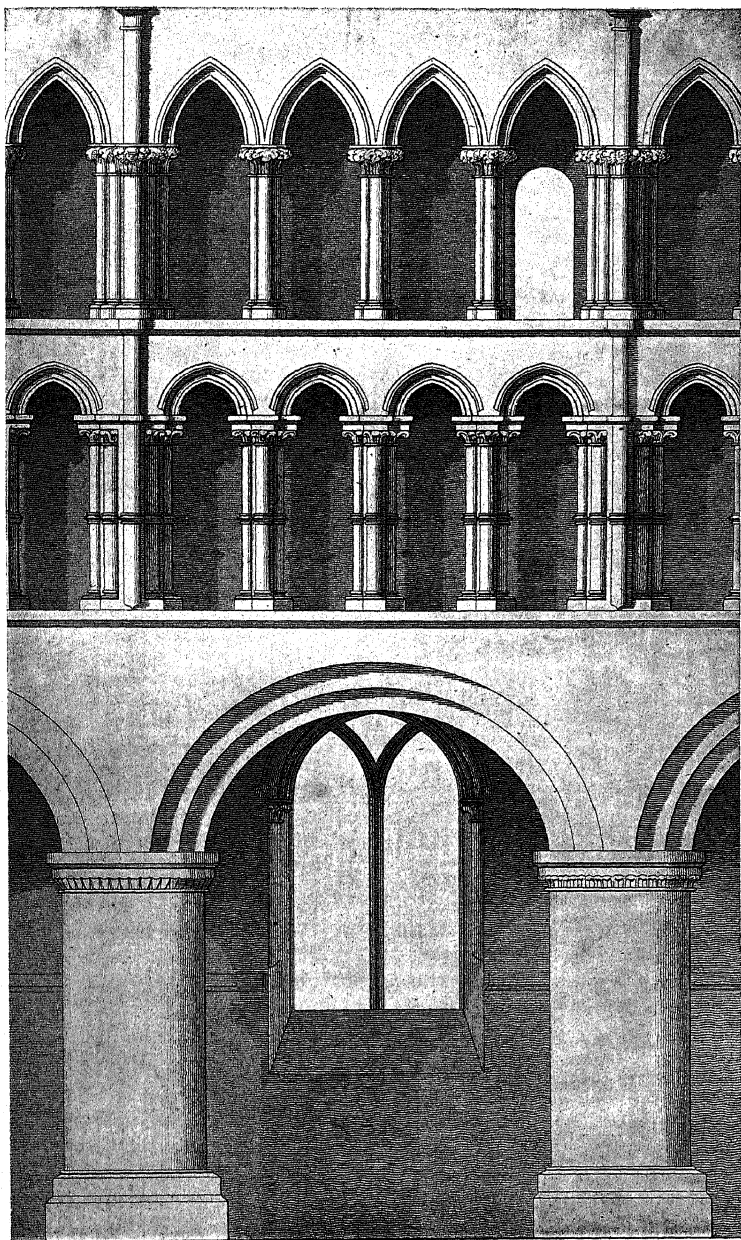
Amid all this fierce self-expression, the Church called craftsmen to its service and calmly embarked upon a magnificent creative adventure. The vigour of experiments in stone increased. The barrel vault, a prolongation of the rounded arch into a tunnel, was replaced by the groined vault, and the intersection of the arches was suggestive to exploring minds. Constructional discoveries were made; the pointed arch came into use; and presently that last architectural link with Rome, the rounded arch, disappeared.

With the purpose of a Church to direct their planning, the early Gothic builders approached architecture as engineers. They had



The crypt below the Trinity Chapel at Canterbury Cathedral. (From Britton's *Dictionary*.)

none of the aesthetic self-consciousness that is occasionally attributed to them by undiscerning students of their work. They were not striving for style: they were the "modernists" of their day, building boldly in new ways and examining all fresh structural possibilities. It was not necessary to convert anybody to their "modernism," although the forms evolved in the Early English period of Gothic building were as revolutionary, compared with the emphatic stabilities of Norman work, as the architectural experiments of Frank Lloyd Wright, Le Corbusier and Walter Gropius, compared with the commercial classicism of the twentieth century. It seemed obvious that every new method for perfecting the framework of their buildings should be tested, and adopted if it proved successful. Moreover, mediaeval modernism (if the paradox is permissible)



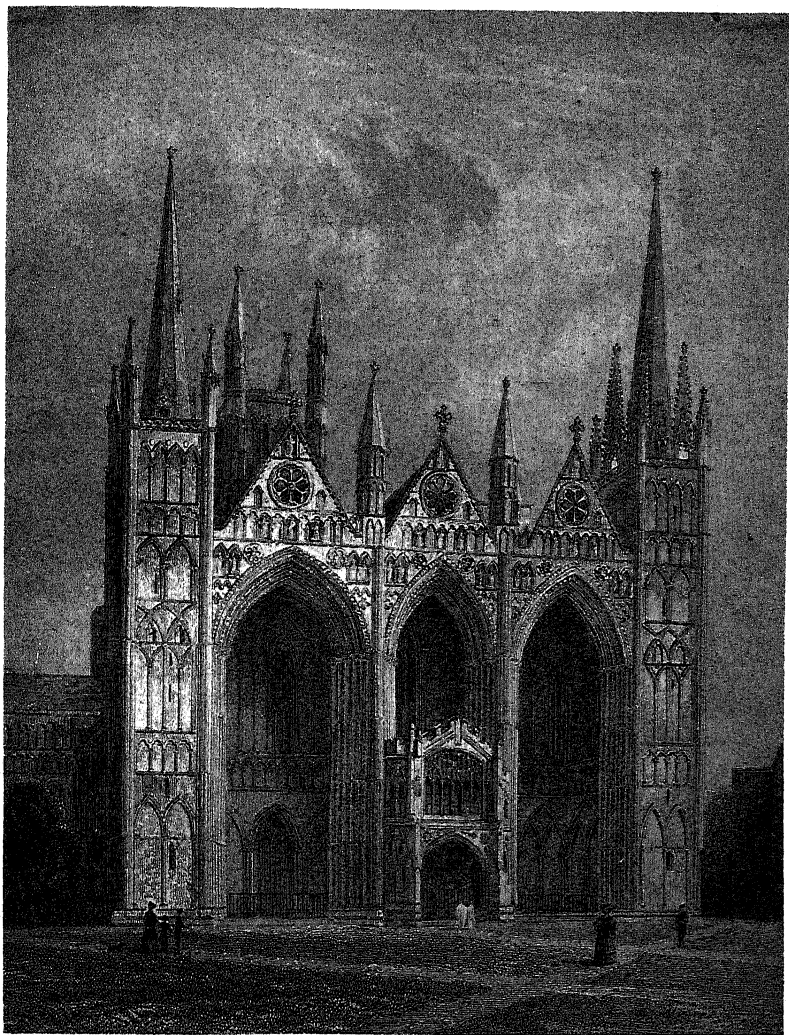
Part of the nave of St. John's Church, without the walls, of Chester. (From Lysons' *Magna Britannia*. Volume II. 1810.)

was introduced gradually. Builders were not confronted with it as an accomplished structural doctrine: it came rather as an infiltration of new ideas affecting the collective intelligence of one or more generations of building craftsmen as, in the course of a century or a period even longer, some abbey or cathedral grew under their hands. So it has come about that many of the greater English churches have, as it were, a Norman core, with which the later Gothic work accords because church building was entrusted to men who first served an unaltering purpose, which made their architectural aims harmonious with those of their predecessors, however much they differed in method and matters of detail.

Perhaps one of the best examples of the gentle transition of Norman architecture to Early English Gothic is Peterborough Cathedral. Here may be seen the beginning and the end of the adventure in stone; all the stages of Gothic building associated in amity.

Until 1541 it was the Abbey Church of St. Peter, the third church to stand upon the site, and it was founded in 1117 or 1118 by John de Sais after the destruction of an earlier building by fire in 1116. The work of the founder was confined to the choir, which terminates in an apse, and this was dedicated about 1140. Between 1149 and 1155 the aisles of both transepts and the south transept were completed by Martin of Bec. William de Waterville finished the work on the transepts and built the central tower between 1155 and 1175. The nave was built by Abbot Benedict, 1177-1193, and Abbot Andrew was responsible for the western transepts, which were erected by the beginning of the thirteenth century. Throughout that century work on the Abbey continued. The triple-arched west front was probably completed by 1250; the Lady chapel (which was demolished in the seventeenth century) was consecrated in 1290; some fifteen years earlier the bell-tower was built, and the pinnacles of the towers of the west front carried work on into the fourteenth century, when decorated windows were introduced. In the fifteenth century an eastern chapel was added in the Perpendicular style; this was begun in 1438 and finished ninety years later. For about two centuries after its foundation builders were at work almost continuously on the Abbey, and the Perpendicular addition—the “new building,” as the eastern chapel is called—accounted for nearly another century. Not far short of three hundred years of mixed work, the skill and thought of nine generations of craftsmen, are embodied in this church.

STONE COMES TO LIFE



The west front of Peterborough Cathedral. (From Winkles's *Architectural and Picturesque Illustrations of the Cathedral Churches of England and Wales*, 1838.)

MEN AND BUILDINGS

Such protracted instalments of architectural activity might be expected to produce an effect of conflict, especially when spread over centuries of change. But here again the purpose of the church dominated the minds of the builders; and the fulfilment of that purpose was recognised throughout the Middle Ages; every generation of craftsmen sought the same goal, although they improved on the methods their forerunners had known.

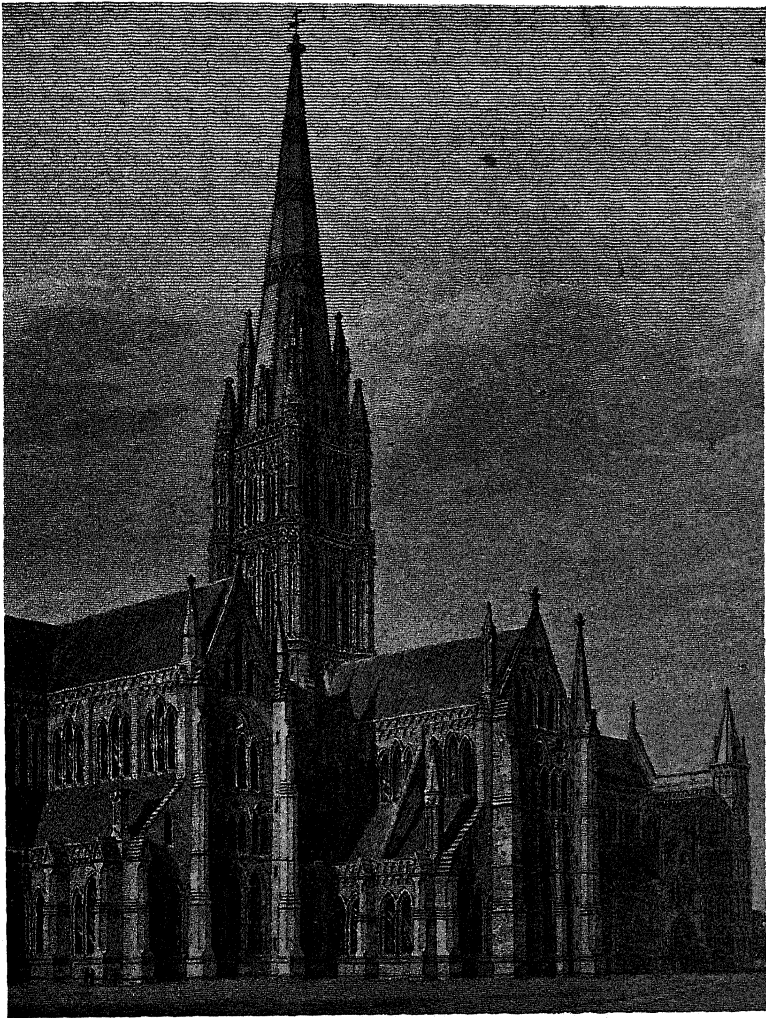
The easy blending of all those years of work is at once apparent inside Peterborough Cathedral. If you stand below the central tower, the first suggestions of an unwonted slenderness in Norman building may be seen in the upward-streaming lines of the piers; and the transepts show that Norman solidity is melting. The arches of the transepts that shoulder the weight of the tower are rounded, with the lines of pointed relieving arches above them; those that carry the tower above the choir are pointed. The broken sweep of their curve gives a gentle hint of thrust spread widely; a mere concession to contemporary "modernism"; remote as yet from that strident structural proclamation of weight driven earthwards by a score of sloping pathways that was to be one of the phases of Gothic building.

Although there is an air of quiet discovery in the interior of this cathedral, arising from the discreet incorporation of new ideas as it grew to completion, the ultimate dominance of voids over solids is clearly foreshadowed. It is an early stage in the evolution of the "cage of stone," in Lethaby's phrase; soon such sturdy skeletons acquired refinements, devised too skilfully to mar their strength. Before that stage was reached builders had achieved a placid formality, as the nave of Peterborough Cathedral illustrates throughout its cool length. About it there is something faintly eastern, something Saracenic, awed into mildness, bereft of any flamboyant heathenish flavour, an oriental spirit chilled: possibly a dying murmur of Byzantium, only articulate since the church lost most of its glass and form gained an ascendancy over colour. The harmony in stone wrought by the builders of this church survives the withdrawal of that vivid element of its composition—colour.

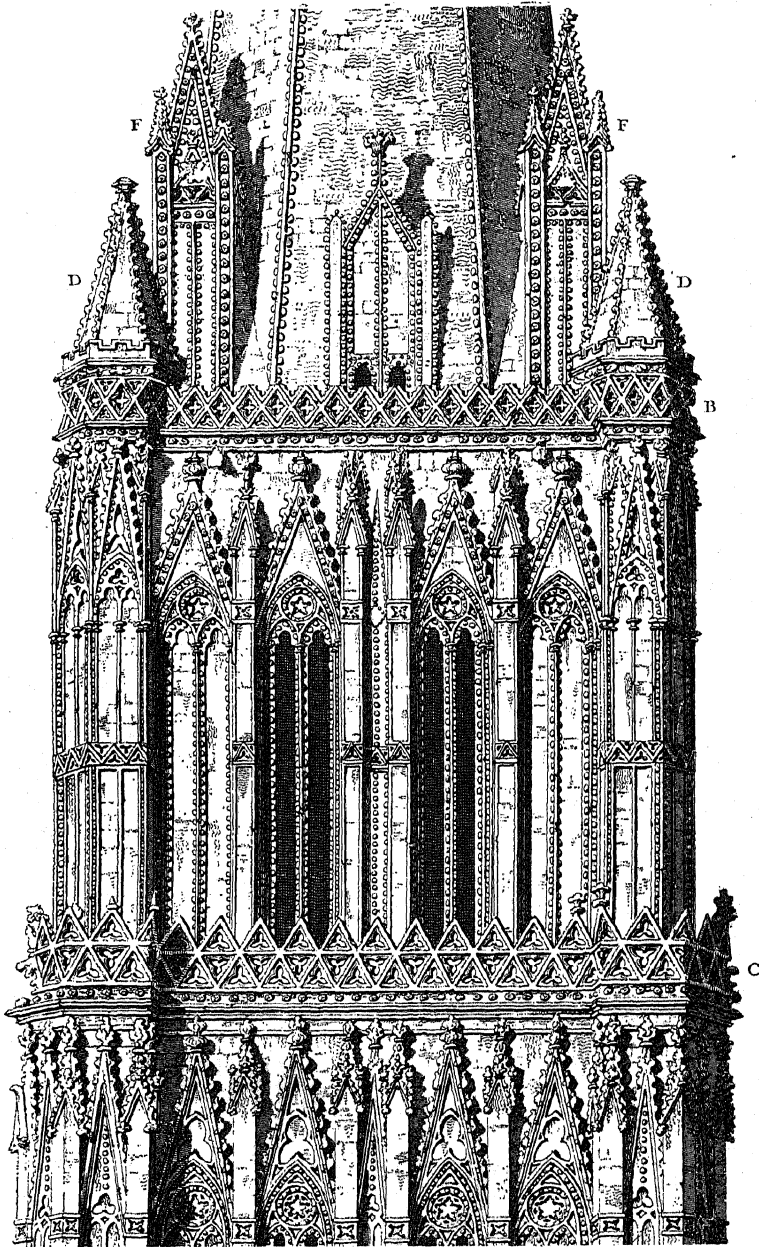
In the refinement of the stone framework, which gave increasing prominence to voids at the expense of solids, the Gothic builders knew that voids were really voices. Jewelled with the symbols and stories of the faith, they could cry God's Word with memorable emphasis to thousands of worshippers in that bookless age.

In a brilliant analysis of the motives of the Gothic builders, Christian Barman has suggested that the idea of fabricating light

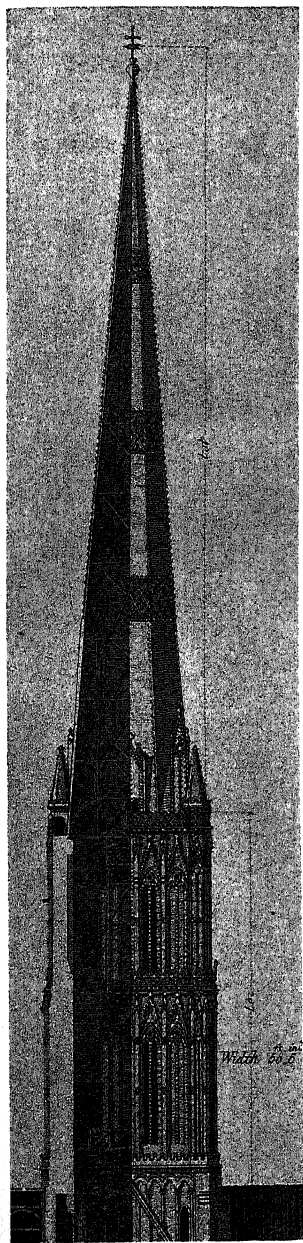
STONE COMES TO LIFE



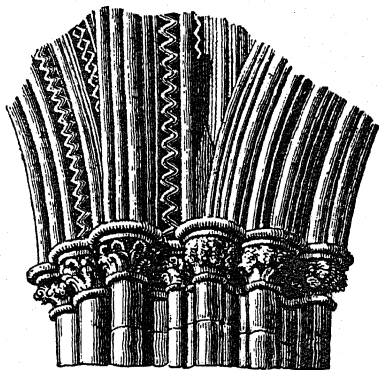
A view of Salisbury Cathedral from the north east. The Cathedral is built almost entirely in the Early English style, but the central tower is Decorated (see detail on the next page), and the total height of the spire is 404 feet. (From *The History and Antiquities of the Cathedral Church of Salisbury*, by John Britton, 1814.)



Portion of the tower and spire of Salisbury Cathedral. See illustrations on the previous page and opposite.



Left : section and elevation of part of the tower and spire of Salisbury Cathedral. See illustrations on page 43 and opposite. (From Britton's *Cathedral Church of Salisbury*.)



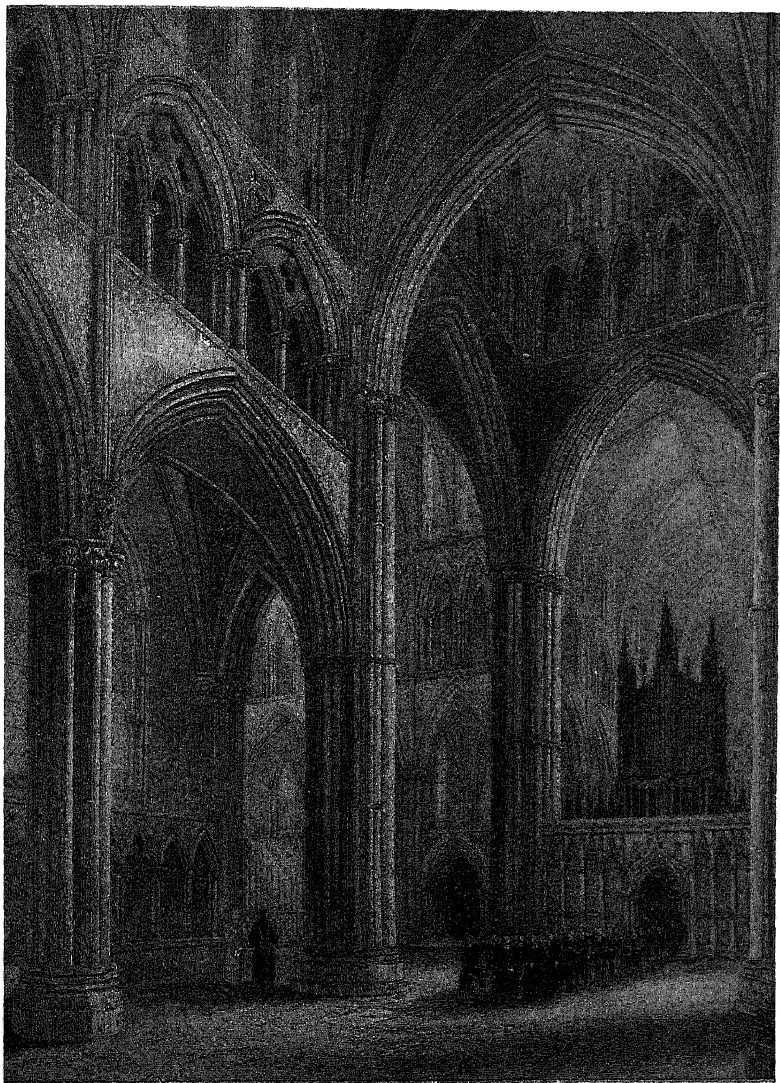
“Structural lines that distributed thrust and carried weight . . . could be handled so that they seemed to ascend . . .” (See page 49.) That is well illustrated by the arches which spring from this clustered column in Salisbury Cathedral: the structural lines of those weight-bearing arches seem to pour upwards from the sculptured capitals. (From John Britton's *History and Antiquities of the Cathedral Church of Salisbury*, 1814.)

MEN AND BUILDINGS

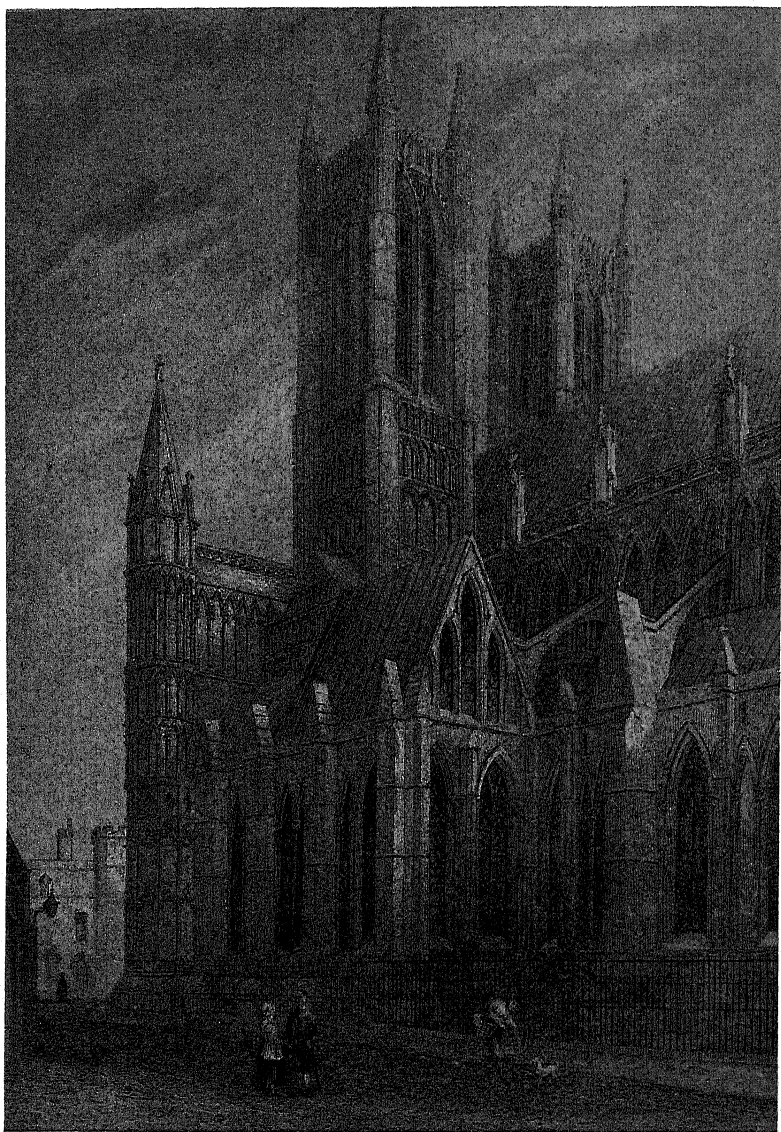


The nave of Salisbury Cathedral, looking east. (From Britton's *Cathedral Church of Salisbury*.)

STONE COMES TO LIFE



The nave of Lincoln Cathedral, looking across the north transept. (From Winkles's *Cathedral Churches*.)



The south west angle of Lincoln Cathedral. (From Winkles's *Cathedral Churches*.)

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into pictures was responsible for the preponderance of windows in churches and cathedrals and for their ultimate gigantic size, which reduced stonework to an attenuated frame. Through coloured glass, daylight drove a flaming message home to the flock: each window spoke, and beyond them "lay a dark and fluid world in process of formation, its noises drowned by the glazier's fiery, enveloping speech."¹

To-day most of the old English churches are dumb, their windows silent and empty, destroyed at the Reformation or by the Puritans of the Commonwealth. To see an old church now is to see a broken instrument, and confronted with the beauty of its form we do not always perceive that it is a frame despoiled. To style-hunters its incompleteness is seldom apparent. In seeking a mode they ignore a purpose. Our consideration of mediaeval churches should be illumined by an understanding of the needs and ideas that they served. They were designed to shelter worshippers, and at all times to convey pictorially from their windows and walls the teachings of Christianity: within the compass of those glowing walls and windows music would resound, and voices would assume a deeper richness as the notes ascended to the roof; externally they were to upraise stone in the likeness of a pointing hand to Heaven.

The internal needs were well served, and from the twelfth to the sixteenth century walls shrank and windows grew as builders gained greater mastery over their materials. The framework is classified in its different phases after the Norman beginning: Early English, Decorated, and Perpendicular. These classifications, and the search for their characteristic forms and ornamentation, have occasionally obscured the appreciation of more fundamental matters, and to the study of Gothic architecture has been added a blinding respect for style. How well the mediaeval builders expressed the idea of an upward-pointing hand is illustrated not only by hundreds of towers, spires, and pinnacles, but by the structural forms they employed. The pointed arch and the vault, spreading weight downwards, were used to create an aesthetic effect of striving ascent. Structural lines that distributed thrust and carried weight, arching over voids and crossing leaping buttresses, could be handled so that they seemed to ascend: high above slender piers, they sweep slantingly together, hurrying to the sky.

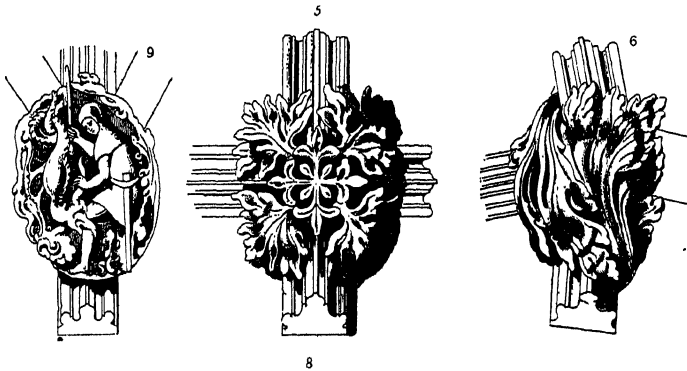
To the lines the builder achieved, the sculptor added his portraiture and symbolism. The upward rush of the stone mass was

¹*Architecture*, by Christian Barman. (Benn's Sixpenny Library, 1928.)

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punctuated by figures. The saints stood as guardians to the fabric. The evils that assail mankind were shown: devils grinned: the fauna of magic and witchcraft crawled leering over mouldings, capitals and corbels; birds and beasts, sins and virtues, were shaped with fantastic zest, and humour was vigorously abundant. The sculptor was not merely a specialist in ornament, to be called in at the discretion of the architect: like the glazier, he created a voice; like the glazier, he was a fellow-craftsman with the masons. Like all the craftsmen who worked at church building, he enjoyed a measure of creative freedom that enabled him to be boldly experimental, florid, profuse, and grotesque as his fancy desired. It was the golden age for those who carved in wood and stone. Never again were they to enjoy such an unfettered partnership with architecture.

Sculpture to-day has to stand on or cling to a few projections, casually left vacant in the architectural composition; it has no intimate relationship with building; and the sculptor himself has nothing in common with the men who erect with all the devices of machine-craft the building he embellishes. He belongs to the artist caste; and the setting of his work is the studio and not the scaffold. He is a stranger where once he was a fellow-craftsman. The architect is in undisputed control of his work; and as for many generations



Three carved bosses from York Cathedral. Mediaeval sculpture was intimately related to building. "It was the golden age for those who carved in wood and stone." (From Britton's *Dictionary*.)

STONE COMES TO LIFE

both sculptors and architects have thought of sculpture as an isolated art-form, the sculptor has lost the architectonic sense which in mediaeval times gave to his carven figures and ornamentation a decorative stability. The modern sculptor is seldom allowed a choice of subject in treating the patch or pedestal allotted to him by the architect. Most of the buildings he works on being secular and dedicated to commerce, he cannot symbolise the service that is given to civilisation within their concrete walls, because while his work might be permanent the business to which it referred might be fleeting, and to symbolise some forms of commercial activity too emphatically or with a touch of humour would be deemed libellous. The Anglican Church has little taste for sculpture, although if there is any surplus available after the modern builder has completed his study in suburban "Gothic," a monumental marble mason may be commissioned to supply a few stock figures of saints and angels.

We should recall that to-day the attempt to use a Gothic "style" for church building is foredoomed to futility, for the true instrument, were it possible for modern builders, glaziers, and sculptors to make it, would sound no message to a modern congregation. We cannot reproduce the spiritual receptivity which determined the functional character of Gothic building, and "still less can we reproduce the world of the Middle Ages for all the enthusiasm which its ideals may generate in our mind. The mediaeval sociology postulated a united Christendom, recognising a common ecclesiastical authority presiding over the whole of human life: and when bit by bit, in this department of life and in that, such a common recognition of authority was no longer to be found, the mediaeval system ceased to work. To-day it is hardly more applicable to the general social life of the Catholic than of Protestant countries."¹

There is in the modern Western world no religious movement that is capable of expressing itself architecturally. But until the Reformation and the dissolution of the monasteries, the Church cried aloud its mission, its warnings and promises, through the work of craftsmen.

As the right to practise a craft could be secured only by a long and rigorous apprenticeship under the auspices of a craft guild, the standard of skill was maintained, and craftsmen were collectively interested in good workmanship and methods of work. To a

¹*Christ and Society*, by Charles Gore. (Halley Stewart Lectures, 1927, Lecture VI, p. 162.)

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fraternal regard for the welfare of their craft was added an individual pride in the making of things which founded a national tradition of excellence in craftsmanship. Skill and inventiveness were latent, and were apparent as early as Romano-British times; the Church enabled them to grow and to become permanently established. The talent thus fertilised by liberal opportunities displayed a frank and splendid fecundity. Men worked in wood, stone, metal, and glass with obvious delight and interest; they painted and carved with such animation and facility that their work, despite its archaic form, strikes an emotionally responsive chord even in an age as spiritually depleted and materialistic as our own.

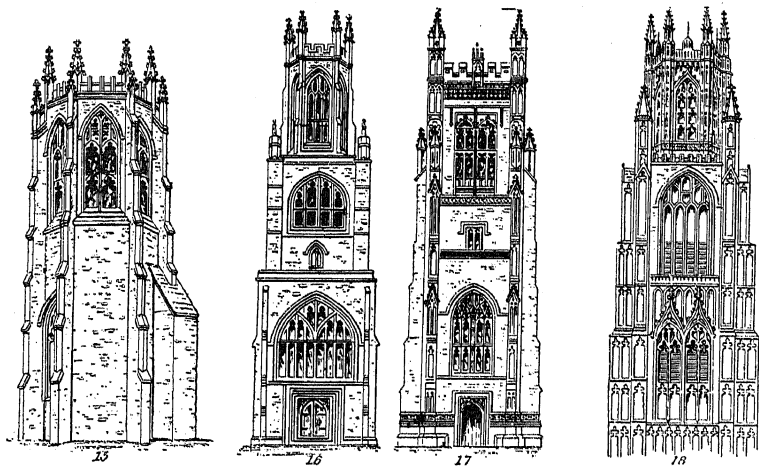
As Gothic building developed its later forms, the fluid naturalistic conceptions of the Decorated period were sobered geometrically, and their ornate audacity daunted by the vertical lines of the Perpendicular phase. New architectural needs, civic and domestic, were arising; towns were coming into their own again, and merchants and their money were accounted for in the calculations of kings and nobles. The country was far more civilised than in the century following the Norman Conquest, although it was still immeasurably inferior to the prosperous order of Britain under the *Pax Romana*. Gradually the halls of the nobles were released from the severe limits of fortification. With the example of the monasteries to inform their early experiments in house construction, and the re-introduction of brickmaking in the fourteenth century, which provided a pliant and durable material, builders achieved a standard of generous comfort in domestic architecture. Outwardly the form of the castle persisted; the battlements and the girdling moat remained; but a concern for privacy asserted itself in the interior planning, and the great hall was supplemented by pleasant solars and withdrawing rooms to which the lord and his lady could retire.

Soon the windows of those great new houses and palaces were enlarged. Light entered through small lead-bound panes of glass, framed in tall stone mullions that borrowed their moulded detail, as the pointed heads and the simplified tracery that occasionally filled the upper part of the window were borrowed, from the prevailing Perpendicular forms. Rooms were panelled with wood; big fireplaces wastefully provided heat and cheerfulness; and the history of English furnishing and interior decoration had its real beginning. There is still about the scale of things a heaviness that is vaguely suggestive of gross good living. Throughout England there is a high standard of common art; an excellence in the workmanship

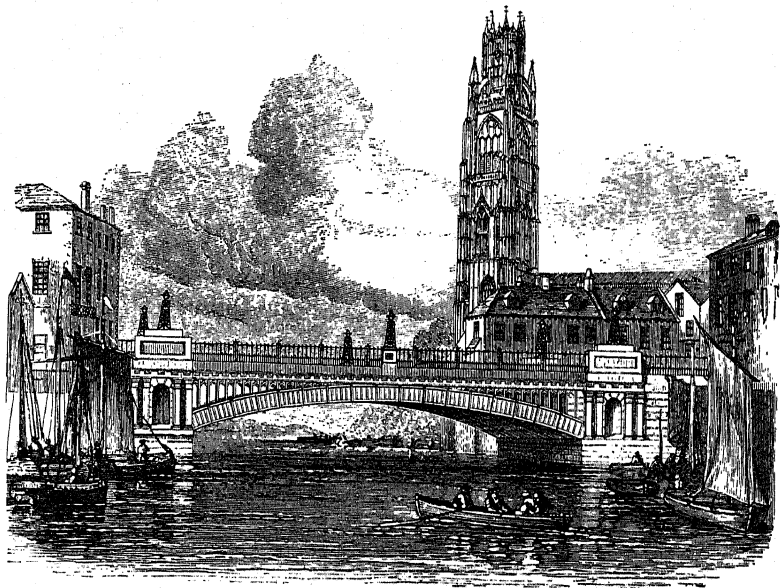
STONE COMES TO LIFE

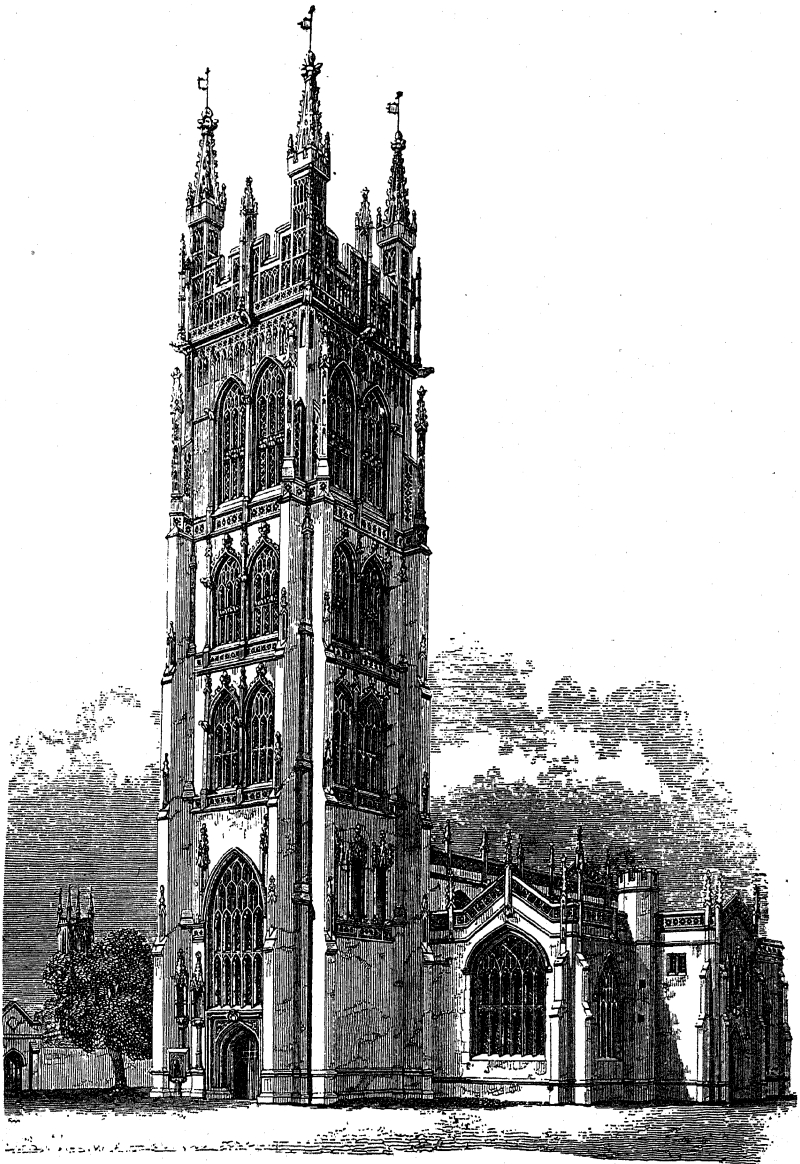


An old English parish church as originally used for the ancient worship, was one of the most beautiful and appropriate buildings that the mind of man could conceive ; every portion of it answered both a useful and mystical purpose.”
This was Pugin’s view, which he set down in his book, *The True Principles of Pointed or Christian Architecture* from which the illustration above is reproduced. (See Plate 3.)

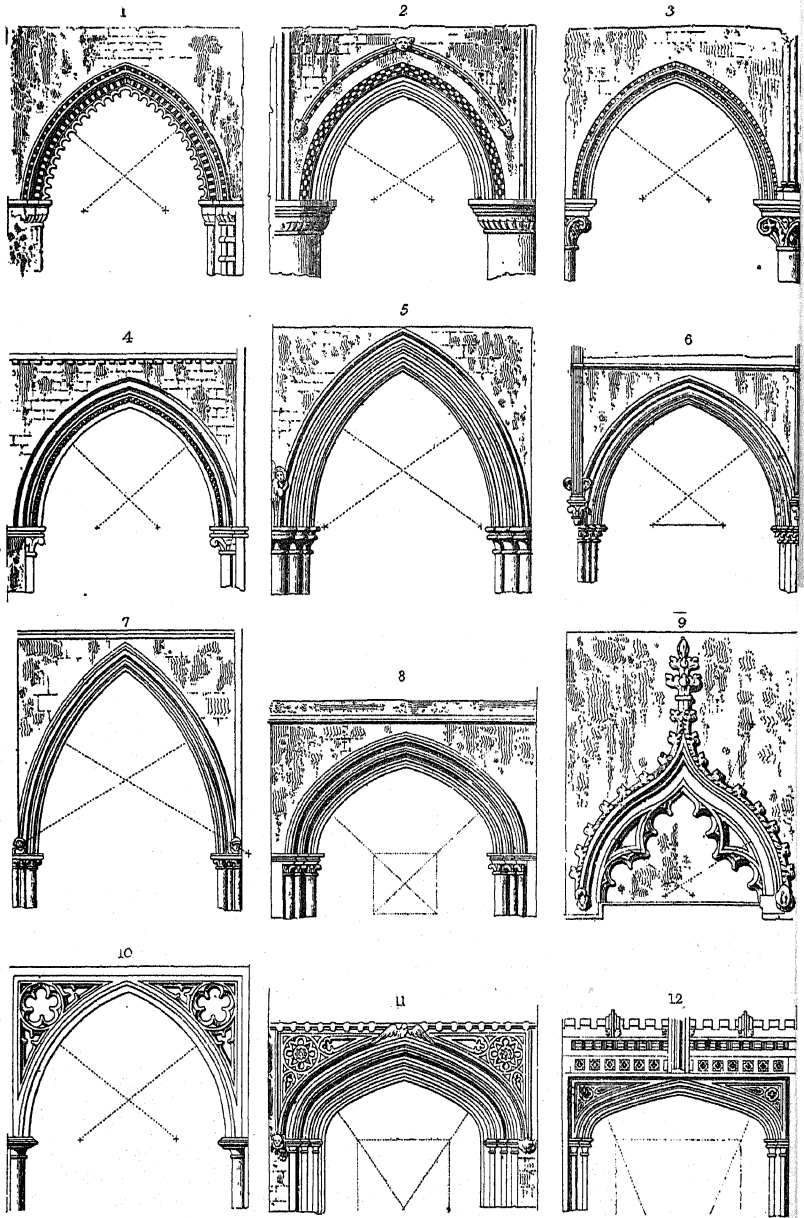


From left to right : Octagonal tower, at the west end of Sancton Church, York-shire. Square tower with octagonal lantern, Fotheringhay Church, Northampton. Tower of St. Mary, St. Neot's, Huntingdonshire. Upper part of the tower of St. Botolph, Boston, Lincolnshire : the famous Boston Stump, which is 288 feet high. (From Britton's *Dictionary*.) Another view of the Boston Stump is shown below. (From an engraving of a drawing by Percival Skelton.)



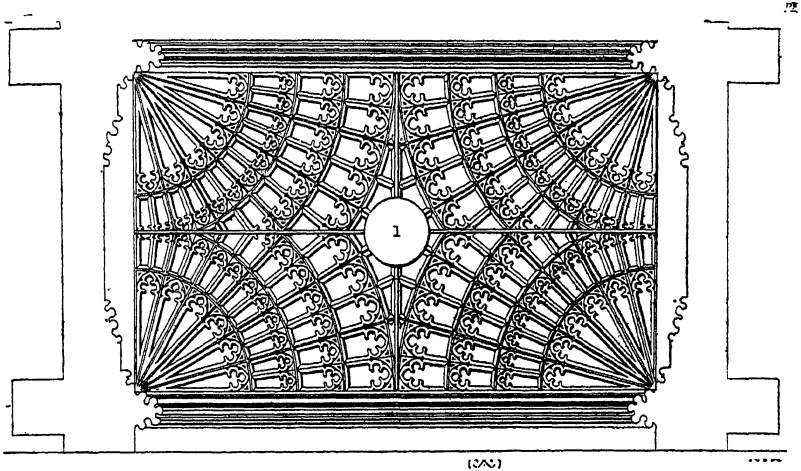


The tower of St. Mary Magdalene, at Taunton, Somerset. "As Gothic building developed its later forms, the fluid naturalistic conceptions of the Decorated period were sobered geometrically, and their ornate audacity daunted by the vertical lines of the Perpendicular phase." (Page 52.) Compare this with the detail of the Decorated tower of Salisbury on page 44. (From *Some Account of the Church of St. Mary Magdalene, Taunton*, 1845. Engraved from a drawing by F. T. Dollman.)



The changes in the pointed arch, from the time when the Early English style replaced Norman, or English Romanesque, to the final phase of Gothic architecture in England: the Perpendicular style. (From Britton's *Dictionary*.)

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“The loss of spontaneity in the later Perpendicular work is apparent in the geometric inflexibility of its ornament, the stiff canopies above its sculptured figures, and the laboured delicacy of much of its fan tracery vaulting . . .” Above : fan vaulting in the ceiling of King’s College Chapel, Cambridge. From Britton’s *Dictionary*.)

of everything in wood and metal; and in the towns goldsmiths and silversmiths are making elaborate and costly things, reproducing in precious metals and jewels miniatures of the ornamentation that is gradually becoming conventionalised and stilted in stone.

The executive skill of craftsmen often carries them to complex extremes of enrichment. When so much skill is given to pure elaboration, fluency may be lost, and decadence may follow. The loss of spontaneity in the later Perpendicular work is apparent in the geometric inflexibility of its ornament, the stiff canopies above its sculptured figures, and the laboured delicacy of much of the fan tracery vaulting; it suggests that builders had adopted a set technique for churches, reserving for secular architecture the greater treasures of their imagination.

Foreign talent was introduced long before that square, ogre-like figure, Henry VIII, interrupted such social serenities as the Middle Ages had achieved. But foreign influence sowed its seeds on barren ground in the England of the early sixteenth century. Only after the dissolution of the monasteries, which was virtually the dissolution of collective craftsmanship and the destruction of the

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English centres of artistic inspiration, were "Italianate" ideas adopted at all; not were they assimilated artistically until the beginning of the next century.

Although the Gothic tradition persisted and found sporadic expression in various parts of the country until the Commonwealth, the fraternal fabric of the craft guilds was damaged and never effectively repaired. Craftsmen were isolated, and never again enjoyed those spacious days of partnership when they built the great cathedrals and churches of England. Already they were on the road to becoming "hands", and initiative in design was passing from the workshop and the scaffold to the studio.

The adventure in stone was over.

CHAPTER V

ITALY REPEATS ITSELF

DURING THE most promising period of the Roman Empire's existence, when Augustus was making plans for its future stability and organising an efficient bureaucracy to cope with its immense administrative area, there lived a small and perhaps unimposing man who, after practising as an architect without much financial success, devoted his old age to writing a work that was destined to instruct many generations of architects some fourteen hundred years after his death. He was Marcus Vitruvius Pollio, and his treatise, *De Architectura Libri Decem*, consisting of ten books with an introduction dedicated to the Emperor, was re-discovered in the fifteenth century.

We may picture Vitruvius as an ill, old man, accepting with philosophic calm the bleak conclusion of an ill-rewarded career, and setting down in those closing years of his life the precepts that guided the good Roman architect. He acknowledged his indebtedness to Greece and was a respectful student of Greek science and philosophy, though not a lucid commentator upon them. As he wrote, setting forth his authorities for this or that branch of science, recording the standards of architectural practice of his day, and dealing with building materials, planning, proportion, decoration, plumbing, and machinery, we may wonder whether he ever saw very far beyond the age in which he lived. In those early days of its Imperial power, the Empire must have seemed so secure, so righteously strong in its civilising mission, spreading roads and aqueducts over the known world with the same boundless confidence in the permanence of material order that impelled a later society to spread railways over every land. That Rome should ever perish was unthinkable; and if Vitruvius glanced ahead as he planned his ten books, he may have seen himself as a guide and counsellor to future generations of Roman architects, but that there could be a world without Roman architects was scarcely credible. "From what we now know, it is evident, even on the most superficial view, that civilisation is an intermittent phenomenon," wrote

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Sir W. M. Flinders Petrie, three years before the enormous strain of the first world war was endured by Western civilisation.¹ The sickness of nations and the decay that debilitates and destroys social systems had not been studied two thousand years ago, so the mind of Vitruvius was untroubled by any prophetic vision of the barbarism that would soon limit learning and darken life. He did his work of careful recording, and thereby stretched the arm of Roman influence across the centuries, helping to resurrect the forms that Rome had standardised, a thousand years after her temporal power had died.

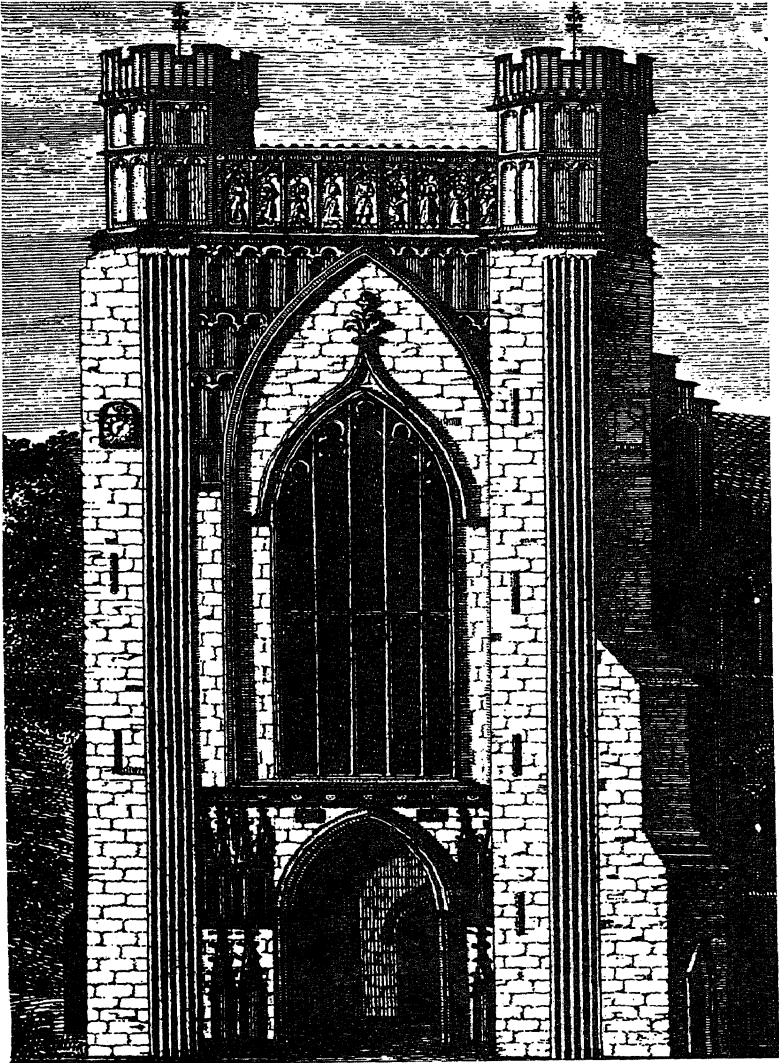
He provided for the Italian architects of the Renaissance an authoritative basis for their work, without repressing their mental agility or transforming them into mere antiquaries. In Vitruvius they found authority: in the Roman buildings everywhere about them, surviving from Imperial days or uncovered by eager excavation, they found example: in the revival of learning and the spirit of humanism they found inspiration.

When Mahomet, the Turkish conqueror of Constantinople, transformed Santa Sophia into a mosque, "the walls, which were covered with images and mosaics, were washed and purified, and restored to a state of naked simplicity."² The pious certitudes of the Middle Ages were to suffer the same fate as the mosaics on the walls of Justinian's great church: they were covered over by a new culture, which encouraged a frankly pagan appreciation of beauty in art and life, sensuous in its intensity, reverential in its regard for the antique; differing both from mediaeval and Roman culture in its intellectual animation. Released from the fetters of faith, hundreds of minds were stimulated to enquire into branches of knowledge that had hitherto been shielded from the curious to prevent any disturbance of the stability of revealed or approved learning. Mediaeval scholars, whenever they emerged from the theological labyrinth to which their education consigned them, were either delighted with the world as it was or hopeless about it: they thought according to code upon lines decided by authority; and their thinking led always to another world. They were unconcerned with their own, and their occasional curiosities were checked by the dread of heresy.

¹*The Revolutions of Civilisation*. (First published in 1911. The quotation is from the third edition, published by Harper and Brothers, 1922. Chapter I, Section 2, p. 5.)

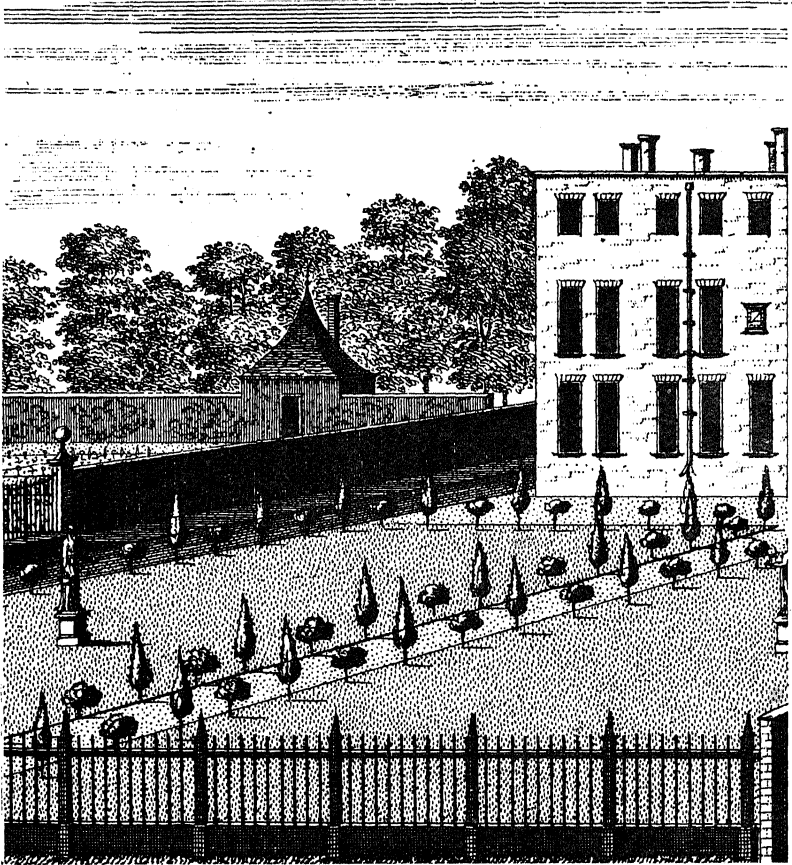
²Gibbon, *Decline and Fall of the Roman Empire*, Volume III, Chapter LXVIII.

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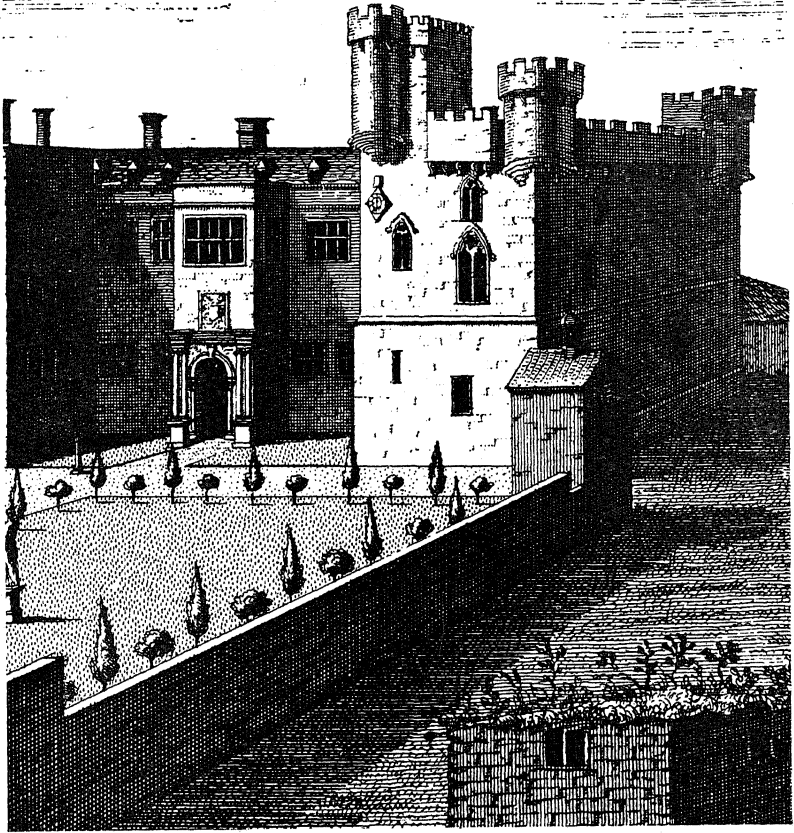
Thorney was one of the Fenland abbeys, but much of it was destroyed at the Reformation, and a fragment of the original structure only was preserved. The central part of the nave has, since the sixteenth century, served as the parish church. (From one of Buck's views, published in 1730.)

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In the country, many architectural partnerships occurred in the sixteenth and seventeenth centuries between the remains of mediaeval, fortified buildings and the new, spacious houses of the new, mercantile aristocracy. Additions to the keeps and halls of ancient castles were made, also to many monastic buildings that were put to secular uses after the Reformation. Above and on the opposite page is the south view of Belso Castle in Northumberland, as it appeared in the early eighteenth century.

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This completes the south view of Belso Castle shown on the opposite page. These rather untidily picturesque associations of vastly different styles, provided examples for the sort of faked mediaeval buildings that were derided by Pugin in the early part of the nineteenth century. Many a builder of so-called mediaeval villas or mansions must have drawn inspiration from Buck's views, from which this illustration of Belso Castle is reproduced. The illustration on page 185 supports this suggestion.

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The intellectual awakening of Italy restored to Europe an understanding of the spirit of architecture. Building ceased to be a battle with obdurate materials, a series of structural victories won by master masons. The harmonies of an age of reason and educated taste were re-established.

Lisle March Phillipps, in *The Works of Man*, regretted the revival of the antique forms, and wished "that the earth had lain a little deeper on the Roman ruins, and that Italy had been left to evolve her new architecture for herself. An original style produced by the Renaissance, Michelangelo working architecturally in the ideas of the period, would have been vastly more interesting to posterity than the reproduction of stereotyped classic formulas."¹ But the Renaissance was more than a return to the basic architectural forms of Roman tradition. It was a fresh development of those forms, a new flowering after the mediaeval interlude, invigorated by quite un-Roman liberties of architectural thought. It is altogether too easy to write off this liberation of creative design as mere imitativeness, as Sir W. M. Flinders Petrie does in *The Revolutions of Civilisation*, when he contends that "The Renaissance was but the resort of copying an earlier period, owing to the decay and loss of the true style of the VIIIth, or Mediaeval, age of Art."² The adoption of forms indigenous to Italy for the expression of a new understanding of architectural composition cannot justly be stigmatised as copyism.

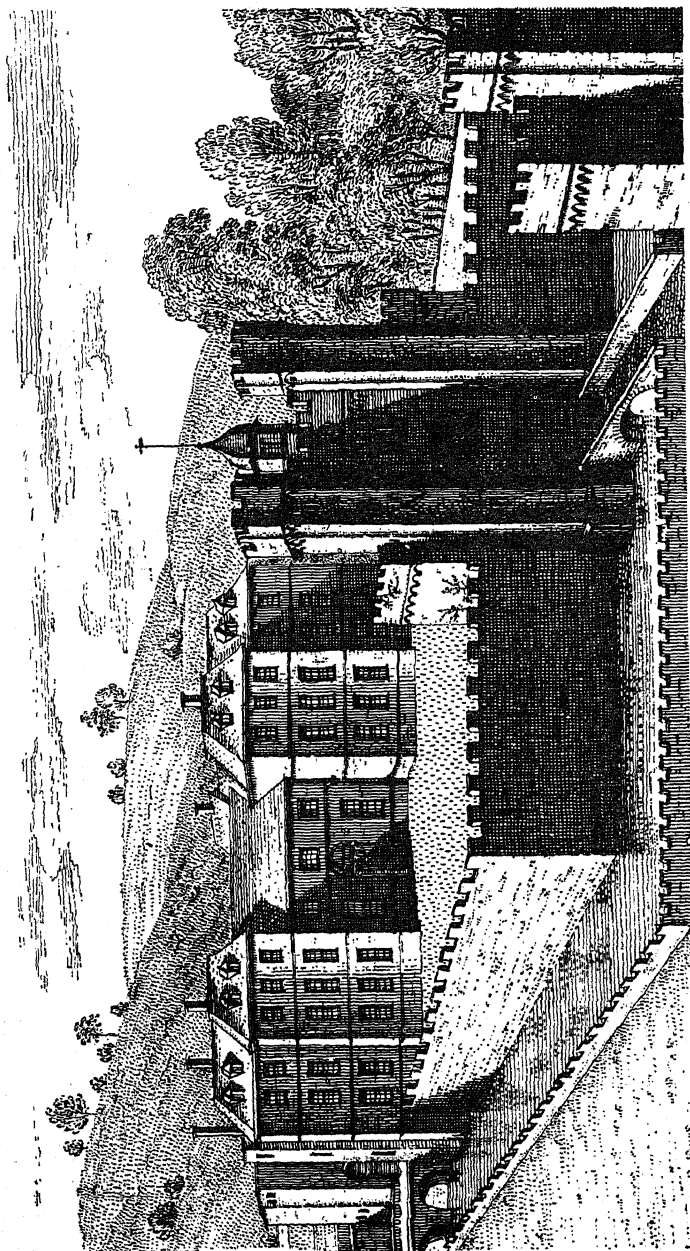
Renaissance architecture in Italy illustrated the new attitude of mind towards art and life. The Italian architects of the fifteenth and sixteenth centuries were different from the Gothic builders in thought and intention; and any attempt to compare their work is as futile as attempting to compare Beethoven's symphonies with Negro spirituals. "Intelligence of shape was to the Italian mind a language and a necessity. Against the complexity of mediaeval theology is now set the profound simplicity of a work of art."³

The attainment of order and coherence in composition, and the creation of shapes that delighted the eye were aims that could never have been either conceived or attained by slavish copying. Vitruvius was acknowledged as the authority, the great guide whose

¹Chapter VIII, pp. 225-226. (Second edition, 1914. Duckworth.)

²Chapter III, p. 74.

³*Theory and Elements of Architecture*, by Robert Atkinson and Hope Bagenal, Vol. 1, Part I, Chapter V, p. 144. (Ernest Benn, Ltd., 1926.)



The north west view of Lullingstone Castle in Kent, showing a more orderly partnership between mediaeval and subsequent building. Gate houses, curtain wall and moat have been preserved. Compare this with the views of Belso Castle on pages 62 and 63.

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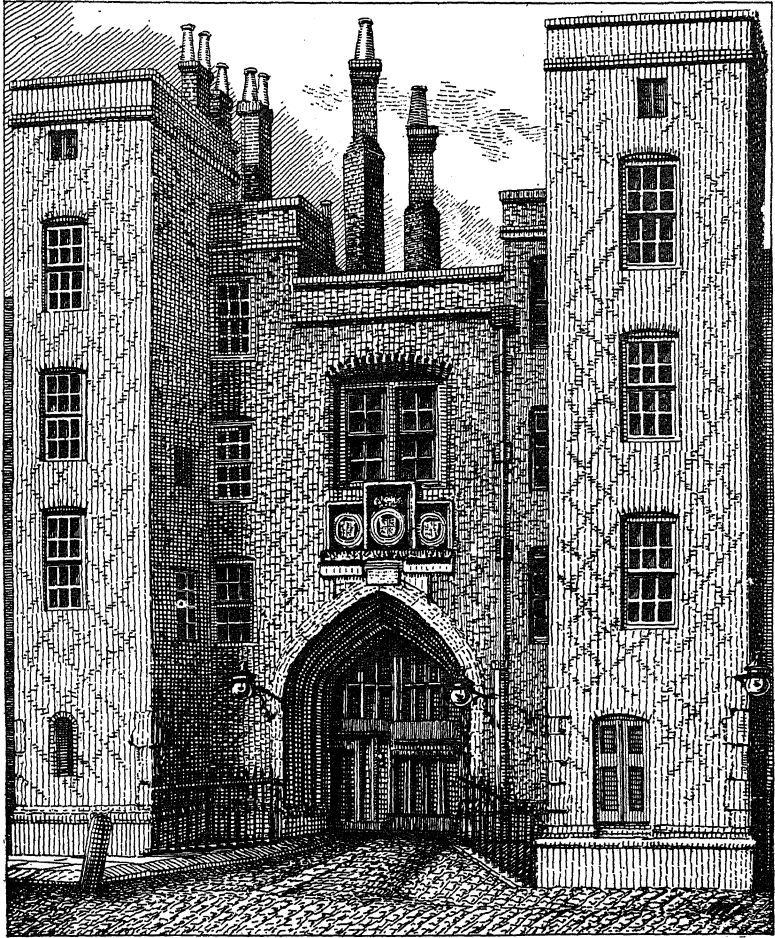
principles of proportion were applied, whose word upon the details of the classic orders was the last word; but the application of his principles was not a matter of blind obedience: it was the occasion for lucid breadth of thought about composition, and such thinking had Greek rather than Roman affinities. Greece created; Rome standardised: the one was concerned with civilisation, the other with material aggrandisement; and the Renaissance architects enjoyed some of the clarity of mind which had helped to create the Greek temples and cities of the Periclean age.

The builders of the Doric temples of Greece and Sicily had been actuated by so deep a reverence for the sense of sight that they lavished an immense amount of work upon correcting the optical distortions that affected the lines and masses of their structures. "The real shape of the thing did not matter; it was the apparent shape that mattered. Equal columns which appeared unequal would be made unequal to appear equal. A level floor which looked unlevel would be made unlevel to appear level. Vertical lines which appeared to slant would be made to slant that they might appear vertical. Among other races the eye has been called upon to adjust itself to the facts. With the Greeks the facts are, with infinite pains, adjusted to the eye."¹ Such subtle deceits, contrived with a mathematical solicitude for the enthronement of beauty, were produced by men who saw most things clearly and cleanly: no moral or material needs for justifying their work obstructed its execution. Although the intellectual enlightenment of Grecian civilisation was not conferred upon the architects of the Renaissance, those alert Italians addressed themselves to the rational satisfaction of the eye with a competence activated by an appreciation for abstract beauty, that was Greek in spirit.

They had at their command the high standards of skill that had distinguished the mediaeval crafts; and this abundance of executive talent they shaped and directed, so that its prodigal individualism was adjusted to the needs of their designs. They ignored the limitations of material; they flouted structural negations. They desired their material to be malleable; and if its nature prevented it from fitting the forms they created, then without scruple it was imitated. They realised that the columns and entablatures of the classic orders provided them with a satisfying compromise between horizontal and vertical elements in design; and because they realised this and were content to employ a tested formula, it has

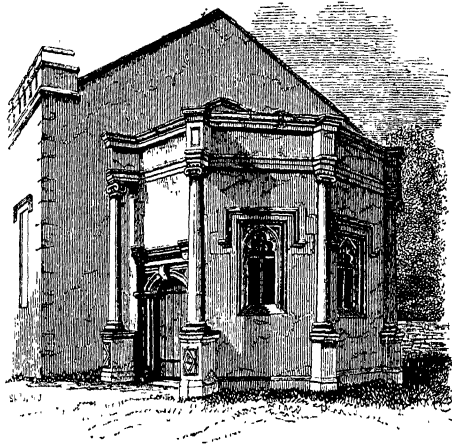
¹*The Works of Man*, Chapter IV, p. 110.

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“When military needs no longer inflicted an exaggerated massiveness upon buildings, and walls were expected to resist only the assaults of weather, an appreciation of texture asserted itself. Brickwork was enriched with geometric patterns.” This appreciation of texture is apparent in this drawing of Lincoln’s Inn Gate in Chancery Lane, from J. T. Smith’s *Antiquities of London*. The sash windows are a later addition ; so too are the chimney pots.

The porch added to Sunningwell Church, Berkshire, during the sixteenth century, exemplifies how "The external features of Renaissance architecture were accepted," but "were adopted without any understanding of their rhythms." (Page 71.) Bloxam illustrates this in *The Principles of Gothic Ecclesiastical Architecture* and states that it is supposed to have been erected by John Jewel (1522-1571), Bishop of Salisbury. He describes the building as "sexagonal in form, at the angles of which are projecting columns of the Ionic order supporting an horizontal entablature. On each side of this building, except that by which it communicates with the church, and that in which the doorway is contained, is a plain window of Debased Gothic, of one cinquefoiled pointed light, within a square head with a hood moulding over The doorway is nondescript, neither Roman nor Gothic, but in detail partaking of both."



been suggested that their architectural perception was only skin-deep. Their minds were certainly not bounded by the system of decorative contrasts which they had mastered. They recognised that the creation of order was a function of architecture; and as the scale of their experiments in fulfilling this function extended, they rediscovered the civic responsibilities of the architect. They became aware of the town, and being able to perceive it as a whole, they began to abolish its dark complexities.

The mediaeval town had grown up within its walls, its houses surging about the few big buildings it could boast—the cathedral, the palace, the guildhall. A market would secure an open space, but other open spaces were rare. The main streets were processional ways, and as such, curved and wound towards the cathedral. The life of the place flowed along dark and narrow lanes between houses that were built with the intensive individualism that made every street-side a hotch-potch of disconnected units. Under the beneficent rule of commercial individualism (every man for himself and the devil take the street), we have reverted to this pre-Renaissance disorder, but with an aesthetic debasement wholly unknown in the towns of the Middle Ages. The Renaissance architects brought coherence to the street, and ended the discord that arose from regarding each site as a space isolated for the self-expression

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of its owner. The old haphazard method of building had made the adoption of Gothic verticality easy and obvious; and the results would certainly have satiated our modern hunger for the picturesque. Cities of crooked streets, with towers and spires rising into the sunlight above the shouldering roofs of the cramped houses, girt by thick walls which granted protection but forbade expansion, were to be found all over Europe; and the rebuilding of those cities so that the streets became articulate and were drained of their shadows and stagnant air was the work of men whose taste inclined to horizontal instead of vertical forms. The street was conceived as a series of horizontally related units, and the nobility of its character thus revealed was enduringly impressed upon the minds of architects.

The effect of all these Italian experiments and researches spread across Europe, but their intellectual and artistic significance was not understood in England until early in the seventeenth century. The external features of Renaissance architecture were accepted; once again the decorative forms that Rome had standardised came into England, but they were adopted without any understanding of their rhythms. Regarded simply as fashionable forms of ornament, they were applied to wood and stone, and their proportions mutilated by craftsmen who were still under the influence of Gothic tradition.

The men who created the domestic architecture of sixteenth century England had discovered the decorative possibilities of the wall. The striving framework of the churches, the slender stone lines that clasped the big glass pictures, were not adaptable to the needs of palaces and country houses; and although English builders had learned how to produce architecture in which solids dominated voids, the semi-military pre-Tudor country house had only afforded limited opportunities. When military needs no longer inflicted an exaggerated massiveness upon buildings, and walls were expected to resist only the assaults of weather, an appreciation of texture asserted itself. Brickwork was enriched with geometric patterns. Windows still followed Perpendicular forms; and moulded detail and carven stone were Gothic in character. There was no real interference with tradition until the dissolution of the monasteries, and even that disruption of art and life could not completely change established methods of building and decorating.

The excellence of common art was maintained, and the skill with which English builders handled their materials—brick, stone,

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glass and timber—and their straightforward approach to architectural problems anticipated the admirable precepts set forth early in the seventeenth century by Sir Henry Wotton in *The Elements of Architecture*, which, he stated, were collected from the best Authors and Examples. They have been quoted often, and in great periods of architectural design their message is respected, comprehended and translated into action:

“In architecture as in all other Operative Arts, the end must direct the Operation.

“The End is to build well.

“Well-building hath three Conditions,

“Commodity, Firmness, and Delight.”

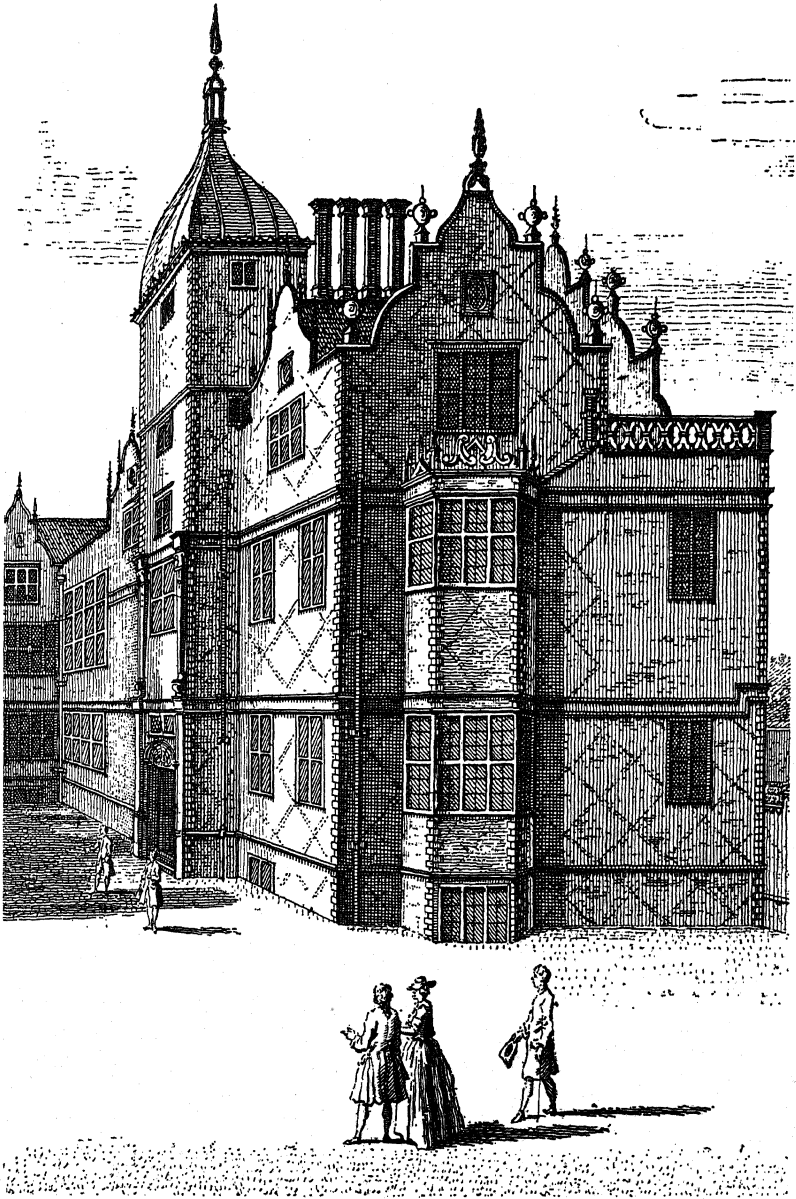
It was the vigour of the common art of England that obstructed an early and discerning adoption of Renaissance forms. Those forms represented foreign ideas, thrust upon craftsmen whose technical and ornamental traditions were mediaeval. Nothing in the character of English builders responded to the mental clarity of the Italian architects. Appreciation for the intellectual emancipation of Europe was reserved for the well-born people whose education had been rounded off by travel.

In *Form and Colour*, Lisle March Phillipps suggested that “the reason Renaissance culture affects only the surface of life is that, in renouncing the spiritual element, it renounced the popular element—the element which forms the connecting link between art and the national life. It renounced this in order to promote the idea of art as a matter of culture and the perquisite of an exclusive and privileged minority. Henceforth the national life lost the pleasure which it can derive from art, while art lost the robustness and sincerity which it derives from life.”¹

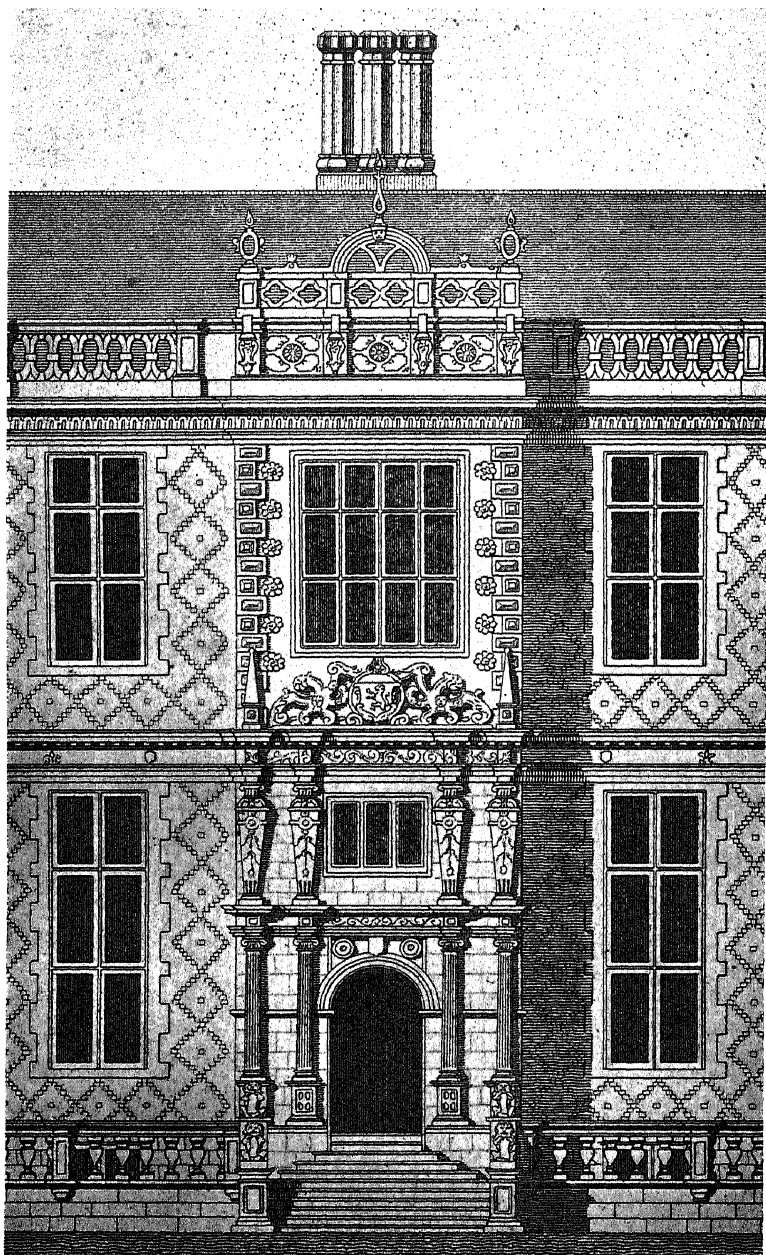
This detachment of art from life began in England after the opening decades of the sixteenth century. The process was gradual, and it took some centuries and a period of Puritan dictatorship to transform the Englishman into an art-proof being.

After the pillage of the Church, builders and craftsmen served many new masters; but although the nobility and the new-rich of that day were impressed by “Italianate” ideas, the strength of English tradition was at first unimpaired, and the classic columns and pilasters, the acanthus leaves, the conventional Roman ornamentation, were adapted to forms with which they had no structural or decorative relationship.

¹Part III, Chapter XI, pp. 212-213. (Duckworth, 1915.)

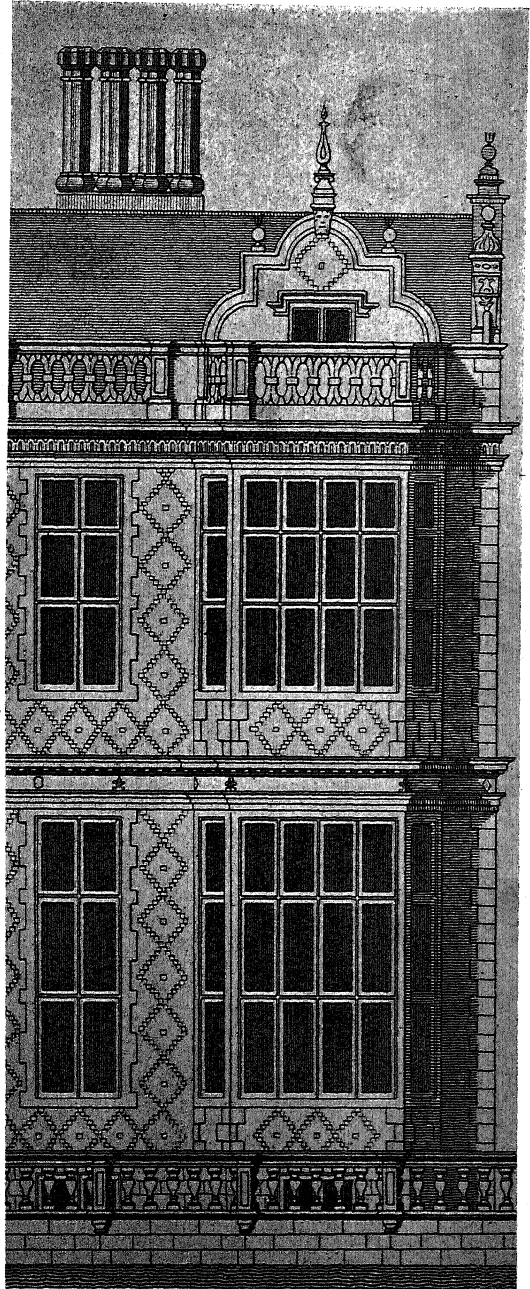


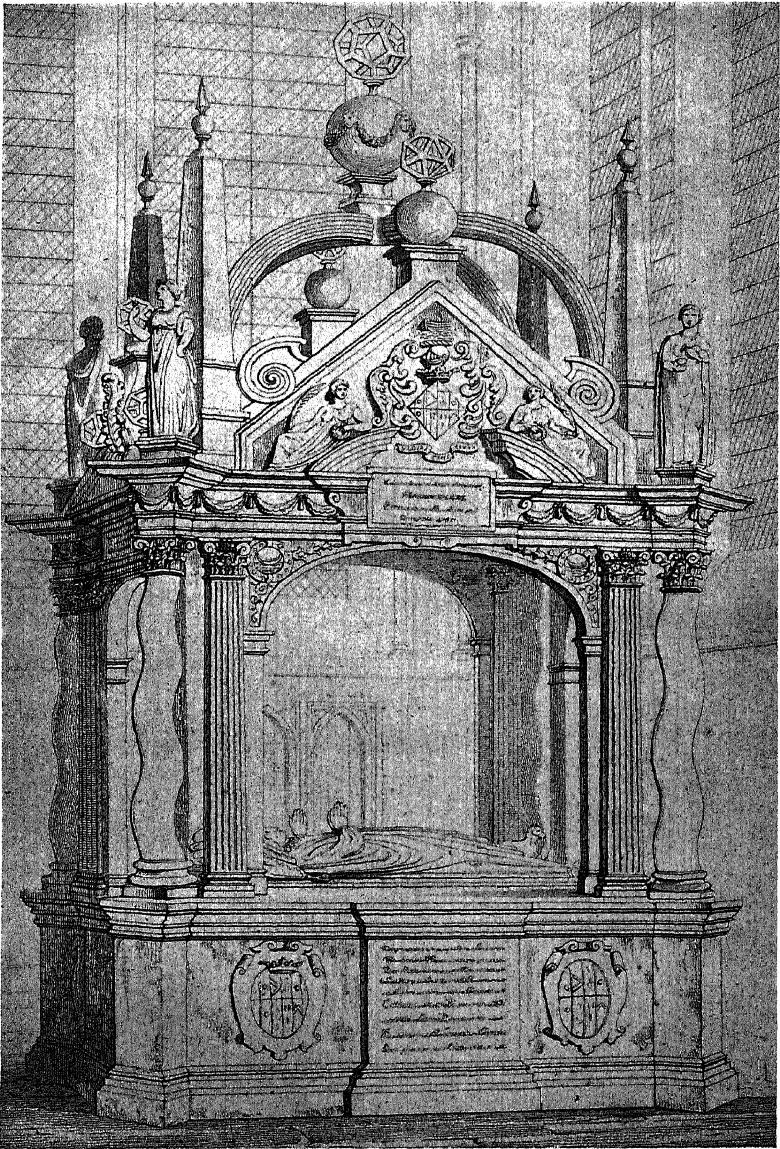
The east wing of Aston Hall, Warwickshire, a Jacobean mansion built from the designs of John Thorpe between 1618 and 1635. (From one of Buck's views, published in 1744.)



Crewe Hall, Cheshire. See page opposite.

Part of the elevation of Crewe Hall, Cheshire, is shown to the right and on the page opposite. It was begun in 1615 and completed in 1636. The doorway and the Ionic columns that flank it and the pilasters above them are typical of the restless fumbling with the forms of the classic orders which preceded a true understanding of their significance as a system of design. (From Lysons' *Magna Britannia*, Vol. II. Originally published as a large print in 1742, by William Yoxall.)





The monument in Salisbury Cathedral to Sir Thomas Gorges, Knight, who died in 1610. It is also a monument to the exuberant taste of the Elizabethan and Jacobean aristocracy, and is as lavishly ornamented and as ill-proportioned as anything conceived and executed by a Victorian monumental marble mason and his draughtsmen. (From Britton's *History and Antiquities of the Cathedral Church of Salisbury*.)

ITALY REPEATS ITSELF

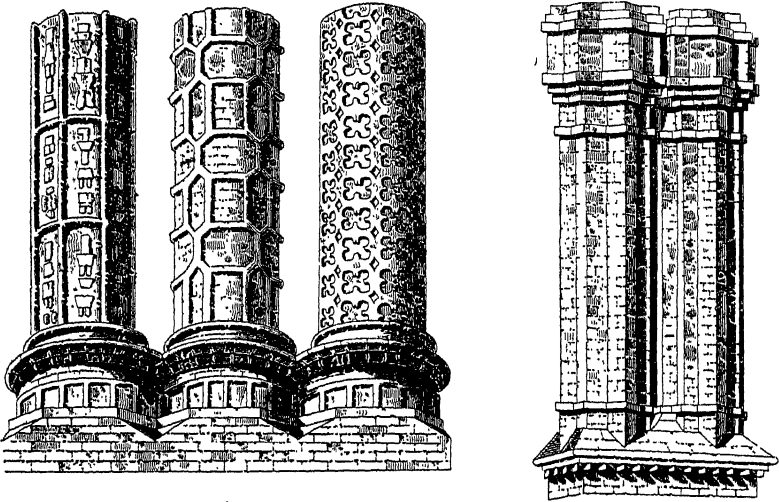
“Want Italian things, do you?” the craftsmen said to their patrons; “very well, but you must have them *our way*.”

That, at least, is what their work said.

They took preposterous liberties with the sacred shapes of column and capital. They lacked respect for this new-fangled foreign stuff, and until the scholars presently enlightened them, they did not realise that it was really old-fangled, and that what they thought was a fashion was really a great system of design. Meanwhile they played about with the superficial characteristics of Renaissance architecture, oblivious of its inherent beauty; making clumsy compromises between modified Gothic and ill-digested classic forms; obviously perplexed over details of embellishment, but solving their problems of grouping and construction without any hesitations, and by sturdy confidence and a broad simplicity of treatment achieving graciousness in architecture.

The English Renaissance, which found literary expression in Elizabeth's reign, did not begin to find ordered architectural expression until the early Stuart period. The Elizabethans displayed the most bewildering inconsistencies. A soldier, a sailor, a poet, and a musician would be combined in the body of one elaborately clothed, elaborately courteous, and slightly effeminate gentleman, who pronounced his views of the world in wonderful English above a delicately trimmed beard and an ornate expanse of starched linen ruff. His astonishing miscellany of accomplishments was partly exercised in and around the Court, which was seldom far from London. The contrast London made with the fashionable life that had for its background Whitehall or Hampton Court, Nonesuch or Windsor, was perhaps the most glaring of all the inconsistencies of that strange time. London was still dark with mediaeval lusts and fears; marvellously picturesque, with its timber, brick and plaster houses huddled together about the churches that made it a city of towers; it was also a city that afforded such diverse entertainments as Shakespeare's plays or the bloody spectacles staged in the bear-pit or upon the scaffold. Palaces were set about its approaches, and the Thames was its great highway.

Despite extremes of light and shade, and a curious and sometimes savage capriciousness, the achievements of the Elizabethan period were staggering. What had really happened was that the wealthy, powerful, governing class of England had been introduced to civilisation. At last they began to play intelligently with the lovely toys that Italy had taken out of the buried Roman cupboard. Veneration for antiquity left their creative power in literature



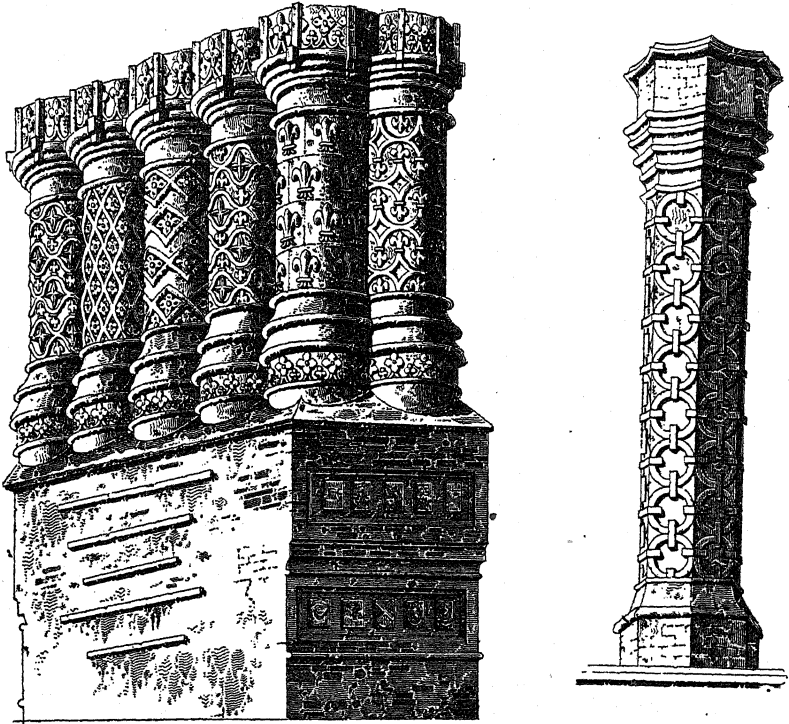
From the late fifteenth to the early seventeenth century the free and vigorous ornamentation of chimney shafts showed not only the lively appreciation of texture, but how well English builders could have invented and used decorative forms if the development of native domestic architecture had not been interrupted by Italianate fashions. (From Britton's *Dictionary*.) See also page opposite.

unclouded. It acquired a flavouring of classical allegory; but with that tribute to erudition, the poets and dramatists and their educated and appreciative patrons were satisfied. They set about re-telling old tales and inventing new ones with the zest and freedom that had, a little earlier, been devoted to architecture. "The sense of liberty and power, and of belief in the capacity and destiny of man, which was quickened by the new discoveries, distinguishes the literature of the Elizabethan age from the great backward-looking periods of romance. It is a literature of youth and hope, with none of the subtle and poignant flavours that are to be tasted in a literature of regret and memory."¹

Art that was made by the people for the people was changing; but although craftsmen were bought and organised and their work

¹(*The English Voyages of the Sixteenth Century*, by Sir Walter Raleigh, Section 3, p. 174. Glasgow: James Maclehose and Sons, 1906.)

ITALY REPEATS ITSELF



dedicated to the service of the wealthy, common art survived in music, in the spontaneous pageantry of the drama, and to some extent in woodwork, metal work, and building. Lethaby once said that "when building direction was removed from the works and shops, and took the veil in offices, old traditions of craftsmanship were lost. What we called by the mysterious long word 'architecture' became a question of taste in shapes."¹ Even that taste for shapes was confused when educated people began to be aware of their responsibility for choosing the form of their buildings. Most Elizabethan architecture is a patchwork of indecisions, not in

¹In an address on the "Preservation of National Monuments," given at the fifty-third annual meeting of the Society for the Preservation of Ancient Buildings, May 30, 1930. Quoted from the report in the *Builder*, June 13, p. 1142.

MEN AND BUILDINGS

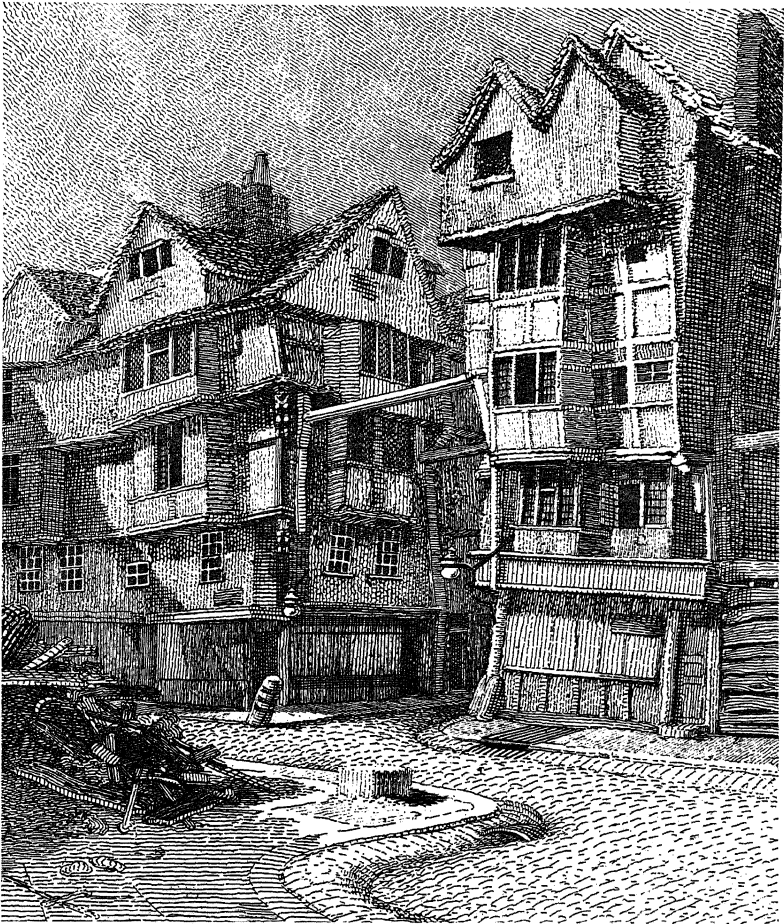
any degenerate or feeble sense, for those indecisions arose from the difficulty of selecting from a multitude of beautiful forms.

The minds of the Elizabethans became overcrowded with memories of exquisite things seen in their travels, and with new thoughts and exciting possibilities. A new world was revealed across the Atlantic, and a new mind was revealed in the old world across the Channel.

Sometimes they may have resembled the powerfully prayerful crusading Protestants that Charles Kingsley idealised in *Westward Ho!* The effortless transition of the fine gentleman into a grimly efficient sea-raider certainly assisted the growth of the vast perplexity which to this day affects the other European nations when they consider the English character. Those godly, practical, and determined traders sailed to the ends of the earth, and the splendour of their deeds, set forth by Hakluyt, shows us the fortitude and dignity that sustained their adventuring. We see men whose self-control was endowed with an unaffected stateliness, whose implacable sense of duty permitted no deflections from the discipline that was the moral armour of their expeditions. Their education owed much to the rigours of their experiences in the New World. The cities of Europe contributed the polite accomplishments, the polish and the gilding; the tall ships that sailed to the tropics and the example of those who manned them kept bright the spirit that once had sought and found adventures in stone.

It is understandable that their age should be one of trial and error in building, but mostly of error. The large, flamboyant houses of this new mercantile aristocracy increased the complexity of the attempts to use ornamental notions that were imported not only from Italy, but from France, Flanders and Germany. All the simplicity of Early Tudor work was murdered in the ensuing muddle. Avid of luxury, the Elizabethan nobles demanded surroundings of intensive elegance. Carvers and plasterers, both English and foreign, toiled to keep pace with the artistic passions of the rich. Strapwork uncoiled its geometric loopings over ceilings; Doric, Ionic, and Corinthian columns, squat or elongated as the carver's temperament or the space at his disposal dictated, supported entablatures that were loaded with ornament; the variation of surfaces with mouldings was practised with feverish monotony, and all this congestion was diversified with sculpture that anticipated the worst efforts of the modern maker of tombstone angels. It is surprising that the English tradition was not finally overwhelmed by this flood of extravagant taste; but it survived, and bequeathed to the architects of the following century the power of its crafts.

ITALY REPEATS ITSELF



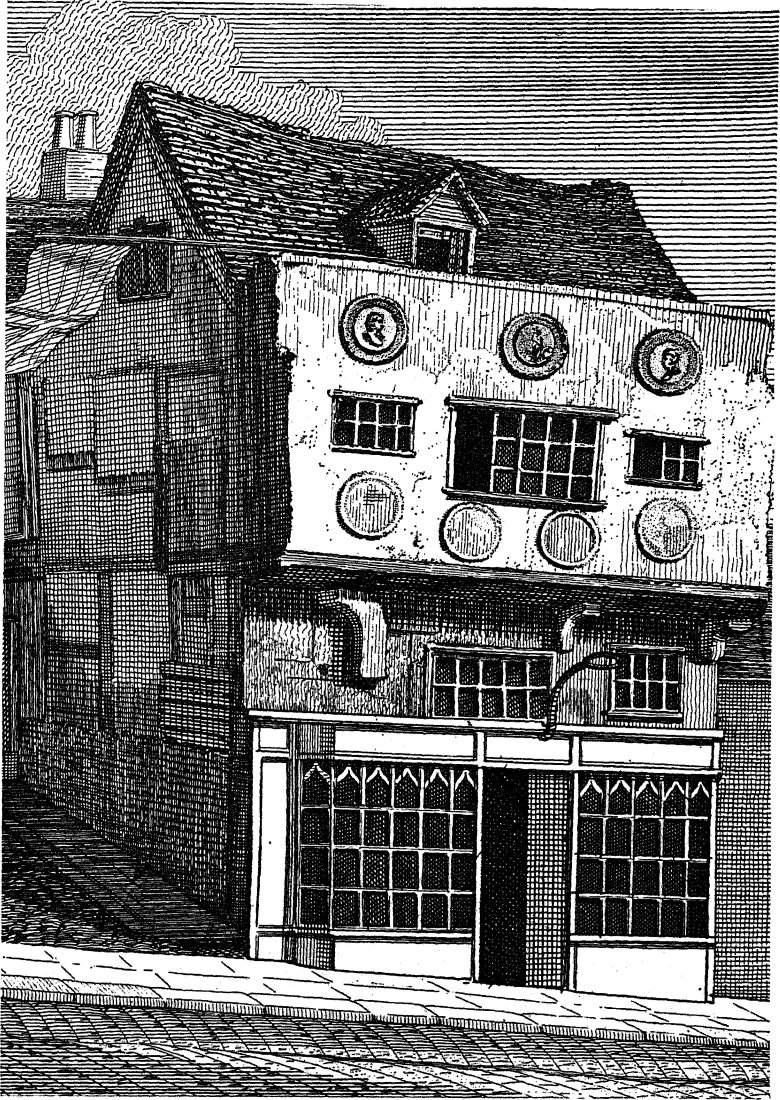
London and other English cities had streets of houses which were stout cages of wood, formed from oak beams and upright members, locked and pegged together, plastered or bricked in between the uprights. These houses, which were built and used from the late fifteenth century until the end of the seventeenth, were the prototypes of the modern jerry builders' so-called "Tudor" houses: they were the true half-timbered houses, and they burnt like tinder. Not all of them were destroyed in the Great Fire of London in 1666: a few survived. These, in Butcher Row, were included in J. T. Smith's *Antiquities of London*, and he made most of the drawings in that book in the last years of the eighteenth century.

MEN AND BUILDINGS

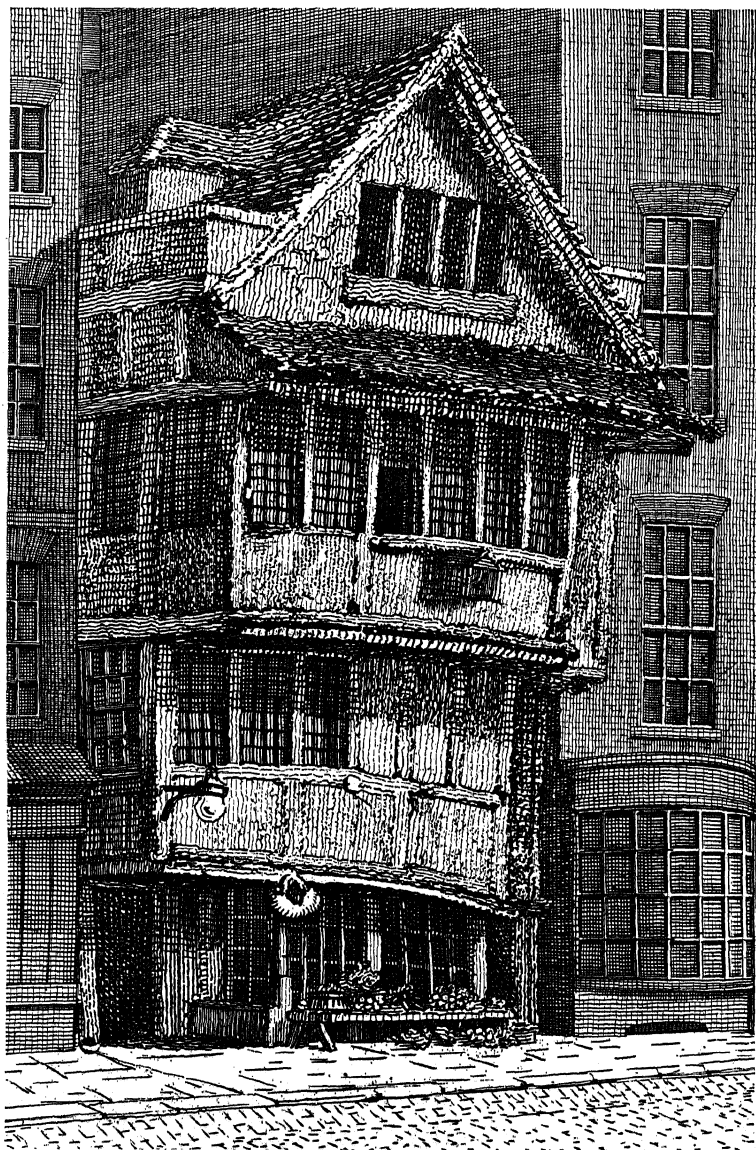
“There are few matters on which we can lay down definite laws in relation to outbursts of artistic energy,” Sir Hubert Llewellyn Smith points out, “but the law which we can infer from observation with the least element of doubt is that an essential condition of such an outburst is the pre-existence of a continuous and strong tradition of common art.”¹ The technical competence of English builders represented more than mechanical facility: it was a manifestation of the living power of the country’s common art; too strong to be obliterated by the transient indecisions and occasional vulgarities of Elizabethan taste or by the academic imposition of uncomprehended Roman forms. The great English architects of the Renaissance took that common art into honourable partnership; and to the discernment that prompted this action as well as to their personal scholarship and genius for composition must be attributed the humanised grandeur and serene beauty of seventeenth and eighteenth century architecture in England. In editing Rome, those architects preserved the intimate, homely air that the Early Tudor builders had given to domestic architecture, and to the England of the Stuarts and Georges the last of the Gothic craftsmen thus contributed their influence.

¹*The Economic Laws of Art Production*, Chapter VIII, p. 202. (Oxford University Press, 1924.)

ITALY REPEATS ITSELF

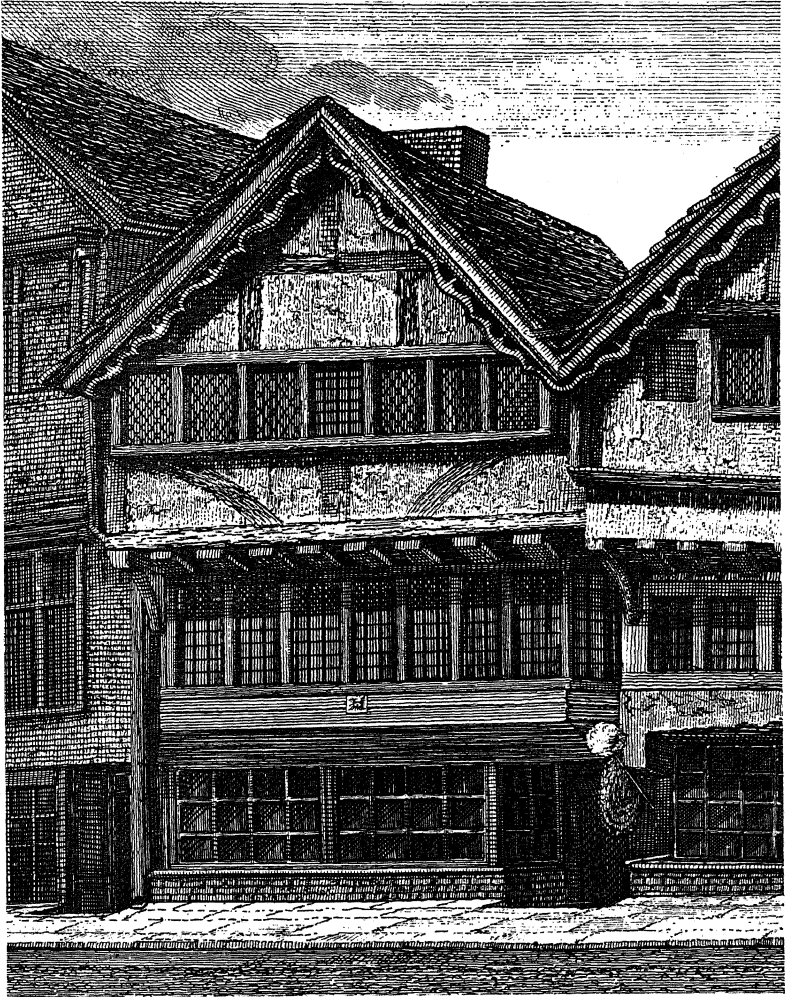


An old house on Little Tower Hill, included in J. T. Smith's *Antiquities of London*. The face of the upper storey has been plastered over, and embellished with medallions. The shop windows on the ground floor are an eighteenth century addition : the house itself is late sixteenth century or even earlier.



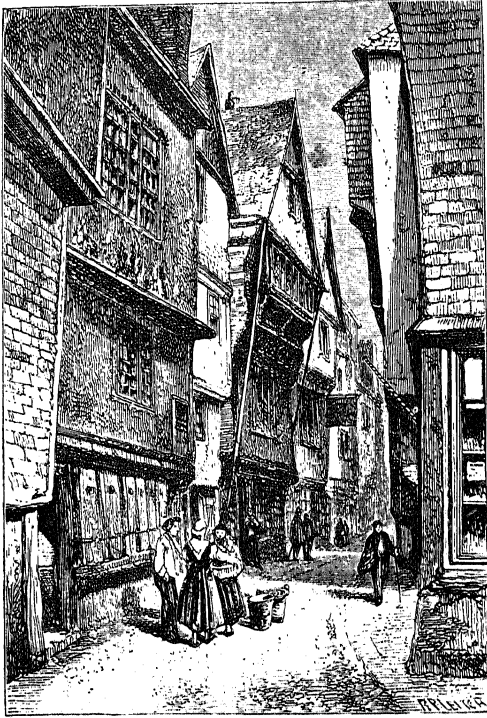
The old Fountain Inn, in the Minories. Like the houses shown opposite and those in Butcher Row on the previous page, this is an example of half-timbered building : the upright members of the framework acting also as the mullions of the windows (as they do in the body of a modern motor 'bus), and the upper stories projecting to win extra floor space at the expense of the street below. (From J. T. Smith's *Antiquities of London*.)

MEN AND BUILDINGS



Another specimen of half-timbered building which survived until the end of the eighteenth century, when that industrious draughtsman, John Thomas Smith (who was chiefly famous for his biography of Joseph Nollekens) recorded it in his *Antiquities of London*. (See also pages 81 and 84.)

MEN AND BUILDINGS



Narrow streets, shadowed by houses with their upper storeys projecting, were to be found everywhere in the towns and cities of the sixteenth and seventeenth centuries. This is a street in Dartmouth which survived until the mid-nineteenth century. Thomas Newcomen was born in the house that appears in the centre. (From a drawing by R. P. Leitch.)

CHAPTER VI

ENGLAND EDITS ROME

FEW ARCHITECTS have endured the depressing experience of losing an understanding and powerful client on the scaffold while the place selected for the official act of bloodshed happened to be in front of a noble fragment of an unrealised architectural dream, and the executed client the one man who could have commissioned the fulfilment of that dream. When Charles I was beheaded on the scaffold that had been built before the central window of the banquetting hall of the palace of Whitehall, the headsman's axe cut deeply into the lives of many men; but for Inigo Jones, who had designed the magnificent stone background of the scene, it cut down all the hopes that, year after year, may have budded in his mind, for the ultimate completion of the great royal building he had conceived thirty years before.

Inigo Jones, the first lucid interpreter of the Renaissance in England, was born in 1573, and he began to practice as an architect in an age that had inherited the literary and dramatic accomplishments of the Elizabethans. He had travelled in Europe, and in Italy had studied both the ancient Roman forms of architecture, and the work of the men who had reintroduced them to European life. He had seen how such architects as Filippo Brunelleschi had resurrected Roman architecture, and endowed it with new vitality, by liberating the classic orders from the arid standardisation that had atrophied imagination, and from the vulgar appetite for ostentation that overburdened the buildings of the Western Empire with a glut of ornament.

Brunelleschi, who was born in 1377 and died in 1446, had been one of the first of the great Italian architects to study the principles of classic architecture at first hand in Rome. Thereafter, the five classic Roman orders, Tuscan, Doric, Ionic, Corinthian and Composite, were restored to architectural life; and were subsequently codified by such men as Palladio and Vignola, so that they formed a comprehensive system of design. The Italian architects had an immense advantage, for all about them in their own land were the original sources of this system of design; and although, buried and

forgotten, Romano-British remains abounded in England and Wales, nothing was taken from this unsuspected treasury; instead the English architects and builders of the sixteenth century copied what they regarded as a new "Italianate" fashion. Without understanding the principles which governed the proportions of the classic orders, they merely used their decorative features as a new form of ornament, which they imposed upon the external and internal surfaces of the great houses that were built for the new rich families of the English Renaissance. When Inigo Jones went to Italy, the Renaissance had been blossoming in that highly civilised country for over two hundred years, and although its flowers had become florid, abundant evidence existed of the splendour and coherence which had marked its growth.

It was in the work of Andrea Palladio that Inigo Jones found a subject for special admiration. Its reticent stateliness commanded his respectful attention; his eyes, wearied by the ornate confusions of contemporary Italian architecture, were refreshed by the clarity of its classical lines. Palladio had died in 1580, and Inigo Jones devoted some time to the study of his buildings at Vicenza. In 1570, Palladio's *I quattro libri dell' Architettura* had been published at Venice; a work that became a best-seller, going through many editions and being translated into several languages. A copy of this book, annotated by Inigo Jones, is one of the important sources of information about him, and may have been responsible for the conventional assumption that it was from Palladio that he drew much if not all of his inspiration as an architect. Unquestionably the work of Palladio helped to enrich his understanding of classic architecture, but the study of another man's achievements could not alone beget that mastery of the great classic system of design which is apparent in all the work of Inigo Jones that has survived, or of which we have records. All that was best in the work of the earlier Renaissance architects and in the remains of antique buildings contributed to the training of his imagination; and with a perception, comparable with that enjoyed by the makers of the Italian Renaissance, he used Rome's forms while abjuring Rome's inflexibility. To England he introduced a true understanding of those forms.

At first his genius found an outlet in the theatre; and in the designing of settings for the elaborate masques which entertained the Court of James I, he gradually impressed many potential patrons, royal and noble, with the fertility of his mind and the ripeness of his architectural scholarship. He changed the character of the English theatre, for he saw the stage not as an arena or an

King Charles the 1



Both Inigo Jones and Wren "had to deal with Stuart minds and Stuart weaknesses : from those scholarly but unstable minds they derived abundant encouragement ; but the encouragement almost always lacked financial backing." Both James I and Charles I had been patrons of Inigo Jones. Charles was executed in 1649 : Inigo Jones died in 1651.

elevated platform, but as a moving picture; and, following an Italian prototype, he made for that picture a great frame, and this proscenium opening has been used ever since.

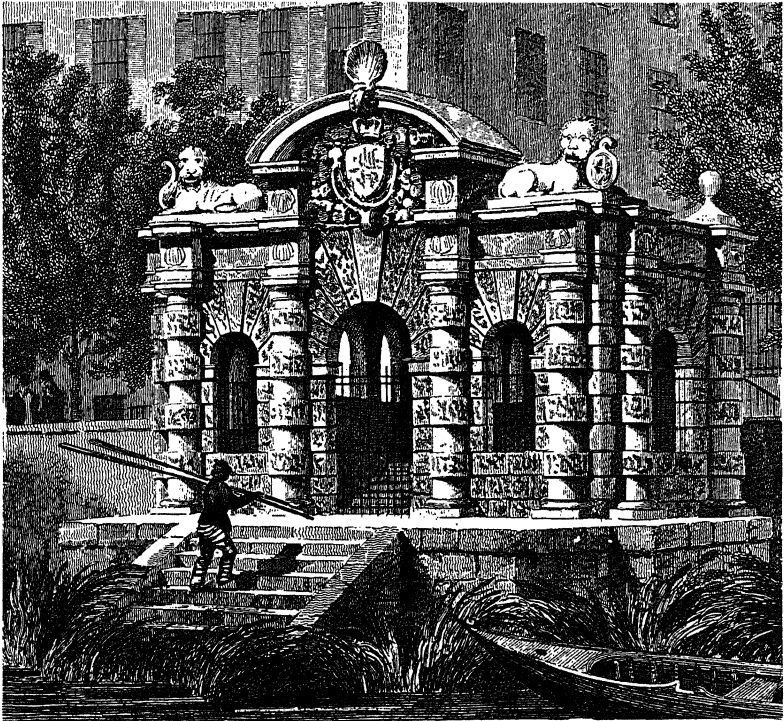
His appointment as Surveyor of the Works to Henry, Prince of Wales, in 1610, did not provide any great opportunities. He may have been responsible for superintending various repairs and alterations at Ham House, Petersham, which might have become a minor palace, only the Prince died in 1612. Inigo Jones then paid his second visit to Italy, and a few months after his return in 1614 he was appointed Surveyor of Works to the King. His architectural career now began, and three years later he designed the Queen's House at Greenwich, which was not finished until 1635.

MEN AND BUILDINGS

Throughout his life Inigo Jones saw his work delayed and his ideas starved or curtailed; for the Stuarts, while sympathetic patrons of architecture, nearly always lacked the money that could have made their patronage generous and complete. Early in 1619 the Banqueting House in Whitehall had been burnt down, and the condition of disrepair into which the rest of the palace had fallen hardly accorded with the King's conception of surroundings appropriate to his dignity. So the Surveyor of Works was instructed to prepare plans for a new palace; and he created two designs, though whether he was responsible for the actual drawings has been the subject of conjecture and some controversy. It seems reasonable to assume that he delegated much of his work. Of these two designs, the second was of vast dimensions and almost overpowering in its grandeur. Had it been built, it would have made the magnificence of every other royal palace in Europe seem limited and petty, not only by its scale, but by the fluent nobility of its lines. Of this august dream a fragment only turned from paper into stone, and that fragment, the Banqueting Hall, was apparently one section only of four similar sections, which were to form one of the subsidiary buildings of the great court. This great court was to have been 800 feet by 400 feet, double the size of the Louvre, and the Palace itself would have had one of the principal façades facing the Thames, with St. James's Park for its western boundary.

Before inspiring this ambitious scheme, he had been working on plans for Lincoln's Inn Fields, having been appointed as one of the Commissioners in 1618. This also was doomed to unfulfilment; only a small part of the scheme being carried out; and to-day Lindsey House is all that survives to illustrate the faultless beauty of the project. It was not actually built until 1640-42.

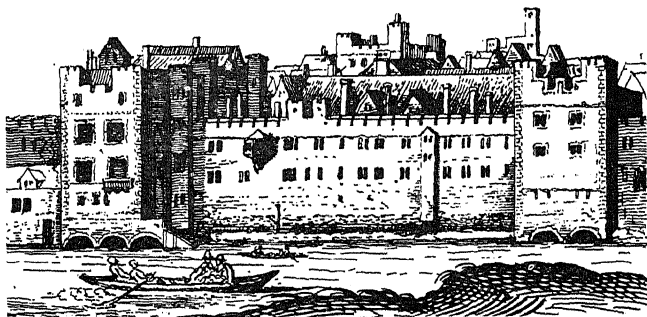
He revealed in every building he designed or influenced, a complete mastery of the classic forms he had observed in Italy; and the example of his work ended the period of caricature in which those forms had become incongruous and purely superficial additions to Tudor domestic architecture. His influence ended for ever that ineffectual compromise between classic and Gothic architecture, from which arose such picturesque and clumsy patchworks in the late sixteenth and early seventeenth centuries; and he founded in England a new architecture, formal but flexible, expressing through the Roman orders a quite un-Roman freedom and imaginative power. He was the great progenitor of the urbane beauty which for two hundred years distinguished English architecture and all the ancillary arts and crafts. His buildings proclaimed their



York Water Gate, designed by Inigo Jones, as it appeared before the Embankment Gardens and the Victoria Embankment separated it from the River Thames.

national character in emphatic contrast with the attempts to anglicise Italianate fashions which had occupied his contemporaries and immediate forerunners. There is all the difference in the world between reciting the alphabet and spelling words with it; and Inigo Jones not only learned how to make words, but had something to say, a great lesson to impart, a doctrine of unity and order to establish.

He did not lack patrons. Great houses such as Wilton, Lees Court, Faversham, and Raynham Hall, Norfolk, brought new dignities to English domestic building, but they were not alien



The Thames reflected many noble palaces in the sixteenth and seventeenth centuries, and of those which lined the Strand, the Savoy was one of the most impressive. It looked like this in 1650 : compare it with the view, recorded 142 years later, shown on the opposite page.

dignities. The architectural ancestry of the comfortable halls and manors of the late Stuart and Georgian periods may be traced to the influence of his work. A deep sense of civic responsibility is apparent in every design he created; he had reverence for the street, for compact relationships between buildings that would preserve inviolate the spaciousness of courts and ways; and even his country houses are apt to suggest that they belong to some noble city. Inigo Jones was a passionate believer in the essential nobility of the town: like Wren, he saw the glory of the order that awaited it; like Wren, he had to be content with fragmentary progress towards that glory, though to both came opportunities of splendid promise. Unfortunately, both had to deal with Stuart minds and Stuart weaknesses: from those scholarly but unstable minds they derived abundant encouragement; but the encouragement usually lacked financial backing.

Inigo Jones was far less fortunate than Wren. Although he was actively engaged in creative work until his death in 1651, the latter years of his life were darkened by a sense of shrinking opportunities for public work, and by the hostility of the growing Puritan power towards everything pertaining to art. Although he had done so much to replace the architectural traditions of mediaeval civilisation, although in the practice of his own art he was so much a man of the new, innovating world of the early seventeenth century, he



The Savoy in 1792. Gone are the battlements : the East side is in ruins, and the depth has been diminished by new buildings backing on to it from the Strand. (See opposite page. Both views are from J. T. Smith's *Antiquities of London*.)

was also a man of the old Faith, and as a Roman Catholic he suffered in that age of ferocious, Puritan intolerance. Spiritually, he was a stranger in the world of Calvinism and commerce and tentative flirtations with natural science; but he was an artist and a technician, and a patron was a patron—even when it was an amorphous body like the Commissioners for Pious Uses. This body involved him in work which touched the pride of Londoners, the restoration of St. Paul's Cathedral. That great Gothic church was hemmed in by mean houses, and built up against it was the church of St. Gregory. His work began with a survey of St. Gregory's in 1631, and from that year it dragged on, exasperating and inconclusive, constantly halted by delays that were beyond the control of the architect, until the Civil War stopped all progress.

Meanwhile, popular prejudice against the architect's religion was excited. No doubt the thought of a Papist tinkering with St. Paul's exasperated seventeenth century cockneys, and their resentment expanded when they saw the church of St. Gregory, which adjoined the western end of the south wall of old St. Paul's, being demolished to accommodate the improvements Inigo Jones had planned. It was useless to point out that St. Paul's acquired a new dignity from the amputation of this unrelated structure, and that the gain in spaciousness contributed to the beauty of London.

Inigo Jones discovered the invalidity of that plea when the culmination of this gutter-bred criticism brought him before Parliament a few years later, for the citizens had lodged a formal complaint against him. It was an early public expression of that itch to interfere with the artist which the Puritans established as an English characteristic. Essentially uncreative, those bleak creatures could only destroy or persecute what they did not understand. The indictment of Inigo Jones was typical of the grim influence that was draining the colour and gaiety from the civilisation of England. In the course of this pettifogging affair we get a sudden glimpse of the man himself: quickly impatient, contemptuous of the ignorance arrayed against him, dismissing the solemn proceedings and the ponderously ridiculous questions with a gesture. He accepted complete personal responsibility. It was an expensive gesture, for he was compelled to pay a sum of £500. That piece of staggering injustice probably affected him less than the stoppage of work on his design, and the casual treatment of the fine portico which had been built on the west front.

Three years later, in 1643, he was deprived of his office as Surveyor of the Royal Works, which he had continued to hold under Charles I; and as a Royalist and a Roman Catholic, a combination of errors from the Puritan point of view and one which earned the damning description of "malignant," he had to save his estate from confiscation by paying a sum of over £500.

In the last two years of his life, the world must have seemed a wretched and disheartening place to Inigo Jones. The brilliant Court had disappeared, the unreliable King had been executed, and the institution of regicide had been consecrated with a moral earnestness for which the history of religious and political fanaticism provided no precedents. The excesses of the righteous were alarming, and the extirpation of art became one of the sanctified callings of the godly.

It was a sad time for people with creative gifts, and to a man over seventy-five its evils would have had a depressing air of permanence. Perhaps Inigo Jones realised, as many other people must have realised in the middle years of the seventeenth century, that there were two kinds of Englishmen. This national division was not specially marked until the Reformation; but in the sixteenth century there were hints of it, and a new, strange kind of Englishman drew aside from his fellows, leaving for ever the laughter and the frankness and the fellowship of mediaeval society in transition, and walking along narrow ways of his own devising. Such men

formed a harsh community that specialised in the invention and detection of sin; and they had their prophets and their warrior priests, and a faith that ran like a devouring flame over the land. Man was born to sorrow, let him not presume to rejoice: it was more blessed to forbid than to conceive anything that lent graciousness or ease to life.

These people rose in three generations to absolute power in England. They were efficient as rulers, soldiers and sailors; they were incorruptible, inexorable, and insensitive. They made the country as dismal as possible in the relatively short period of their rule, and they established a profound popular suspicion of art and artists. After their one grim experiment in government they were never again allowed the appearance of power—till now: but they worked in underground ways; and although their influence was checked for a century, it revived and gathered strength for the affliction of our own times. To the spiritual descendants of these passionate prigs we owe the net of prohibitions that made the modern Englishman ridiculous in the eyes of civilised Continental countries, even before the second World War. They inspire the homilies of the bench and the pulpit on the way the Sabbath should be sunk in holy gloom; they fortify every prying beach inspector with the sense of his pure, civilising mission; they make the mass production of moral censors a normal process of municipal government, and in these innumerable duplicates of Cato, the Puritan afflatus works to a crusading end, so that they are impelled to launch local movements against everything they fail to comprehend—art, literature, music, science, and rational enjoyment.

It is easy now to imagine the joylessness of England when the activities of the Puritans were concentrated, and they set about reshaping life so that earth should more nearly resemble a preparation ground for the just rewards of their bleak Heaven. In the seventeenth century, as in the mid-twentieth, their powers of interference were unlimited. Had the Commonwealth survived Cromwell, English architecture might well have lost all that Inigo Jones had brought to it, and a certain brilliant young man, Mr. Christopher Wren, who was beginning to distinguish himself at Oxford in the years immediately following the death of the first great English classic architect, might have remained all his life a professor of astronomy.

That fearless Royalist, John Evelyn, visiting Oxford in July 1654, met Wren, whom he described as "that miracle of a youth." On the 13th of that month, there is an entry in the *Diary* of a dinner with

"that most obliging and universally-curious" Dr. Wilkins at Wadham College. Evelyn records that "He had above in his lodgings and gallery variety of shadows, dyals, perspectives, and many other artificial, mathematical, and magical curiosities, a way-wiser, a thermometer, a monstrous magnet, conic and other sections, a ballance on a demi-circle, most of them his owne and that prodigious young scholar Mr. Chr. Wren, who presented me with a piece of white marble, which he had stain'd with a lively red very deepe, as beautiful as if it had ben natural."

Evelyn was to make many more entries in the *Diary* concerning Wren before the century ended. Ten years after the first mention, he refers to him as "that incomparable genius my worthy friend Dr Christopher Wren," (October 24th, 1664), in connection with the Sheldonian Theatre at Oxford, based on the design of the Theatre of Marcellus, and one of Wren's earliest works. His first, a doorway in the North transept of Ely Cathedral, was commissioned in 1663 by his uncle, who was the Bishop of Ely, for whom he also designed his first large architectural work: Pembroke College Chapel, Cambridge.

Incomparable genius he certainly was, with a mind that ranged through all learning. He displayed an aptitude for applying the facts of science to the mechanical amplification of life that anticipated in theory some modern inventions. In that carelessly assembled book, *Parentalia, or Memoirs of the Wrens*, compiled by Sir Christopher's son, Christopher, there is a "Catalogue of New Theories, Inventions, Experiments, and Mechanick Improvements, exhibited by Mr Wren at the First Assemblies at Wadham College in Oxford for Advancement of Natural and Experimental Knowledge." From this catalogue the following suggestive items indicate not only the agility of Wren's intelligence, but its entirely practical character: "To build in the Sea, Forts, Moles, etc." "Ways of Submarine Navigation," "A Speaking Organ, articulating Sounds," "A Scenographical Instrument, to survey at one Station," "Several new Ways of Graving and Etching," Altogether, there are fifty-three items, including one that reveals a train of thought destined to immortal developments: "New Designs tending to Strength, Convenience, and Beauty in Building." Robert Hooke (1635-1703), that irritable and solitary scientist, said of Wren: "Since the time of Archimedes there scarce ever met in one man in so great perfection such a mechanical hand and so philosophical a mind."

In 1657, at the age of twenty-four, he was appointed Professor of Astronomy at Gresham College, and for a time it seemed as



John Evelyn, 1620–1706, the diarist who recorded so many matters that affected the taste of cultivated people and the history of architecture in the second half of the seventeenth century. A friend and admirer of Wren, he did much to make that great architect's work for London an effective reality. (Reproduced by courtesy of the Trustees of the National Portrait Gallery.)

Sir Christopher Wren, designer of St. Paul's Cathedral and fifty parish churches in the City of London. His plan for London is shown on pages 101, 102 and 103.



though the scientist would become uppermost in that rich and variously gifted personality. In whatever field of knowledge his interest was planted, his imagination raised original thoughts, which, uncoiling like the tendrils of young bracken in the shape of queries, later expanded into the bright fronds of intellectual discovery.

On November 28th, 1660, the Royal Society was founded after one of Wren's lectures at Gresham College. It was the custom of certain erudite noblemen and gentlemen to meet frequently to hear these lectures, and on this occasion they discussed after the lecture the idea of founding a College for promoting what they called Physico-Mathematical Experimental Learning. Weekly meetings

were arranged; an admission fee of ten shillings and a weekly subscription of a shilling were agreed upon; and at the second meeting the royal approval of His Majesty King Charles II was conveyed to the assembly by Sir Robert Moray, one of its members.

Science attracted all the creative activity of Wren's mind to its service until he was over thirty. Unlike Inigo Jones, he was spiritually attuned to the new age—the scientific commercial age which was then beginning with such abundant promise of new greatness for mankind. From this new, adventurous scientific learning many well-stocked minds were deriving a sense of power that was utterly different from the stodgy nourishment the old order of scholars and philosophers had drawn from their ponderous, bookish discussions. The thick air of theology no longer muted the voice of original inquiry. Curiosity was unchained. A man with a problem did not automatically seek for some consoling authority in a library; the liberation of common sense changed his approach to the task of discovering a solution. He often devised an experiment which clarified his process of thought instead of delving for an extract which stopped it.

Bishop Sprat, in his *History of the Royal Society*, describes some of Dr. Wren's experiments and inventions: the record occupies nearly seven pages of that stimulating and occasionally unepiscopal work, and demonstrates the singular fecundity of Wren's mind and the extent of his personal ingenuity. For example, in improving the mechanical operation of telescopes by the addition of new types of screws and the control of the apertures to admit light, he also successfully attempted to make glasses in forms other than spherical and added much "to the manufacture itself of grinding good glasses." He improved the operation of thermometers; invented an instrument to measure the annual rainfall in an area; and was the author of the anatomical experiment of injecting liquids into the veins of animals. "Hence arose many new experiments," as Bishop Sprat declares with zest, "and chiefly that of Transfusing Blood, which the Society has prosecuted in sundry instances, that will probably end in extraordinary success."

Blood transfusion has since saved thousands of lives; though few people know that the designer of St. Paul's Cathedral was its progenitor.

In 1661 Wren became Savilian Professor of Astronomy at Oxford, and in the same year the King sent for him to act as assistant to the Surveyor-General. The selection of that official had been a refreshing proof of the change from the unctuous efficiency of the

Commonwealth to the casualness of Stuart favouritism. The great national game of fitting square pegs into round holes had been restored with the Monarchy, and has been played with uninterrupted relish ever since: it is a stimulating game, for it gives such a palatable flavour to our astonishment when by some queer chance the right man gets the right job.

Sir John Denham, whom Wren was appointed to assist, had earned some meagre distinction as a poet, and, with the help of the Duke of York, a far more spectacular notoriety as an injured husband, towards the end of his life. He had been rewarded in 1660 with the office of Surveyor-General, and was also made a Knight of the Bath, for he had been an active and persecuted Royalist in the Civil War. His knowledge of architecture, if he had any, certainly never exceeded a polite interest. John Webb, who had been assistant to Inigo Jones and had hoped, not unreasonably, to succeed him as Surveyor-General at the Restoration, suggested in a tactless memorial to the King about the appointment, that although Mr. Denham might in common with most gentlemen, have some knowledge of the theory of architecture, he could have no practical experience and would have to depend on and employ an assistant.

Sir John Denham soon found that one assistant did not counter-balance his own technical insufficiency, though possibly Webb was too disgruntled to be very helpful. The appointment of Wren as an additional assistant must have ruffled Webb even more, for although the King had promised him the reversion of Sir John's post, the false currency of Stuart promises was again becoming apparent.

To Webb, Dr Wren must have seemed just another confounded amateur. As a professor of astronomy, a mathematician, an accomplished and cultured gentleman, with friends at Court, and one of the founders and recognised leaders of the Royal Society which His Majesty so graciously patronised, he must have filled Webb with despair. How could he compete with this array of talents and influences, save by clinging to the fact that he was a technical specialist and Wren an amateur? This was true, for Wren's architectural career did not really begin until he became Denham's assistant. And to the end of his life he retained the eclectic approach of the amateur; some of his work suggests that a gifted gentleman was indulging a taste for architecture with indisputable genius. When the charm and animation of Wren's personality prompted Webb to forgive him for holding office at all, it was probably difficult to forgive him for not being Inigo Jones.

In this architectural partnership of amateurs, Denham was naturally a nonentity. He merely drew the largest salary; and after his second marriage in 1665 he was submerged by the domestic disaster which drove him mad. It was a typical Carolian scandal, which turned abruptly to tragedy, for as Sir John was recovering, his wife suddenly died; and although both the Duchess of York and Denham himself were suspected of poisoning her, no trace of poison was ever found. Samuel Butler's "Panegyric upon Sir John Denham's Recovery from his Madness" was, by its mordant brutality, also typical of the time; and although his accusation of incompetence was perhaps deserved, the charge of peculation which accompanied it had by then become customary when reviling anybody who held public office, and was probably an invention.

During the first two years of association with Denham, Wren had no commissions for public works, but in 1662 he was appointed to survey old St. Paul's, and in 1663 he had begun Pembroke Chapel, Cambridge, and the Sheldonian Theatre at Oxford. Before he was thirty-five, he had a huge architectural practice, for London had been burnt down, and that stupendous stroke of luck that occasionally befalls mankind had occurred: a great genius had been given a great opportunity.

In the spring of 1666, Wren had returned from an eight months' visit to Paris. There he had met Bernini, and was granted a brief glimpse of his designs for the Louvre. He may have gained more from his conversation with "the old reserv'd Italian," as he called him, than from that tantalising view of his projected work: Bernini may have lit his imagination by some reference to the magnificent approaches he had planned to St. Peter's. Certainly his visit to France stimulated and influenced him, although he was contemptuous in his comments on the manner in which even buildings in France had to accommodate their design to some prevailing mode. He blamed women for this, saying that "as they make here the Language and Fashions, and meddle with Politicks and Philosophy, so they sway also in Architecture; Works of Filgrand, and little knacks are in great Vogue; but building certainly ought to have the Attribute of Eternal, and therefore the only Thing uncapable of new Fashions."

In France Wren saw architectural work planned with an almost careless grandeur, and it was a manner to which his own spacious imagination responded. Had London been rebuilt according to Wren's plan, the city might to-day have streets capable of graceful expansion, a less harassing traffic problem, and an embankment

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extending from the Temple to the Tower; moreover, the example of its central order and convenience might have influenced the whole character of its subsequent enormous growth. In Appendix A of his book, *The Rebuilding of London after the Great Fire*, T. F. Reddaway gives the facts about the long-accepted story that Wren's plan was "unhappily defeated by faction." It was never even approved by Parliament. It was considered, together with other plans, and rejected. The idea of having a new plan at all was abandoned.¹

The Great Fire began on September 2nd, 1666, and after the disaster the King ordered Wren to survey the area of the ruins. Writing to Sir Samuel Tuke on September 27th, Evelyn said: "They are now busied with adjusting the claimes of each proprietor that so they may dispose things for the building after the noblest model: Everybody brings in his idea, amongst the rest I presented his Majestie my owne conceptions, with a Discourse annex'd. It was the second that was seene, within 2 dayes after the Conflagration: but Dr Wren had got the start of me. Both of us did *coincide* so frequently, that his Majestie was not displeas'd with it, & it caus'd divers alterations; and truly there was never a more glorious Phoenix upon Earth, if it do at last emerge out of these cinders, & as the designe is layd, with the present fervour of the undertakers."

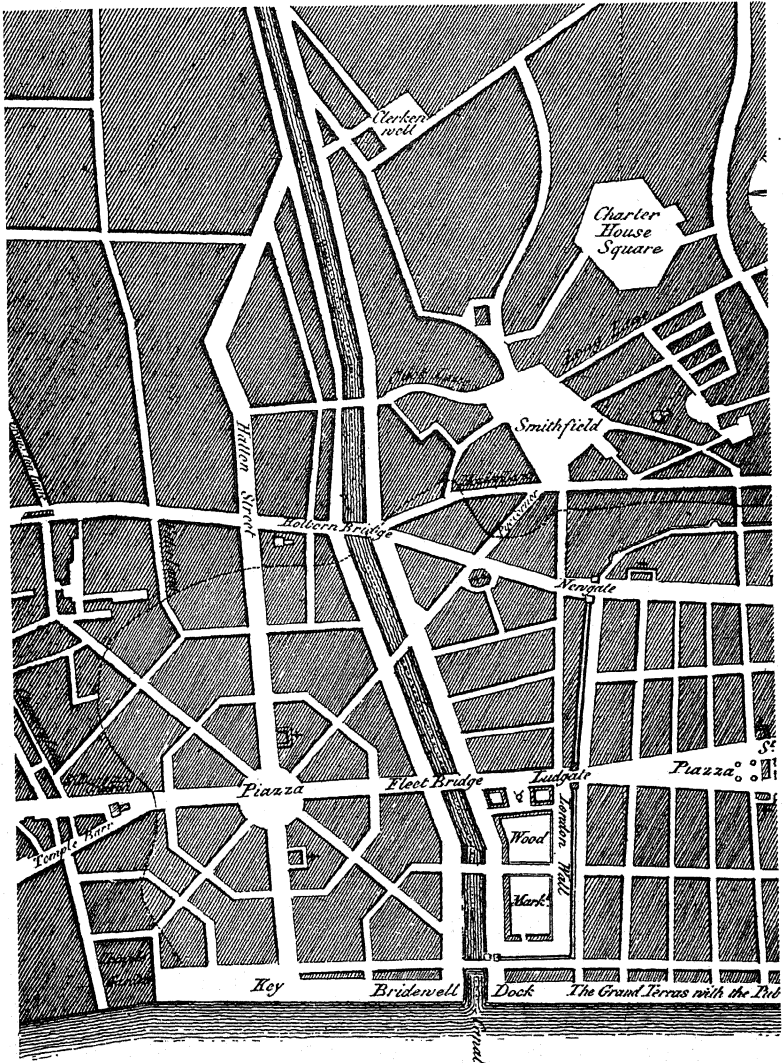
The opportunity of replanning was lost. Mr Reddaway records that "The difficulties were too great. Finally the whole matter seems to have been relegated to the royal commissioners and the City surveyors. Wren himself was one of them . . ." The others were Hooke and Mills, who had both made new plans, and three architects: Pratt, May and Jerman. "No more sympathetic body could have been found," writes Mr Reddaway; "but, after a month's hard work, the adoption of a different policy showed that the idea had been abandoned."² Wren built half a hundred towers and spires that gave to London's skyline a glory that was debarred from its streets. His greatest achievement, St. Paul's Cathedral, was hemmed in with mean buildings, until the air raids of the second World War opened up the surrounding areas.

Ludgate Hill, a potentially magnificent approach, was walled with tawdry Victorian trappings, and shadowed by a railway bridge. Even so, as the road rises to the splendid crown of the hill,

¹ *The Rebuilding of London after the Great Fire*, by T. F. Reddaway, p. 311. (Jonathan Cape, 1940.)

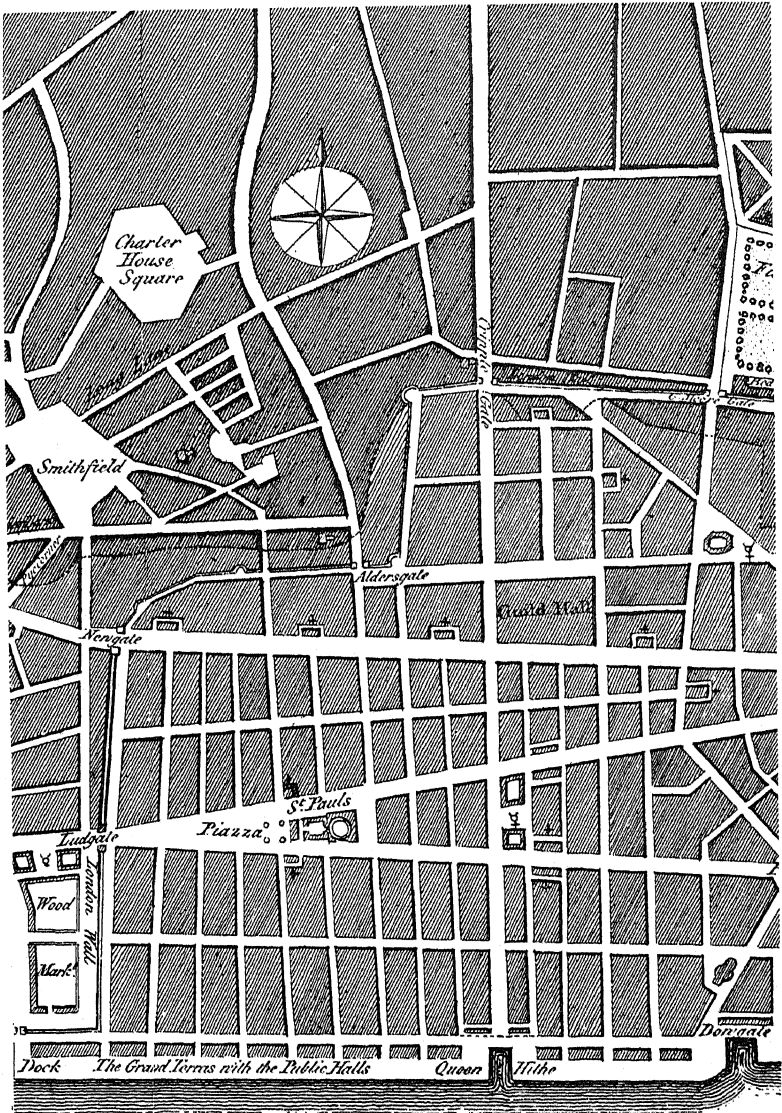
² *Opus cit*, p. 312.

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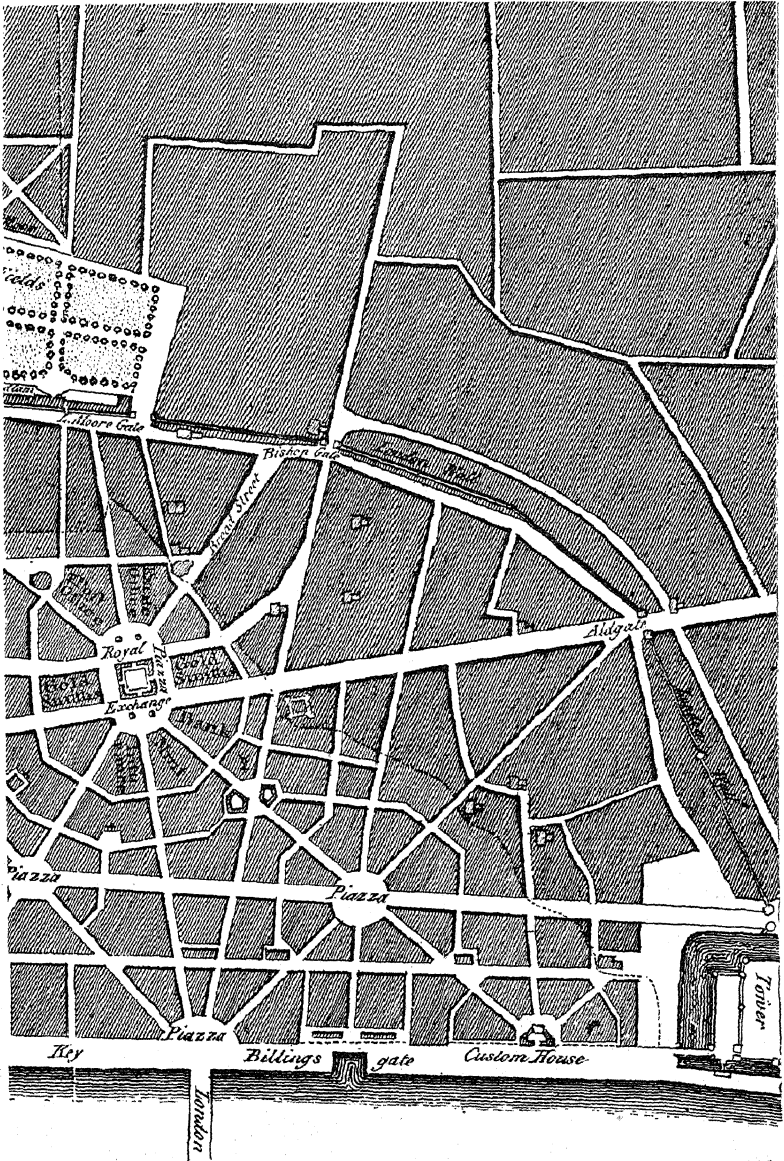
Wren's plan for London, made after the Great Fire of 1666. This shows the proposals for the streets west of the City wall, from Ludgate to Temple Bar. The continuation eastwards of the plan is shown on the two pages that follow.

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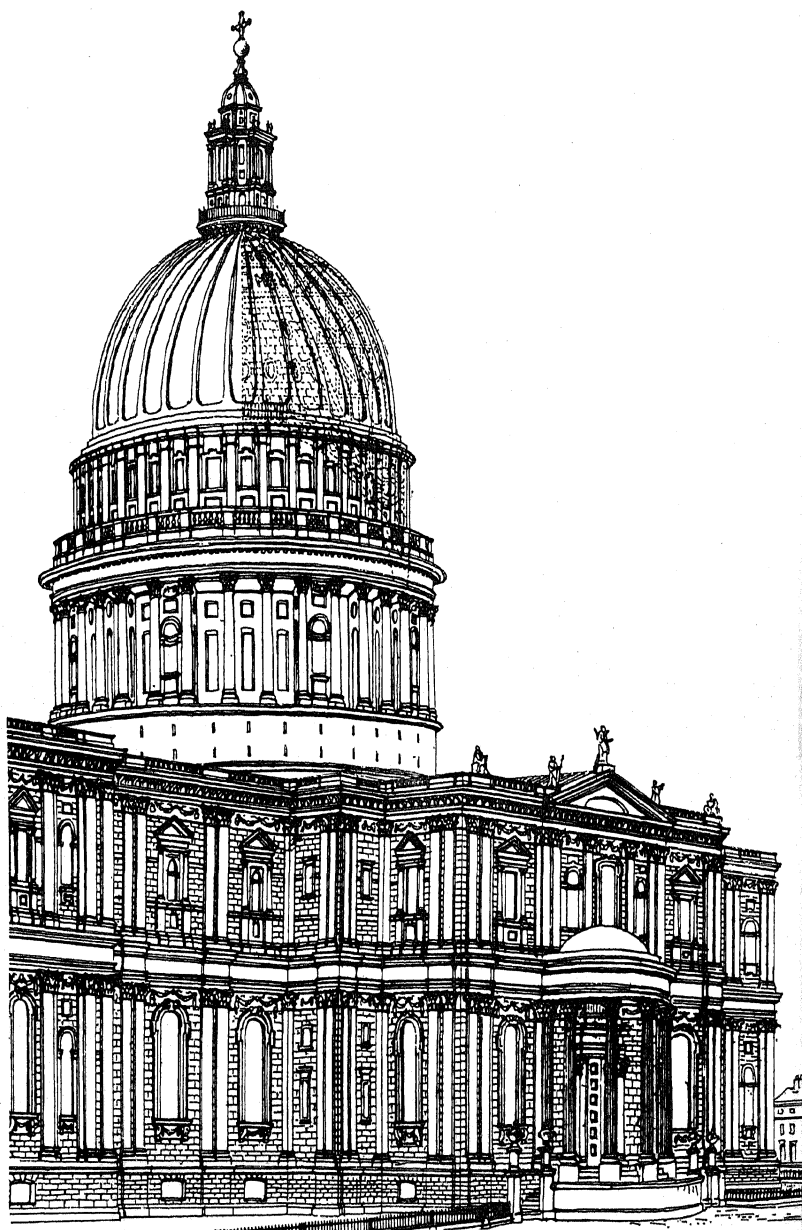


Wren's plan for London from Ludgate to the Tower is shown above and on the opposite page.

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The eastern part of Wren's plan for London : see opposite page, and page 101.



The dome and south façade of St. Paul's Cathedral. It was built between 1675 and 1710. (See Plates 13, 16 and 17.)

the congested façades of the nineteenth century become blurred and obscure, and we can ignore them; further west, as we walk along Fleet Street, we are conscious only of the slender pencil stroke made by the spire of St. Martin's, a dark line against the mass of St. Paul's.

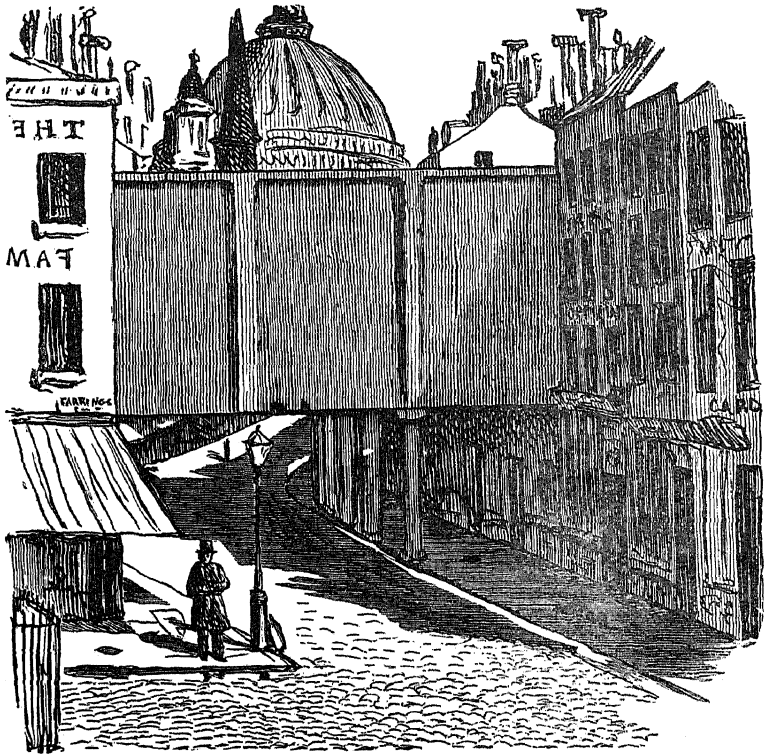
The dome of the cathedral dominates the city, and throughout the world it has become one of the recognised symbols of London. Unfortunately, there are others, like the superlatively idiotic Tower Bridge with its Scottish baronial trimmings. But St. Paul's is one of the rare things built by man that pass into the visual memory of the race.

Inside, space is shaped and ordered in a fashion that seems almost to transcend human effort. Under the dome, one gets the impression that light has been carved into gracious forms; the very atmosphere acquires unwonted substance. Perhaps this is some trick of optical fancy; perhaps the impress of a mind that had mastered optical laws and used the knowledge of a scientist with the inspiration of an artist. Below the dome the great arches piled upon the piers are calmly powerful: curve melts into curve in a majestic ascent to the lantern. The Gothic cathedral builders made a stone framework for light working pictorially through coloured glass: Wren designed a temple, far greater in conception than anything Roman, and made daylight work in relation to form instead of through colour; for everywhere in St. Paul's daylight is used to cast shadows for the greater glory of noble shapes, and to touch with brightness the sublime beauty of masses, harmoniously assembled. Only when daylight fails, and the high spaces are dim, does the interior acquire all the solemn mystery of a great church. In every line it represents the thought of its age; the new far-ranging thought that had made the character of Heaven discreetly indefinite and had turned the minds of so many able men towards the improvement of the material world.

Ever since he had been appointed to survey St. Paul's in 1662, Wren had been considering the rebuilding of the church, and he advocated at first a reconstruction of the interior "after a good Roman manner" which would harmonise with the fine western portico Inigo Jones had added and the scheme of exterior refacing he had designed and which had been partly completed.

Several nervous and ineffectual gentlemen, who believed in playing for safety, hampered the plans of their more intelligent fellow-Commissioners by refusing to entertain any original measures for reconstruction. St. Paul's had to be patched up somehow; and so the Commission wrangled on, sanctioning minor repairs here

LAST FEW DAYS OF ST. PAUL'S.



Now then, make haste, make haste, and pay a visit to Ludgate Hill, and behold, for nearly the last time you will have the opportunity, the vast and celebrated Cathedral of St. Paul, erected by that famous architect SIR CHRISTOPHER WREN, in the reigns of their Majesties the last of the Stuarts. Be in time, be in time. In a very short time this remarkable edifice will become invisible, owing to the great improvements which the march of intellect and the progress of commerce, providentially force upon this Great Metropolis. Therefore, be in time before the view is shut out for ever and ever by the highly ornamented tank in preparation by the Railway Company. The architecture will well repay inspection, the *façade*, henceforth to be seen no more, is regarded as one of the finest things in the world, and the majestic appearance of the west front defies at once competition and description. There is no charge, so long as you keep out of the building, and in short this is an opportunity which can never occur again in the history of London. Be in time, be in time.

How the mid-Victorians showed their respect for Wren, and what *Punch* said about it on August 8th, 1863.

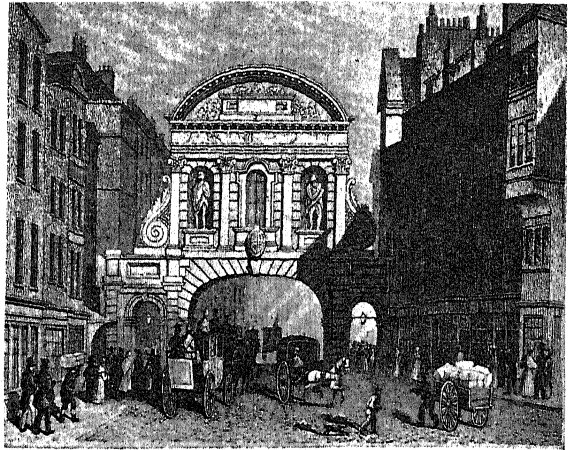
(Reproduced by permission of the proprietors of *Punch*.)

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The disfigurement of the approach to St. Paul's was accepted and even approved. Seventeen years after the protest in *Punch*, Samuel Butler wrote in the introductory chapter of *Alps and Sanctuaries*: "I know of nothing in any foreign city equal to the view down Fleet Street, walking along the north side from the corner of Fetter Lane. It is often said that this has been spoiled by the London, Chatham and Dover Railway bridge over Ludgate Hill; I think, however, the effect is more imposing now than it was before the bridge was built." Meanwhile Doré had portrayed this scene after the bridge had been built in 1865, despite the opposition of the City Corporation. *Punch* had protested three years after the plans had been submitted to Parliament.

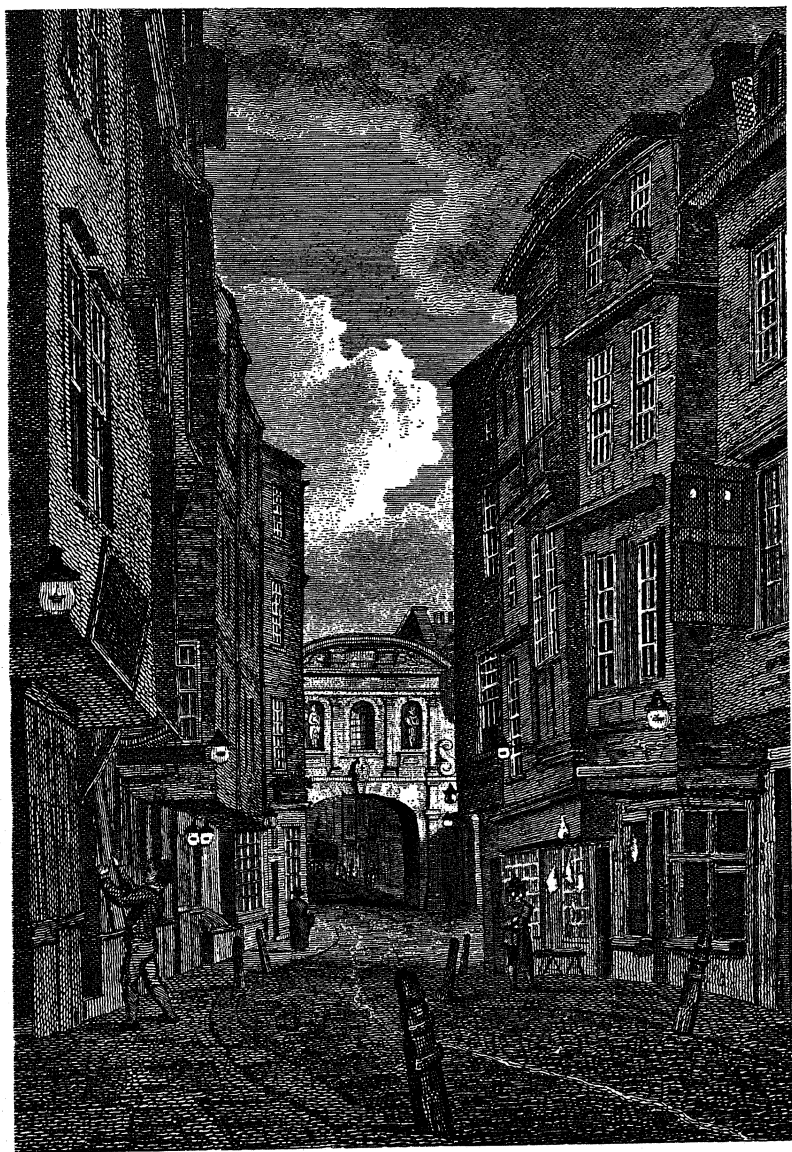
Temple Bar, London, designed by Wren and built in 1672. An early nineteenth century view.



and there, and a few days before the Fire, Evelyn and Wren were still battling for a larger view of the Commission's responsibilities. Evelyn records (August 27th, 1666) that "When we came to the steeple, it was deliberated whether it were not well enough to repair it onely on its old foundation, with reservation to the 4 pillars; this Mr Chichley and Mr Prat were also for, but we totally rejected it, and persisted that it requir'd a new foundation, not onely in regard to the necessitie, but for that the shape of what stood was very meane, and we had a mind to build it with a noble cupola, a forme of church building not as yet known in England, but of wonderful grace . . ."

Even after the Fire, and the destruction of old St. Paul's, a committee was formed to attempt some impossible patchwork to the roofless, crazy fabric. Wren left them to muddle along until even the stupidest members realised the hopelessness of the task; this naturally took time, and more than a year was wasted before everyone was convinced that a complete clearance of the ruins and a new design for the cathedral were the only solutions.

In all the designs for St. Paul's that Wren produced, his complete mastery of the "good Roman manner" was apparent. Classic architecture was his medium; and as the beauty of his wonderfully



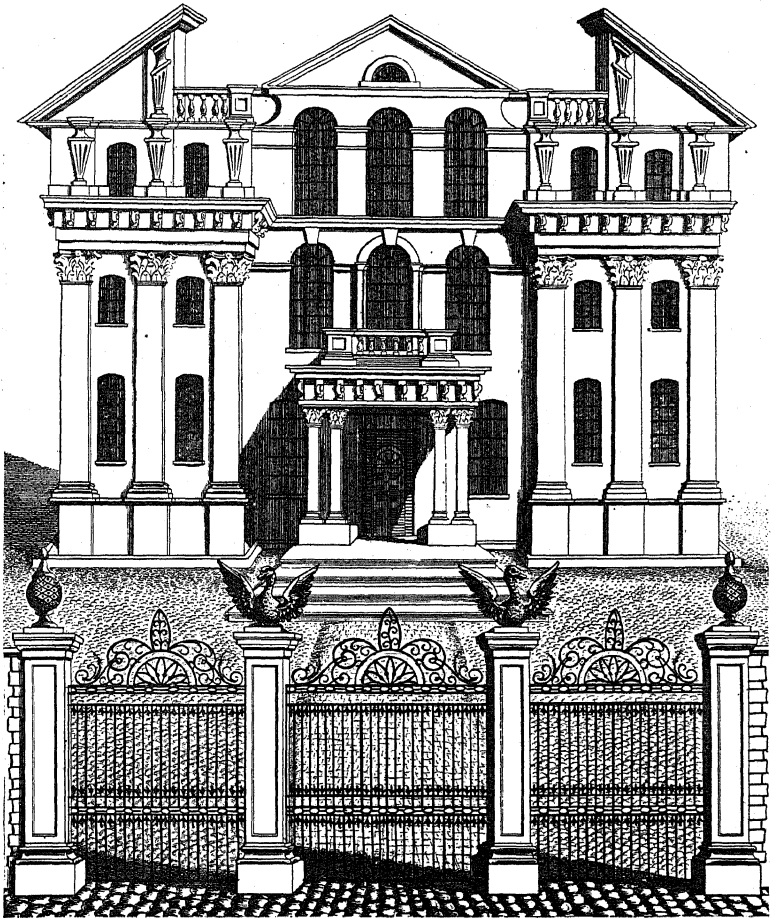
Temple Bar, designed by Sir Christopher Wren, was surrounded by mean streets. Here is a view of it from Butcher Row, from an engraving made in 1796; an example of architectural squalor which remained long after Temple Bar was removed.

varied spires and steeples witnesses, he was boldly unconventional in associating architectural elements. A few of the city churches he built were Gothic in manner; and there must have been some strong compelling reason for his use of a dead architectural language, for although he understood it, he spoke it badly, and could not thus convey the thoughts of his age. The Tom Tower over Wolsey's gateway at Christ Church, Oxford, is another example of his treatment of alien forms, used in order to harmonise with the existing Tudor work, though here he may have been interpreting some earlier record of the original designs by Wolsey's architects. The proportions of the tower are noble: the pseudo-Gothic details are just queer.

In rebuilding Hampton Court Palace for William III, Wren showed no tenderness for Tudor Building. The age that had produced such work was mentally and artistically far more remote from Wren and his contemporaries than the Rome of Augustus. The men of the late seventeenth century were realists, and if intellectual affinities with the past were absent, they did not substitute antiquarian sentimentalities. The death of William III prevented Wren's plan for Hampton Court from being carried through completely; if the work had been finished, Wolsey's palace would have disappeared.

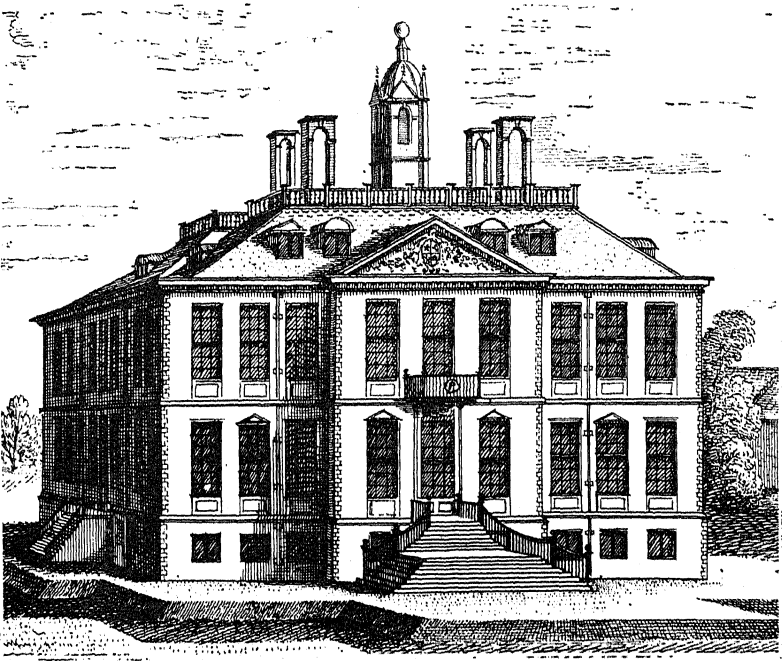
Wren's activity was stupendous. St. Paul's was begun in 1675 and finished in 1710. After his appointment as Surveyor-General on Denham's death in 1669 (the King's promise to Webb having gone the way of most Stuart pledges), he built fifty-three parish churches, fifty in the city itself, and such great secular buildings as Chelsea Hospital, Greenwich Hospital, and Kensington Palace. He built libraries at Trinity College, Cambridge, and at Queen's College, Oxford; and up and down England his work and the example of it began the most prolific and satisfying phase of English architectural history.

His architecture was intensely national; and even his palaces, in particular Hampton Court, were endowed with an air of deep, hospitable comfort, unmistakably and fundamentally English. He was patient with obstructive and silly people, and in the running of his vast practice such diplomatic tolerance undoubtedly enabled most of the work that he began to be finished, though not always in the way he would have wished. He was plagued by ignorant egoists, armed with full powers of interference, and he dealt gently with them, while they contrived miracles of meanness and folly to mark their small-minded suspicion of his genius.



Monmouth House, built in 1681, and one of the first two houses to be erected in Soho Square. It has been attributed to Wren, though the detail above the entablature is uncharacteristic, and indeed suggests an earlier date than 1681. According to J. T. Smith's *Antiquities of London*, from which this illustration is reproduced, the house was bought by Lord Bateman, and remained in possession of that noble family until it was pulled down in 1773. (See also Beresford Chancellor's *Private Palaces of London*, Chap. IV., pages 103-104.)

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Melton Constable, Norfolk, built in 1687, and attributed to Sir Christopher Wren. (From Buck's views, published in 1741.)

When he built the town hall at Windsor, in 1688, the burghers of the town declared that it was structurally unsound (so the story runs). The ground floor was to serve as a corn exchange, while above it was the great hall. The beams which Wren had put in to support the floor of that hall were not strong enough to please the burghers, who politely assumed that the great architect had given no thought to the matter.

"We're all friends 'ere, *and* practical business men. I say Sir Christopher's one o' these idealists, and wants watching!" The modern municipal note may have been sounded in the burghers' discussions: it is almost certain that some fool made use of the word "practical" or its seventeenth-century equivalent before they tackled their architect.

Wren soothed their inflamed stupidity by promising to place columns below the points where the beams intersected. He did

so, but he built them about two inches short, so that for over two and a half centuries they have supported nothing but Wren's reputation. If the story is true, it is another indication of the long view Wren took concerning all building. He had his laugh at the burghers of Windsor, but projected that quiet chuckle into the future, confident of ultimate shareholders in the joke.

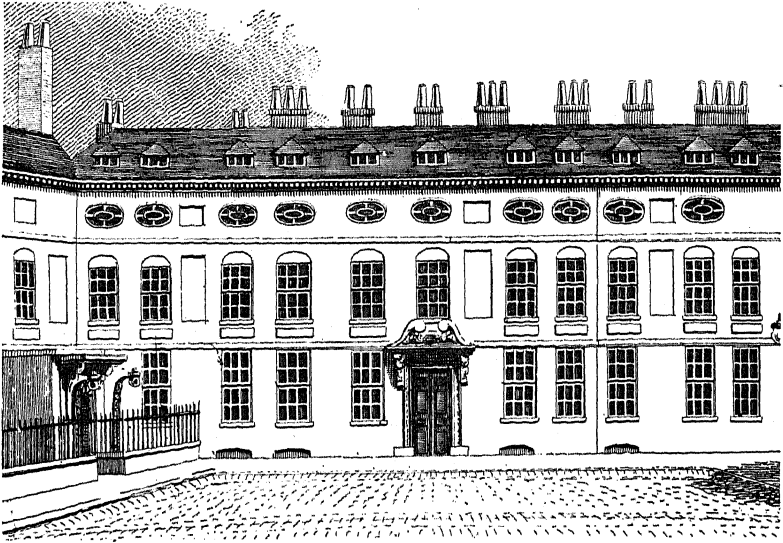
The Commissioners of St. Paul's, with their wider opportunities, easily surpassed the merely parochial idiocies of the Windsor burghers. They rewarded Wren with a salary of £200 a year from the beginning of work on the new cathedral, and in 1696-7, an Act, passed for its completion and decoration, included a provision "to suspend a moiety of the Surveyor's salary until the said church should be finished, thereby the better to encourage him to finish the same with the utmost diligence and expedition." They thwarted him, bickering over details of decoration, refusing to sanction the mosaic Wren had intended for the inner dome, and introducing features of embellishment that were both inappropriate and vulgar. But the meddling of such dwarfs could not seriously harm the interior of St. Paul's. Wren's decoration is florid, but it is disposed with such skill and is so well balanced that it escapes any hint of the oppressive profusion which characterised the later stages of Continental baroque. In that accomplished carver, Grinling Gibbons, he found a brilliant collaborator. Wren chose craftsmen wisely, and there was always an element of partnership in his direction of their work.

In 1718, he was dismissed from the post of Surveyor-General by George I, who appointed an incompetent creature, one William Benson, in his place. Wren retired, and lived at his house at Hampton Court until his death on February 25th, 1725. He was buried in the crypt of St. Paul's, and the suggestion that a monument should be erected to him gave the authorities who had hampered his work their last chance of pettiness: they refused to sanction any such memorial. So his son, Christopher, had inscribed upon the simple tablet over his tomb an epitaph that ended with the words—

"SI MONUMENTUM REQUIRIS, CIRCUMSPICE."

When Wren began his career, England was still in an architectural age of confusion. When he died, the new architecture, first made articulate by Inigo Jones was alive and fluent, and established in town and country. England had adapted the "good Roman manner" to her own liking, and Wren had become immortal.

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Cleveland House, St. James's as it appeared in 1795, when it was recorded by J. T. Smith in his *Antiquities of London*. Originally built by Thomas Howard, first Earl of Berkshire, *circa* 1630, it was called Berkshire House. In 1668 Charles II gave it to Barbara Villiers, who, when created Duchess of Cleveland in 1670, called it Cleveland House. When the Duke of Bridgewater bought it in 1730, the name was changed to Bridgewater House, though sixty-five years later J. T. Smith still described it as Cleveland House. It was completely rebuilt in the mid-nineteenth century to the designs of Sir Charles Barry.

CHAPTER VII

GREAT CENTURY AND GREAT DECLINE

“**I** HAVE been forced into Chancery by *that* B.B.B. the duchess of Marlborough, where she had got an injunction upon me by her friend the late good chancellor, who declared that I never was employed by the duke, and therefore had no demand upon his estate for my services at Blenheim. Since my hands were thus tied up from trying by law to recover my arrears, I have prevailed with Sir Robert Walpole to help me *in a scheme* which I proposed to him, by which I got my money in spite of the hussy’s teeth.”

In such terms did Sir John Vanbrugh indicate his displeasure at the economic consequences of dealing with an impossible client. The letter in which they occur is quoted by Isaac Disraeli in his article on the “Secret History of the Building of Blenheim” in the *Curiosities of Literature*, also by Leigh Hunt in his biographical and critical notices on Wycherley, Congreve, Vanbrugh and Farquhar, which prefaced a volume containing their dramatic works published in 1840.

Perhaps the most difficult problem that the architect has always had to face is his client. Whether the designer of buildings in England works for civic or ecclesiastical authorities or for private individuals, he has, since the Renaissance, been compelled to devote patience and ingenuity to circumventing whims, ignorance, and the obstinacy that above a certain age and income is known as firmness.

There was a golden interlude; a period when the patrons of architecture were animated by such an educated and intelligent interest in the subject that their qualifications for collaborating with the gifted men who designed their town and country houses were indisputable. Even Webb in his complaint to Charles II about the appointment of Sir John Denham as Surveyor-General had grudgingly admitted that his supplanter might have “some understanding of the theory of architecture,” such knowledge being common to “most gentry.” Forty years later, when the work of Wren and his contemporaries had afforded abundant proofs in stone and brick of the delight for the eye that lay in good proportions,

a respect for Vitruvian precepts and a critical understanding of the form and character of the five classic orders illuminated the interest of the nobility and gentry in architecture, an interest which was untainted by any suggestion of specialisation. That a gentleman in the eighteenth century should be an amateur of architecture was natural and obvious. It was the obstructive meanness of the Marlboroughs that enraged Vanbrugh; not ignorance or obtuseness on their part regarding his design for their great mansion. Both the duke and the duchess were averse to paying for anything; and although Parliament had voted the building of Blenheim, the financial responsibility for it was never clearly admitted, and the provision of supplies became an intermittent phenomenon, so that the architect for years endured agonised anxiety about the progress and completion of his work. The Marlboroughs certainly appreciated the greatness of that work; but they refused to accept responsibility for it; that was the nation's business. They felt, possibly, that it was a little ungracious of the architect to insist upon worrying them for money, and for his disappointment over fees they provided a counter-irritant, on which Vanbrugh's views were thus recorded: "I have the misfortune of losing, for I now see little hopes of ever getting it, near 2,000*l* due to me for many years' service, plague, and trouble, at Blenheim, which *that wicked woman* of Marlborough is so far from paying me, that the duke being sued by some of the workmen for work done there, she has tried to turn the debt due to them upon me, *for which I think she ought to be hanged.*"

After the duke's death, his widow's indignation at the thought of any reward for Vanbrugh was inflamed into passionate spite. The architect's suggestions for the disposal of the duchess's person and fortune were written down with his usual explosive bitterness. "He has given his widow (*may a Scottish ensign get her*) 10,000*l* a year to spoil Blenheim her own way: 12,000*l* to keep herself clean and go to law," etc.

In devising insults and restraints for Vanbrugh, the duchess concentrated all the venom that was at the disposal of a naturally offensive character, and finally she was able to arrange for his dismissal. It is possible that he never saw the last stages of the building, for after the duchess had succeeded in ending his appointment, she refused him permission to enter the palace grounds. His "scheme" with Sir Robert Walpole succeeded, and his fees overdue for nearly twenty years were paid. (Mr. Christian Barman's study of Sir John Vanbrugh, in the "Masters of Architecture" series, gives in some detail the sordid side of the building of Blenheim.

This sketch of the architect's work is far more interesting and illuminating than the sections devoted to Vanbrugh that appear in various histories of architecture: Mr. Barman takes you into Sir John's buildings, and afterwards you feel that you have met Sir John himself.)¹

Vanbrugh, like Wren, was an amateur. Like Inigo Jones, he was concerned with the theatre, although only incidentally as a designer, for he was a dramatist whose plays were remarkable for their unbounded exuberance. He selected types of people that he disliked, caricatured them until their human likeness almost departed, and sent them struggling on to the stage to ridicule, somewhat in the manner of a Punch-and-Judy show, such peculiarities as foppishness, fortune-hunting, adultery, and drunkenness. In *The Relapse, or Virtue in Danger*, and *The Provoked Wife*, he preached sermons upon contemporary vices and stupidities, and, like some clergymen who discovered during the first world war that such words as "bloody" opened the ears (though not the understanding) of many obtuse congregations, he spoke in contemporary terms; but, unlike the modern priests, he spoke with robust and ample humour, and never allowed his audience to suspect that he was preaching at all. Possibly he was unconscious of it himself: he wanted to hit silly and evil things, and the fact that he did the hitting in an atmosphere of lascivious harlequinade, and smote lechery and intemperance with a string of sausages made the practitioners of those follies appear ridiculous rather than unrighteous.

Vanbrugh was born to take liberties with all the arts that engaged his mind.

After finishing his education in France, he began his career as an ensign in the army. On another visit to France in 1690, he was arrested on a charge of espionage at Calais, and, after being imprisoned at Vincennes, was transferred, by a *lettre de cachet*, to the Bastille. He was released in November, 1692. He spent these terms of imprisonment in drafting *The Provoked Wife*.

The Relapse was the first of his plays to be staged. It was produced at Drury Lane on Boxing Day, 1696, and its diverting unconventionality entertained London as much as it outraged the ornate piety of Jeremy Collier, who attacked it in his *Short View of the Immorality and Profaneness of the English Stage*. It has been conjectured that Collier's attack and the prejudices it fomented against his

¹Ernest Benn, Ltd., 1924.

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plays turned Vanbrugh's interest from the theatre towards architecture. Christian Barman mentions a more probable cause of the transition from dramatist to architect: "It is possible that the designing of the Queen's Theatre, Haymarket (the site for which he acquired in 1703 at a cost of £2,000), may have launched him on his architectural career. . . ."¹ In 1702 he had been appointed Comptroller of the Royal Works, under Wren. In the following year he wrote to his friend, Jacob Tonson, the bookseller, for a copy of Palladio. The witty playwright, the man of fashion, now nearly forty, had decided to study the rules of a new profession. Not that rules were ever allowed to curb the opulent boldness of his imagination. He built with the same disregard for conventional trimming and polishing that characterised his plays. Unencumbered by excessive technical knowledge, he jotted down his fine conceptions of country houses, and they grew into masterpieces of radiant stateliness. Without effort, without profound scholarship, but with the eye of an artist, he arranged his stone masses so that from every point of approach some fresh beauty of associated forms was disclosed.

In Castle Howard, which he built for the Earl of Carlisle, the power and freedom of his imagination are fully revealed. The majestic stabilities of that mansion have been called ponderous; but in the garden elevation, where the alleged ponderousness should surely be apparent, the massive effect is relieved by the tall arched windows, while the fluted Corinthian pilasters are disposed to secure a most harmonious adjustment of horizontal and vertical lines; and everywhere upon the face of the building shadows are trapped so that the sun for ever underlines and daylight always discloses the perfections of grouping which illustrate Vanbrugh's genius for composition. Blenheim Palace and Castle Howard are the works of a man who invented beautiful shapes and made them accord so exactly with their surroundings that it seems as though he had designed a whole tract of country as well. He was like a painter composing in three dimensions. Something about all his work suggests that he stood outside architecture; that, intent upon personal expression, he used the classic orders as media through which coherent form was given to all manner of glorious dreams of beauty. Castle Howard and Blenheim, and such smaller houses as Seaton Delaval, enabled him to develop his dreaming with a grandeur of manner that was not always appreciated by his

¹Barman, *opus cit.*

contemporaries or by the critics and amateurs of succeeding generations.

Nearly half a century after Vanbrugh's death, Horace Walpole subscribed to the popular misconception of his work in a casual sentence in which he said: ". . . as Vanbrugh dealt in quarries, and Kent in lumber, Adam, our most admired, is all gingerbread, filigraine, and fan-painting."¹ Horace Walpole, with his lath-and-plaster Gothic toys and his carefully nurtured romanticism, was, in the maturity of his antiquarian taste, too remote from the massive harmony of early eighteenth century building to perceive the true character of Vanbrugh's designs. Leigh Hunt, in the brief biography of Vanbrugh, quoted at the beginning of this chapter, said: "As to Walpole, who ridiculed his grander efforts, Walpole really had a solid judgement in most things, hardly to be expected from his effeminate temperament; but the latter predominated in his own Gothic toys of wood; and one fancies Vanbrugh, if he had had a mind to build on Strawberry Hill, putting his manly leg upon Horace's little pinnacles, and crushing them as he might have done a house in a toy-shop."

In the first years of the great century, architectural design was florid. English baroque, never unduly extravagant, though dedicated with splendid shamelessness to the pursuit and enjoyment of pleasure, was followed by a period in which the taste for florid forms was refined by fresh studies of the orders. Classical models were properly revered; but it was to the work of Palladio that many architects turned their thoughts, and, as they lacked the genius of Inigo Jones, that earlier admirer of Palladio, they chilled and contracted their powers of expression, and often achieved a correct and slightly vacuous formality. Dull work was done only because some architects had been mastered by rules, and the Palladians were in danger of becoming well-mannered bores. Extravagance was not wholly subdued by a renewed respect for the basic discipline of the orders; for example the opulent fancy of William Kent was never limited by rules, but flourished like an exotic plant, and though overpowering was never boring.

Vanbrugh was the last of the independent nationalists in design. In architecture he spoke Latin, but continued to think in English, while some of his contemporaries and many of his successors imagined that by speaking Latin they were absolved from the fatiguing necessity of thinking at all. Unstinted admiration for the

¹In a letter to Sir Horace Mann, April 22, 1775.

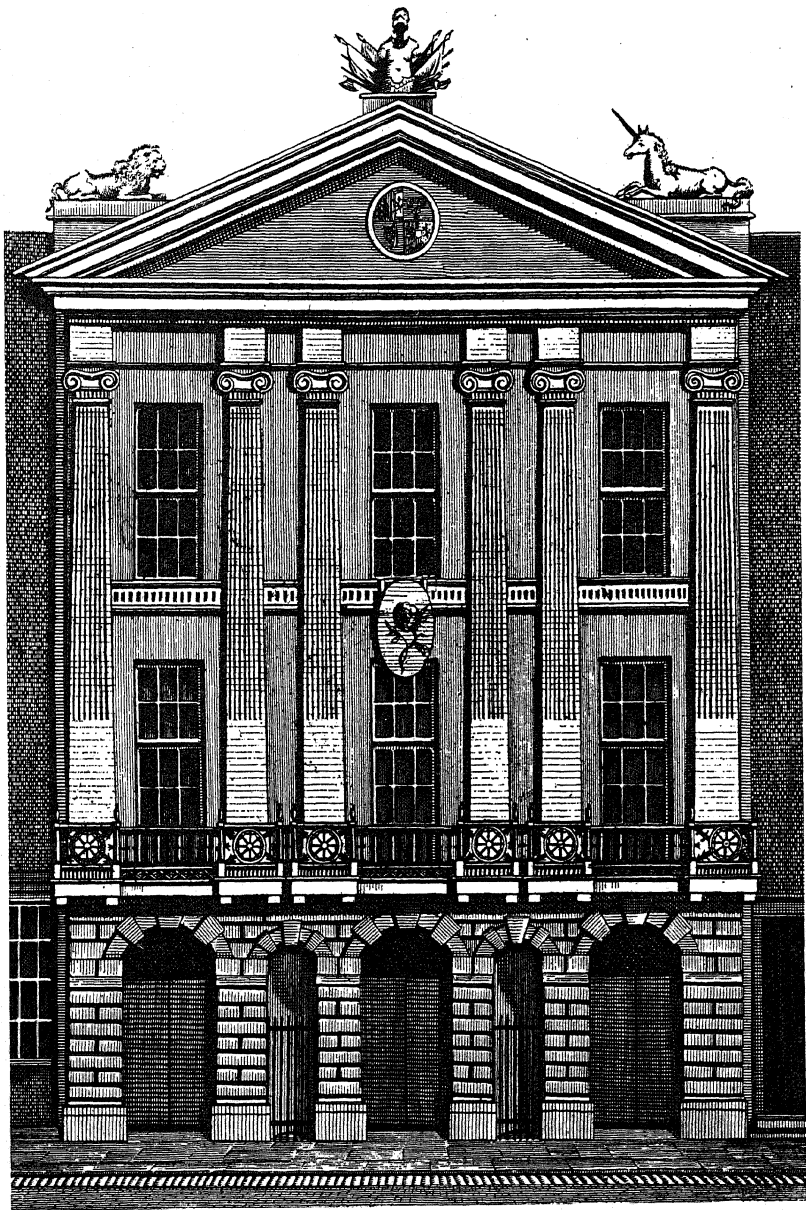
“good Roman manner” of building was already corroding the faculties of a few critics and amateurs, making acceptable the idea that standardised classic forms, however well or ill they were composed, were right and that everything else was wrong. Addison in one of the *Spectator* essays¹ supported his educated preference for classic architecture by a sweeping generalisation about Gothic building. “Let any one reflect,” he wrote, “on the disposition of mind he finds in himself, at his first entrance into the Pantheon at Rome, and how his imagination is filled with something great and amazing; and at the same time consider how little, in proportion, he is affected with the inside of a Gothic cathedral, though it be five times larger than the other; which can arise from nothing else but the greatness of the manner of the one and the meanness in the other.” It may be doubted whether real greatness of manner was always recognised by those finished gentlemen of Queen Anne and Georgian times: few could detect it in Vanbrugh’s work.

When that scholarly amateur of architecture, the Earl of Burlington, published the designs of Inigo Jones and Palladio’s drawings of the “Antiquities of Rome,” Pope anticipated the avid misappropriation of their contents by the unimaginative in these lines:

“You show us Rome was glorious, not profuse,
 And pompous buildings once were things of use.
 Yet shall, my lord, your just, your noble rules
 Fill half the land with imitating fools;
 Who random drawings from your sheets shall take,
 And of one beauty many blunders make,
 Load some vain church with old theatric state,
 Turn arcs of triumph to a garden gate. . . .”

Yet even the “imitating fools” who were empowered by fortune or error to build were at least well-mannered, thanks to the Roman rules of conduct they observed. It is possible to be both well-mannered and dull-witted in architecture; and the practice of veneering with a Palladian pattern a square box of bricks, varying only the dimensions to suit the needs of a manor, a country seat, or a town house, did not demand much originality or intelligence. This was fortunate, for it enabled builders all over the country to conform without effort to an excellent system of proportion, and to carry out in local materials a standardised range of designs. Gothic initiative had gradually been drained from the building

¹June 26, 1712.

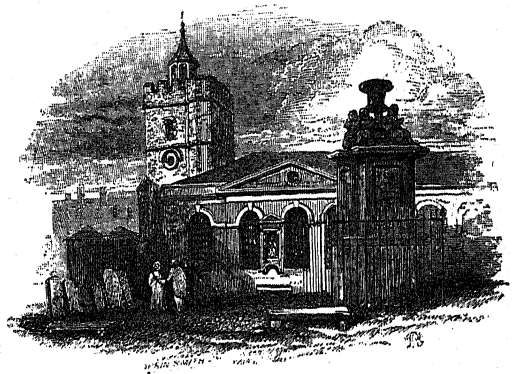


The old theatre at Drury Lane, showing the elevation which fronted Bridges Street and was rebuilt by David Garrick's order. This theatre, originally designed by Wren, was replaced in 1794. (From J. T. Smith's *Antiquities of London*.)

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Two views of Richmond parish church, Surrey, showing how additions were made in the classical manner to a Gothic structure. Such additions in a contemporary style were more satisfactory than the attempts to imitate Gothic architecture sometimes made by architects in the late seventeenth and eighteenth centuries.



craft, and except in a few districts—notably the Cotswolds—the assimilation of classic forms during three generations had by the beginning of the Georgian period made them commonplace among country craftsmen.

Throughout the country a simple and pleasant uniformity of design was soon apparent. The use of the sash window with its painted wooden glazing bars gave to framed glass an external emphasis that the small lead-clasped panes of casement windows had never possessed. The use of larger panes of glass and the

pronounced vertical form of the sash window, the glazed area of which was often based on a double square, constituted the greatest difference between Tudor, Elizabethan, and early Stuart buildings, and those of the eighteenth century. A casement, recessed between its mullions, was at first a glazed gap in a wall: in its simplest domestic form it had lost all the pride and importance of its Gothic origin, and put to secular uses it could never pretend to the intricate glories prescribed for its original sacred function, although in some of the large Elizabethan houses it might dominate an elevation by ascending vertically through two or three floors; but a sash window always smiled.

In the late seventeenth and early eighteenth centuries the double square was usually divided by its glazing bars into four vertical and six horizontal sections, making twenty-four panes. Mid and late eighteenth century sashes were divided into three vertical and four horizontal sections, making twelve panes, a form that persisted in the nineteenth century, and is still used. There were variations on these forms, and in the mid nineteenth century glazing bars were often omitted and two large panes of plate glass used instead.

Such features as porches followed classic patterns, and the detail of mouldings, cornices, and the architraves of doors and windows, both inside the rooms and outside the house, were evolved from Roman prototypes; but it was the generous enlargement of windows that made rooms airy and spacious and their orderly arrangement in elevations that set streets smiling. The window tax of 1697, which was in force for over one hundred and fifty years, put blind patches of brick in many walls where formerly daylight had entered. Existing windows were blocked up; and new houses were built with blank recesses framed by architraves to maintain an illusion of well-balanced fenestration. This evil tax was repealed in 1851.

Throughout all England a system of design was diffused—a system that had become common to Europe—which allowed craftsmen to work with national, and, to some extent, local variations. This system fixed the proportion of various architectural features and provided the basic forms of all ornamentation. Things as different as coaches, barges, chairs, lamps, and doorknockers were shaped and embellished in a manner that made them members of one large gracious family whose outstanding characteristic was elegant proportion. So powerful was this characteristic that it was possible for designers to borrow from foreign fashions and to incorporate their borrowings without danger of incongruity. The yeasty tide of Rococo decoration was neatly dammed and moderated

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Horatio Walpole, Fourth Earl of Orford, 1717-1797. (From an engraving based on a drawing by Sir Thomas Lawrence and published in 1811.)

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to suit the more sober and solid taste of the English gentry. Ideas were borrowed from China; oriental fabrics, porcelain, and lacquer having been imported during the seventeenth century, and their decorative character sedulously imitated.

Fresh enthusiasms for classic forms were generated after the first half of the eighteenth century was completed, for the buried cities of Pompeii and Herculaneum were rediscovered at this time, and stimulated interest in Roman life, art, and buildings. French archaeologists were notably active in contributing to the literature of these subjects. Fashion fed for a time upon unadulterated antiquity. But whatever exotic turns fashionable fancy took, whatever oriental, classical, or romantic capers the modish world cut, the Georgian architects accommodated the new whim and fitted its superficial features with masterly tidiness into the framework of established tradition.

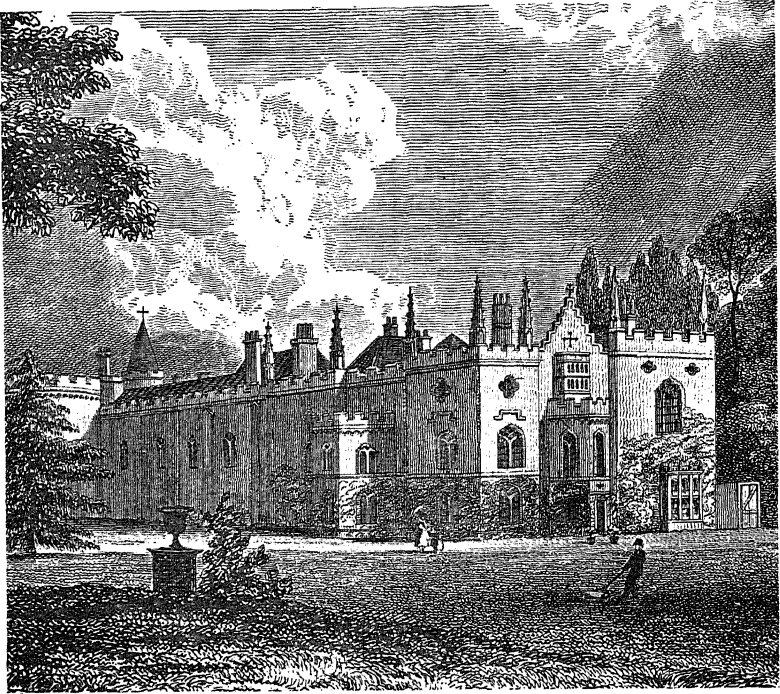
There were many great English architects in the great century, although they were outnumbered by men of mediocre ability. Fortunately, in a period when a universal system of design ensured a high universal standard of architectural taste, mediocre minds were not required to invent. Their egoistical fancies were consequently unemployed: technical knowledge and commonsense only were required of them, and they built according to the revealed word of the architectural hierarchy—Vitruvius, Palladio, and Inigo Jones.

“The practice of architecture,” wrote Gibbon, “is directed by a few general and even mechanical rules.”¹ So simple did the matter seem to all educated gentlemen, who spoke and wrote with the full authority of intelligent study and criticised with a discernment that often transcended the idiosyncracies of personal taste.

Everywhere towns and cities were being rebuilt. The square and the circus, with their central gardens, variegated the town plan, while occasionally the same broad street would be continued through gardens, the houses on each side curving back to form a crescent. For over a hundred years urban growth was a comely, although a piecemeal process. Even the mills and factories had some pretensions to good design, as the surviving Georgian mills of the Stroud valley in Gloucestershire testify. The background that Hogarth shows us is always stamped with the traces of ordered design, no matter what miseries he is depicting. Whether we look

¹*Decline and Fall of the Roman Empire*, Volume I, Chapter XIII.

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Strawberry Hill, which gave Horace Walpole "satisfaction in imprinting the gloomth of abbeys and cathedrals" on his "little plaything house."

at the foulness of Gin Lane or the horrors of Bedlam, we see order of form and shape, although the fabric upon which it is impressed may be decayed and neglected. It was Piranesi who dramatised the agony of buildings in decay, and whose engravings of crumbling, weed-tufted Roman temples and triumphal arches turned ruins into a romantic fashion. When Hogarth committed to paper his indignation at folly and cruelty, he was a cold realist in the settings he chose for his bitter scenes. His gibes at fashionable life certainly illustrate how aptly contemporary architecture matched that agreeably pagan fantasy.

In the letters that record the charming trivialities which occupied his day, Horace Walpole reveals the extent of the interest of modish society in building. That queer, rather effeminate, gentleman,

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with his literary temperament (the possession of which he would have denied, for he affected to despise literary men), his observant contempt for life, and his collector's appetite for ancient and beautiful things, was a heretic in architectural taste. He never denied the authority of Vitruvius and Palladio, but he loved "dressing up" his villa of Strawberry in a rich mediæval fabric. He had acquired a fondness for Gothic forms, and he had a cultivated man's dislike of the hybrid picturesque Elizabethan and Jacobean building. Describing Gosfield House in a letter to George Montagu (July 25, 1748), he wrote: "The rest of the house is all modernised, but in patches, and in the bad taste that came between the charming venerable Gothic and pure architecture."



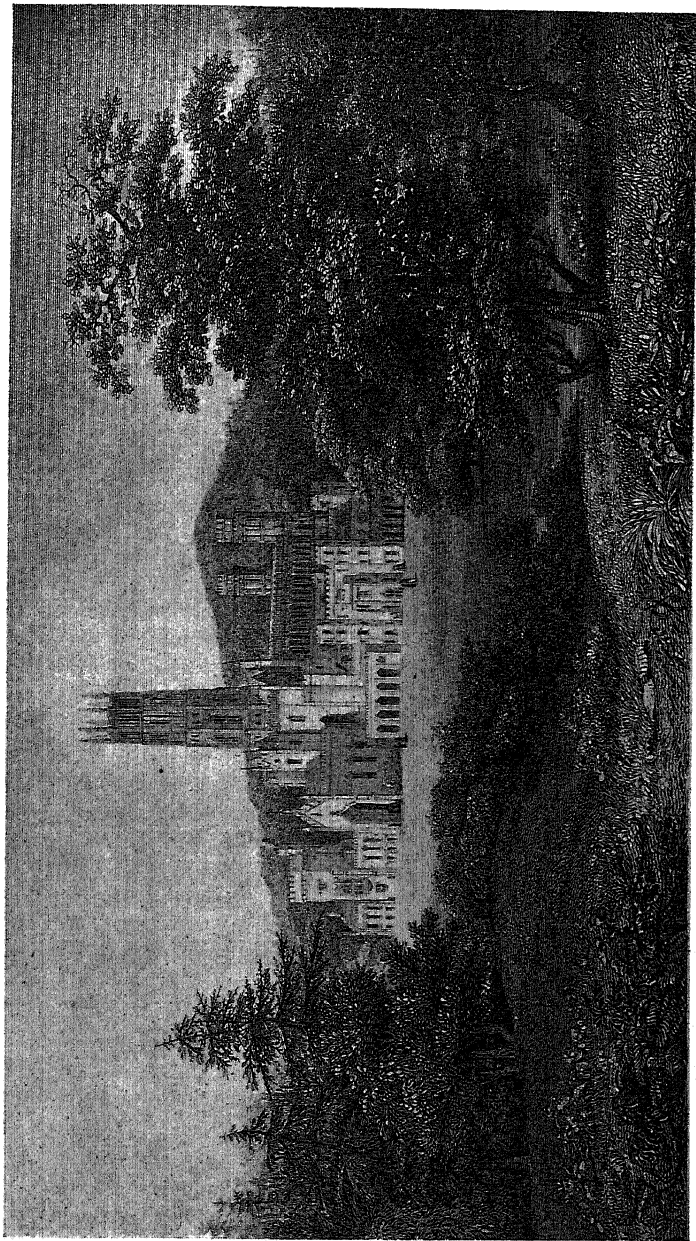
This elegant little building is often wrongly attributed to Robert Adam : it was probably designed by James Wyatt. It is the Duke of Northumberland's boat house on the Thames, near Sion House.

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“Charming” and “venerable” are the key adjectives in his developing affection for Gothic; but as an educated Georgian gentleman he admitted that “pure architecture” was a very different thing from the romantic foibles he was indulging at Strawberry Hill. That villa he described as “a little plaything-house.” As, year by year, he altered and enlarged the place, he insensibly refined the strenuousness of Gothic lines. The result resembled stage scenery, and the fashion it set was easily reconciled with the formulae of design that every architect understood and employed and every craftsman accepted. Gothic motifs were incorporated in designs merely as component parts of a modish pattern. The upper panes of sash windows were diminished by glazing bars made in the shape of a pointed arch: the same arched form was adapted by Thomas Chippendale and his contemporaries for the glazed doors of bookcases and for chair backs. Local attempts to imitate Strawberry Hill may be seen in the windows of the rapidly diminishing number of fine Georgian houses in the neighbourhood of Twickenham, in Middlesex.

Occasionally the master of Strawberry found himself in temporary revolt against the antiquarian adventure in which he had become involved. To Richard Bentley he wrote (from Tonbridge, August 7, 1752) of Mereworth: “. . . which is so perfect in a Palladian taste, that I must own it has recovered me a little from Gothic . . .” Less than a year later he was building eagerly, and writing of the “satisfaction in imprinting the gloomth of abbeys and cathedrals on one’s house . . .” He was never quite sure whether he wanted it to be a castle or a pseudo-abbey; but as it grew and housed a collection of precious and lovely things, it became perfectly compatible with its owner’s romantic needs. There he could dream Gothic dreams, and one of them was so vivid that it impelled him to write the *Castle of Otranto*. “I waked one morning, in the beginning of last June, from a dream, of which, all I could recover was, that I had thought myself in an ancient castle (a very natural dream for a head filled like mine with Gothic story), and that on the uppermost bannister of a great staircase I saw a gigantic hand in armour. In the evening I sat down, and began to write, without knowing in the least what I intended to say or relate.” The next sentence conventionally disclaims any professional literary interest in the making of his book. “The work grew on my hands, and I grew fond of it . . . add, that I was very glad to think of anything, rather than politics.”¹

¹Letter to the Rev. William Cole, March 9, 1765.

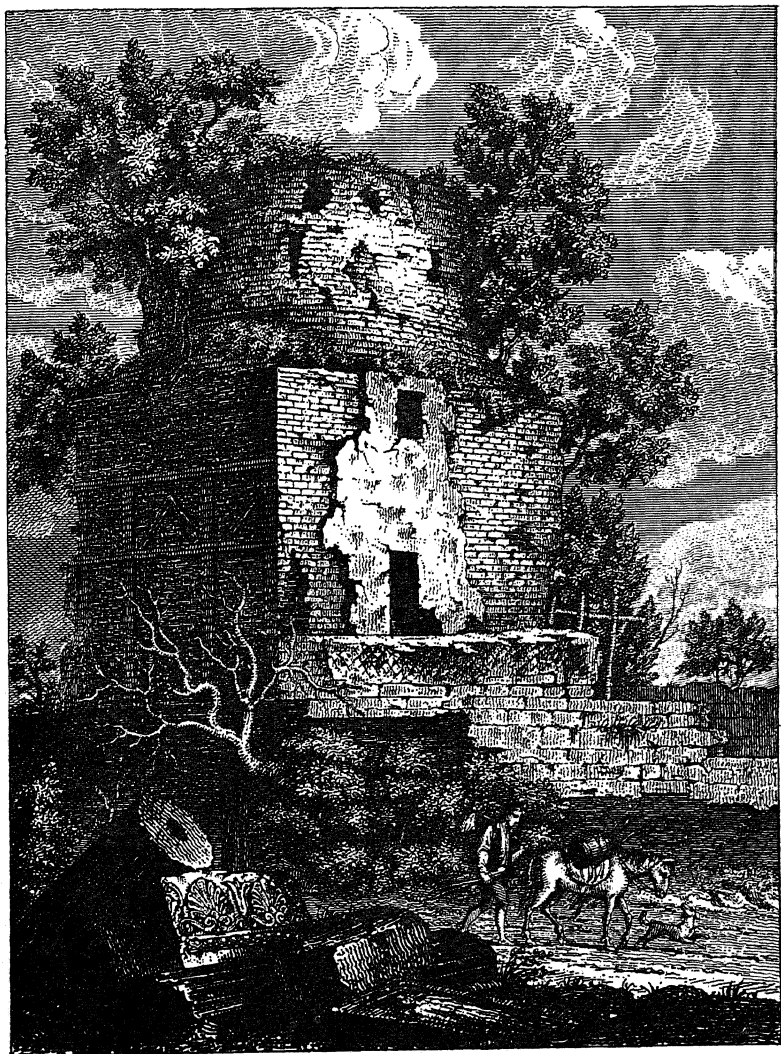


Fonthill Abbey, Wiltshire, designed by James Wyatt for William Beckford and built 1796-1799. Like Walpole's Strawberry Hill, it represented fashionable as opposed to revivalist Gothic. This shows the south west view of the Abbey and is reproduced from the frontispiece of John Rutter's *Description of Fonthill Abbey*, third edition, 1822.

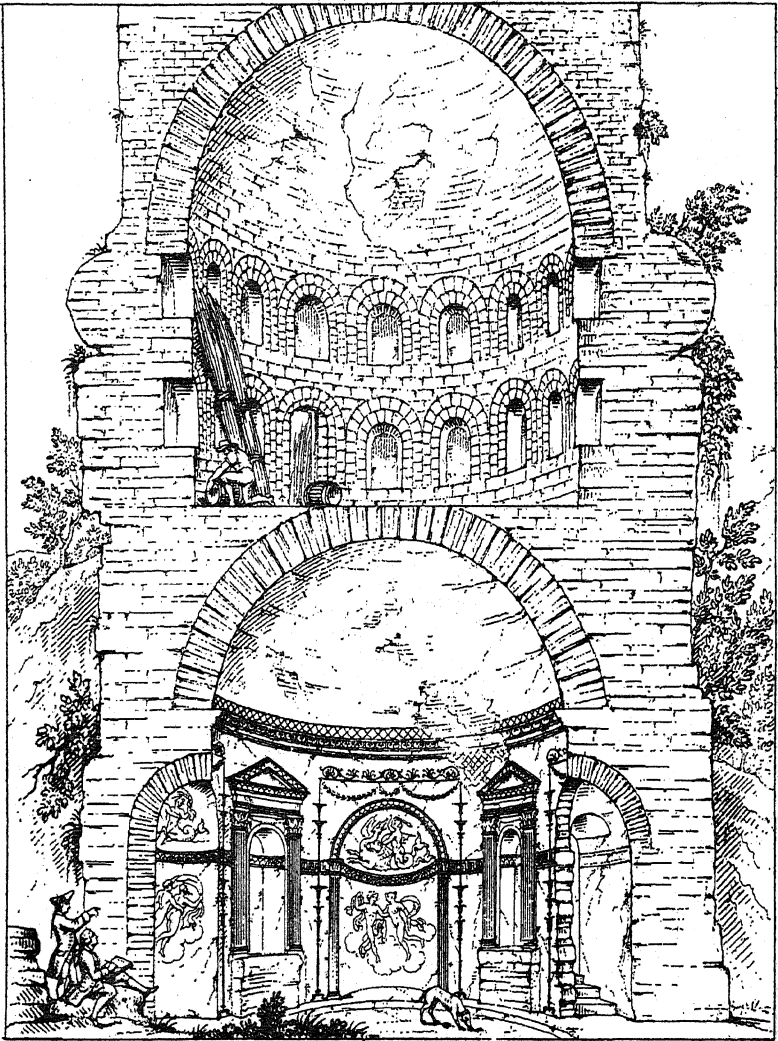
His mediaeval preoccupations never injured his critical perception of the merits or demerits of "pure architecture." His views on the abilities of various architects were amusingly pungent; his sprightly disposal of Vanbrugh and Adam, already quoted, was unjust; his estimate of Kent as a dealer in "lumber" was savage. Of Wren and Inigo Jones, he said that "Sir Christopher Wren was a genius in some respects and wanted taste in others. . . . Inigo Jones seems to me to have had more taste than genius."

He never pretended that Strawberry Hill was anything but a personal eccentricity—mere private theatricals in building which amused him. He had no intention of instructing his contemporaries or leading taste along his own chosen lines. In some unfavourable comments upon French ideas of interior decoration, he claims for his own country "as pure architecture and as classic taste as there was in Adrian's or Pliny's villas." Nevertheless, Horace Walpole and his *Castle of Otranto*, and the spikey skyline and battlements and cloisters and stained glass windows of Strawberry Hill projected an influence into the next century. It seems odd that a big, blowzy, passionate hoyden like the romantic movement should be able to claim so witty and cynical a gentleman as Horace Walpole for a progenitor; but the character of Strawberry Hill gives substance to the claim.

Walpole's little Gothic fashion became a forerunner of an architectural revival because it was associated with a sentimental appetite for mediaeval romance. That appetite affected literature, and literary taste in the nineteenth century began to affect the shape of buildings; though what put the "drive," as Arnold Toynbee would say, into the Gothic Revival, was that last Christian recrudescence of English Puritanism—the Evangelical movement. The Georgian period produced a multiplicity of fashions, variously ridiculous, fanciful, pretty, and amusing, which left no permanent trace upon architecture; reflecting only the ephemeral recreations of a cultivated society, whose intellectual energy was expended upon gossip, gaming, and—in a lesser degree—politics. Birth mattered so much that it was almost impossible for money to buy the way into the houses where Horace Walpole and his friends and acquaintances sharpened their wits upon the grindstones of scandal and enjoyed the flavour of George Selwyn's latest *bon mot*. Unless men of genius were well born, they had to seek patrons; and patronage, however generous and sympathetic, could not always adjust social differences that were respected and maintained throughout Europe. Mozart had to dine with the servants of his

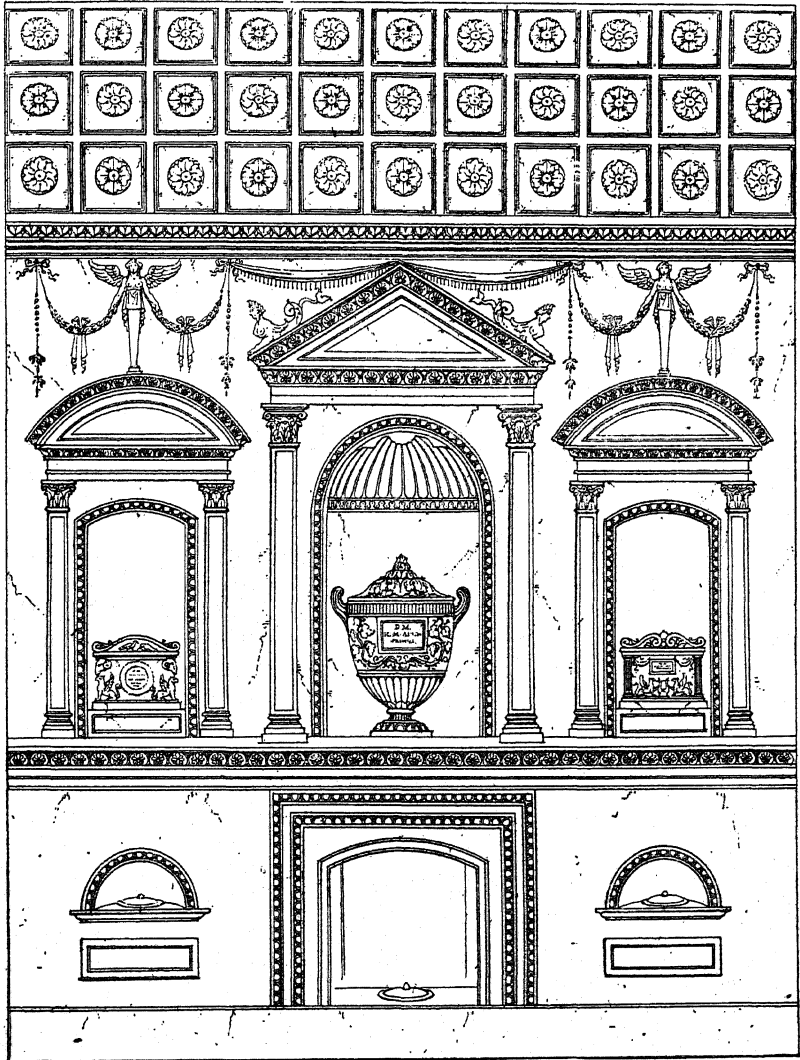


Although the taste for romantic Gothic forms was intermittently nourished by the publication of prints and drawings, the interest in the antique prototypes of contemporary architecture and decoration was constantly renewed. Innumerable engravings and prints and books revealed the treasures of Italy. "Fresh enthusiasms for classic forms were generated after the first half of the eighteenth century was completed, for the buried cities of Pompeii and Herculaneum were rediscovered at this time, and stimulated interest in Roman life, art, and buildings." (Page 125.) Until half way through the nineteenth century, illustrated books on Roman remains were popular. Above: a view of a tomb near San Vito, from a collection of plates engraved and published in book form by Henry Moses in 1814. (See following pages.)



Section of the tomb near San Vito, illustrated on the previous page, showing the interior.

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Part of a sepulchral chamber in the Villa Corsina. From *A Collection of Vases, Altars, Paterae, Tripods, Candelabra, Sarcophagi, etc.*, engraved by Henry Moses. (Published by J. Taylor, London, 1814.) The engraver dedicated his book to Thomas Hope; and the subjects on his plates must have seemed familiar to most educated people, representing as they did, the sources from which nearly all contemporary ornamentation was taken.

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unpleasant patron, the Archbishop of Salzburg; Samuel Johnson had to waste hours of his life in the waiting room of Lord Chesterfield, a nobleman whose famous letters to his natural son gave the great doctor the opportunity of saying that they taught "the morals of a whore, and the manners of a dancing master." Exaggerated respect for the aristocracy was productive of much evil nonsense and discontent of the sort that made Mr Chucks in Marryat's *Peter Simple* say: "I had rather be the bye-blow of a gentleman, than the 'gitimate offspring of a boatswain and his wife." The rigidity of social ideas is apparent in the novels of the time. All the heroes in literature want a fortune; and the only acceptable ways of getting one are to marry money, or to be patronised by some wealthy gentleman and be given a "place," or to be generously remembered in a will. There is never any suggestion that fortunes should be earned by work, apart from the hard labour involved in cultivating the goodwill of an heiress or a wealthy relative. Even the people who retain a servile satisfaction in that state of poverty or insignificance their parentage has ordained get left fortunes, if merely for the sake of showing how embarrassing are possessor's without position.

Society was preserved from the defiling touch of commerce. Merchants and manufacturers were kept in their place. There was widespread lawlessness, for the Georgian highwaymen with the simple apparatus of their craft, a horse and a pistol, rivalled in daring and perhaps exceeded in criminal efficiency the modern American gangsters with their bombs and machine guns; there was gin-bred poverty in the slums of every town, for cheap spirits had destroyed large numbers of the people, both morally and physically, and the sale of gin had at last to be regulated by law; there were riots and political disturbances, corruption, and a bland acceptance of incompetence in administration as something not only normal but perfectly natural; nevertheless the men of the Georgian age exhibited when need arose a vast resourcefulness. They improvised solutions to the most perplexing problems. They lost the American colonies, but consolidated an eastern empire. They carried all over the world the high courage of the Elizabethan adventurers. They won many of the battles they fought on land, and nearly all those they fought at sea. They never confused the means of civilisation with its object. They did not employ the arts for the mere adornment of their leisure: they made them the accompaniment of life. They did not build self-consciously for the sake of architecture, or lay out gardens for the sake of gardening, but because they wanted

in London and in the country the satisfaction of a stage that was elegantly appointed to suit the art of living, as they had mastered it; and because the Georgian gentry's conception of the art of living demanded good manners and encouraged nobility and spaciousness, the English architects from Vanbrugh to Nash were able to build with a distinction and a commodious dignity that have never been surpassed.

In great periods of building there is a certainty of touch in design; and although experiments are made, they are made as the personal inventive expressions of individual architects. No moral sanctions were required for innovations in eighteenth century building. Many of the great and some of the minor architects wrote books; but they were not explanatory books, they were not apologetic books, or books that presented confused prejudices. Some of them were, perhaps, a little complacent in their tone; but they were all addressed to an architecturally educated audience. Often they were simple records of designs. They contained no confident preaching or hesitant criticism. They indicated a healthy security of taste so different from the conditions of the second quarter of the twentieth century, when the need to explain their beliefs drives scores of architects into uneasy confessions in print. Between the wars the bright young people of architecture shouted incoherences to one another about functionalism and the relationship of design to social science and economic planning, and worshipped various angularities in glass and steel and concrete and whatnot, while commerce cried for columns, and architects (no longer addressing an educated audience) were compelled to build all sorts of things they hated building, and honestly believed to be wrong and ridiculous, hoping that they would be able to squeeze in a few jobs of which they could be reasonably proud in the course of their professional careers. Georgian culture has decomposed, and the dust that remains blinds the eyes of that modern patron of architecture, the business magnate, and of his successor, the socialist politician and his docile bureaucrats.

There is now a universal uncertainty of touch in design; and everybody who pretends to any interest in building attempts to explain why. The appearance of a book like this one is a symptom of such uncertainty; indeed, the writing of such a book in the eighteenth century, except as a discursive historical study, would have been absurd. The fantastic chaos of our own time naturally produces a crop of reformers, reactionaries, and apologists, who insist on labelling, according to their creeds, this, that, or the other



The king's bath and pump room, at Bath. (From an early nineteenth century drawing by Thomas H. Shepherd.)

contemporary building as "great," while those who cannot accept creeds as a substitute for critical thought are at liberty to doubt whether any great modern architecture has yet been produced. So healthy was the architecture of the eighteenth century that its greatness was never suspected by the men whose skill and taste helped to make it great.

A swift review of the outstanding architects of that age must begin (as this chapter began) with Vanbrugh. Nicholas Hawksmoor (1661-1736), who worked both for Wren and Vanbrugh, built with the bold freedoms of the Wren tradition, and designed several London churches, notably Christ Church, Spitalfields, St. Mary's Woolnoth in Lombard Street, and St. Anne's, Limehouse. James

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Gibbs (1682-1754), a contemporary of Hawksmoor, was also influenced by Wren. He built the Radcliffe Library at Oxford (probably under the direction of Hawksmoor), the Senate House at Cambridge, St. Bartholomew's Hospital in London, and a number of churches, including St. Martin-in-the-Fields, St. Mary-le-Strand, and the steeple of St. Clement Danes. Both these architects had something of the unfettered personal power of Vanbrugh, although they lacked the gigantic ease of his invention.

William Kent was born in 1684 and died in 1748. His chief claims to distinction are the designing of Holkham Hall for the Earl of Leicester, and the Horse Guards, London. He built with a lavish ponderousness that was occasionally corrected by the judgment of his patron, the Earl of Burlington. He decorated everything—furniture, walls, ceilings—with such diligence that all available surfaces were encrusted with florid ornamentation, and the lines of the mouldings were blurred with carved and gilded enrichment.

Kent's work is too often judged adversely because only some isolated example of his furniture is seen; and removed from its context, as it were, it may well seem rather overwhelming. In a critical essay on Kent's furniture, Mr Joseph Downs has said that "It was frankly conceived to fit a particular scheme of decoration and when removed from its original surroundings becomes meaningless."¹ And he also points out that "It cannot be denied that Kent was eclectic, drawing upon many sources in order to feed the maw of his ambitious schemes. Naturally he was influenced by the baroque style which was rampant during his stay in Italy, but his own designs are tempered with restraint and logic."² Even admitting that he knew how and where to place the corpulent ornamental motifs to which he was devoted, it cannot be denied that Kent was a decorator rather than a designer; and as a decorator he occasionally lacked discrimination. To furniture he gave architectural form and sometimes forgot or ignored that he was dealing with wood, and designed his great bookcases and cabinets as though he intended them to be executed in stone.

During the middle years of the century, architects designed their streets and country houses with a lighter touch. Prior Park, near Bath, built by John Wood (1705-1754), exemplified this fresh

¹*The Pennsylvania Museum Bulletin*, Vol. XXIV, No. 125, (February, 1929), p. 19. (Published by the Pennsylvania Museum and School of Industrial Art.)

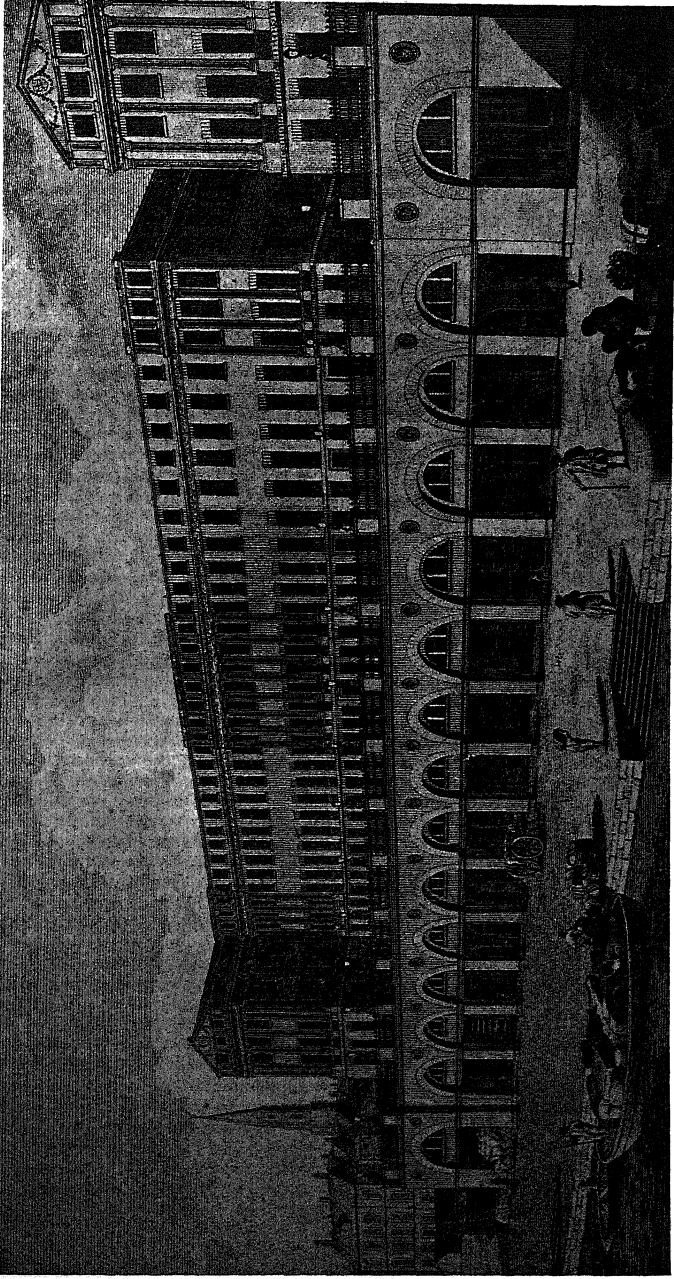
²*Opus cit.*

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refinement of form; and Wood remodelled Bath itself, and turned it into one of the finest cities in the country. After Wood's death his son carried out many of the designs that were either incomplete or merely projected on paper. It is in the streets of Bath that the architectural achievement of the Georgian age may be most fully comprehended: in the dignity of the Circus and the Royal Crescent, in the perfect manners of the houses, and in the sense of social fitness they reflect.

Town planning was in fragmentary progress in many cities. Small isolated groupings of streets and gardens were set out, and sometimes linked with existing street plans. In London, the brothers Adam were responsible for some of this limited development. Of the four brothers, Robert Adam (1728-1792) was the most famous; and although James, John, and William worked with him, he was the master designer and his was the creative and perhaps the dominating mind. He reduced the refinement of architectural forms to a condition of frigid delicacy. Severe in outline, and painstakingly correct in every classical detail of their abundant and beautiful ornamentation, Adam's schemes were somewhat dehumanised. He designed houses complete with their contents; ordaining for ceilings and carpets, curtains, chair coverings, and furniture the coldly elegant decoration that he pieced together from his profound knowledge of Greek and Roman ornament. He employed such artists as Pergolesi, Cipriani, and the attractive, flirtatious and accomplished Angelica Kauffmann, who, after an unfortunate marriage with a discarded servant of Count Horn, who had impersonated his master, ultimately married Zucchi, who also worked for Adam. With their little exquisite paintings, these artists embellished the furniture and the rooms of the houses he built. Where Kent had carved and gilded, Adam painted: the heavy swags and festoons of fruit and flowers and trophies that had bulged from the walls of early Georgian rooms were now subdued in vigour and reduced in bulk. The light relief of plasterwork, the attenuated lines of metalwork, and the intensive refinement of decorated surfaces all contributed to an effect of airy fragility, so that rooms seemed like bubbles of glass, minutely engraved and softly tinted: it was graciousness in decline. The exterior of Adam's well planned houses sometimes suffered also from exaggerated decorative refinement.

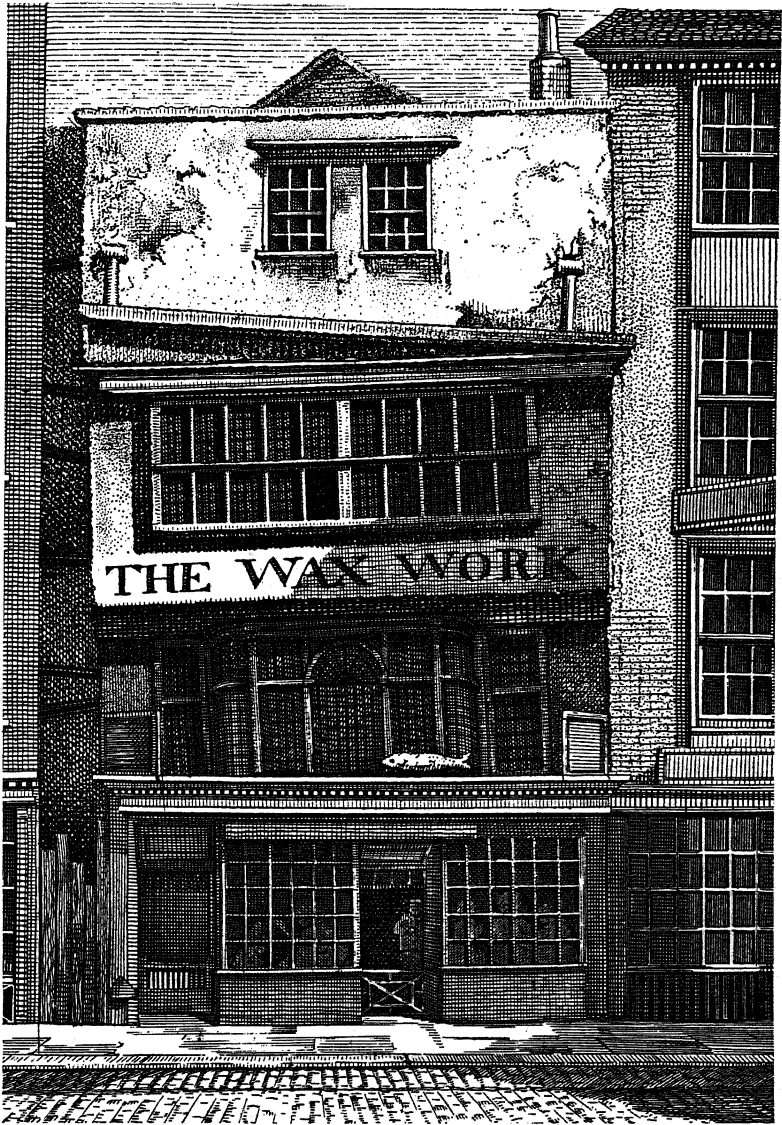
Adam was a capable designer whose faith in Palladian principles was adulterated with disturbing knowledge of the form and function of Greek and Roman architecture. Vitruvius had been the chief



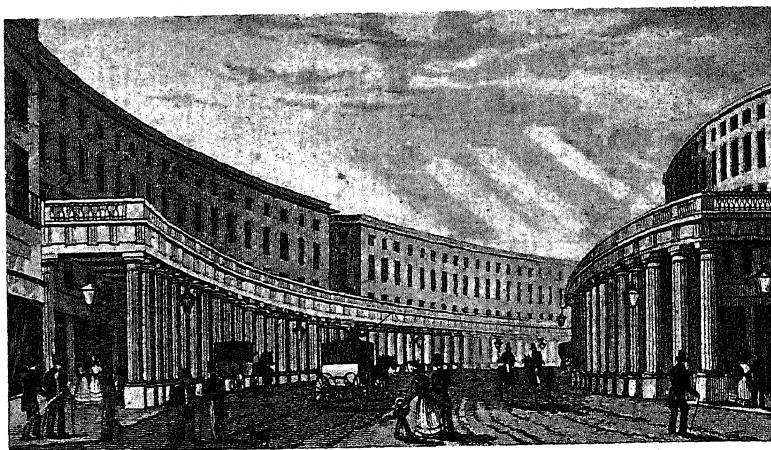
A view of the Adelphi from the Thames, showing the quay and the arches which formed the sub-structure of the buildings on the site.
(From a contemporary print.)

link between the architects of the English Renaissance and the architecture of ancient Rome, and he was regarded as a guide to proportion: rules for building rather than recommendations for forms suited to the functional needs of individual buildings were culled from his works; indeed, the recommendations set forth in the sixth of his ten books, which were concerned with various types of buildings, and the forms of houses suited to different ranks of persons, seemed hardly applicable to the needs of English life: it was from Palladio that a more comprehensive guidance was sought. Adam's extensive studies of antique building led him to recognise the fact that though Greek and Roman temple architecture differed from Greek and Roman domestic architecture, the Palladians had usually adapted the former for every type of building. Perhaps this realisation deepened his concern for the more superficial matter of ornament; he may have thought that, by the accurate reproduction of decorative details, he could partly revive the character of ancient domestic architecture. He certainly attempted with conspicuous success to bring into the hands of the architect, complete responsibility for the design of everything; and he was an unwavering dictator. When he employed great cabinet makers like Thomas Chippendale, no hint of Chippendale's characteristic personal gifts for furniture design could emerge; and when, through the interest of the brothers in the Carron Company—of which John Adam was a partner as early as 1764—he began to use cast iron for reproducing his delicate ornamental detail, he treated this promising material, as new and stimulating and exciting to architects then as reinforced concrete is now, merely as a convenience, as he treated compositum or plaster, without any sense of obligation to its properties and possibilities. It was left to an obscure Shrewsbury architect, Thomas Farnolls Pritchard, to make the first great structural experiment with cast iron, in the form of a bridge over the Severn at Coalbrookdale, which was opened in 1779; the first of a great series of cast iron structures, which culminated in the greatest of all, built seventy-two years later: Paxton's Crystal Palace.

These decorative preoccupations and the reticent aristocratic style which seemed, almost imperceptibly, to arise from so many elegantly disposed and complementary forms, certainly exerted a refining influence upon contemporary architecture, and particularly upon interior decoration and furnishing, though it had no lasting effect. It lived and died as an exquisite fashion. But London still bears the impress of the work of those remarkable brothers, for their



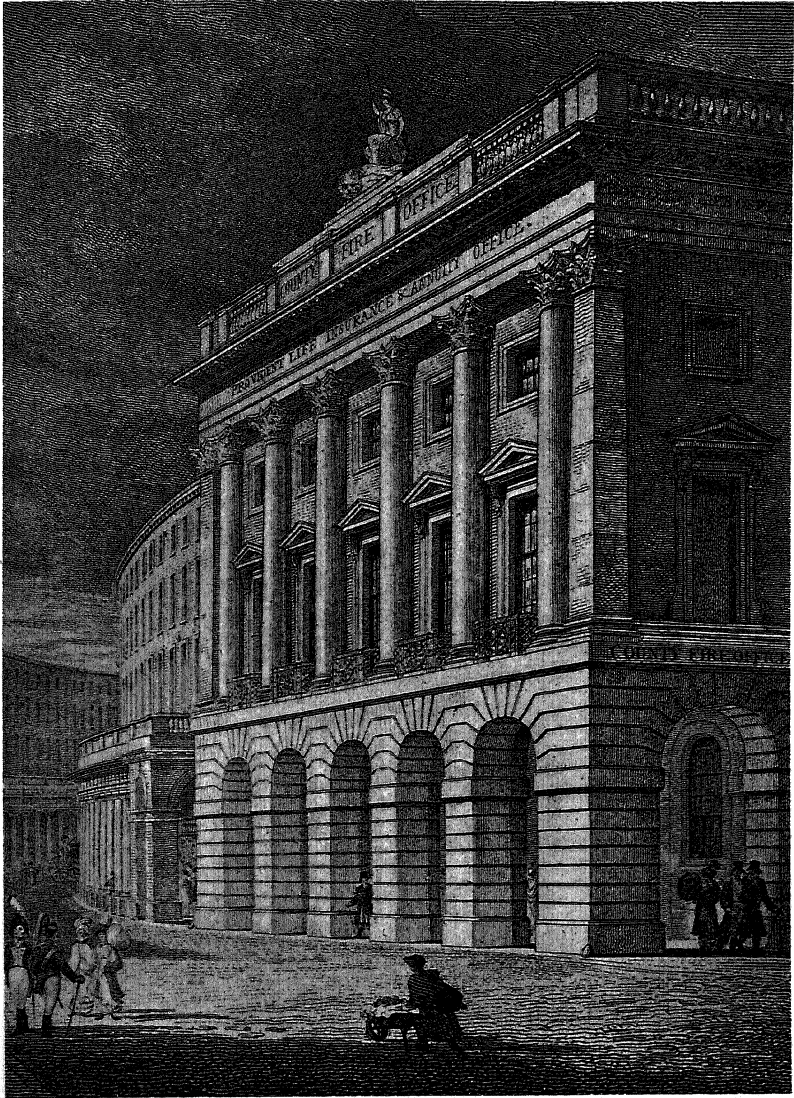
Although in retrospect the eighteenth century appears orderly and urbane and occasionally magnificent, in architecture and furnishing, clothes and manners, it was a patchwork ; the orderliness and urbanity were disrupted by untidy survivals, like the architectural jumble in which Mrs. Salmon's famous wax work was housed in Fleet Street. There was seldom any horizontal continuity in the streets, and the skyline was ragged and as hideously untidy as it is to-day. (From J. T. Smith's *Antiquities of London*.)



Horizontal continuity was not attained in shopping streets until such streets were designed as a whole by one architect. In London, Regent Street, designed by John Nash and built between 1817 and 1823, is the best example. Above is a view of the Quadrant, showing the colonnades of cast iron Roman Doric columns. These colonnades were removed in 1848. Opposite is a contemporary view of the County Fire Office, which once occupied the North side of Piccadilly Circus and terminated the Quadrant of Regent Street. (See also Plate 39.)

great building schemes included the development of the Adelphi site—which nearly ruined them financially, and from which their fortunes were extricated by a lottery which was sanctioned by Parliament—also Portland Place, two sides of Fitzroy Square, and Stratford Place in Oxford Street.

Very different was the work of that staunch Palladian, Sir William Chambers (1726-1796), who gave to London the robust grandeur of Somerset House. The Albany in Piccadilly and the temples and the orangery at Kew indicate his capacity for making compactly beautiful buildings, no matter upon what scale he was called to work. He had travelled extensively in China, and had grasped the ornamental significance of Chinese buildings in parks and gardens, which explains why so devoted an adherent of Roman building could design the Pagoda at Kew. Such structures he regarded as incidental embellishments in garden design. In 1757 he published a treatise on *Designs of Chinese Buildings, Furniture, Dresses, Machines, and Utensils*, and in 1772 a *Dissertation on Oriental Gardening*. The last

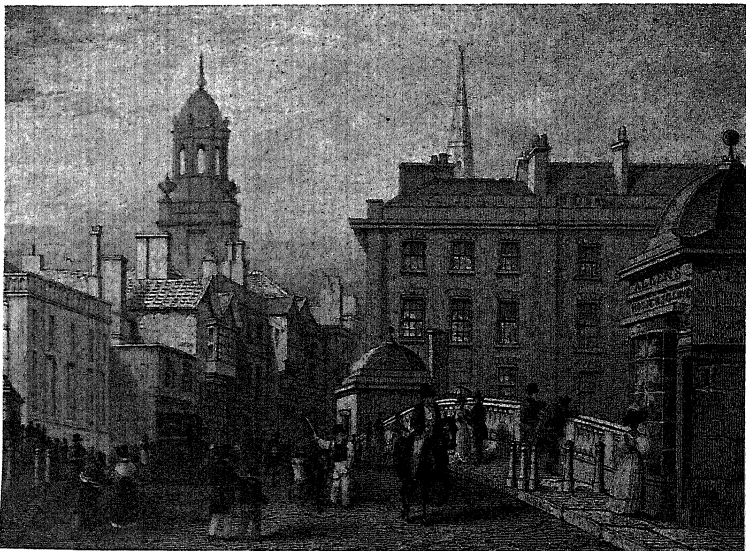


The original County Fire Office building. The architect was Robert Abraham; but most of the credit for the design was claimed by his employer, J. T. Barber Beaumont, who founded the insurance firm. John Summerson suggests that in view of the importance of the site, John Nash probably indicated "the main lines of the composition, Abraham and Beaumont between them doing everything else." (*John Nash*, by John Summerson. George Allen & Unwin, 1935. Chap. XIII, page 219.)

MEN AND BUILDINGS



Above : entrance to Bath from the Bristol Road. Below : entrance to Bristol from the London Road. Cities were still urbane in character and still adjusted to human scale until far into the nineteenth century.



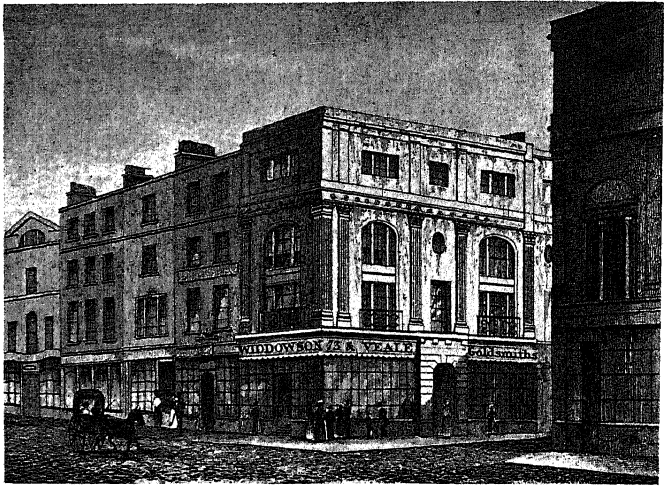
GREAT CENTURY AND GREAT DECLINE

great exponent of the "good Roman manner" of building, he rejected the ideas of the Greek revivalists, whose activities became notable in the latter part of the century. Those activities were devoted mainly to an academic study of architectural detail; and although they led a few architects to the making of competent replicas of Grecian work, they also helped to obscure the principles of composition by inducing a state of mind that subordinated design to the rigid demands of classical precedent. The lucidity of the Renaissance was threatened by a scholastic devotion to antique models. Records were ransacked: the reconstruction of Greek interiors was attempted; even furniture was modelled on the chairs and tables depicted on Greek vases. This classical revival produced some good but few great buildings. It may perhaps have narrowed the architect's sense of his civic obligations. John Nash (1752-1835) was the last designer to demonstrate upon a big scale that memorable achievement of the Renaissance—the unity of the street. The blocks of houses that encircle Regent's Park, old Regent Street with its Quadrant and colonnades, and Carlton House Terrace, were the work of Nash; and he changed the face of buildings by introducing smooth stucco, which provided a surface that could be refreshed with paint, and so kept bright, year after year.

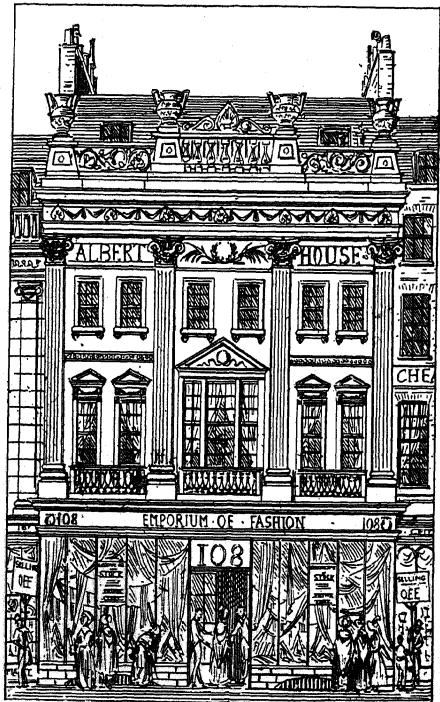
Stucco was associated with that pleasant phase of early nineteenth century building which is usually labelled "Regency." Many English towns acquired streets and squares in the simple and well mannered style that distinguished the end of the Georgian period.

Sir John Soane (1750-1837) also carried into the nineteenth century some of the good influences of the great age of English architecture. He never abandoned his private judgment to bow down before the academic authority of the classicists. He retained complete freedom in the handling of architectural elements. His best known and his largest work was the Bank of England, to which he was appointed architect in 1788.

Soane was perhaps the last architect who saw in the classic orders a flexible system of design; a lively, humanised array of adjustments between various horizontal and vertical elements; which permitted individual expression without the sacrifice of good manners. Many of the architects of the nineteenth century who were responsible for classic buildings accepted the absolutism of Greek or Roman style. Always in the background of their fancy loomed the exacting prototype, bullying them into limp imitation or provoking them into some puny rebellion of which they quickly repented. Enlargements of Roman temples and thermae were manifolded, with such



The shops of the late eighteenth and early nineteenth centuries were unrelated units in the street, but were individually well designed. Above is the goldsmith's shop on the corner of Adam Street and the Strand as it appeared a century ago: it was the debasement of this quiet, orderly style, which prompted Pugin's gibe that "Every linen-draper's shop apes to be something after the palace of the Caesars; the mock stone columns are fixed over a front of plate glass. . . ." The illustration on the right accompanied these remarks which occur in *The True Principles of Pointed or Christian Architecture*, published in 1841.



GREAT CENTURY AND GREAT DECLINE

modifications of plan as the purpose of the building and the shape of the site demanded; while in domestic architecture the portico was the outward and visible sign that the authority of the classic style was acknowledged.

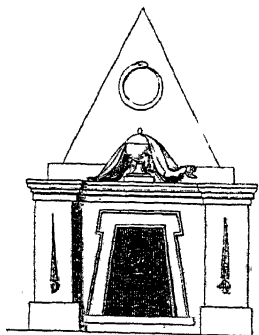
Meanwhile Sir Jeffrey Wyatville had done (or undone) wonders at Windsor Castle, which acquired a more authentic mediaeval air through his attentions. The romantic movement was now overwhelming the imagination of society, and good Sir Walter Scott was pouring hundreds of thousands of words into the printing press about "the good old times," and the Middle Ages in particular; while the Evangelical movement was discrediting the urbane rationalism of Georgian England. Church going was no longer a formal obligation, an expression of good manners on the Sabbath, and an opportunity to be mildly diverted should some rising and presentable young parson possess a good delivery and a gracious turn of phrase. Old, hot-eyed enthusiasms had struggled back into everyday life; and condemnation of the pagan serenities of the eighteenth century included the characteristic buildings of that highly civilised age.

A pamphleteering architect arose, Augustus Welby Northmore Pugin (1812-1852), who demanded a return to "Christian" architecture, and attacked savagely the work of men who still respected the orders. Pugin's unforgettable criticisms, his skill as a draughtsman, and his almost demoniac energy, helped to hurry England into that sombre period of moral earnestness in building which was called the Gothic revival. Pugin, like all prophets, was misunderstood, and his ideas ingeniously distorted by his followers and by a large number of ignorant and acquisitive people. In the opening paragraph of the first of two lectures that he ultimately published in book form under the title of *The True Principles of Pointed or Christian Architecture* (1841), he had said: "The two great rules for design are these: 1st, that there should be no features about a building which are not necessary for convenience, construction, or propriety; 2nd, that all ornament should consist of enrichment of the essential construction of the building." Pugin was horrified and indignant when he realised that the Gothic revival had become a fashion, and if he had consulted the work of the diligent Mr Loudon, he would have realised that it was classified as one of many fashions in building and furnishing. In that transitional period, between the end of the Georgian age and the beginning of Queen Victoria's reign; when William IV was on the throne and Tom Brown was at Rugby; Mr J. C. Loudon, F.L.S., H.S., G.S., Z.S., etc.

who described himself as the "Conductor of the Gardener's Magazine," compiled a huge volume of 1138 pages, entitled: *An Encyclopaedia of Cottage, Farm, and Villa Architecture and Furniture; containing numerous designs for dwellings, from the cottage to the villa, including farm houses, farmeries, and other agricultural buildings; several designs for country inns, public houses, and parochial schools, etc.*¹ Mr Loudon's England was, as the estate agents used to say, "ripe for development," and domestic and rural architecture might have followed various styles, classic, Italian, Scottish baronial, Elizabethan, oriental, and Gothic. All were tried by the new rich manufacturers and the middle classes in the early and mid Victorian periods; but Gothic predominated. The Gothic Revival continued.

At first the full meaning of that revival was not appreciated by men whose minds were still influenced by traditions or orderliness. Sir Charles Barry (1795-1860) appeared to regard it as an attempt to continue the development of the Gothic tradition, to pick up the lost threads from the early sixteenth century, and to weave therefrom a coherent sequel to the Perpendicular period, forgetting the interlude occupied by the Renaissance. The Houses of Parliament were certainly designed in that spirit. But the Gothic revivalists forgot more than the interlude of three centuries: they forgot the intellectual and scientific achievements of those centuries, and discarded every lesson of design, every rule of proportion, every attribute of dignity.

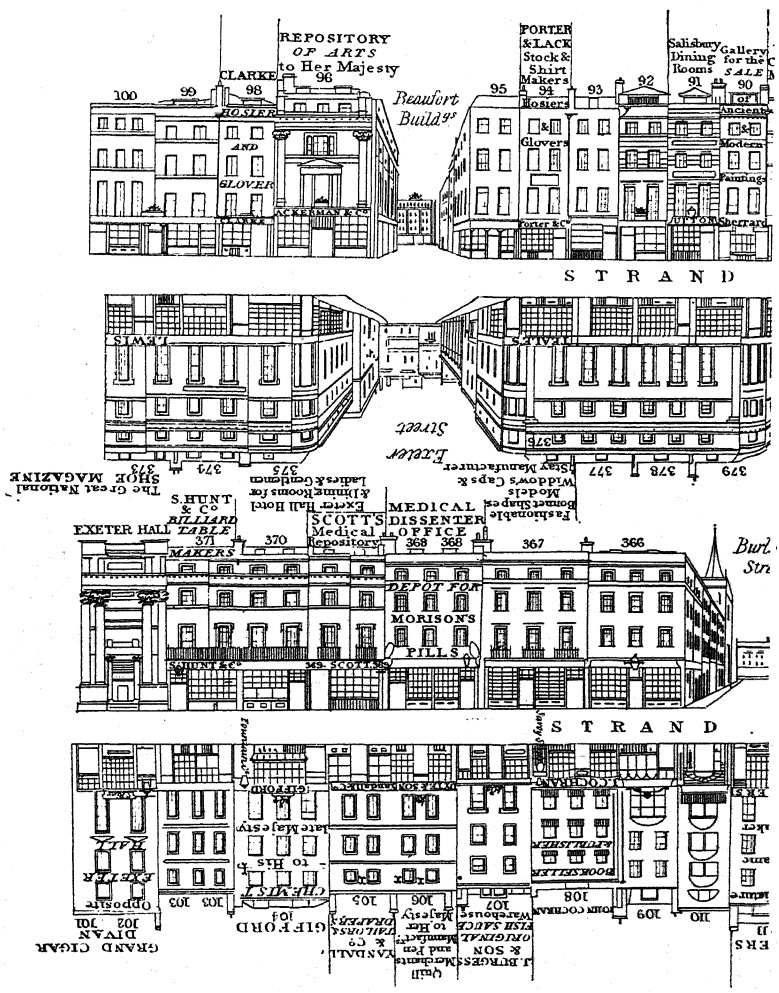
It was another barbarian conquest.



To Pugin, classic architecture was a manifestation of paganism. To the whole work of the English Renaissance, from the time of Inigo Jones to the Greek revival of the late eighteenth century, he affixed the label of the "refined pagan style." That was how he described this drawing of a tomb, which he condemned on the grounds that it outraged Christian ideas.

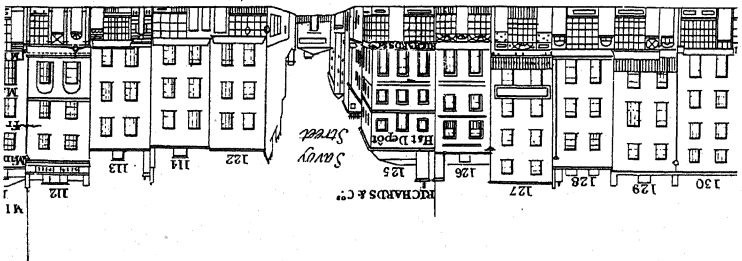
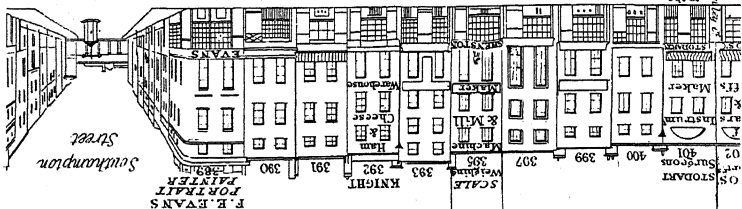
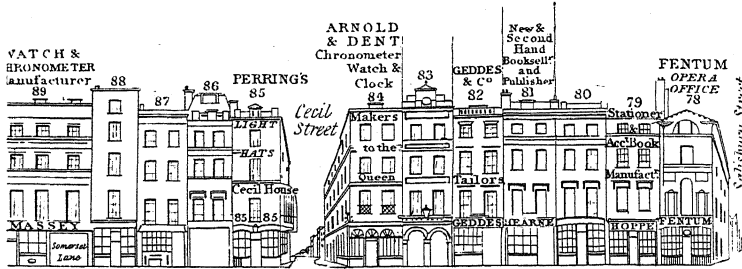
¹London: Longman, Rees, Orme, Brown, Green, and Longman. 1833.

GREAT CENTURY AND GREAT DECLINE



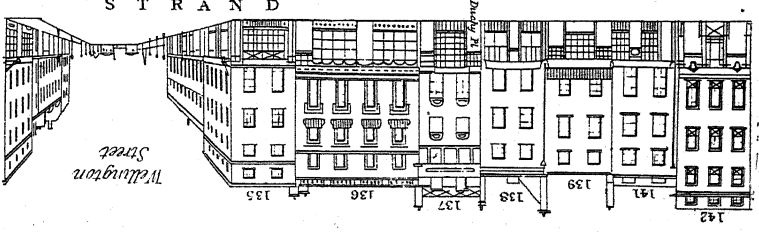
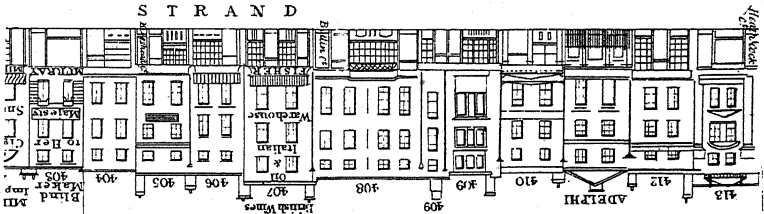
By the first half of the nineteenth century, nearly all traces of the old timber-framed buildings had disappeared from the principal streets. Above, and on the five pages that follow, both sides of the Strand are shown as they appeared in one of the numerous illustrated directories published in the opening decades of that century—when tradesmen who paid for the honour, presumably, had their names mentioned, which accounts for the anonymity of the others who didn't believe in advertising.

MEN AND BUILDINGS



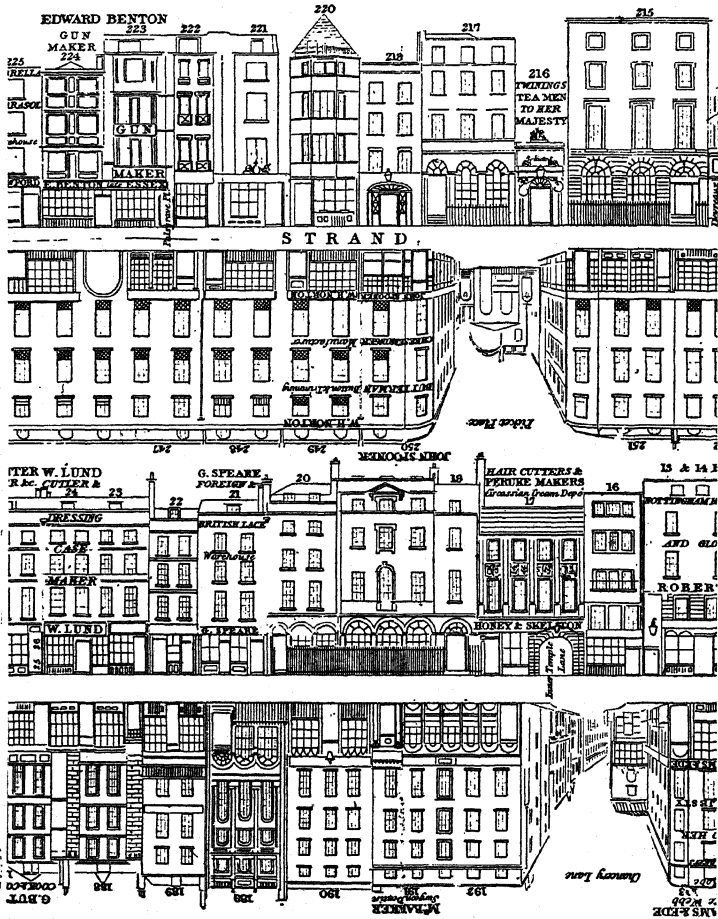
The record of the buildings in the Strand, which began on the previous page, and is continued above and opposite, shows that although horizontal unity was lacking, and the lines of cornices and fascias were often broken, a general relationship was preserved by the proportions of the sash windows. There was a family resemblance among the shops, also suggested by the proportions of the panes and the arrangement of the glazing bars in their windows.

GREAT CENTURY AND GREAT DECLINE



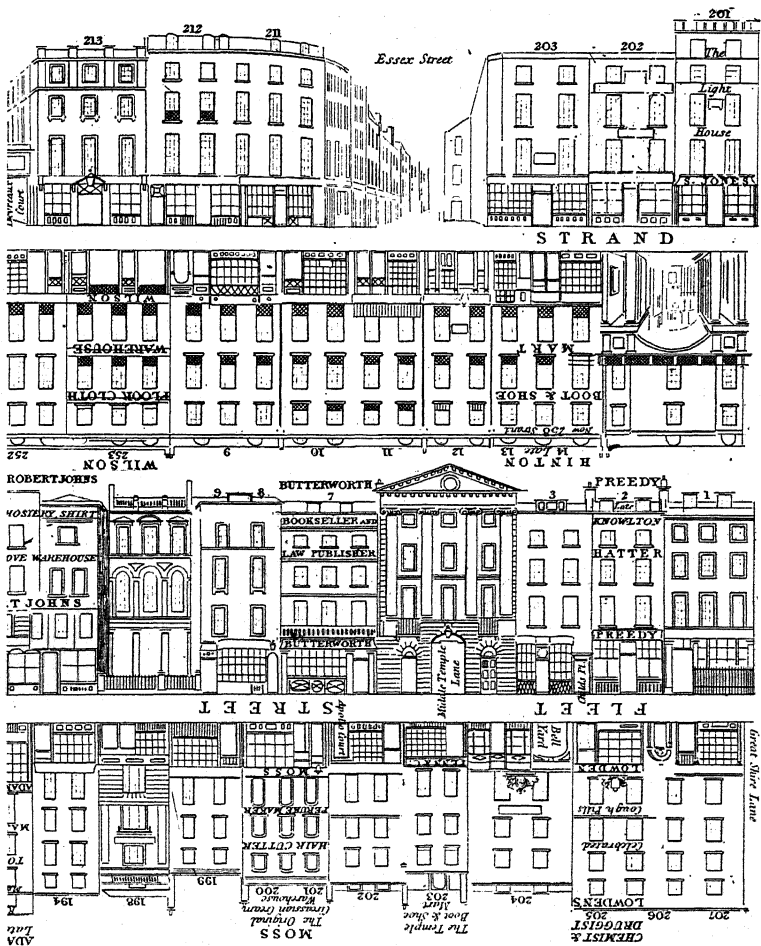
The Strand side of the Adelphi. The goldsmith's shop illustrated on page 146 is shown in its place at the corner of Adam Street. (The eastward continuation to Fleet Street is on the next page.)

MEN AND BUILDINGS



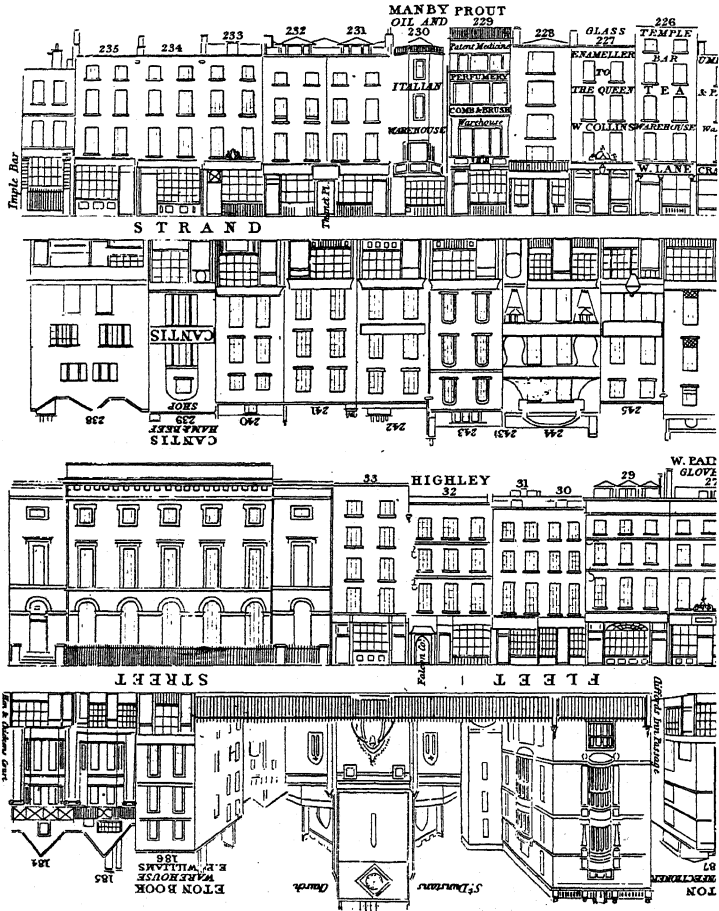
The line of illustrations at the top of this and the opposite page, show the south side of the Strand : Fleet Street is shown, north and south sides, below.

GREAT CENTURY AND GREAT DECLINE



The south and north sides of the Strand occupy the two upper lines of illustrations : a few of the buildings have survived to the present day, notably the Middle Temple Gateway, designed by Wren. (See opposite page, also pages 149 to 151 and the following page.)

MEN AND BUILDINGS



The eastern end of the Strand, at Temple Bar. The lower lines of illustrations show the north and south sides of Fleet Street, with the space occupied by St. Dunstan's in the West. (See pages 149 to 153.)

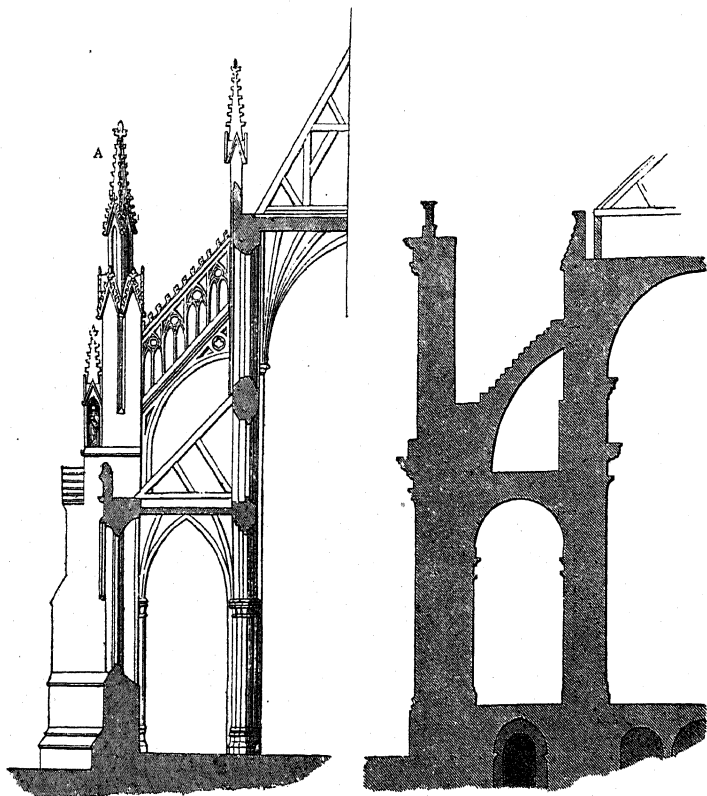
CHAPTER VIII

BACK TO THE HAND

THE HABIT of antedating the failings of modern commercial civilisation has become fashionable among writers who make historical excursions. They may approach the past in a mood of lighthearted disillusionment; and as a result, great, pure-minded public men of the Victorian age have been subjected to the most disrespectful scrutiny, and displayed in the unbecoming colours some witty modern felt they ought to wear. The earnest type of occasional historian usually has some ulterior motive in examining the past; but shares with the flippant an ungenerous inability to distinguish the fine pattern of disinterested actions and the warm hues of genuine faith that beautify the fabric of history.

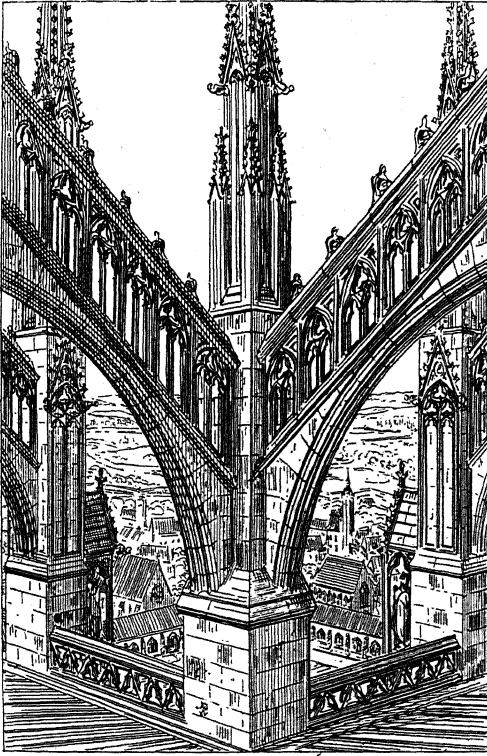
For instance, the magnificent work of the seventh Earl of Shaftesbury in fighting for factory legislation to improve the working conditions of operatives in the middle of the nineteenth century is sometimes stigmatised as the jealous obstruction of a landed proprietor, a representative of agricultural interests, who feared the growing power of industry. This sort of half-baked misrepresentation is dished up for the nourishment of individualists of the moribund Manchester school, and it comes naturally not only to weighty and serious minded apologists for the shady side of commercial individualism, but to bright young men and women who feel that a good action is its own condemnation, and who write their glittering strictures on the achievements of the Victorians with a profound belief in their own intellectual infallibility. All kinds of contemporary abuses, stupidities, and dishonesties are overestimated in their age; and if this habit of mind persists we may soon be told by some brilliantly wordy child that Cromwell's soldiers smashed church windows, not from religious conviction but because the great dour dictator of Puritan England probably had shares in a group of glass factories.

The people who deal in history are a mixed lot. Apart from the old fashioned academic historians, who like bones to be dry and dust to be plentiful, and the modern iconoclasts, whose antics have just been mentioned, there are the antiquaries and the romanticists.



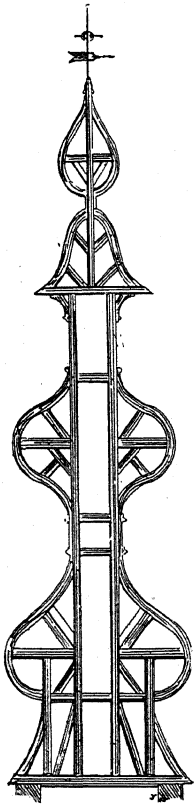
Pugin on Structural Honesty. To the left he shows a section through a flying buttress on a mediaeval church. To the right he shows a section of St. Paul's Cathedral, with the flying buttresses concealed by a screen. (From *The True Principles of Pointed or Christian Architecture*.)

The archaeologist is the real scientist—the man who collects his facts by physical research, and who reads history not only from inscriptions but from everything set down in mortar. From brick and stone, and also from pottery, glass, metalwork, and wood, he collects his records. He is a cautious and patient enquirer who makes the most valuable additions to historical knowledge. The antiquary, if he is also a romantic, opens his heart and closes his mind to the past; worshipping age for its own sake; and in that

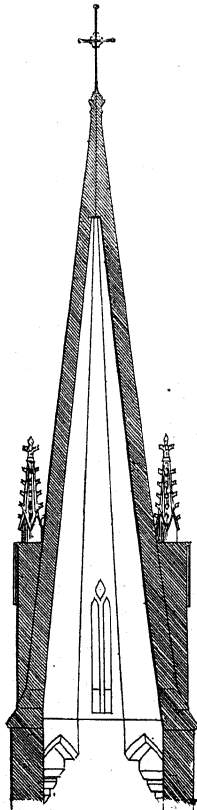


Pugin was a superb draughtsman, and his delineations of Gothic architecture were free from the stiff formal representations of the various Gothic styles, which were so often set down on paper in the early nineteenth century. Here is a drawing of a flying buttress which accompanies the sections shown on the page opposite, and is reproduced from *The True Principles of Pointed or Christian Architecture*.

spirit he acquires collections of various objects that were made a century or more before his own appearance in the world. Design, in his view, becomes subordinated to age, and as that view expands into a popular belief, the way is made easy for imitation that has a romantic instead of an intellectual basis. Such imitation is invariably slavish: the imitators have been taught to reverence the original, not because it has merit as a design, but because it is old. The time comes when hardly anybody is capable of judging whether a design has merit or not; only "styles" can be identified; and when people begin to think of "styles" in connection with their surroundings, it usually means that the principles of design have been forgotten and that a romantic regard for the picturesque has replaced the love of order.



Bulbous Covering or Steeple,
in the debased style.

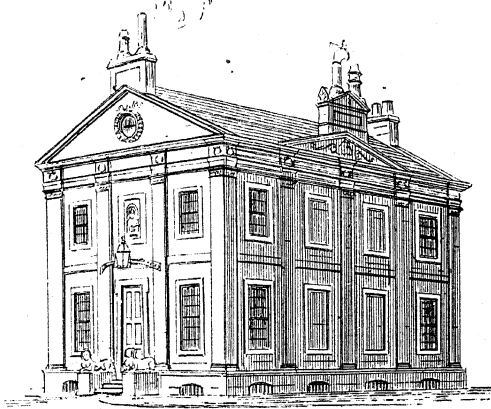


Spiral Covering or Steeple,
in the Christian style.

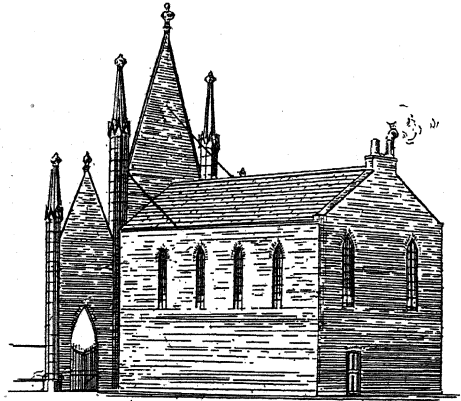
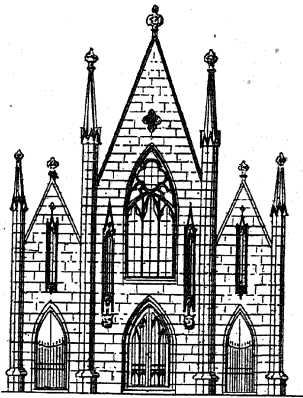
Basically many of Pugin's views about structure were sound, and he objected to "a form which does not result from any consistent mode of constructing a covering, and, on the contrary, requires by its shape to be constructed. . . ." To illustrate this point he gave examples of a bulbous form of steeple, contrasted with a Gothic steeple. (From *The True Principles of Pointed or Christian Architecture*.)

Under these conditions ornament becomes a subject of commanding importance. A style is recognised through its ornamental features, and the true use of ornament, which is to punctuate a design, to relieve the expanse of some surface or to emphasise the sweep of some line, is no longer understood.

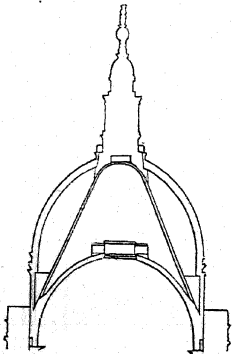
By the third quarter of the nineteenth century, nearly all traces of traditional orderliness had vanished. The intellectual force of the Renaissance had lost its power over architectural forms, even as the spiritual force of the Middle Ages had lost that power three hundred years earlier. The chaos that followed the greatest period of English architecture delighted the Victorians. "We can build anything!" they said, and rejoiced at this evidence of their material



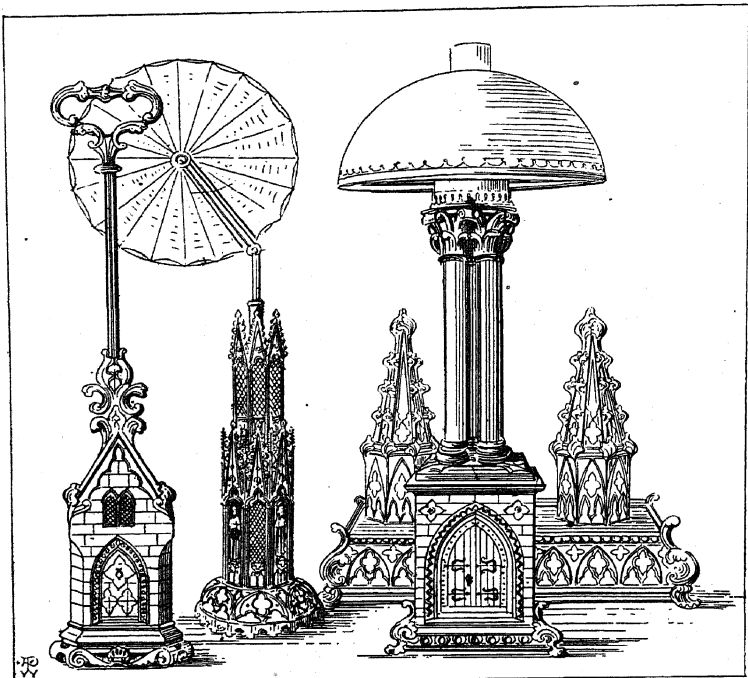
Pugin used this drawing to support his contention that contemporary buildings all present "the eternal sameness of a Grecian temple, outraged in all its proportions and character."



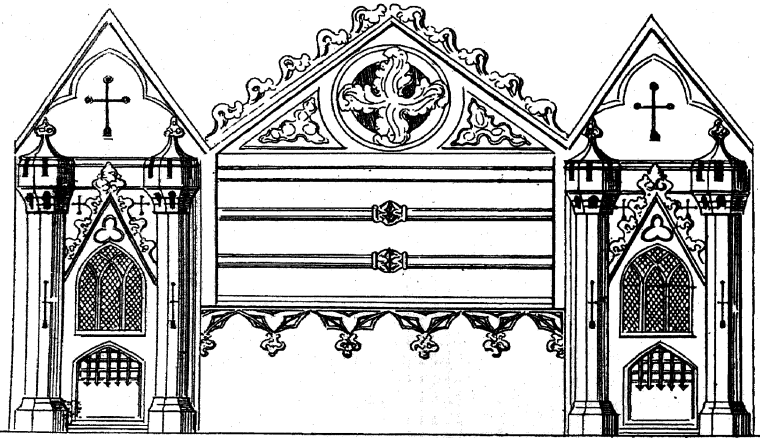
Pugin loathed shams of any kind, and wherever possible exposed them. He includes these examples of the street elevation and the side perspective of a Gothic Meeting House in *The True Principles of Pointed or Christian Architecture*.



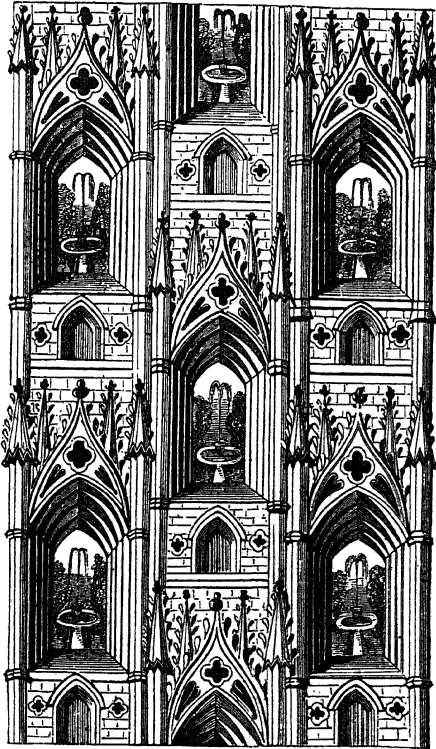
Pugin carried his dislike of shams to a logical conclusion, particularly when he was attacking classical architecture. He objected to St. Paul's, and giving a section of the dome said that "the upper part of St. Paul's is mere imposing show, constructed at a vast expense without any legitimate reason." (From *The True Principles of Pointed or Christian Architecture*.)



These examples of some of the more repellent results of the Gothic revival were savagely criticised by Pugin in *The True Principles of Pointed or Christian Architecture*. Above, are patterns of Brumagem Gothic. Pugin referred to Birmingham and Sheffield as “those inexhaustible mines of bad taste. . . .”



New Sheffield pattern for a modern Castellated Grate.



Pattern of Modern Gothic Paper

Another by-product of the Gothic revival was the Gothic patterned wallpaper. Here is an example reproduced in Pugin's book, to which he refers as "a wretched caricature of a pointed building," observing it was "a great favourite with hotel and tavern keepers." (From *The True Principles of Pointed or Christian Architecture*.)

progress. It was true: they could build anything, but could design nothing; a defect which remained unsuspected. They were delighted with their own works, and they said so with pompous immodesty.

In the seventies, one C. J. Richardson, an architect, wrote a book called *The Englishman's House from a Cottage to a Mansion*. He describes the volume as "a practical guide to members of Building Societies, and all interested in selecting or building a house." He explains the contemporary attitude towards taste, handling this delicate subject with impeccable respectability, and he is full of helpful hints about the contrivance of picturesque effects. He suggests, again with masterly delicacy, that preoccupation with the creation of wealth might tend to vitiate artistic judgment; but

he is comforted by his pride in the sterling worth of the mid Victorian Briton. "However much the occupations of our countrymen may partake of the commercial character, the mental qualities requisite to such pursuits have not been so displayed as to exclude a taste for art." He supplements this fortifying reflection by asking: "Where, for example, can be found superior specimens of art-choice than exist in their mansions, villas, or cottage-ornées, their picture and sculpture galleries, or the museums and other collections of those whose business pursuits have been the cause of their prosperity?"

Blandly assuming that the answer is "nowhere", the author proceeds to analyse the cause of these exalted standards. "An essential element of success in every branch of progress is involved in tasteful selection. Without considering those classes who by successful efforts of their ancestry have been placed beyond the pale of want (either artificial or real), a large proportion of our population may be ranked as having advanced morally, socially, and commercially by that intuition which characterises our national progress. It takes as its basis nature and nature's products. It eliminates from these not only pecuniary benefits that in a commercial point of view may occur, but associating the useful with the beautiful (the sense of the latter having been gained during intervals of quiet thought as a relief from the incessant requirements of business engagements), a tendency to embody the picturesque, especially in regard to architecture, arises. We have no hesitation in assigning to this cause the production of some of the most picturesque architectural erections which grace our country—that render English homes an example, and prove that, while the main element of our national prosperity is making money, we are not insensible to the beneficent influence resulting from the cultivation of refined taste."

Those "intervals of quiet thought" were filled with the echoes of a great voice that cried aloud a richly confused message. In language of inspiring splendour, John Ruskin told the world what to think about art and architecture. He preached the Gothic Revival, and he wrote and spoke with passionate sincerity, investing his array of prejudices with an air of sublime revelation. He uncompromisingly rejected classic architecture, as Pugin had rejected it; and from much the same motives. His renunciation was made in *The Stones of Venice*, in these words: "Whatever has any connection with the five orders, or with any one of the orders; whatever is Doric or Ionic or Corinthian or Composite, or in any



Adlestrop Park, Gloucestershire, as it appeared in the early nineteenth century. The bay windows ascending through two storeys have a Gothic flavour ; but the house, to which various additions had been made, is not unduly fussed and fretted with applied ornamental features. It preserves a true Georgian serenity.

way Grecised or Romanised; whatever betrays the smallest respect for Vitruvian laws or conformity with Palladian work—that we are to endure no more.” His deep concern with the superficial aspects of architecture is illustrated perhaps more clearly and concisely in his preface to the second edition of *The Seven Lamps of Architecture* than in any of his other writings.

“All high art consists in the carving or painting natural objects, chiefly figures: it has always subject and meaning, never consisting solely in arrangement of lines, or even of colours. It always paints or carves something that it sees or believes in; nothing ideal or uncredited. For the most part, it paints and carves the men and things that are visible around it. And as soon as we possess a body of sculptors able, and willing, and having leave from the English public, to carve on the façades of our cathedrals portraits of the living bishops, deans, canons, and choristers, who are to minister in the said cathedrals; and on the façades of our public buildings, portraits of the men chiefly moving or acting in the same; and on

our buildings, generally, the birds and flowers which are singing and budding in the fields around them—we shall have a school of English architecture. Not till then.”{

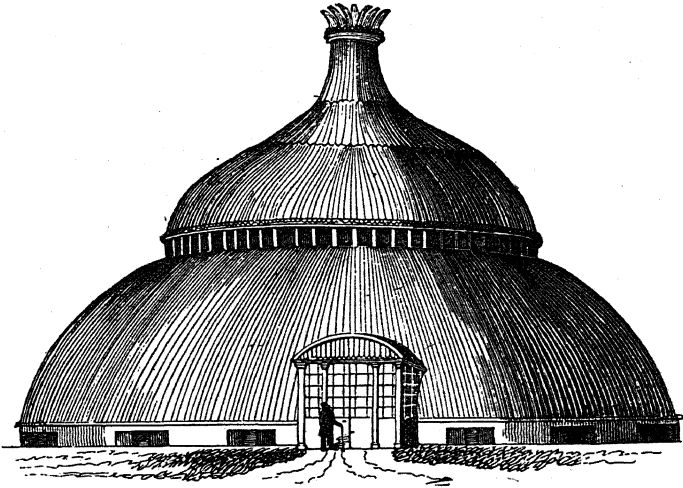
There is a flavour of John Calvin about all this stern moralising. Indeed, not only the tone but the spirit of the doctrine marches with a pronouncement of that sixteenth century reformer. “It remaineth therefore lawfull, that onely those things be painted and graven whereof our eyes are capable: but that the majesty of God which is farre above the sense of our eye, be not abused with uncomely devised shapes.”¹

In Ruskin’s eyes all shapes were uncomely unless they were natural, and to every refinement of pattern and texture he was blind. “I have now no doubt that the only style proper for modern northern work is Northern Gothic of the thirteenth century,” he writes in that revealing preface already quoted.

Why Gothic? Because Gothic was “natural,” and because the antiquaries (among whom we must include Horace Walpole) had made it alluringly romantic, and because it was so overpoweringly picturesque. That crude brat, Naturalism, sired by Rousseau and tailored in the latest mediaeval style by Sir Walter Scott, was by Ruskin’s proclamation the saviour of the architectural world. The Renaissance was pontifically condemned as a “foul torrent.” From its large rhythms Ruskin turned in loathing: it was an impious, an indecent attempt on the part of man to set himself up against Nature; unity was a thing accursed. “Do not be afraid of incongruities—do not think of unities of effect,” he charges his audience in one of the more harmfully muddling lectures he delivered. “Introduce your Gothic line by line and stone by stone; never mind mixing it with your present architecture; your existing houses will be none the worse for having little bits of better work fitted to them; build a porch, or point a window, if you can do nothing else; and remember that it is the glory of Gothic architecture that it can do *anything*. Whatever you really seriously want, Gothic will do it for you; but it must be an *earnest* want.”

When all “*earnest* wants” have been satisfied, the building is to be handed over to sculptors for their sport; but the number and variety of “*earnest* wants” imply a high degree of external congestion before the carvers are turned loose to shape the ornamental forms

¹Thomas Norton’s translation of *The Institution of Christian Religion*, by John Calvin, Book I, Chapter II, p. 12. (From the edition printed in London by Anne Griffin for Joyce Norton and R. Whitaker, 1634.)



During the dust and the heat of "the Battle of the Styles" the significance of the new building materials like cast iron was missed, or misused by architects like John Nash who employed cast iron as a cheap substitute for stone, just as some modern designers have used plastics as a cheap substitute for wood or other materials. Dr. Nikolaus Pevsner has reminded us in his *Pioneers of Modern Design* (1949 American edition), that the glass and iron dome appeared in the first decade of the nineteenth century, and that the gardener and journalist J. C. Loudon (see page 147) suggested shapes for "curvilinear" roofs in 1817 and 1818. In his famous *Encyclopaedia of Cottage, Farm and Villa Architecture and Furniture*, published in 1833, Loudon included the illustration shown above, describing it as a glass dome, erected in 1827, for Mrs. Beaumont, at Bretton Hall, Yorkshire. It was 100 feet in diameter and 60 feet high. "It was constructed entirely of cast and wrought iron; all the perpendicular supports being of the former, and all the sash-bar composing the ribs of the roof of the latter, material."

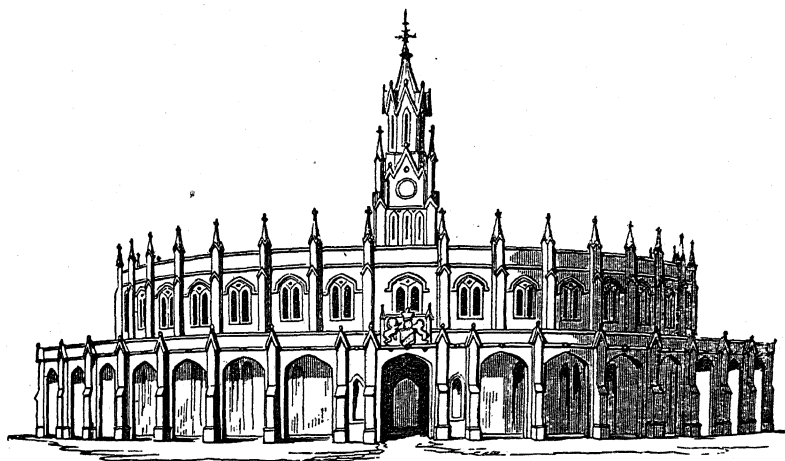
that were acceptable as idols to nature worshippers. Ruskin urged people who were building houses to "insist upon having the pure old Gothic porch, walled in on both sides, with its pointed arch entrance and gable roof above." The delightfulness of a bow window enraptures him: he can hardly believe that any room can be perfect without one; and so he issues those reckless instructions which were taken so seriously, and, worse still, were carried out all over the country by the new rich and the non-thinking. "Now you have nothing to do but to resolve that every one of your principal rooms

shall have a bow window, either large or small. Sustain the projection of it on a bracket, crown it above with a little peaked roof, and give a massy piece of stone sculpture to the pointed arch in each of its casements, and you will have as inexhaustible a source of quaint richness in your street architecture, as of additional comfort and delight in the interiors of your rooms."

Quaintness is exalted as a quality, and the street relapses into barbarism, a rabble of romantic buildings proving to the satisfaction of Ruskin and his huge following that the parts are greater than the whole. He was intoxicated with detail, having drunk deep draughts of sweetened history from the Waverley cellars.

"Have not these words, Pinnacle, Turret, Belfry, Spire, Tower, a pleasant sound in all your ears?" he asks, and assures his hearers that the "strange and thrilling interest with which such words strike you as are in any wise connected with Gothic architecture—as for instance, Vault, Arch, Spire, Pinnacle, Battlement, Barbican, Porch, and myriads of such others, words everlastingly poetical and powerful whenever they occur—is a most true and certain index that the things themselves are delightful to you, and will ever continue to be so."

Wonderfully soothing all this must have been to people suffering from a disturbed state of taste. This great man, with his literary genius, his charming voice, and his brightly muddled mind, gave to the Middle Ages the likeness of a glorious treasure house which was made accessible for the first time because the world had awakened. Their fathers and grandfathers had been wrong, sinfully wrong, almost pagan: those arrogant Georgian harmonies denied God in spirit even as they flouted Nature in form. Let them for ever be forgotten. Gothic was acceptable to Heaven, and must therefore be respectable on earth. They would build spires and pinnacles and turrets while the angels smiled and Mr Ruskin heartened them with the music of his phrases. They did; but whatever may have been the effect of Victorian Gothic upon the angels, it often irritated Ruskin. As an immensely painstaking student of architectural detail, he was naturally distressed by inept imitation, but the fact that it was imitation at all was really disheartening, for that indicated a misunderstanding of his attempt to resurrect the spirit of Gothic building. Ruskin had shown how easily this free and joyous spirit could be reborn by leaving the embellishment of the building to masons who were sincere worshippers of natural forms. Even if this might seem a little dubious on paper, it had been

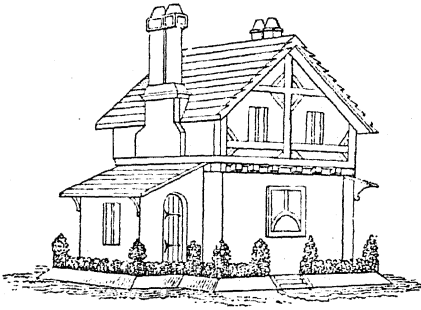


Mr. J. C. Loudon was a designer of gardens, and a copious writer on gardens and architecture. But he occasionally designed buildings. For example, he produced two designs for circular stables in 1809 for Colonel Mytton of Garth, Montgomeryshire, one in the Italian style, and one, which is shown above, in what he called Tudor Gothic. He included both in his monumental *Encyclopaedia of Cottage, Farm and Villa Architecture and Furniture*, which he published in 1833, and recorded that "The elevation actually executed from our Design was different from either of those now given, and, we need not say, much inferior. . . ." A selection of designs included in Loudon's *Encyclopaedia* appears on the pages that follow.

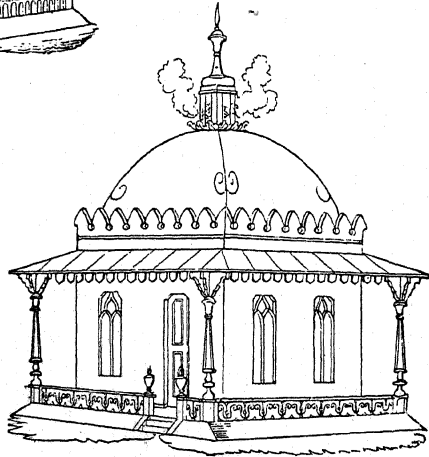
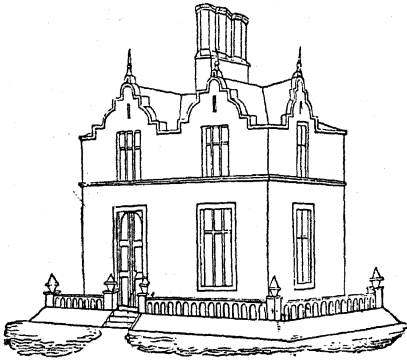
demonstrated as a workable idea by an architect named Woodward, who, with a band of masons and the help of Ruskin's abundant, varied, and occasionally unpractical advice, had built the Oxford Museum and the Union Debating Rooms. Mrs Williams-Ellis has, if anything, been too restrained in her reference to that work in her book, *The Tragedy of John Ruskin*, for she tells us that Ruskin and Woodward "produced, with infinite care, two buildings of unparalleled ugliness. They appear to have been designed by a man who had no sense either of colour or texture. Even now, when three-quarters of a century must have mellowed them considerably, the steep roofs of purple slates relieved with patterns of green, and the large unpleasant bricks of one, and the gingerish stone of the other, are extremely grating."¹

¹Part III, Chapter XVII, p. 183. (Cape, 1928.)

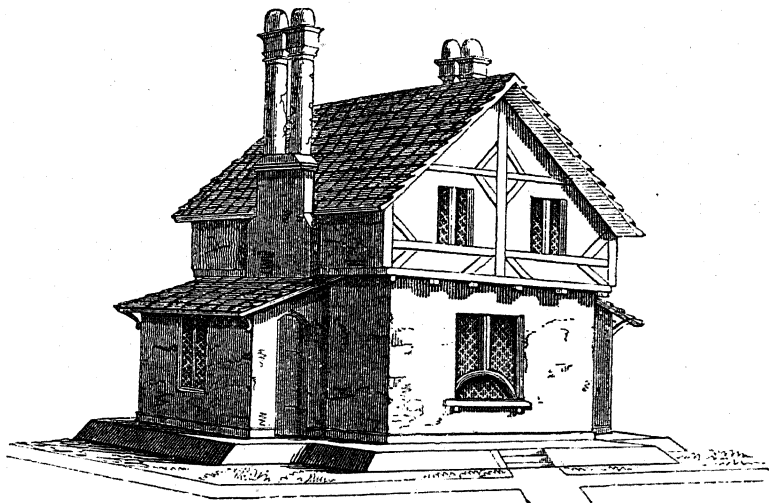
MEN AND BUILDINGS



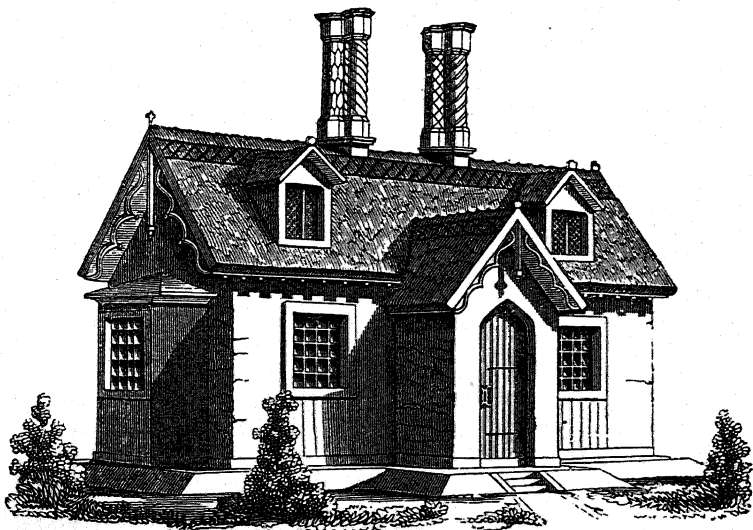
A selection of cottages from Loudon's *Encyclopaedia* is given on this page and on the next three pages. The cottage has, since the early nineteenth century, had a profoundly sentimental appeal for the English householder. Shapes which the jerry builder has since made familiar are foreshadowed in Loudon's pages. This is particularly true of the sham half-timbered cottage at the top of this page. (See also page 169.) The structure at the bottom of the page is described as "Indian Gothic." (First published in 1833.)

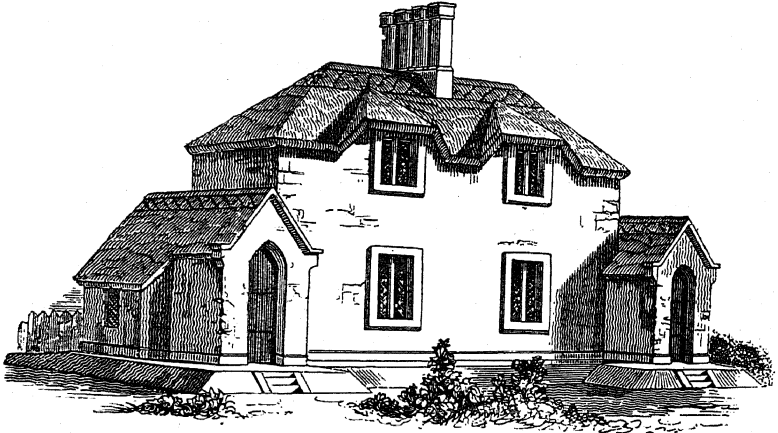
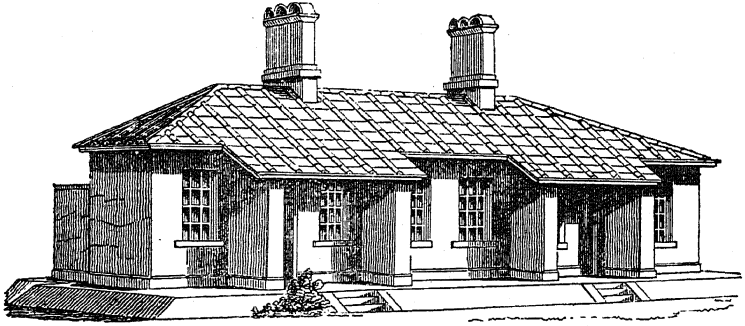


BACK TO THE HAND

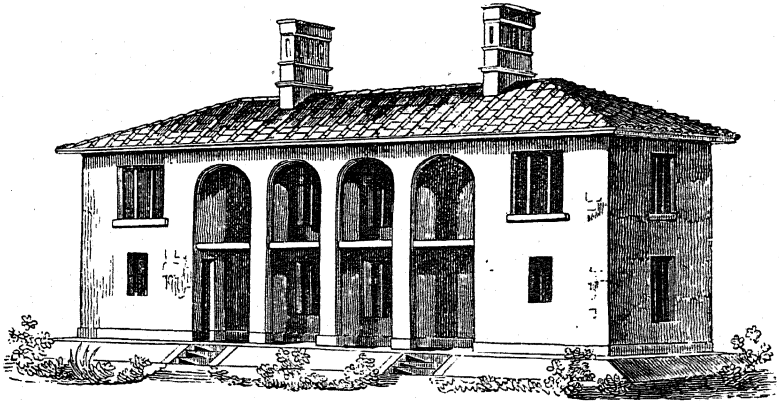
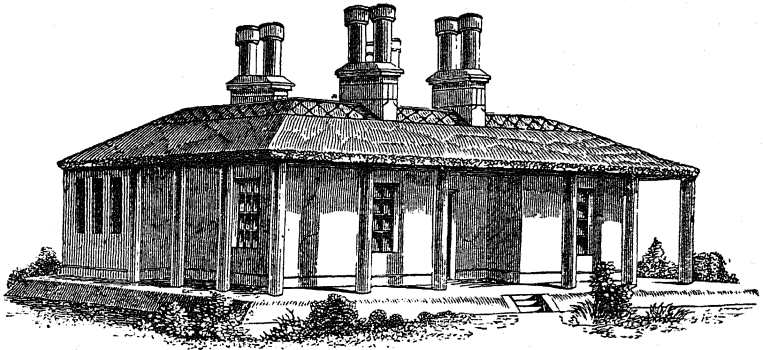


Cottages from Loudon's *Encyclopaedia*. Above : a detailed sketch of the half-timbered cottage shown in outline at the top of the opposite page. Loudon says that "this cottage is in what is called the old English manner." He enumerates various advantages and objections, the latter relating mainly to the windows, but he includes it. Below is what he calls "a dwelling for a working man with a family of children." (See pages 170, 171 and 172.)



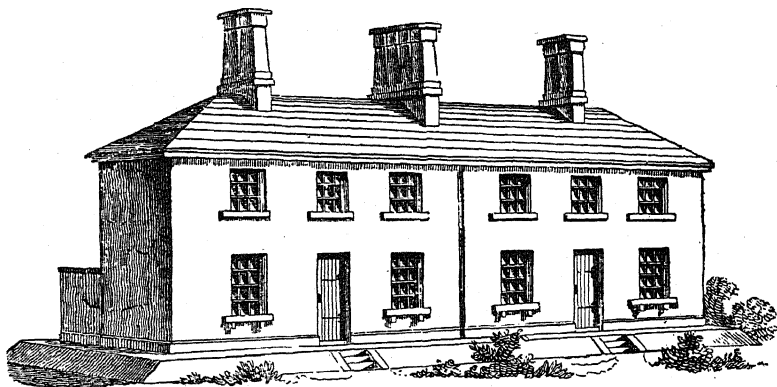


A selection of cottages from Loudon's *Encyclopaedia*. (See opposite, and pages 168, 169 and 172.)



More of Loudon's cottages, from his *Encyclopaedia*. (See opposite, also pages 168, 169 and 172.)

MEN AND BUILDINGS



Weighed down by heavy chimneys, devoid of all distinction, these two "cottages for country labourers, under one roof," shown in Loudon's *Encyclopaedia* are quite as dreary as anything designed and praised by the latter-day functionalists. "If it were desired to ornament such cottages," says Loudon, "it might readily be done by placing chimney pots on the stacks, by porches, or by a veranda; in either case, adding a parapet to the terrace." (See pages 168 to 171.)

It was inevitable that the Gothic revival should condemn architecture to a period of imitation. Ruskin was very fluent about the Gothic spirit, but he was thinking only about ornamentation and the reinstatement of the mason as a creative craftsman. The emancipated middle classes of England, the manufacturers and tradesmen and their wives, were thinking only about picturesque possibilities. Scott set them sighing after battlements and keeps, and Ruskin had suggested that in the Gothic style lay the salvation of taste. Anything that could establish safe standards of taste was bound to be popular: you might not know where you were with Ruskin, but you knew where you were with the Gothic style, and you could find examples of it all over the place, and any builder could copy it, and they all did. (Loudon's *Encyclopaedia* was reprinted in 1846, and many other copy books were available.) Soon the nation of shopkeepers was living in sham baronial halls, and conducting its business, private and municipal and national, in a variety of tumid edifices that frothed with mediaeval detail. Architecture had got out of step with contemporary needs.

Ruskin hated his own time and spoke with savage scorn of railways, machinery, and industrialism. He did the most dangerous

thing that a popular and influential writer can do: he told an unpopular truth. He criticised economic and social conditions, and questioned the divine right of manufacturers to murder not only the beauty of England, but the beauty of millions of English lives. There were howls of execration from every respectable middle class throat when the great guide to genteel Gothic ways ventured to doubt the holy economic doctrines of the industrial age.

Ruskin had seen growing up in his own lifetime the awful squalor of industry: the grimy streets of houses that were slums from the day they were roofed, where the operatives lived and their children died (when they were not slaughtered in the factory): the spread of the smoke cloud over England, and, as the sky darkened over fresh areas of the country, the desolation that followed. No fiery circle of Dante's hell could compete with a manufacturing centre for satanic effect.

"The straggling cottages by the roadside, the dingy hue of every object visible, the murky atmosphere, the paths of cinders and brick-dust, the deep-red glow of furnace fires in the distance, the volumes of dense smoke issuing heavily forth from high toppling chimneys, blackening and obscuring everything around; the glare of distant lights, the ponderous wagons which toiled along the road, laden with clashing rods of iron, or piled with heavy goods—all betokened their rapid approach to the great working town of Birmingham."

That description comes as a sudden and sooty shock after the hilarities of Mr Pickwick's journey from Bristol to Birmingham in the company of Bob Sawyer and Benjamin Allen.

Many thoughtful people felt with Ruskin that if industry produced such horrors and miseries, it was incurably evil, whereas it was only being mismanaged. If nothing could be done to modify contemporary evils, it was best to forget them, and to encourage a reaction that would re-establish the crafts that were threatened with extinction by machinery. Back to the hand, was a cry to which many creative minds gladly responded.

From its inception, the movement for the revival of handicrafts was influenced by romantic antiquarianism. William Morris, the most energetic leader of the movement, was a mediaevalist, a reactionary like Ruskin, and almost wholly unaware of the promise that lurked beneath the smoke cloud of the factories, of the beauty that machine craft might bring to the world under proper direction. He only heard the roar of the machines, and saw the dismal mess their masters made of the country, and thought of the lives they stunted; and in their products he saw only a tawdry heaping up of

cheap and nasty things, an endless procreation of vulgarity. To Morris and to many hundreds of other artists and designers industry was a cancerous growth, and if it could not be cut out of civilisation, then some part of the social body must be kept sweet and healthy by recalling the conditions of the past, and by dreaming of sunny utopias in which no wheel was turned save by the breeze or running water or the power of living muscle.

Let industry go its own foul way.

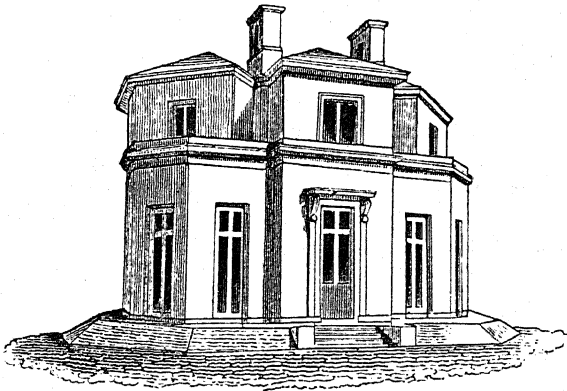
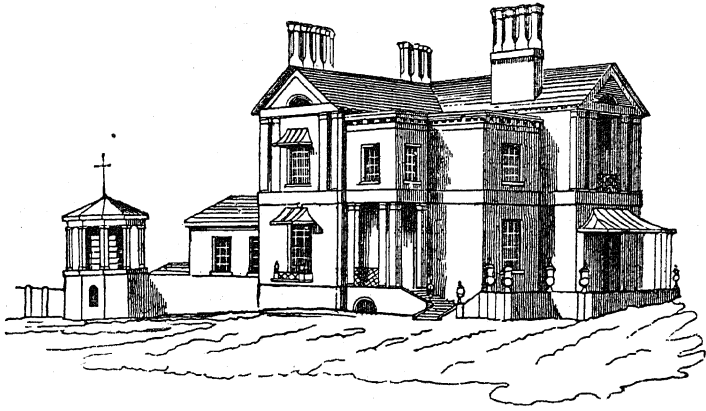
“Forget six counties overhung with smoke,
 Forget the snorting steam and piston stroke,
 Forget the spreading of the hideous town;
 Think rather of the pack-horse on the down,
 And dream of London, small, and white, and clean,
 The clear Thames bordered by its gardens green . . .”¹

Morris found that the joy had gone out of all work; that common art had vanished, and that all the crafts were rapidly approaching the state when they would be regarded as “interesting survivals.” Industrialism was surely the black sunset of mankind. “Was it all to end in a counting-house on the top of a cinder heap, with Podsnap’s drawing-room in the offing, and a Whig committee dealing out champagne to the rich and margarine to the poor in such convenient proportions as would make all men contented together, though the pleasure of the eyes was gone from the world, and the place of Homer was to be taken by Huxley?” Morris asked that bitter question because, as he explained, “the study of history and the love and practice of art forced me into a hatred of the civilisation, which if things were to stop as they are would turn history into inconsequent nonsense, and make art a collection of curiosities of the past, which would have no serious relation to the life of the present.”²

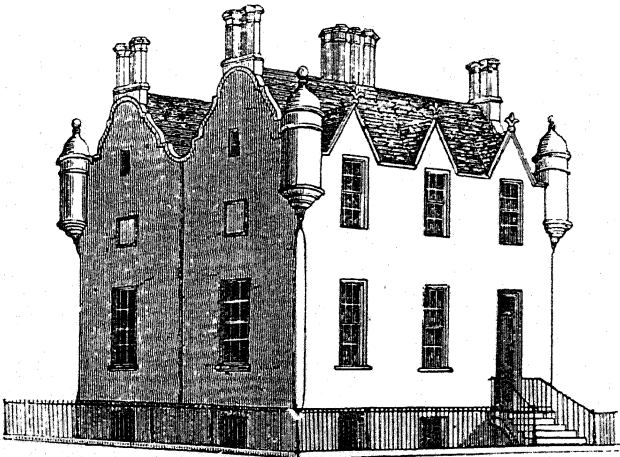
He turned to the past with a sigh of relief: there he found refuge from the clamorous realities of his own century. He looked back, not to the great civilisation of the Renaissance: that was too intellectually lordly at the expense of the men with tools in their hands and creative emotion in their hearts: so back to the days of the mediaeval guilds he went in spirit. He looked back, and by the exercise of that convenient editorial faculty that is essential to the maintenance of a perfect state of self-deception, he ran a mental blue pencil through all the miseries and limitations, the ills and

¹*The Earthly Paradise.*

²*How I became a Socialist.*



A selection of villas from Loudon's *Encyclopaedia*. Above: A villa in the Anglo-Italian style. To the left: A small Grecian villa or Casino, to be placed on an eminence, commanding extensive prospects in two directions only. Below: A villa in the "Old Scotch" style, erected in 1831, at Springfield, near Glasgow.



MEN AND BUILDINGS

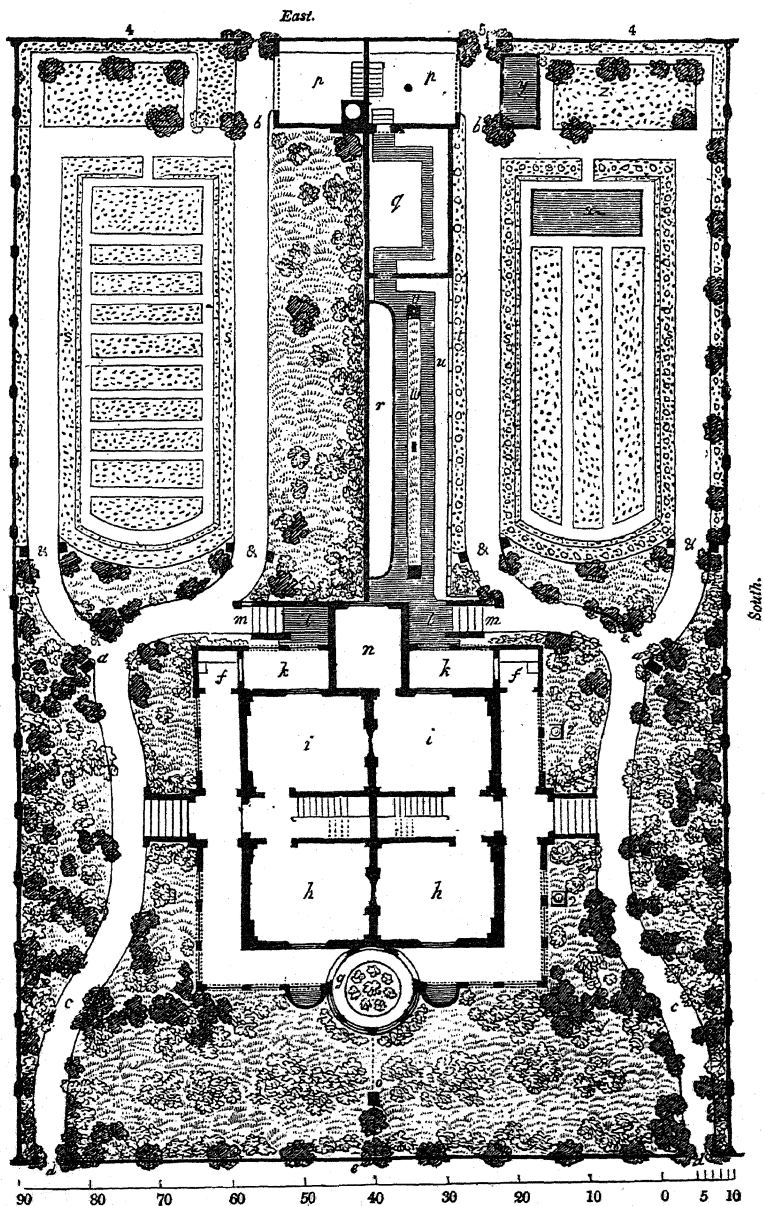
frantic fears of the Middle Ages. The age of the mediaeval craftsmen became for him an illumined manuscript, unsoiled by ugly facts, shining with bright colours and packed with inspiring texts. He early abandoned the idea of becoming an architect, partly because the architect of the mid nineteenth century was a man of drains and drawing boards, who dealt in "styles," but chiefly because the arts and crafts had dissolved partnership with building. He wanted to see houses and cities growing into beauty under the hands of craftsmen: he wanted wood and stone to be carved freely and surfaces to carry a burning splendour of decoration.

The house that Philip Webb built for him at Upton, in Kent, was a small scale model of this great ambition. It was called the Red House, and it gave a new shape to the romantic movement in domestic architecture. It was a two-storied house with walls of red brick and a high-pitched roof of red tiles. The plan was L-shaped. (For some reason or reasons unknown, it was planned so that the sitting rooms, the dining room, the drawing room, and the hall, all faced north.) There was a careless and comfortable independence in its character: its oriel windows and gables were unostentatiously romantic; and within, the furniture and decoration were strongly individual. It possessed the "quaint richness" that Ruskin had applauded; but its antiquarian flavour was incidental, for it was a sincere attempt on the part of some singularly gifted people to solve an architectural problem from a particular point of view.

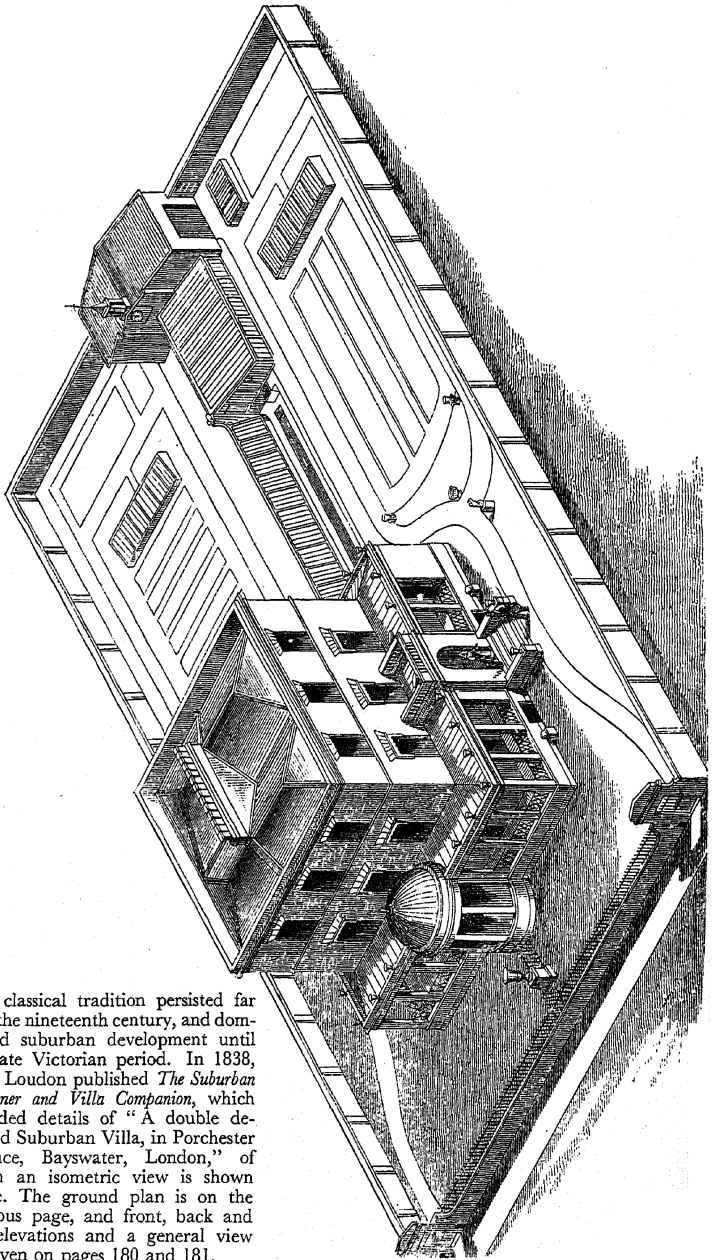
Morris and the artists who shared his sympathies felt that architecture should arise naturally and joyfully from a revival of the crafts, and that the work of a brotherhood of craftsmen must transcend the tyrannical harmonies imposed by the Renaissance. Hitherto the Gothic revival had been a thirsty search for picturesque forms, which, in spite of all Ruskin's eloquent directions, was usually satisfied with copyism. Morris tried to resurrect the creative spirit of the men who had made the mediaeval abbeys and guild halls, and he devoted his abounding energy to mastering a number of crafts, not as an artistic dabbler, but as a skilled craftsman.

His personal powers were bewildering in their variety and perfection. He was a poet of a high order—a teller of tales, whose prose unrolled like some glowing tapestry, with the story vividly depicted in rich colours; and he was a great decorative artist.

After the building of the Red House, Morris and his friends realised that every branch of decorative and applied art in England was in a state of advanced decay. It was impossible to buy well



Ground plan of a double detached suburban villa in Porchester Terrace, Bayswater, London, described and illustrated in J. C. Loudon's *The Suburban Gardener and Villa Companion* (1838). See pages 178, 180 and 181.



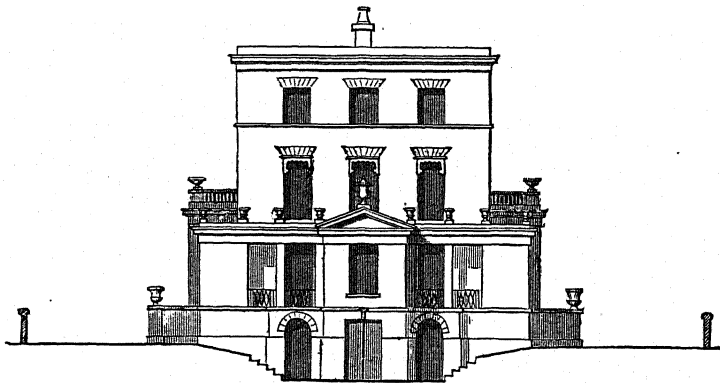
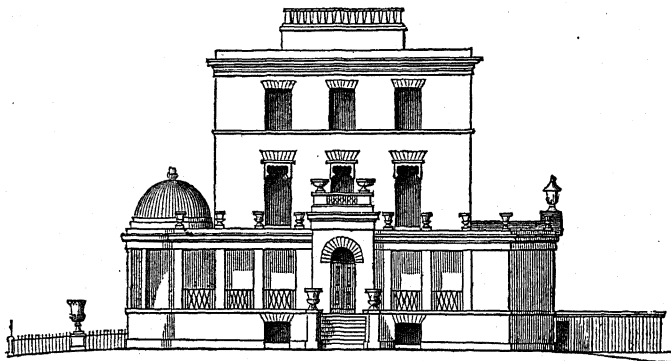
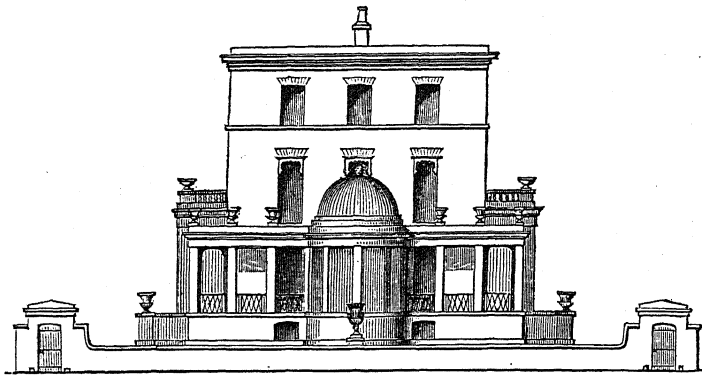
The classical tradition persisted far into the nineteenth century, and dominated suburban development until the late Victorian period. In 1838, J. C. Loudon published *The Suburban Gardener and Villa Companion*, which included details of "A double detached Suburban Villa, in Porchester Terrace, Bayswater, London," of which an isometric view is shown above. The ground plan is on the previous page, and front, back and side elevations and a general view are given on pages 180 and 181.

designed furniture, fabrics, or wallpapers, and it was to elevate standards of domestic design that the firm of Morris and Company was founded in 1861. Philip Webb, Burne-Jones, Rossetti, Ford Madox Brown, Faulkner and Marshall were associated with Morris in this venture. This firm was prepared to undertake church decoration, carving, metalwork, stained glass, and also to deal with wallpaper, chintzes, carpets, and furniture.

Unfortunately, the practical expression of the "back to the hand" doctrine was expensive. Handicrafts could be revived, or their extinction delayed, but the craftsmen could not live upon the joy of work alone, and the cost of living was higher in the nineteenth century than it was in the Middle Ages. Consequently, Morris perforce found himself working for that relatively tiny section of the community that had both riches and artistic perception. The lives and homes of the common people were untouched, and common art—that dear popular possession of mediaeval England—was still unrestored to the multitude.

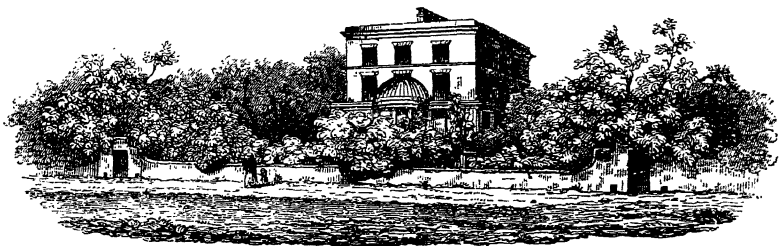
Presently the costly products of organised handicraft were imitated by industry. Morris had, quite unintentionally, started a vogue for "hand-made" articles, and the manufacturers had a new label for their wares. In the mid Victorian drawing room, glowing with silk and money, where genteel, sentimental ditties were sung by whiskered young men, and Mendelssohn's molasses was milked out of the piano by blushing young women, the word "artistic" was heard occasionally; and it became attached to William Morris and his works. It was all rather advanced and daring, of course; but it grew into a fashion and decayed into a cult. The machine was equal to the demand for "art" products; and the handicraft note was admirably simulated by speckling metalwork with mock hammer marks, leaving woodwork rough and heavy; and, where no external evidence of handwork could be faked, emphasis was laid by shopkeepers on the "quaintness" of the form or the ornamentation of the articles they had for sale.

A few crafts had been precariously preserved by the influence of Morris; but in providing opportunities for craftsmen to work, he had omitted to furnish them with the right customers. It was galling to have one's activities supported by the "arty" rich, while the "people" (as Morris thought) were starving for colour and gaiety and carving and folk songs amid the reek of the factory chimneys and the clangour of machinery. Before common art could come back to their lives a social revolution would have to take place; so Morris, without bothering his head about any economic quibbles,



Double detached suburban villa at Porchester Terrace, Bayswater. At top : front elevation. Centre : elevation of the entrance front to the house on the south side. Below : back elevation. See ground plan on page 177, isometric view on page 178, and general view on page opposite.

BACK TO THE HAND

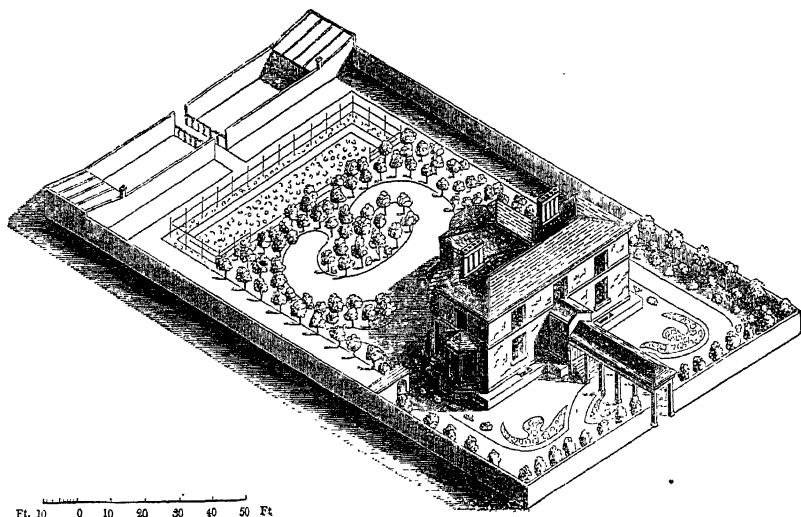


General view of double detached suburban villa at Porchester Terrace, Bayswater. See opposite, and pages 177 and 178.

became a socialist. Meanwhile his teaching gave a fresh impetus to the romantic antiquarian movement, and established an exaggerated reverence for handwork and handicraftsmen. Therefrom arose two evils: firstly, blind admiration of the antique, which begot the curse of sterile imitativeness and atrophied all critical judgment of design; and secondly, the intolerance of the creative artist for machine craft, which has robbed modern industry of immeasurable advantages, and has made the designer a stranger to businesses where he should most properly be a partner.

Morris could not have foreseen the trade that was to arise from the sale, restoration, and faking of antique things. Commercialised antiquarianism developed. The old curio shop flourished and became a recognised haunt of fashionably artistic people. Old panelling was bought by the yard; old mantelpieces and oddments of stone carving were collected and assembled in the picturesque houses that architects were building and speculative builders were imitating. The Gothic revival entered upon the gable and case-ment stage; and Ruskin and the thirteenth century were forgotten in the re-discovery of the half-timbered house. The revival of the crafts was quickly followed by their perversion, for hundreds of skilled metalworkers, joiners, and cabinet makers were employed in copying old designs, and a new type of craftsman arose, who practised a new mystery of craft, for to him came the imitations of antique things in wood and metal, and to those carefully copied forms he gave the outward appearance of age, "distressing" the surfaces—colouring, staining, denting, weathering, until the deceit

MEN AND BUILDINGS



A single detached house and grounds, occupying about an acre and three quarters, included in J. C. Loudon's book, *The Suburban Gardener and Villa Companion*, published in 1838. Loudon estimated that such a house "need not cost more than £750 ; and £250 more will lay out and plant the garden. . . ." The architecture of the house qualifies for the adjective : blameless.

was perfect. This habit brought into existence a detective class of experts, whose lucrative task it was to tell the wealthy whether they were buying genuine antique objects.

The teaching of Ruskin and the work of Morris had helped to establish this atmosphere of make-believe. Their passionate praise of the past diverted the interest of cultivated and sensitive people from the forces that were serving contemporary needs—forces that were creating wealth and ugliness upon a gigantic scale. Taste has always been affected by wealth; and it degenerates when wealth has been created too rapidly for education to influence its creators. Good taste in the past has so often stood for willingness to accept the ideas of some aristocratic, mode-making clique. In a society dominated by a relatively small class of leisured people these ideas are carefully copied by socially inferior classes, and modified to suit simpler ways of life. A certain national uniformity in architecture and the crafts is guaranteed by this filtering of fashion; but taste naturally declines when the dominating class is unduly influenced by some ill-educated person or persons. This has been illustrated on the fairly frequent occasions when a woman of the streets has

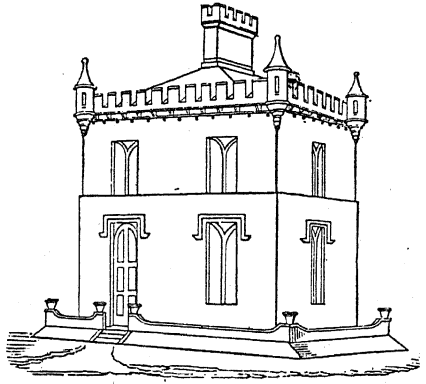
become the mistress of a king or a great nobleman. The standards of the stews have been responsible for much flamboyant vulgarity.

Until the nineteenth century, the strength of architectural tradition restrained the extravagant fancies of modish society; but the sentimental antiquarianism of the Gothic revival and the abandonment of all the civilised teachings of the Renaissance deprived architects of any directive control of taste, and turned them into style-mongers. The patrons of architecture often came from that new wealth-making class, the traders and manufacturers, and they had responded to the inharmonious liberties of the romantic movement.

A desire for ornate things arises when an intense devotion to commerce retards education so that the primitive inclination towards profusion predominates, and the undisciplined eye rejects reticence and regards simplicity as a symbol of poverty. While the wealthy trader's ideas of self-expression are somewhat less sickly in their richness than those of the woman whom some king delights to honour, they have certain common characteristics. To revel in complexity, to acquire a voluptuous regard for intricate carving and gilded enrichment, to collect elaborate furniture and anything else that happens to be showy and costly, are habits that come easily to those who have dedicated their energy to acquiring large fortunes or princes' favours. We have seen how vulgarity marred taste in England during the late Tudor period, and in early Stuart times, after the successful commercialism of Elizabeth's reign. But although it led to the over-ornamentation of buildings and their contents, it was only a mild attack of the complaint, and it was cured by the work of the great English architects.

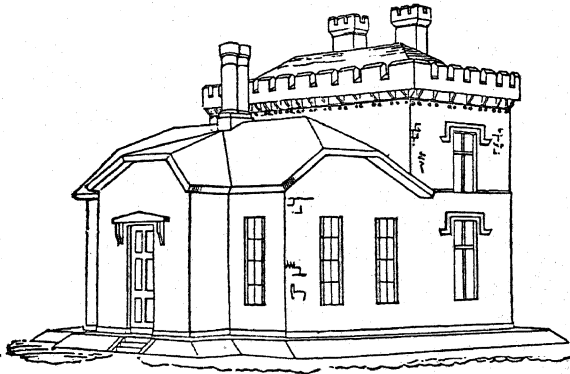
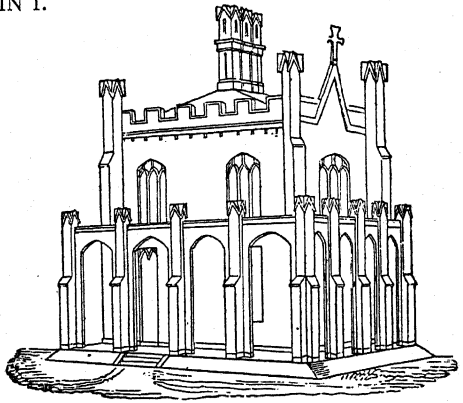
The nineteenth century had no great healers of taste among its architects. Sir Gilbert Scott gloried in Gothic building, and scattered his pious enthusiasms about the land, occasionally indulging in some heavy-handed restoration of the original fabric of old churches. George Edmund Street, Scott's pupil, who was the architect of the Law Courts and of a large number of churches, shared his mentor's outlook, and the work of both men illustrated the limitations which narrowed the vision of the Gothic revivalists. In the Albert Memorial, Scott showed how completely design was subordinated to ornament, and the fact that this monument would certainly have delighted the prince to whose memory it was erected is a sufficient comment on Court taste of that period.

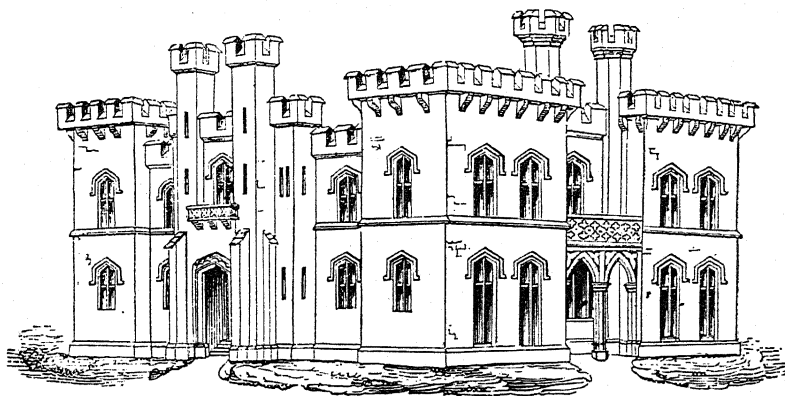
Disorder became an architectural convention, and ornamentation the principal aim in building. But Morris's tranquil dreams of



THE BATTLEMENTS OF BRITAIN I.

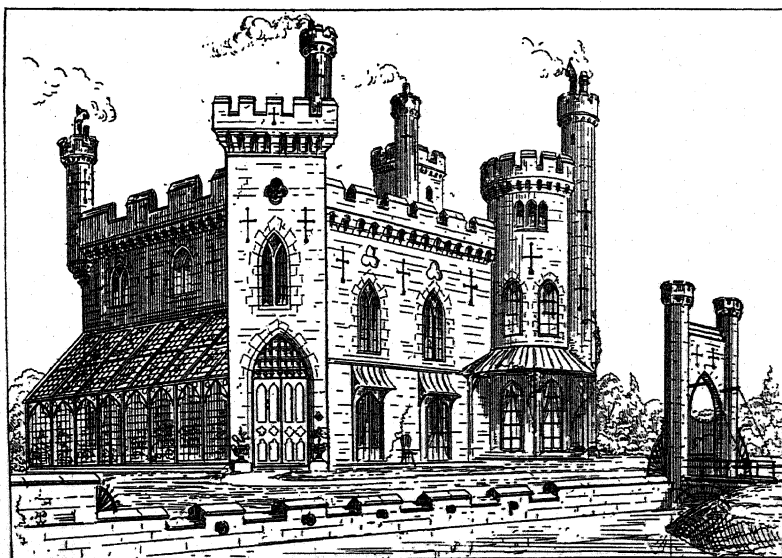
Early nineteenth patterns prepared and published by J. C. Loudon in his *Encyclopaedia of Cottage, Farm and Villa Architecture and Furniture*, 1833. Everything from a cottage to a villa. (See page opposite.)





THE BATTLEMENTS OF BRITAIN II.

Above : What Mr. Loudon described as "A villa for a small family, in the Castellated Style of Gothic Architecture." Below : modern castellated mansion, illustrated by Pugin in *The True Principles of Pointed or Christian Architecture*, 1841, of which he said : "What absurdities, what anomalies, what utter contradictions do not the builders of modern castles perpetrate !" Not only Loudon in the early nineteenth century, but those industrious engravers, Samuel and Nathaniel Buck a hundred years earlier, had stimulated popular imagination about ancient castles, and the romances of Sir Walter Scott rekindled enthusiasm for castles and keeps. (See the illustrations of Belso and Lullingstone castles on pages 62, 63 and 65.)



craftsmen enriching buildings joyfully and spontaneously were still unrealised. Craftsmen were not only diminishing in numbers, but in the uncongenial civilisation of the nineteenth century their status was hardly respectable. Even the most detached dreamers were forced to consider some awkward questions concerning the social aspects of the handicraft revival. For instance, would craftsmen ever be accorded the respect that the black-coated "worker," however unworthy or unskilled, could claim? Would a well-to-do father regard, except with dismay, the decision of his son to become a mason, a cabinet maker, or a smith? It was sufficiently agonising for the Victorian father when a son announced his intention of becoming a painter, a musician, or an author, although such creative activities occasionally redeemed their disrepute by proving lucrative; but the rewards were uncertain, and could only be earned by leading a loose, unwholesome life, without regular office hours. If the true wishes of most parents were scrutinised, it would be found that the earning of money and much of it, was the end to which they felt all careers should be directed. How then would it be possible, save under some communistic system where rewards for all activities were equalised, for a father to take pride in the talent of his son when that talent was ably directed to a humble end?

Faced with such questions, Morris's conversion to the simple socialism of the eighties and nineties naturally followed. But the social revolution which seemed to promising, and so near, was spending its force in battles concerned with conditions of work rather than with the work itself, with the scale of payment per hour, and the number of hours to be worked in the day and the week, and such-like questions, while the finest reward for all work, true pride in it, was never discussed, perhaps never considered. The crafts, as Morris knew them and loved them and practised them, were being hurried into oblivion. Only the monkey gland injection of amateur interest could extend their life; and Morris must have shrunk from the vision of the venerated figure of the craftsman surrounded in his old age by people who had "taken up" craftsmanship as a hobby. Those carefully "colourful" people, who dabbled in everything from pokerwork to sewing beads on slippers and punching heart-shaped patterns out of copper plates for the enrichment of their furniture, were impossible as trustees for the country's handicrafts. Morris never suspected the existence of the new craftsman, the man who understood what the machine could do if it was wisely used, and who was prepared to make it do its wonderful best if only he got the chance. Morris's teaching went so far awry

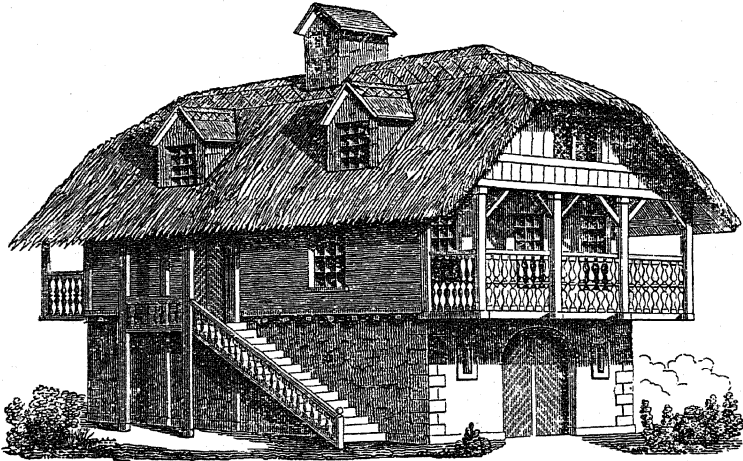
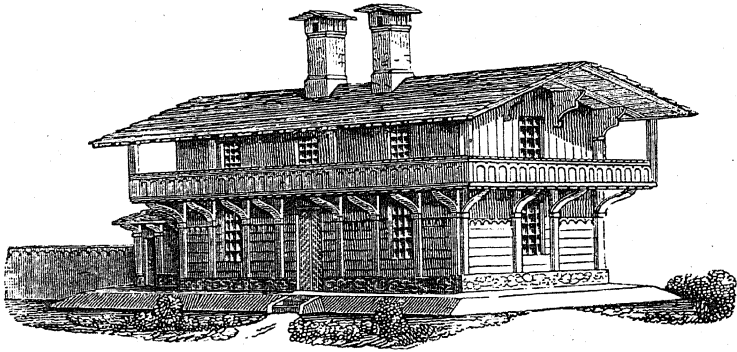


THE BATTLEMENTS OF BRITAIN III.

Shugborough Park tunnel, on the Trent Valley Railway. From *Our Iron Roads*, by Frederick S. Williams, who, writing in 1852, said that the entrances to tunnels "should be massive, to be suitable as approaches to works presenting the appearance of gloom, solidity, and strength." He praised this example of tunnel architecture, with its towers and battlements. Certainly the Gothic Revival took builders into some queer, archaic byways.

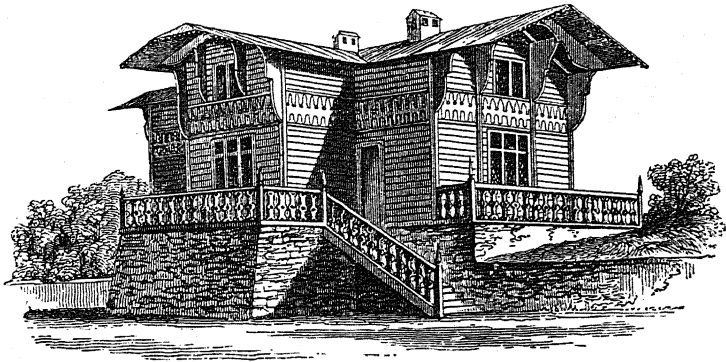
that the machine-craftsman was condemned to practise imitation for another generation, except in those fields of production where the absence of hand-made prototypes allowed him to originate new forms.

MEN AND BUILDINGS

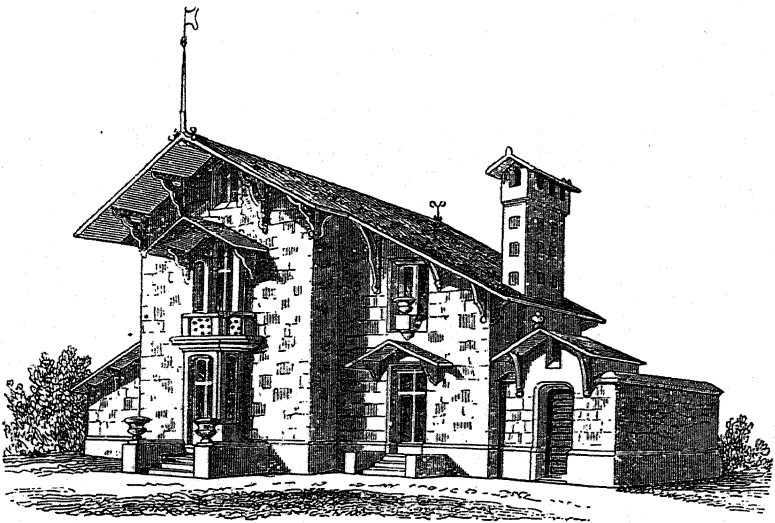


The speculative builder of the twentieth century who erects suburban "villas" in a sort of Swiss-Tudor style, may never have heard of J. C. Loudon and his *Encyclopaedia*, but in the pages of the original edition of 1833, and in the supplement which was added to the edition of 1846, Swiss dwellings are illustrated and described. Above is a cottage dwelling "in the Swiss style, for a Married couple and family": below is "A Cottage Dwelling in the German Swiss style for a man and his family." Both of these are from the 1833 edition. Although he illustrated them, Mr. Loudon thought poorly of wooden buildings and said so: the design at the top of this page provoking him to say that he would "by no means, recommend this style for any country." All the same, Loudon's pictures were copied: perhaps the text was ignored.

BACK TO THE HAND

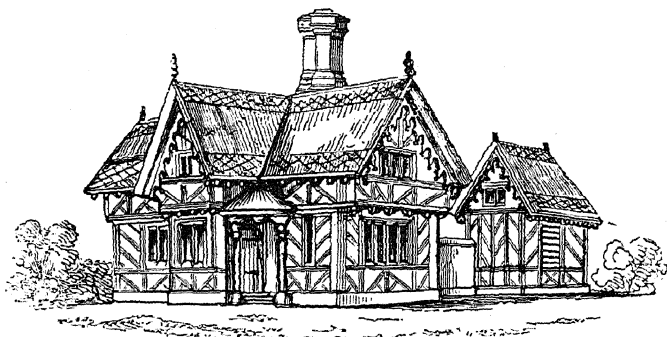


A Gate-Lodge, combining a Stable, in the Swiss style, by R. Varden, included in the supplement of the 1846 edition of Loudon's *Encyclopaedia*.



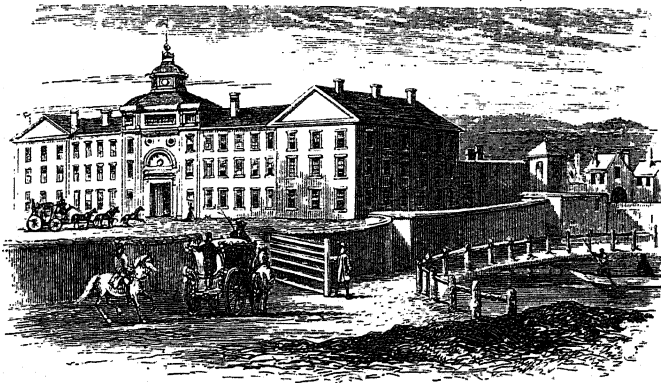
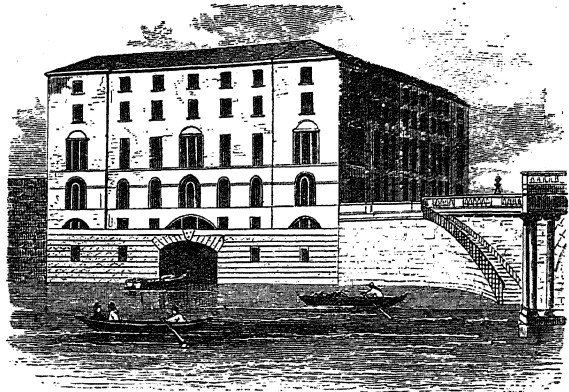
A villa in the Swiss Style designed by E. B. Lamb, F.I.B.A., for Mr. John Murray, and included in the supplement of the 1846 edition of Loudon's *Encyclopaedia*. Although that edition appeared after Mr. Loudon's death, his widow states in the preface that the supplement was largely prepared before his death. He had, in the interval since 1833 when the first edition appeared, changed his mind about Swiss designs, for in this supplement he says in connection with the Gate House and Stable shown above: "It is quite unnecessary for me to offer any remarks on the strong and picturesque character of the Swiss style of architecture. . . ." He regretted that it was "not more frequently adopted. . . ."

MEN AND BUILDINGS

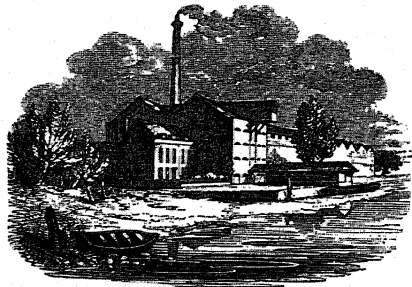


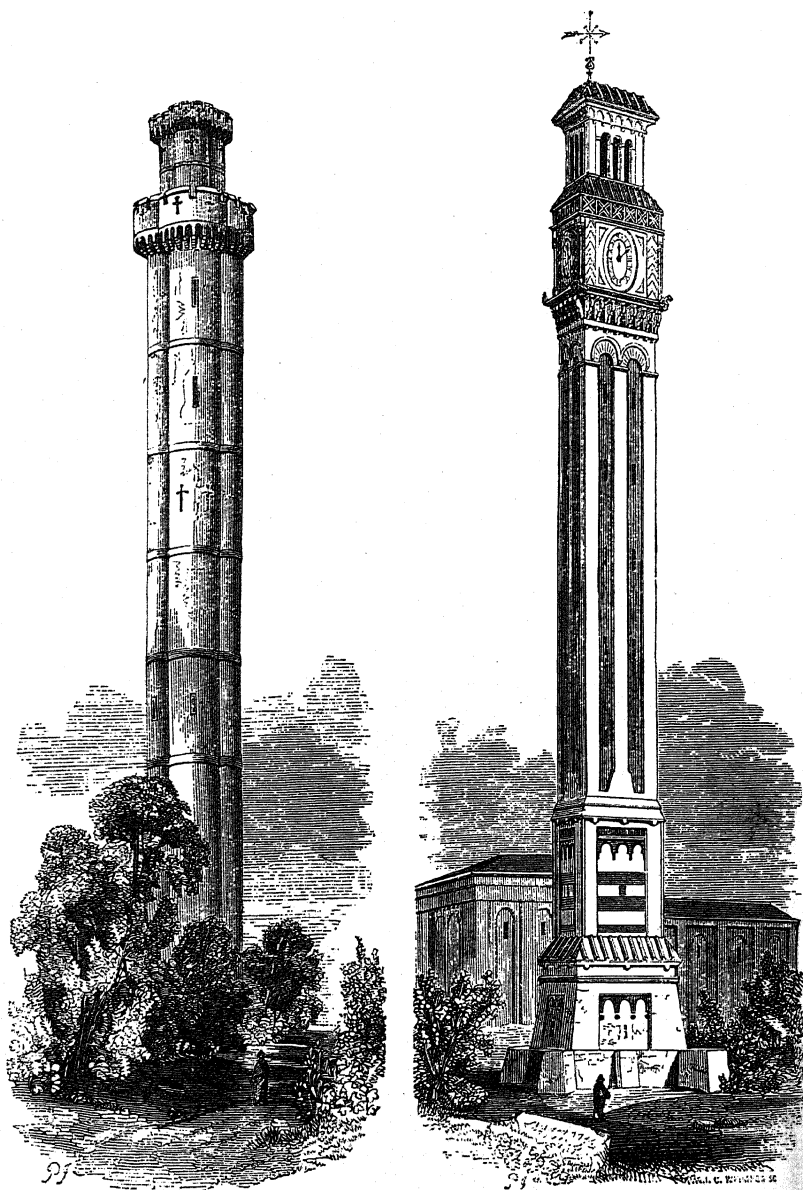
The characteristic architecture of the nineteenth century might have been inspired by the railways : and some of the great terminus stations achieved a majestic individuality : but the smaller railway buildings, the country stations, often suffered from an architect having paid too much attention to the patterns of the ubiquitous Mr Loudon. His *Encyclopaedia of Cottage, Farm and Villa Architecture and Furniture*, was re-issued by his widow in 1846, and included in the supplement the design shown above, for "a cottage with ornamental elevations in the style of the ancient half-timbered Houses of England." Below is Woburn station, described by Frederick S. Williams in *Our Iron Roads* (1852) as "the most picturesque with which the writer is acquainted." Mr. Loudon's England was certainly of the approved picturesque pattern, according to the illustrations on pages 168, 169, 184, 185, 188 and 189.





Industrial architecture began well in the eighteenth century, as the two examples shown above prove. Top : the Albion Mills, on the Thames near the south east end of Blackfriars Bridge Centre : the Soho manufactory of Boulton and Watt, Birmingham. But industrial processes were often housed untidily. The tall chimney asserted itself : outbuildings, sheds and dismal piles of junk accumulated. The gardens and villas on the banks of the Thames were replaced by this sort of thing : the distillery at Wandsworth. (From a drawing by G. W. Bonner published in 1832.)





The Victorian solution to the problem of the factory chimney was to disguise it. Let it pretend to be something quite different—a clock tower, a bell tower, a watch tower—and the situation would be saved. Here are two suggestions for treatment, taken from *Designs for Factory, Furnace and other Tall Chimneys*, by R. Rawlinson, C.E., which was enthusiastically reviewed in the *Art Journal* in 1862.

Following Morris's influence on design and decoration came a violent naturalistic movement that was florid without the formal framework that had related the masses of the most ornate baroque ornament. It was Continental; it was free—as free in practice from laws and restraints as anarchists and lunatics are in theory. It acquired the label of "New Art," and it glorified the vegetable kingdom with such copious simulation that the nineteenth century seemed doomed to die in a mangrove swamp. Curving roots straddled everywhere, and from them boughs and blossoms burst upwards with the abnormal fecundity of the plants in H. G. Wells's *Food of the Gods*. "New Art" attained a precarious establishment as a fashion; but its boisterous modernism soon produced a reaction against original design in decoration, in ornament, in anything. All the praise that Ruskin and Morris had given to the work of the past was recalled: most of the wisdom they had uttered about reviving the vital spirit of the crafts was forgotten. Again their teaching became a buttress for the support of taste for the antique.

From one expression of Morris's thoughts and desires arose a school of architectural design that by the end of the century was well grown and purposefully directed by several architects. The Red House, which Philip Webb had built for Morris in the early 'sixties, became a model for the next generation. It appealed to the emotions with its romantic originality, and the materials used by its architect—red brick and red tiles—led to the rediscovery of texture. It bequeathed no harmonies of form to the generation that followed; but it set architects thinking of comfortable associations of materials, embodied in attractive "features," of gables and porches, and bays; not the scholastic stuff of the Gothic revival, but the warm, homely shapes of the simpler early Tudor and Elizabethan buildings. The cottage style developed, and for the architect, domestic building became a delightful exercise in picturesque casualness. The colour and texture of materials were much more important than ornament now: half-timbering, with rough plaster, or brick set in herringbone patterns, between the oak uprights, could produce convincingly artistic and "old world" effects. Roofs could press down their livid load of red tiles almost to the ground in places, for the roof flowed over and down the walls, while a thrusting family of dormers dived up through it, and took unto themselves finials to celebrate their emergence.

Such architects as Norman Shaw applied to buildings conceived upon a larger scale than country houses this remodelled romanticism. Presently New Scotland Yard was to illustrate the revived



“Factory chimneys disfigure our most beautiful vales ; Government preaching-houses, called churches, start up at the cost of a few hundreds each, by the side of Zion chapels, Bethel Meetings, New Connexions and Socialist Halls.” Pugin, in *The True Principles of Pointed or Christian Architecture*, 1841.

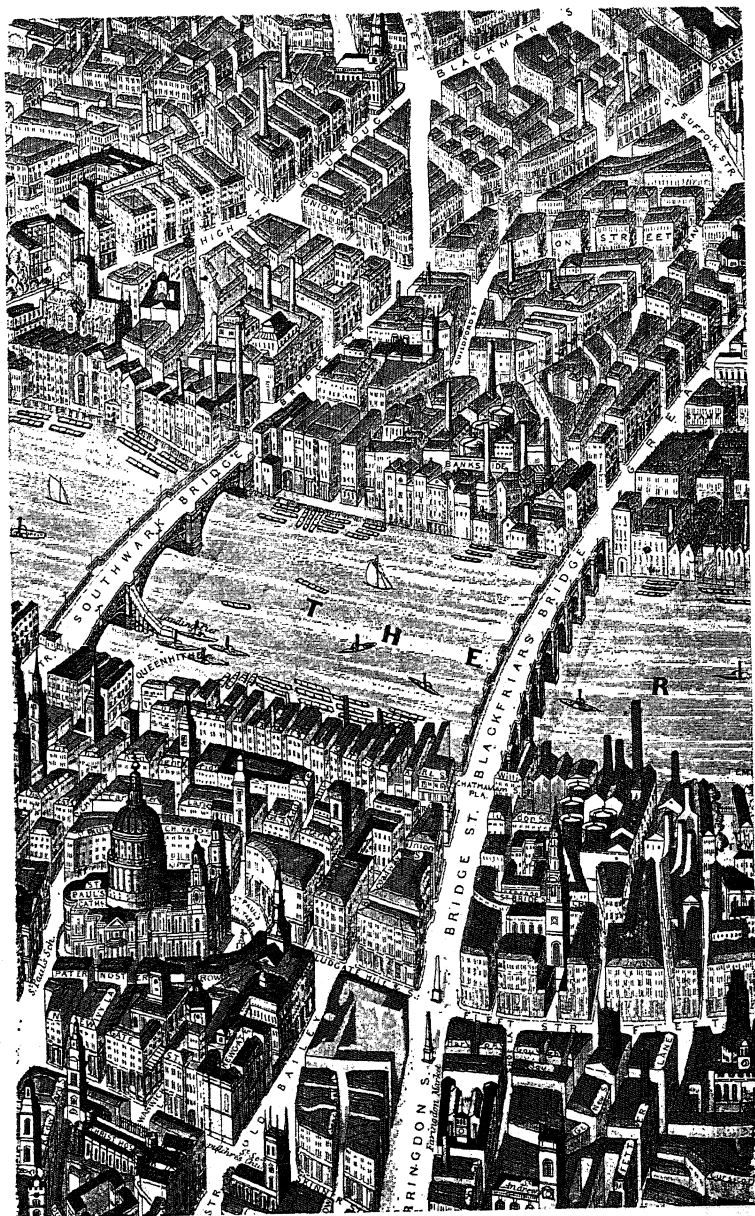
regard for the significance of materials. Whether this regard led architects to study the brick and stone buildings of the late seveneenth and eighteenth centuries so that they appreciated forgotten formal graces, or whether a thoughtless style-mongering in favour of classic architecture had set in, there was certainly distressing evidence of flirtations with classic ideas, generally conducted with an unbecoming Gothic freedom. In the manner of their time, the late Victorian architects gave their minds to detail instead of design. This fresh confounding of confusion was dubbed “Free Classic”; and although some of its earlier exponents repented as they grew older and embraced civilisation, they could not save the modern city from the barbarities of commercial classicism.

Meanwhile, the old, accepted methods of building construction were being melted in the furnaces of the ironmasters. Steel was dissolving stone. The wall was ceasing to support anything, and was changing into the merest gossamer covering for a framework of girders.

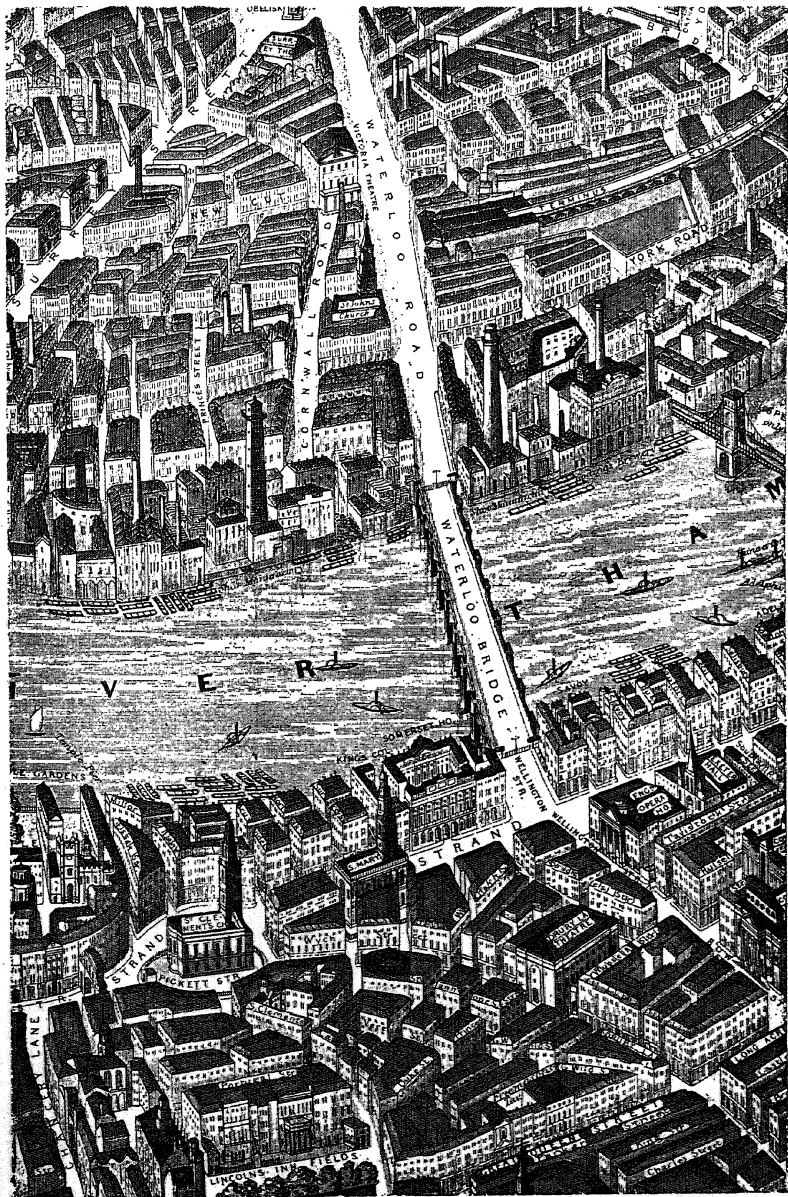
The Gothic Revival had ended: the Structural Revolution had begun.



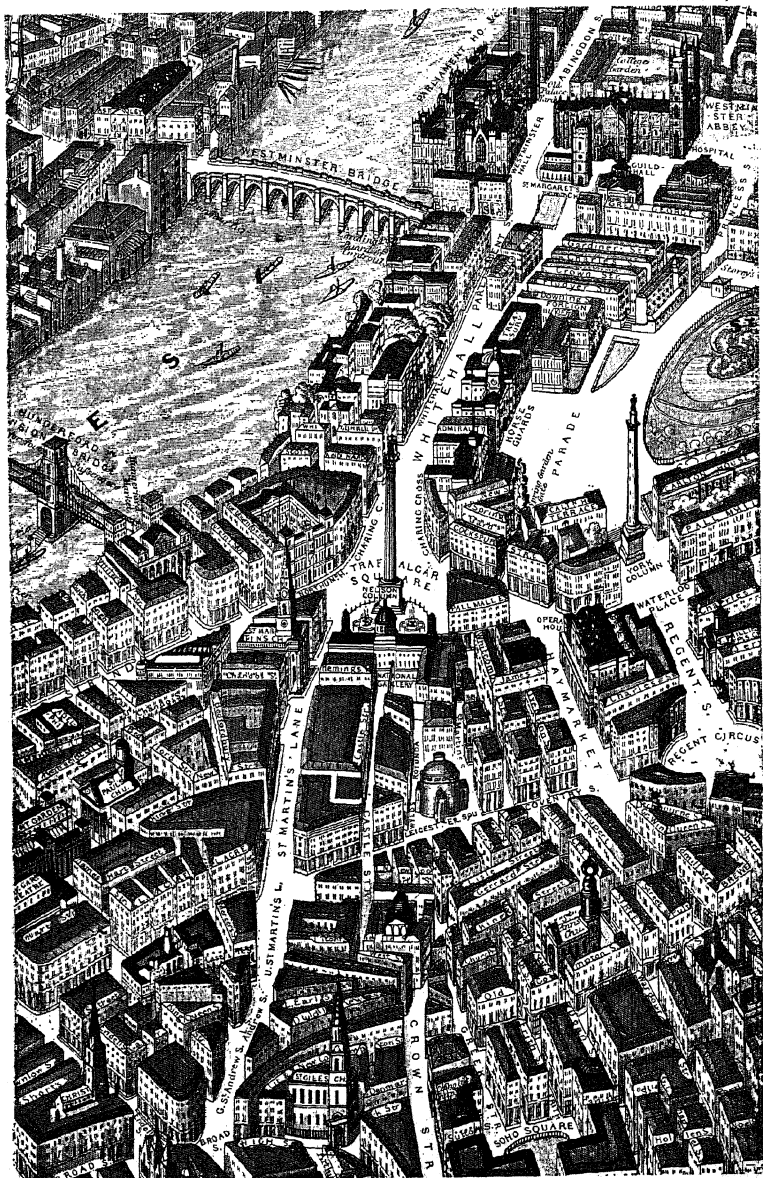
London, which had been a city of spires and towers, was, by the mid-nineteenth century, a city of reeking factory chimneys. Above, and on the three pages that follow, is a balloon view of London, published in 1851, by Banks and Company. Here is the City, west of the Tower and east of St. Paul's.



From St. Paul's along Fleet Street the balloon view continues. Ludgate Hill had not then been crossed by a railway bridge (see pages 106 and 107), and nothing obstructed the view of Wren's cathedral from Ludgate Circus.



From Temple Bar westwards along the Strand, showing part of the Hungerford Suspension Bridge, joining the south bank by the Lion Brewery. The Strand and Fleet Street changed very little during the first half of the nineteenth century. Compare the views on these two pages with those on pages 149 to 154.



From mid-Strand westwards to Regent Circus, as Piccadilly Circus was then called, and Westminster. North of the Thames, the spires are still in command of the architectural situation : but the chimneys have won on the south bank. No wonder Pugin and Ruskin averted their eyes from such spectacles of chaos : unfortunately they looked backwards instead of forwards.

CHAPTER IX

THE STRUCTURAL REVOLUTION AND THE NEW MATERIALS

STEEL AND concrete and standardised fittings have become identified with the civic and industrial architecture of the twentieth century. They have introduced new views about our responsibilities to posterity; they have forced the architect into an unacknowledged partnership with the structural engineer; and they have completed the degradation of the men who work at the job of building, turning them into machine-craftsmen who assemble and rivet the girders that are delivered to the site, drilled, shaped, and cut.

To-day the drawing board is mightier than the trowel.

Putting up the shuttering for concrete and pouring it into the wood mould to set makes little claim upon the individual skill and judgment of the workman. Only in the country can the builder practise as a craftsman, and every day his opportunities are narrowed.

Concrete is still in the experimental stage. Although hailed by the ultra-modernists as the last word in building material, it may give to the future a strangely mixed message about our faith and works. Some buildings that appear to be of a construction proper to concrete, or are given shapes which are supposed to be suggested by its malleable nature, are really brick shells faced with concrete. For example, Joseph Emberton's Empire Hall extension to Olympia in London, is a steel-frame structure with wall panels formed of Fletton brickwork, faced on the street frontage with concrete. Erich Mendelsohn's Einstein Tower at Potsdam is sometimes cited as an example of a brick-built structure that looks like a concrete one, but it was designed for concrete. In the course of its erection after the first world war, there were many difficulties which held up supplies of cement, and as the building proceeded all sorts of materials, including brick, were used to complete the work. A church at Vincennes, Paris, by J. Marast, reverses this method by facing with brick the forms produced by concrete construction. At the village of Silver End, Essex, part of a big housing scheme for

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the employees of the Crittall factories has been completed in white-washed brick in forms originally designed for concrete. Some of the Silver End houses were actually built in concrete, including a few outside the housing scheme, designed for directors of the Crittall organisation.

Apart from concrete, there are hundreds of new materials—branded, standardised, and obtainable all over the country—which influence the character of building throughout England. These gifts of organised industry are not always used with discretion; occasionally they are not worth using at all.

Our civilisation has now reached the nervously tactful period which favours the isolation of criticism, as though it were an infectious disease. It may soon be thought too dangerous to vested interests, industrial or bureaucratic, for any criticism to be allowed regarding buildings or the materials of which they are composed. Even now it would involve the printer, publisher, and author of this book in actions for damages, libel, defamation of character—or whatever descriptive term the lawyers selected—if a list was given in this chapter of ugly and unreliable branded materials.

The repression of criticism may extend to every kind of creative activity—a possibility that was playfully acknowledged by Mr Hilaire Belloc when he wrote: "... I have always thought it prudent to throw my novels into the future, lest I should be sent to gaol for insulting the rich."¹

Art may become entangled in the web of mis-statement that sometimes surrounds the products or actions of commerce. If some multiple store concern sees fit to use a cheap imitation of Sienna marble (for instance) for facing its buildings, disfiguring the frontages it owns with an exhibition of the worst possible taste expressed in the stupidest possible way, we cannot expect the Press to allow anybody to tell the truth about the abomination, (a) because the multiple stores would object, and perhaps withdraw their advertising from the papers that published the criticism, and (b) because Uriah Heep Limited, manufacturers of Slipslime Products, which were used for the offending buildings, would also withdraw their advertising, if they did any, and might bring an action for damages.

The Press is only articulate: it is no longer wholly free. Popular newspapers seldom assist an art or a cause unless by so doing, they

¹*The Emerald of Catherine the Great*, p. 241. (Arrowsmith, 1926.)

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can enlarge their circulation or the prestige of their proprietors. Papers under political control are even less helpful. There is neither leadership nor liberty. No pens can turn into shining swords for the sake of truth: those who would wield weapons are ordered to grind axes.

There is an honourable section of the Press, which includes some daily and many weekly papers, and scores of well-edited, influential technical publications.

It was not unreasonable to have hoped that the Press, as it extended its power and touched the thoughts of more and more people, might have helped to make the man in the street conscious of the form of the buildings about him. But the popular Press has made the man in the street walk in the gutter. Art for him is a matter of spicy comments about pictures or stupid ones about sculpture, while architecture usually means churches, and its beauty remains a closed book. As a father said to his small son when showing him the sights of London:

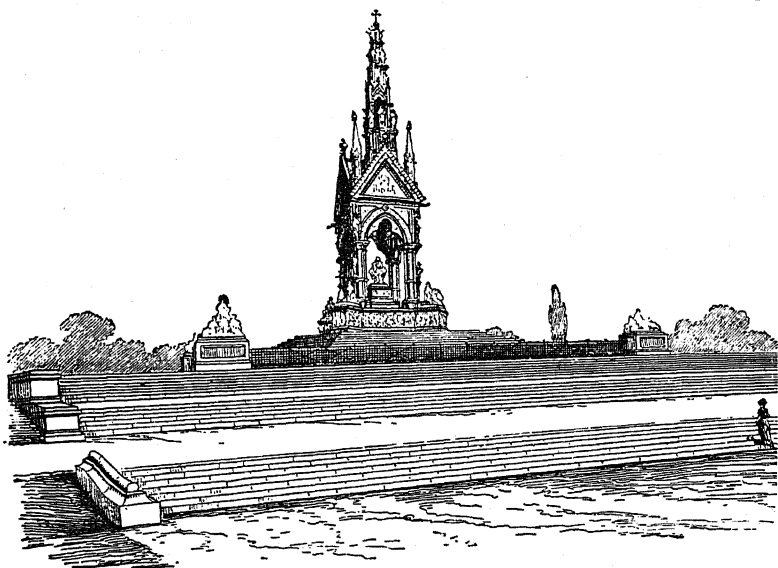
“You’ve been to Westminster Abbey—wot’s the use of going to St. Paul’s? If you’ve seen one you’ve as good as seen the other!”

That Cockney carelessness reveals a tragedy of our times: the blindness to art that is common to all grades of social life. It explains our tolerance of disorder and the monotonous vulgarity of commercial architecture.

Greed designs our modern streets, turning them into gulfs of traffic, shadowed by dead walls. “What rent can we get from this site?” is the first, often the only, thought of those who build in the cities of to-day.

No wonder the streets are unsmiling. Architecture conceived between balance sheets is born dead or feeble-minded; while under bureaucracy, that contraceptive for all creative impulses, architecture is not conceived at all.

The vision of unity that came to the Renaissance architects, when they discovered the significance of the street, has been destroyed by the rampant individualism of the commercial powers that own the sides of it. In London and some other cities a sort of architectural censorship is exercised by municipal authority, or by great landlords, chiefly over such matters as height regulation, and it may sometimes enforce the adoption of a “classic” note for the façades of main thoroughfares. Such restrictions and recommendations could not prevent Nash’s Regent Street from being changed into the dreariest disaster that has ever befallen London. On the steel frames of the buildings in that street of misadventure



HARD-HITTING VICTORIAN CRITICISM

The Albert Memorial, designed by Sir Gilbert Scott, completed in 1872, and criticised by John T. Emmett, in *The British Quarterly Review*, April 1880. The Victorian Gothic style was not opposed only by the protagonists of classic architecture in "the Battle of the Styles": there were other critics, who almost achieved impartiality, and of these John T. Emmett was pungent and almost libellous. Of the monument and the sculpture which adorned it, he wrote as follows: "The monument, above the ground, commences with a large inflation of brick piers and arches, which support long flights of steps and landings, with abutting piers; and when an architectural student totally without ideas starts in design, such piles of steps and piers are his immediate resource. The monument is thus founded, in a way quite unmonumental, on a vast conglomerate of coal cellars and street kerbs.

"As 'steps' are the first refuge for the architectural destitute, so the 'Four Quarters of the Globe' assist the monumental sculptor. They admit of any nonsense; no one can tell assuredly what all the figures mean, or why they came together. Thus they are used unmeaningly, to make a show and catch the eye, with no attempt to satisfy the understanding. Next is the podium, covered with figures just as irrelevant as the 'Four Quarters of the Globe.' In one corner is a group of fancy portraits, named after celebrated ancient master workmen; somewhat interesting, as they represent the carvers, and thus probably the best and most refined idea of the style and manner of the classic architect." [This group is shown at the top of the page opposite.] "These figures are not shown in workmen's dress, nor in heroic fashion without clothes, nor are they actively engaged in handicraft, nor yet 'assigning to the individual workmen their appropriate tasks'; they are a set of weak-limbed, semi-idiotic and half-naked

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lounge, wrapped in sheets, engaged and much perplexed in watching one who, specially insane, is busy in a bungling way with compasses and paper and will surely make a painful puncture in his knee. These ideal architects have nothing of the workman in their figure, muscle, implements, or swaddling clothes. The carver evidently thought with most of his contemporaries, that Greek master workmen were in some way superhuman, beings of pure thought, not working men at all, but absolute creators, who evoked the Parthenon complete from their superior intellects, just as Minerva sprang, all armoured, from the brain of Jove.

"Another corner has a group of modern 'architects of eminence.' The



shrewd, successful, speculating draughtsman, 'clever at a plan,' and the pedantic scholar are appropriately distinguished, while the enthusiastic architectural reformer turns his back upon the pair."

These comments were accompanied by three illustrations which are reproduced on these two pages.

COULD WE BE AS FRANK TO-DAY ABOUT ANYTHING?



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are hung the patterns that were set out in a drawing office. The horizontal lines of each block are preserved, but nearly all the blocks are designed with complete indifference to the fact that they stand in a street faced by other buildings: most of them need a depth of approach ten times the present width of Regent Street.

Everywhere in our surroundings we come across the mute remains of some message from the civilisation of antiquity. We have used our mechanical facilities for a senseless proliferation of ornamental forms which are incorporated in façades without any appreciation of their true decorative character; and this easy reproductive power has sapped our understanding of composition to an extent that would fill any of the Renaissance architects with pitying scorn were they confronted with the incoherences we achieve with our stone-cased steelwork. Obsessed with detail, the designers of these pseudo-classic curtains of stone, which are draped over the girders of office blocks, hotels, and departmental stores, have lost the sense of fitness in the selection of ornament.

Of all ornamental devices used by man, the acanthus leaf has been reproduced more frequently, and, during the last fifty years, used more unimaginatively than any other conventionalised natural form. Between the wars, a lust for "difference", nervously indulged, drove the architectural servants of commerce out of this upright jungle of forms into an old curiosity shop of classical remains, from which assorted junk they contrived to make the most inappropriate selections. An example of this casual looting of ornament is the shop in Regent Street with a row of lions' masks in bronze, with rings depending from their jaws, placed twenty feet or so above the pavement level. Intent upon cutting out and pasting on such scraps of uncomprehended detail, the men who pin their faith as well as their paper to drawing boards seem carelessly incapable of visualising all the practical needs of the things they build, for they leave their skylines in the most unsightly disarray. Tanks, the cowls of chimneys and ventilating shafts, hut-like erections to house apparatus connected with lifts, are placed side by side with pointless inutilities in the form of miniature temples, which might at least excuse their presence by accommodating some of the necessary encumbrances of the modern roof space.

From whatever angle we view it, graciousness has departed from the street. The scale of the modern city has changed. London was once a city of towers: now we must climb to the upper storeys of one of the new office blocks to appreciate that partly submerged grandeur. The towers are still there, but they are screened and

sometimes completely surrounded by offices and warehouses. The air raids of the second world war have revealed more architectural beauties than they destroyed.

Iron has entered into the soul of modern architecture. Steelwork has made it so easy to imitate this, that, or the other—to lift a bit of ornament here, or a “feature” there, and to assemble the borrowed ideas for the elevations by draughtsmanship from which creative thought has been abstracted. Iron has ever been a faithless helper to the architect. When it was used for cramps with masonry it would split and in time destroy the stonework it bound or supported: now, in its modern form of steel, it often destroys something more vital than stonework—the spirit that can make stone live.

The architect has to please his client, and his client may be pleased with such idiocies as a factory dolled up to resemble an Egyptian temple. The architect’s work is nearly always subjected to the scrutiny of men who are, nine hundred and ninety-nine times out of a thousand, completely uneducated in architecture. Their suggestions must be respected, for their money gives them authority in all things, artistic, spiritual, and temporal. They want a splash for that money: something original. “No, no—not *that!*” they protest, when an architect tactlessly takes them at their word; “we’ve never seen anything like *that* before. What we meant was something like Selfridge’s—columns, you know; but done in a new way.” They can have what they want, of course, but what they want is seldom worth having, for they approach the problem of building from the wrong end.

Anything that is built by commercial interests has to be economically justified. A business, quite rightly and properly, has to pay its way; but if it is conducted by men of vision it does not lose its way in architecture. Some basic questions must be asked and answered before a thought is given to design.

How much rent would we have to pay if we wanted to accommodate our staff and our plant, and we did not own the building?

If we invest so much capital in this building shall we see a fair return on it in our saving of rent, our increase in efficiency owing to greater conveniences of planning and arrangement, the advertising value we shall get out of it, and the rents we may collect from letting floor space we don’t want ourselves?

A term of years may be calculated for the building to prove itself as an investment. Beyond that, its life matters little to mere counting-house patrons of architecture. They are often men without vision, and to them figures on paper are all-important, and even

gratifying. So the design of the building becomes incidental, a triviality that may be dealt with in a few words.

"Better get a big man on to this—after all, we're spending nearly a quarter of a million."

"Well, who is there?"

The sensible course would be to arrange a competition for designs, drawing it up in collaboration with the Royal Institute of British Architects, and asking the help of that body in judging the results, a practice frequently adopted for municipal buildings. But the selection of the architect for a new sanctuary of commerce is a tricky affair, which may be influenced by the interests controlling the site, and may finally be decided by the pertinacity of some director whose nephew or son-in-law is an architect; for that matter, every director on the board of the company concerned in building may have a pet architect whose claims are advocated; or the board may play for safety and get their big man.

And how is bigness judged?

Generally by the volume of work an architect has to his credit, or maybe to his discredit, but quantity tells; occasionally because the honour of knighthood has been bestowed upon him. In the latter case the chances of the choice being unfortunate are at least reduced.

This most serious business of selecting an architect is unlit by any familiarity with architecture or the men who create it: the captains of commerce seldom appreciate that architecture is a part of their civilisation. It is as remote from them as it is from the man in the street, and yet it encompasses the men in the street and the men in the board room; it insists upon its presence—vulgar, mediocre, or magnificent, it is unescapable. What are its chances of achieving magnificence if it is only economically justified, and if regard for this status excludes from the mind of a designer his sense of responsibility towards contemporary life and towards posterity? This economic consideration, coupled with a belief that the congested industrialism of to-day is a transient ill, certainly promotes a readiness to build only for the needs of the moment. The character of the new materials and the speed with which modern buildings may be erected have helped to turn our thoughts from the future. Our sense of obligation to posterity becomes modified, and we build without that belief in the desirability of permanence that fortified the creative impulses of the Gothic and Renaissance architects.

We have passed out of the architectural age of faith; and although, as suggested in the first chapter, the true architecture of to-day is as

experimental as Early Gothic, its development is curbed and the advantages of the new materials and structural powers are limited by the unadventurousness of the patronage and the dullness of the aim. Commerce insists on wearing the old clothes of a different order of society. The inappropriate use of materials in the business quarters of the modern city once provoked Professor Sir Charles Reilly's famous question: "Why not thatch our banks?"¹

Why should an insurance office pretend to look like an exaggerated Cotswold manor house, or a departmental store like a Roman temple? These essays in pointless imitation are simple enough with steel to support the folly. Any fool can order such stuff; most of them do; and the results may be seen in the streets of London and all provincial cities. Commerce still shrinks from acknowledging its character. It wants to look like a country gentleman or a clergyman or a Roman patrician, and occasionally combines the costumes of these different characters with marked unsuccess. "Every linen-draper's shop apes to be something after the palace of the Caesars; the mock stone columns are fixed over a front of plate glass to exhibit the astonishing bargains; while low-ticketed goods are hung out over the trophies of war." Thus Pugin, on commercial architecture, in 1841.

More serious even than the ill-behaviour of commercial individualism, which has meant the death of the street, is the obstruction of an intelligent development in England of a building technique for steel and concrete. The new materials are used merely to employ upon a larger scale and with less understanding the classic forms that were revived at the Renaissance. This mechanical copyism is unredeemed by any of the intellectual power or experimental vigour that made the Renaissance not only an age of tremendous re-discovery in architecture, but—in spite of Ruskin's invective—one of fine adventure.

In the United States a new technique has been evolved which suits the new materials; although the skyscrapers of New York were the result, not of a conscious search for a new form of architectural expression, but of the limitations and enormous cost of sites in the business quarters of the island on which the city was built.

After the horizontal rhythms established throughout Western civilisation by the Renaissance, vertical features were regarded largely as agreeable punctuations in composition, chaste and

¹In that able and entertaining book, *Some Architectural Problems of To-day*. (University Press of Liverpool Ltd., 1924.)

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harmonious. The conception of vertical building, from a structural and functional point of view, had been dormant since the last days of Gothic architecture. The possibilities of a revival of this conception were revealed when the Eiffel Tower was built; but the application of that piece of expert engineering to architectural needs was not immediately apparent, although in the year of its completion, 1889, New York's first skyscraper, the ten-storey Tower Building was also finished.

After the early, experimental skyscrapers, the American architects were launched upon a course of building that was much more like a Gothic revival than the romantic antiquarianism of the early nineteenth century, for it was carried out with the same boldness and sense of adventure, the same imaginative acceptance of new ideas, that were present when the finest mediaeval churches were built. Stuart Chase, in *Men and Machines*, does well to remind us that "The early skyscrapers were imposing by virtue of their size, but hardly for their surfaces. The architect had not learned to come to terms with the engineer. He scrawled them over with cornices, columns, bad Gothic and worse Byzantine."¹

The intention of the new architecture differed vastly from the work of the Middle Ages, and the restrictions of the sites were strange; but the result, first condemned as hideous by those who were still thinking horizontally (or archaically if they were under the spell of Ruskin and Morris), was a cluster of glorious towers, unlike anything else in the world. Those towers have brought an entirely new idea of the city into being, and they have given commerce an architecture as distinctive as that created by the mediaeval builders for the service of religion.

America has sketched out the possibility of concentrating social and commercial life vertically instead of spreading it over vast areas. The commercial application of this idea is examined with eagerness by that hot gossamer of functionalism, M. Le Corbusier, in *The City of To-Morrow*—an exciting book whose author mistakes enthusiasm for argument. So far, this idea of vertical concentration, which steelwork and lifts have rendered possible, has spread only to the business quarters of American cities, and the presence of several enormously tall buildings in a fairly small area has created an unsolved traffic problem, and has turned streets into sunless valleys, drowning thousands of apartments and offices in shadow

¹Chapter XIII, p. 245.

throughout the day. The latter difficulty has been partly dispelled by zoning regulations, and from this progressive reduction of the area of the upper storeys of tall buildings the new architecture gains fresh forms. The tower now ascends in a series of steps from its huge plinth of ten or more storeys; its bold outlines minimise the details of its surface; and it suggests sculptured masses, assembled in effortless harmony.

These buildings remain individual; they are not part of a city, being in themselves miniature cities. The street has not only been killed in an aesthetic sense; it has been buried and forgotten. The modern town might well consist of one great building; the village of to-morrow of a single tower. This would be a logical development, and in England it would certainly release the land from the sprawling planless muddle of speculative building, bungaloids, and other growths; but it is rather inhuman. Individualism is not the prerogative of commerce; it is enthroned in every little fenced suburban garden, in every walled estate, in every house and flat and room that is rented or owned by an Englishman. The individualism of a people, the quality that gives them individual character, is braver and better than the wilful disregard of everything that stands in the way of apparent success, which is the extreme to which both commercial individualism and socialist planned economy are sometimes taken.

Now that architectural direction has passed from the educated aristocracy and the deeply respectful and imitative trading class of the Stuart and Georgian periods, the existence of good taste among a group of capable architects has little effect upon the general standards of building in town and country. The conditions prevailing in that great age of urbane and beautiful architecture, the eighteenth century, cannot be recalled. The individualism of the English character, which was diverted from general and popular expression in building by the Renaissance, was unchained in the nineteenth century, and encouraged by those ardent reactionaries, John Ruskin and William Morris. All the gifts of modern industry—the new materials and the convenient standardised fittings—have been misused in the service of a spurious romanticism; and English residential areas are desolate with stucco, sham half-timbering, stained glass, and such like gimcrackery. It satisfies individualism, no doubt, but it butchers any civic or rural serenity. The influence of the architect is often confined to the example set by his work, and in a modern suburb the only thing he has the opportunity of designing may be a bank, for banks have the best architectural manners,

and are good though conventional patrons of building. The speculative builder does the shops and the streets of "villa residences," and even embarks upon a little casual town planning in collaboration with the local authorities, whose anxiety for the amenities of their district was, between the wars, generally restricted to questions of drainage.

The garden suburb that is planned by an architect is an advance upon the chaos of ribbon development and the patch-as-patch-can schemes which are devised to secure the maximum rental or house sales from a site; but it is an improvement rather than an effectual solution. It is wasteful; it devours large tracts of country that could be preserved to surround a more compact housing plan with an agricultural and wooded belt; its expansion is a threat to the countryside, for as it grows its chances of merging with the expanding suburbs of other towns are increased, and between these widening lakes of urban building the fields and woods of England are squeezed into meagre islands.

The creation of satellite towns about London and other big commercial and industrial centres might revive the benefits of coherent planning: perhaps the placid unity of the Georgian market town could be conferred upon such modern growths if they were designed by one architect or by a small group of architects working in partnership. Unity is possible when there is a common building tradition. It is achieved without effort, being to some extent a consequence of a common outlook on design, appropriately expressed by the use of local materials. Even when the outlook on design varies, the use of local materials guarantees a certain degree of harmony, as exemplified by the broad High Street of Chipping Campden in Gloucestershire, where the texture and colour of Cotswold stone unites five hundred years of domestic architecture, and fourteenth, fifteenth, sixteenth, seventeenth and eighteenth century buildings blend their differences of form in the warm tones of a lovely and lasting material. The upright Gothic house of William Grevel, the great wool merchant who died in 1401, adorns the High Street, with its fine Perpendicular bay window, and enjoys an intimate relationship to the work of builders who fashioned stone in Campden ten generations later. Even as late as the nineteen twenties there were masons in this part of England who, left to themselves, shaped stone into forms that were Early Tudor in character. This they did naturally, for they had no veneer of sentimental antiquarianism, and they carved and cut and built as their fathers and grandfathers did before them, their family business

forming the channel through which a Gothic tradition still flowed untainted from its mediaeval source.

The stone building tradition of the Cotswolds is an expressive human tradition, founded and maintained by craftsmen, and wholly independent of drawing boards. The houses seem to be a part of the earth; they crouch comfortably rather than stand, and the impression of low length is strengthened by the placing of the windows—they nestle up into a gable as part of it; dormers sit low on the eaves as if seeking the support of the wall below. The chimneys rise out of the ridge with a comfortable suggestion of supporting the roof. The windows of these houses indicate the Cotswold builder's curious immunity from change. In the villages and larger houses the double square sash was occasionally introduced in the eighteenth century, but in the countryside the small leaded casements with their stout chamfered mullions are still employed.

"It is one of the privileges that the Cotswolds to this day enjoy that they have, more fortunately than other parts of England, escaped the defilement of the Industrial Revolution.

"And thus it comes that we have preserved for us still in a fairly healthy state in and around Campden such crafts as walling, stone dressing, lead glazing, thatching, slatting, and wattling—crafts often handed down from father to son, and understood in the sense in which the more advanced of modern schools of craft are seeking to teach them. That is to say, with some quality of traditional design felt by the craftsman as being a part of the craft, and not relegated to an eclectic architect or a landlord building 'en amateur,' as a matter with which the workman has no concern or of which he has no understanding. No one with any sentiment for beauty or fitness can to this day pass down Campden High Street, perhaps the loveliest thing of its kind in England, without a sense that on the whole the local craftsman, even into our own time, has felt this too. His work is not so good as the work he often repairs or replaces, but if he is left alone, he makes no flagrant error of taste and still works with some sense of reverence and conservatism."¹

Thus wrote Mr. C. R. Ashbee in 1905, and there has been little change in that High Street since then. Campden and a few other places in England are isolated survivals, where a tradition has been

¹Quoted from Mr. Ashbee's study of the old sports of Campden and the village community of Weston, which formed an introduction to the Weston Subedge field account book for the final twenty-six years of the famous Cotswold games, which was published in 1905.

accidentally perpetuated. There is no common building tradition to guarantee unity to the streets of the modern town, suburb, or village.

In the past, local materials have been used for economic reasons. Cotswold houses have been built of stone since Roman times, because stone could easily be quarried and worked. Even when bricks were in common use elsewhere in the country, as in the Romano-British and Georgian periods, it was cheaper to use limestone from local quarries. But cheap transport, the new branded and advertised materials, and standardised fittings, have eliminated the geographical factor in domestic architecture, so that local traditions of building presently die out, and the view from any English hilltop becomes ulcerated with patent composition roofings, cements, boards—the whole output of the great, blind, industrial machine when it serves the building trade.

In fairness to industry, it should be stated that the building trade does not, generally speaking, know how to make the best use of industrial products. The bad speculative builder misuses nearly everything: the site, the materials, and his skill (if any). There are a few good and competent speculative builders; but not enough. The other sort—the jerry builders—have, for over a century, established a reign of error unparalleled in the history of domestic architecture.

The solution of the problem which the new building materials provides does not lie in the repudiation of those materials, but in the exploration of the most appropriate ways of using the best of them.

CHAPTER X

PENALTIES OF STANDARDISATION

IN ENGLAND many people still persist in thinking of Americans as vulgar children, and in the armour-plated intolerance of this belief refuse to discuss what contribution, if any, the United States is making to Western civilisation. To those people America is still the uncouth place that Martin Chuzzlewit found so disgusting. Even more exasperating are the Americomaniacs, the enthusiasts for American methods, all methods, any methods (with the possible exception of police methods), so long as they are adopted in the U.S.A.

But there are basic differences which separate the two peoples; and some of them are disclosed in the way work is tackled, perhaps more vividly than in any other department of life.

The Englishman resents the destruction of his interest in work. Many years before he became Archbishop of Canterbury, William Temple analysed industrial unrest in his essay, *Mens Creatrix*, and in the course of a penetrating examination of the causes of labour's discontent, suggested that ". . . what really galls is not so much the small proportion of the results of industry allotted as the reward of labour, but rather the sense that the employees are treated as 'hands' and not as 'persons,' so far as the industry is concerned. Their personality apparently is for their leisure time; only their productive utility counts in industry itself."

The American does not appear to resent the disappearance of interest from work that brings in dollars. Henry Ford said that "the jobs where it is necessary to put in mind as well as muscle have very few takers . . . we always need men who like a job because it is difficult. The average worker, I am sorry to say, wants a job in which he does not have to put forth much physical exertion . . . above all, he wants a job in which he does not have to think." The American workman lives for his leisure, for his radio and joy-riding, and movies; he is a prosperous individualist who probably owns his house as well as a car; but he is often an individualist without individuality. He is a standardised man, with standardised beliefs and standardised pleasures.

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The American accepts the implications of "love thy neighbour as thyself" with the same inert approval of the European, but adds thereto: "and be as like unto him as possible," and takes that addition with profound seriousness. This state of, or rather absence of, mind, leads to the worship of standardisation for its own sake.

Henry Ford in two careless sentences, deals with the destruction of individuality in clothes, and incidentally wrecks the whole delicate edifice of personal taste and judgment. Trampling over the ruins, he talks confidently of the valuable experience enjoyed by the tailor who plans mass production schemes. "Some men would rather have their clothing made than buy it ready made . . . although with the present-day ability to fit anyone in ready-mades, there seems to be no absolute necessity for going to a tailor. Why should not the manufacturer who makes thousands of overcoats be in a better position to give you just the right coat than the man who makes comparatively few to order, and then mostly in the way the customer directs instead of in the way that the tailor's experience has taught to be best?"¹ Standard patterns restrain personal taste in a score of directions, and the one-hundred-per-cent American, relieved of the exhausting need for thought about choosing the right thing, can devote his intellect to tabloid forms of self-improvement . . . twenty-minute chats on "culture" by a paid expert after a rotary club luncheon, for instance. The obliteration of individuality by unwise extensions of standardisation has made personality in America a very valuable possession. It is something to be cultivated as carefully as a rare plant, grown under glass. It may be variously expressed, preferably not in conduct, but certainly in building. The expression of struggling personality in architecture bursts out all over the United States. Here, in England, we only see illustrations of the best work of American architects; the zoned towers of concrete, glass, and steel; or some piece of splendidly conceived and expertly dramatised design by Frank Lloyd Wright; or, upon a more sober note, the domestic building that continues with appropriate amplification the old Colonial traditions.

We seldom see reproduced the thousand and one eccentricities created by the desire for "personality." There are suburbs to some American cities where every house boasts some grotesque rendering of an historic prototype, expressive of the owner's agonised anxiety

¹*To-day and To-morrow*, Chapter XXII, p. 245. (New York: Doubleday, Page and Co., 1926.)

to be different at all costs from his neighbours, except in the matter of thoughts, reading, amusements, and general outlook on life.

This rebellion against large-scale standardisation is, unfortunately for America, only articulate in architecture. The repression of personality by the social organisation and by the methods of industrial production is making the one-hundred-per-cent American incapable of creative work or thought; and that degenerate condition may in time produce a complete dependence upon other nations for skilled craftsmen, designers, and artists.

During the nineteen twenties, Edsel Ford, son of the famous Henry Ford, decided to build himself a house near Detroit. His taste in architecture was agreeably influenced by his memories of the Cotswolds and of the stone buildings that seem to grow as naturally and easily and graciously in that pleasant countryside as the patches of woodland that diversify its smooth hills and rich valleys. He wanted his house to be externally a Cotswold house, and although he did not contemplate any spectacular piece of uprooting and transplanting, he wanted the place to look authentic. Some Americans would have pulled down half a dozen Cotswold buildings and reconstructed them in accordance with the cultural and hygienic needs of their country, making for themselves some passably interesting piece of stage scenery which they could refer to as "old world," or "quaint."

Mr. Edsel Ford analysed the character of Cotswold buildings, and his analysis revealed the special significance of a roof covered with stone slates. No doubt other matters were also made clear, such as the proportion of windows; but the importance of the roof was impressed upon the architects, who were charged with keeping their client's experiment in imitation within the bounds of aesthetic rectitude.

It was decided to import stone slates from the Cotswolds. Thousands of slates were needed, and the bulk of them was new, for it was impossible to get enough old slates. Their shipment was difficult; for owing to various regulations (mainly in connection with cattle disease restriction) hay or straw packing could not be used. Ultimately, they were packed in boxes, like a consignment of glass or china.

Then another problem loomed up. It was one thing to import genuine Cotswold stone slates, but quite another to get one-hundred-per-cent American workmen to fix them, so that the right character was imparted to the building. Somebody suggested importing a

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genuine Cotswold slater to supervise the work; and so it came about that Mr. H. J. Gooding, of Stow-on-the-Wold, left England on the *Leviathan* to spend several months in Detroit, practising a craft that was unknown in America.

Now we are so afflicted with views about America by professional writers who are anxious to say witty and faintly disparaging things, and by some men of commerce who see in American methods something worthy of imitation, and who therefore praise everything blindly, that the views of a craftsman whose chief concerns are stone and common sense have a refreshing clarity, as well as technical interest. It was to obtain that honest, unprejudiced commentary on American methods (particularly building methods) that I sought out Mr. Gooding. He was run to earth (or rather to roof, for he was fixing tiles on a new house) near Stow-on-the-Wold, and he good-naturedly allowed himself to be interviewed.

Mr. Gooding was born in Stow, and has been a slater for twenty-seven years.¹ (*Slater* in the West Country is pronounced to rhyme with *hatter*.) He began to pick up the craft by carrying slates as a boy, being entrusted, when the older hands sought occasional refreshment, with the fixing of so many slates before they returned.

"And if you did it wrong you got clumped over the ear," he said, and added that this method of tuition had its advantages, for you learned the trade thoroughly.

He became versed in the art of putting in a stone valley, for when the upper surfaces of two adjacent roofs meet and form a hollow, this is described as a "valley." It may be formed by the junction of stone slates, or it may be formed of lead. The modern way is to put in lead valleys, adopted largely because "architects ask for lead valleys," though why they should if they have ever had the opportunity of seeing the stone valleys in an old Cotswold roof is inexplicable.

In brief, Mr Gooding became a master of his craft, and was in every way worthy of representing it in the United States. He enjoyed his voyage to New York, and took a set of his tools with him. He was subjected to a cross-examination regarding those tools when he landed, and the authorities decided to accommodate him on Ellis Island until they were easier in mind about his visit.

¹This interview took place in 1928, and was published in the *Architects' Journal*, January 9, 1929, pp. 44, 46.

He was only there for a day, and they treated him in much the same way as he was treated in the Army, which is perhaps a compliment to Ellis Island. When he was released, he went to Detroit, where he spent four idle days until a permit came from Washington allowing him to work.

The tools he had brought out were copied, and he started work on the roof with a gang of seventeen men. This gang consisted of Germans, Austrians, one Belgian, one Englishman, and two coons (Mr Gooding's Americanism is used here); all intelligent men boasting some skill, and all of them American citizens. A skilled slater earns a dollar and a quarter an hour, working eight hours a day and being paid for nine hours, and moreover drawing a daily allowance of thirty-five cents for petrol. Every workman (coons included) has a car, and with every big building job adequate provision must be made for a car park. Most of the men on this job owned Buicks.

An unskilled workman gets sixty cents an hour. There is no piece-work; but high wages encourage big output, and slackness in output is corrected by the almost extravagant use of foremen. "Real hustlers they are," said Mr Gooding, adding that if there were only two men at work there would be a foreman over them.

Every facility was arranged for Mr Gooding to give his best to the work; he was relieved of all possible anxiety, and his comfort was agreeably secured. He stayed at Goose Point in a private house (the property of a millionaire's head gardener), and he was driven by a chauffeur in a Nash two-seater a distance of six miles in time to start work at 7.30 every morning, and collected again in the late afternoon. His life was insured for a substantial sum during the term of his employment, so that his family would have received an income had some accident befallen him.

He soon had his gang working with some degree of skill. The roof he had to deal with, instead of having battens and torching (which is the process of pointing or filling with mortar the spaces between the underside of the tiles and the laths on the inside of a roof), was boarded on the rafters, with Rubberoid superimposed, and horizontal members over the Rubberoid to take the slates. The slates were copper nailed, as distinct from the old method of using oak pegs, and were filled in with cement mortar. A copper soaker was used at the junctions between slating and walling. Mr Gooding took out some zinc nails with him; and very hard unbendable copper nails of a similar pattern were specially made in Cleveland for the job.

The house he described as "a reinforced concrete shell veneered with stone." Corrugated zinc ties were built out from the concrete to link up with the sandstone facing. But Mr. Gooding's description is sufficiently illuminating.

In speaking of methods and men, he said that there were no coloured drawings on the job: only blueprints to a large scale. "They don't get the education in this country to be able to read a blueprint," Mr Gooding remarked; "in America the men do understand blueprints, and they get more opportunities of studying them."

He found that the men were a friendly lot; but they took no interest in their job outside the dollar end of it. They only wanted to get off home after their bootleggers. (All this occurred during the disastrous experiment of Prohibition. I learned, incidentally, that Canadian beer was very poor stuff, and that the whisky was tried only once by Englishmen who had prospects of returning to their native land, the reason being that it tasted like methylated spirit.) Generally speaking, the working man's home in the States is infinitely better than it is in England. Nearly every man has either bought his home or is in process of buying it on the hire-purchase system. All workmen have cars; and they give little dinner parties and dances to each other's families, such proceedings being enlivened with radio and gramophone music. All the same, Detroit has its slums.

Elaborate arrangements are made for the comfort of men working on a big building job. A big dining hall is erected with separate rooms for supervisors, foremen, tradesmen, and general labourers. There are stores where food can be bought and prepared. "But it was roughish cooking," said Mr. Gooding. "All tinned stuff, too. Bacon—I always thought it was Chinese bacon; no flavour at all; just like the bacon we had in the Army!"

Americans are pathetically uncritical, no matter to what station in life it has pleased profit to call them. Mr. Gooding had to contend with souvenir hunters, thirsting for loot at the thought of real, sure-enough stone slates from old England. One lady (a judge's wife, apparently) collected enough broken scraps of slate to have made up into a hearth in her dining room.

The American, according to Mr. Gooding, is "a (slightly qualified) swanker." "They think that England's finished, and they tell you dam' straight that they won the war." (This was particularly amusing to Mr. Gooding, who was engaged in the first world war during the years when the saloons of America displayed the famous

notice: "Nix on the War Gag.") "But they can't compete with the Englishman for quality," said Mr. Gooding.

Where thought is needed, where skill is called for, the American passes quietly by, and leaves the work to older and wiser nations. This was illustrated by the fact that on this house, built for the son of the high priest of standardisation, the man in charge of all the stonework was by birth a Scotsman. The foreman stonecutter (or banker mason to use the English term) was a Lancashire man; the foreman carpenter was a man of Devon; and the foreman electrician also had his origin in the failing British Empire, for he was a Canadian.

Mr. Gooding enjoyed his experience. He said that he would go again like a shot on the same terms. He liked his employers, and throughout the interview his loyalty to them was unimpeachable; in fact, he only consented to be interviewed on condition that no details regarding the planning or arrangement of the house were expected or asked for. The condition was faithfully observed.

Mr. Gooding profited personally by his glimpse of life and work in America. He saw something that we do not see, and that the writers of books in praise or blame of American architecture and civilisation do not see either. He saw that work in the States could not be carried on without injections of talent from the countries where men are bred who can think and act for themselves. His views were of value, for they were the straightforward impressions of a craftsman who had no concern with literary effects, who was not interested in propaganda work for American methods, and who was unaffected by the archaic animosity which, at that time, certain reactionary conservatives displayed towards the U.S.A.

He disclosed the logical result of unrestrained standardisation in methods and in the production of goods—namely a famine of skill. The common American conception of success is perhaps the saddest thing that has ever occurred in Christendom, and the dollar urge displaces the pride and power that work well and thoughtfully done for its own sake can give to a people. Creative will withers when greed is exalted. The magnificent experimental genius of the United States in architecture may degenerate. Already the worship of imitation has been responsible for all kinds of queer exaggerated borrowings—railway stations that are enormous enlargements of Roman baths, for example. But America is certainly not the only sinner in promiscuous imitation. Every country in Europe has its crimes to show. Even in Vienna, the traditional centre of taste in art and all matters concerned with design, the

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Nordbahnhof is built in the Moorish style: a railway station apeing a Moorish palace is wonderfully idiotic, though in the nineteenth century that was not apparent.

Will the twentieth century see a return to copyism? Will American architects continue to sin in antique ways to oblige their plutocratic patrons who cannot eject from their minds the "charm" of the ruins they "did" during their European tours? Must Roman and Gothic and Byzantine rags continue to hang ridiculously from the steel towers of modern America, or will designers be allowed to experiment with other ways of humanising this superb adventure in architecture?

CHAPTER XI

MODERNISM AND THE INHUMANISTS

THE STRUCTURAL revolution and the speed with which modern buildings are erected have curtailed the architect's power of reconsidering his design as it rises from its foundations. His drawing board conception is quickly imprisoned by the steel cage that the structural engineers have worked out with mathematical precision and which was ordered from an ironmaster even before the site was cleared. So when the modern architect builds upon a big scale, he has no chance of "trying out" an idea, or of making modifications or improvements, apart from the superficial variation of surface details. The often admirable second thoughts of such masters of composition as Wren and Vanbrugh would have been lost in the twentieth century. Few buildings in modern Europe have stimulated the invention of their designers in the course of their growth.

A famous exception is Ragnar Ostburg's City Hall at Stockholm, which was built under happier conditions than those usually produced by the patronage of commerce. The architect was able to mobilise the services of various craftsmen, and worked with them in making that monument of civic dignity; a method which gave substance to William Morris's dream of craftsmen working in a band led by a great master, and perhaps the last European example of collective craftsmanship serving architecture.

Sweden until the nineteen thirties, preserved a living tradition of fine building, and it seemed that the spirit of the Renaissance, in alliance with the spirit of the Middle Ages, still directed the thoughts of her architects. They appreciated texture. They understood composition. They had the social sense of building. They had also a great reserve of technical and artistic ability to draw upon; for all the Swedish crafts were and are healthy and richly inventive. But the rather severe consequences of the structural revolution overtook Sweden, and the 1930 Stockholm Exhibition indicated the beginning of perplexity in design. An earlier example of Sweden's national genius for design, the Gothenburg Exhibition

of 1923, suggested that everything that was excellent in the past had been grafted on to the new growths of modern civilisation. Traditional shapes were handled with a complete disrespect for standardised classical patterns, but with a rich endowment of the understanding that can create memorable harmonies of form. The designers of the Gothenburg Exhibition buildings, and of the Stockholm City Hall, appreciated the truth that Mr. Trystan Edwards has aptly stated: "Design can never be an affair of rules, for it is a philosophical activity which is concerned only with principles."¹

Since 1923, when the occasion of the Gothenburg Exhibition revealed for the first time to many English designers the character of contemporary Swedish architecture, Sweden has displayed to our eyes a soothing picture of a civilisation with a Renaissance mentality and a mediaeval competence in arts and crafts, that was absorbing industrialism, and using and controlling machine-craft with a proper sense of proportion. No nation is better equipped by education or inclination for the humanistic control of the structural revolution and the new building materials; and it is to be hoped that Sweden and her architects will never be stampeded into accepting bleak German or slick French solutions of a problem of architectural adjustment that she could solve supremely well in her own way.

"We shall not be able to humanise steel-frame or reinforced concrete construction and make buildings in these or in any future material, logical and graceful, by any other essential process than that by which the Greeks long ago humanised marble masonry. We shall have to penetrate, as they did, to the roots of the problem, structural and artistic, and expend thought and talent upon it."² For too long the structural revolution has been strenuously expounded by enthusiasts who believe that absolute utility, gained with the new methods and the new materials, should be the aim of architecture. They put design under the control of structural methods instead of recognising structural methods as servants of design.

That there should be a powerful reaction from the decadent complexities of nineteenth century building was inevitable. But

¹*Architectural Style*, p. 22. (Faber and Gwyer, 1926.)

²*Theory and Elements of Architecture*, by Robert Atkinson and Hope Bagenal, Volume I, Part I, Chapter I, p. 6.

the modernists invited us to enjoy as a feast of inspiration what was really only a fast from ornament. Although, as the opening chapter recorded, the first world war and the stringent economies it enforced extended the acceptance of utilitarian ideas, the reaction against ornament began several years before 1914. In an article entitled "Ornament and Crime," written in the first years of the century, Adolph Loos, a critic of disruptive originality, condensed the tenets of the creed that became the official faith of the modernist schools of architecture in Germany, Austria, France and England, and to a lesser extent, in the United States. After suggesting that the love of ornamentation in an adult was a sign of arrested mental development, and embellishing the suggestion with sweeping statements to the effect that a modern man who was tattooed was a criminal or a degenerate, quoting statistics which revealed the high percentage of the tattooed among convicts, he became prophetic for the comfort of his contemporaries who deplored the inability of the nineteenth century to invent new styles. He said, quite rightly, that when people in the nineteenth century spoke of style, they meant ornament. But he forgot that, in the words of the late Percy Smith, "Ornament is an ancient human need." His reasoning—or what he mistook for reasoning—seemed to have been influenced by an almost pathological aversion to ornament of any kind. He believed that the greatness of the age, as it appeared in the early twentieth century, was disclosed by our inability to invent new ornament. We had, he said, vanquished ornament, and had learned to do without it. He hailed the new century as one in which the streets of towns would be resplendent with great white walls, and talked of the city of the future as dazzling and bare as Zion.

Such words have undoubtedly inspired many of the unglamorous anthills which we have since been bidden to admire—on paper. But the wrath and impatience of Adolph Loos are understandable when we remember that he was hurling his abrasive denunciations of ornament at people who still thought of design merely as the arrangement of ornamental details. His picture of an august simplicity in architecture was and still is described by the now rather old-fashioned modernists as the earthly Paradise to come.¹

A practising exorcist of ornament is not by virtue of his powers of elimination a competent architect. An undeviating concern for utility does not create great architecture. "A strict adherence to the

¹I am indebted to Prudence Maufe for first introducing me to and translating this article by Adolph Loos.

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doctrine expressed by the phrase 'form follows function' is apt to produce edifices which are sterile creations devoid of charm or meaning."¹

Ruskin, when he invited people to enjoy the romantic intoxication of such words as "Pinnacle," "Turret," "Belfry," and "Spire," was frankly appealing to their emotions. The modernists speak with the same emotional fervour of "Steel," "Concrete," "Glass," and "Function," and they expect people to generate a sort of scientific ecstasy in response to the recitation of those words. Materials and methods have conquered their imaginations; a frigid utility is their aim. The engineer becomes in their eyes an almost divine figure; for his work always has a definite purpose, and is wholly fitted for that purpose; also he is a great manipulator of materials, and in the devising of machinery unwittingly produces strange shapes that excite and stimulate the minds of the modernists who have put ornament out of their lives. The first war left its mark heavily upon them. From 1914 to 1918 people all over Europe became increasingly reluctant to examine the logical aim of war. To study the means by which war was conducted was a relief from the terror of facing the end to which modern war is dedicated. A century of industrialism and commercial civilisation had inclined Europe, and particularly England, to concentrate national thought upon the mechanical and financial means of living; and the first war accelerated world-wide forgetfulness of the aim of civilisation. "Produce and consume" was the ethical routine to which every respectable teacher and every political party gave unstinted support. To this dull belief the modernist designers added a little crude ceremonial. "The means of production are potentially beautiful," they said; and proceeded to adore them. The Israelites worshipped the Golden Calf, which was foolish; but they were not such abject fools as to worship the tools that were used for making it.

The first great war of this century overpowered the artistic sanity of Europe. Everywhere the memory if its vast destructive engineering was perpetuated; not in carefully preserved areas of devastation, but in the housing schemes and factories and state buildings that were constructed in Germany and Austria and France after 1919. That war was perhaps the most unbalancing experience endured by Europe since the Black Death and the Crusades. Amid its huge machines, its tractors, tanks and guns, its chains and wheels of

¹*Architectural Composition*, by Nathaniel Cortland Curtis, A.I.A., Part I, Chapter I (Cleveland, 1923.)

organisation, the engineer easily became a dominant figure, while the armies of the contending countries were mere ants, scurrying out of the way of the things he had made. The engineer's ability to solve an engineering problem is undisputed; and during that war and the far worse second world war, he solved thousands of mechanical problems most efficiently; but we should also remember the peace time record of the engineer, especially when he is serving industry. Remember what he has done in England—in the Black Country, for instance. Does he always think of civilised amenities when he solves his problems? Doesn't he tend to regard his work as an isolated patch in the fabric of urban or rural life? The engineer is always proposing to dump down a power station or a gasworks in ruinous proximity to parks and residential areas. He seems to lack the civic sense; but he means more to modernism than even Vitruvius meant to the Renaissance. Vitruvius gave the letter of the law to designers: the engineer gives licence to lawlessness.

Once inside the factories and the power stations the modernists are overcome with the stupendous technical feats of engineering. They bow their heads before the wheels and turbines and great metal shapes sliding into place. They attempt to extract inspiration from machinery and claim that engineering has given them a new understanding of design.

To many people a fresh idea is so sacred, so moving, that whether it is a good idea or not is unconsidered. The machine is important only because of what it produces. It is a super-tool. No designer in the past has glorified the tools with which he worked, and seldom has he taken from their shapes motifs for a style of decoration; the tools of the soldier's trade have usually inspired ornamental motifs. Yet the tools with which handicraftsmen work have shapes that are nearly always comely. Tools are not ends in themselves. Machines are servants, and men have often been very bad masters for them.

H. G. Wells once wrote a story called "The Lord of the Dynamos," in which a savage from the East Indies was employed in the generating station of an electric railway in London. There he worshipped the dynamos, blindly, adoringly, and even went so far as to arrange human sacrifices to the dynamo deity. In their worship of the machine many modern designers have tried to arrange the sacrifice of human ideas. Their studios are really operating rooms where they cut out all the treasured and likeable human foibles in civilisation. This surgical destruction of familiar beauty and comfort is part of the world's spiritual sickness. The

machine has a certain beauty of its own; but its beauty is incidental and often accidental.

The concentration of interest upon the apparatus of civilisation is a more sinister influence. Its most spectacular manifestation is in modern traffic. People have always been intensely interested in locomotion. Horses have for centuries been a conversational topic; the young men of every generation have discussed both their mounts and their vehicles with a minuteness of detail that was at least as exhausting as motoring prattle. But between the wars, people who travelled for recreation displayed a careless indifference about their destination; possibly because there was a depressing sameness about the hotel accommodation that awaited the English road user at the end of any journey. The journey itself; what the car could do to the gallon; how it would mount this or that hill "on top"; what it could be cracked up to in the way of speed—on these matters, men, women, and children were garrulous.

Early in this century, Rudyard Kipling was forecasting a world that had for its motto, "Transportation is Civilisation," and whose people worshipped the gods of movement, using in their reference to the gifts of those gods (materially represented by an Aerial Board of Control) a semi-liturgical form of words. "Theoretically, we do what we please so long as we do not interfere with traffic *and all it implies.*" Kipling first introduced us to this world in a story called "With the Night Mail"¹ and permitted us a second glimpse a few years later in "As Easy as ABC."²

Man's progress from barbaric nomads to mechanised nomads may be depressing in its last stages. The barbaric nomads wandered to some purpose: the mechanised nomad travels to no purpose. The barbarian settled, and became civilised. The mechanised man is civilised and is becoming unsettled. He moves faster than the wandering nomad and sees less: all places touched by his mechanical civilisation are alike to him. He moves for the sake of moving, and his libations to the gods of speed are poured in petrol upon every road that lies like a serpent, replete with the blood of those slain upon it, for there are sacrifices as well as libations.

The delight of wielding power may partly account for motoring changing from a means into an end. All the novelties of our mechanised entertainments, and the critical weakness we display in

¹ *Actions and Reactions.* (Macmillan and Co., 1909.)

² Published in 1912, and included in *A Diversity of Creatures.* (Macmillan and Co., 1917.)

accepting the worst of them without complaint, react upon architecture. "What'll they give us next?" is the limp question that men ask who have forgotten the whole duty of doubt. Inert acceptance of anything that is alleged to be entertaining or beautiful or "politically" desirable, has become a condition of modern life. It certainly makes the way easy for enthusiasts with new doctrines.

Mechanistic design had already established itself in Central Europe between the wars. Hitler made an abortive effort to arrest it; but Germany and Austria have been released from allegiance to tradition. Both countries have indicated a readiness to regard modern man as a robot. (This state of mind gave Hitler his chance: he could use robots.) This view of humanity accords with the canons of that deadly expression of democracy that America has given to the world. When the ultimate end of social standardisation is reached, then the resemblance of man to Karel Capek's robots will be perfect, and glass and steel barracks designed for the accommodation of millions of machines will be the appropriate architecture for a dehumanised world.

In Austria the beginnings of that phase could be examined in the pre-Hitler period. If you approached Vienna by aeroplane from the direction of Prague, you had a most informing glimpse of the city as the machine crossed and recrossed the Danube on its way to the air field. If your attention was not claimed exclusively by the towers and palaces, you had time to wonder why there were so very few new buildings to be seen. You flew over, at the most, three or four groups of red-roofed new cottages; but the city and its visible suburbs seemed only to possess buildings that were toned by time.

The new buildings were concentrated in the outer suburbs, in the form of huge blocks of flats for the accommodation of workers. The old baroque city, that gained from the genius of Fischer von Erlach as great a heritage of graceful architecture as London gained from Wren, might have become girdled by a starched frill of earnestly utilitarian blocks of dwellings. Every year fresh areas were coming under brick and concrete, and across the Danube, fronting the scorched green levels that protect Vienna from inundation and afford a sun-bathing park for thousands of people, a mile-long cliff of flats proclaimed their stark utility. In some of the new blocks attempts were made to preserve a balance between horizontal and vertical elements; the buildings in Neuwallgasse had shopping arcades to form a base, and above these arcades the street displayed the great white walls that Adolph Loos had prophesied. They were

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certainly dazzling and bare; but as they were designed with some regard for the principles of composition, they were not repellent. In this they were exceptional, for most of the new housing schemes of Vienna had an appearance of mechanical grimness, that suggested (quite wrongly as investigation proved) a superhuman efficiency. Actually the windows of the flats were ungenerously small; the rooms cramped in size; and invasion of privacy seemed unavoidable when so many people are associated in one building with inadequate safeguards for their individual seclusion and immunity from the activities of their neighbours. The walls that separated flat from flat were not soundproof; and it is doubtful whether the musical disposition of all classes in Vienna could have been allowed the freedom of expression that would seem essential to happiness.

Apart from such socialistic shockers, there was little or no new building being done in Vienna between the war and the Dolfuss régime. In the country, traditional methods of building continued undisturbed.

In pre-Hitler Germany, civic, commercial and industrial architecture gave the modernists opportunities for experiment, as well as domestic building. A great force in modern German architectural design was the work of Erich Mendelsohn. That architect and his followers believed that a building should be functional in an objective sense, and that the purpose of the building should be boldly revealed by its form. The word "functionalism," which is bandied about with such voluble vagueness to-day, may be interpreted in two ways.

A building may be called functional that illustrates by its form the structural functions of its parts and the nature of the materials that have been used in its erection. This type of building represents the dominance of method over design.

A building may be called functional that illustrates by its form the purpose it serves. This type of building represents the dominance of individual design over every other consideration.

Some buildings, such as Paxton's Crystal Palace, are functional both structurally and objectively. A mediaeval church was in this dual sense a functional building. In the comparatively simple civilisation of the Middle Ages, every building was individually functional; but the variety of functions to be expressed was small. The church, the monastery, the castle, the palace, the guildhall, the market hall, the manor house, and the barn represented the chief demands made upon builders.

Industrialism has multiplied the functions of buildings almost beyond the possibilities of record. It was from the needs and aims of industrial plants that the leaders of modernism in Germany drew inspirational sustenance. They moulded the new materials with a brutal boldness of intention, branding them indelibly as the eternal slaves of some particular industrial master. A boot factory was for ever a boot factory. A cloth mill was unchangeably a cloth mill till the end of time or the dissolution of steel and concrete.

The German modernists built temples for machines.

Did those men, of a most romantic and poetical race, foresee the worship of machines, the coming of a new religion that would make articulate the world's developing admiration and interest in wheels that go round? E. M. Forster's terrible little story, *The Machine Stops*, suggested some such fate for society many thousands of years hence, and the nightmare reign of the machines in Samuel Butler's *Erewhon* is a variation upon a similar theme. Perhaps mankind is passing into a new phase of development, following the international use of machinery. The men who first made fire must have been at least equally interested in the nature and appearance of the strange new thing they had discovered as in the comfort it gave to their bodies. An awe-stricken regard for fire must have persisted for generations. In a more complex form, this regard minus the awe is given to machines. It may last for some generations, giving place in time to a traditional familiarity. Meanwhile, fascinated by the functions of our metallic servants, we may forget the art of graciously and intelligently employing the leisure they win for us.

German architecture in the nineteen twenties and early thirties was unconcerned with leisure or graciousness. It shouted: "Make something!" "Buy something!" "Go somewhere!" "Eat here!" "Sleep here!" These peremptory orders were like the boisterous cries of a child that is still learning how to speak.

Some people in England have brought up their children on the assumption that boys and girls under five have the understanding of adults; not because they have a poor opinion of adults, but because they have a mistaken opinion of children. They may have created some very unpleasant characters for the discomfort of the world. The same type of people treats the juvenile building experiments of the modernists as adult architecture.

It is a matter of doubt whether very earnest people who have a capacity for belief without any personal creative gifts can ever really be civilised. But the creative mind that is intent and earnest scorches the earth with the flames of revolution.

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There is one country in Europe that has been noted for the production of such minds. It is France. The French do everything with logical thoroughness. In the eighteenth century they built palaces and elaborated their decoration to accord with the ideas of a society that rejoiced in an exquisite artificiality. The delicate complexity of that society and its remoteness from any contact with reality are now difficult to imagine. The Revolution shattered it for ever, and with the Revolution came attempts to make all things afresh. New doctrines, new names for the months, years dating from the beginning of the Republic—all these matters were arranged with the humourless dexterity of fanatics by savagely sincere men who eventually proclaimed that the Christian God was dead and done with, and that pure Reason must receive the worshipful homage of good Republicans. All the carving and gilding was knocked off the surface of French civilisation; fine manners melted away, and then a little self-made soldier strutted across the stage, and France pursued military glory with logical thoroughness until the logical end of that quest was gained and the country, black with mourning, was deep in bankruptcy.

Ever since the days of Louis XIV, France had established an unassailable reputation for supreme competence in decorative art. Her designers and her artist-craftsmen had not only ability and imagination, but the confidence that empowered them to lead the taste of Europe. The influence of French taste during the eighteenth century was immense: its ramifications touched every European capital. Although the Revolution checked for a time the activities of French designers, it did not destroy their national reputation, which still earns the respect of the world. In time the freshening effect of the Revolution gave added strength to the French genius for design. A reputation for the production of magnificence in buildings was supplemented by an adventurous capacity for experiment in architecture and the applied arts. For over a century France has been a land that is kind to new ideas. Such ideas are never allowed to die young; some of them fail to grow up, and disappear of their own accord; a few acquire international fame. Sometimes we recognise in the artistic discoveries of France an old friend in new clothes, and between the wars we were introduced to an old friend whose clothes had been removed. Nudity needs no excuse in France, but for the benefit of English decorum it is carefully explained that we are being presented to a scientific discovery, not an artistic one. The shock to our prejudices having thus been alleviated, we may assess the value of the discovery and take the

measure of the man who exploits it.

France, having discovered the dramatic implications of "fitness for purpose," a ruthless and wholly material functionalism now directs French modernist architecture. This functionalism is objective; but the buildings designed by the modernists are designed for creatures that have lost their human characteristics.

The prophet and to some extent the leader of this new movement in architecture was and is M. Le Corbusier, a designer and an accomplished propagandist. Two of his books have long been translated into English. These books, *Towards a New Architecture*, and *The City of To-Morrow*,¹ have influenced a large number of contemporary French designers, and have stimulated, irritated or amused many English architects. It is significant that few discussions about modern architecture take place, either in the Press or in books or at the meetings of societies that devote their time to aesthetic analysis, without the name of M. Le Corbusier being mentioned, either with acrimony or approval.

M. Le Corbusier has adopted for his books the literary technique of the skilled writers of advertisements. He uses words in small numbers, but marshals them forcefully, and repeats the sentences that contain his most dramatic dogmas in italics and sometimes in capitals.

He believes in the superlative competence of the engineer. He regulates the solution of all problems of social and domestic accommodation by the assumption that men have become standardised. Like a true modern, he cannot see beyond the machines that were created for service and not for adoration. "We claim, in the name of the steamship, of the airplane, and of the motor-car, the right to health, logic, daring, harmony, perfection."²

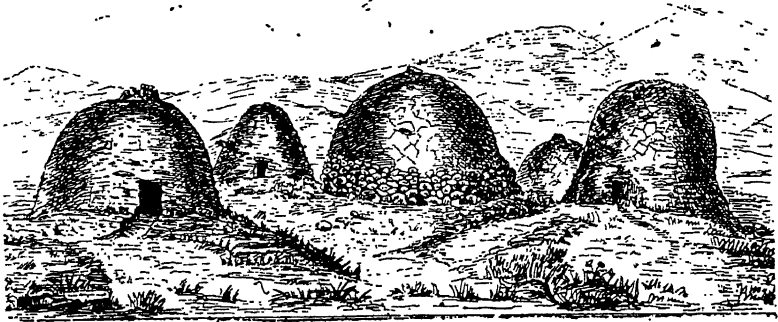
Why not claim the right in the name of man?

"The American engineers overwhelm with their calculations our expiring architecture," he cries (in capitals), and hails as the first-fruits of the new age the grain elevators and factories of America. Men, women and children must be stored and transported like the standardised products of some industrial plant. "The house is a machine for living in," he cries (this time in italics); and he describes the house that fulfils that ideal. In entering such a house,

¹The English edition of *Vers une Architecture*, translated from the thirteenth French edition, appeared first in 1927: *Urbanisme*, translated from the eighth French edition, was published in 1929. (Both published by John Rodker.)

²*Towards a New Architecture*, p. 19.

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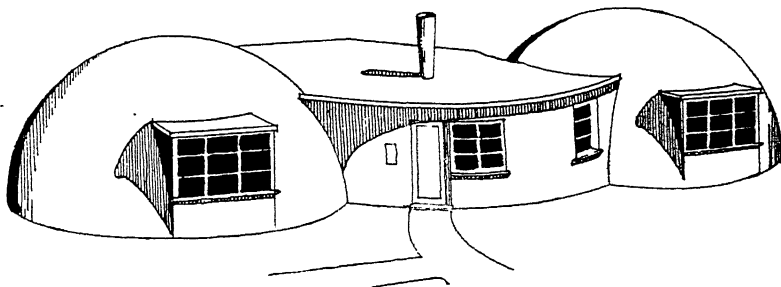
That form follows structure as well as function is almost a platitude: but old materials and archaic structural methods occasionally beget shapes that have a surprising kinship with the latest pre-fabricated, highly mechanised techniques of building. Compare these stone beehive houses, inhabited as late as 1859, in Uig, Lewis, with the "Bubble Houses" shown opposite.



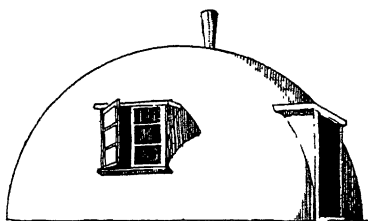
Both these drawings, showing the single beehive houses and the group, are by Captain Thomas and are included in Dr. Arthur Mitchell's book, *The Past in the Present* (Edinburgh, 1880. Page 64.)

you enter another life; something far removed from human experience. The functions of the body are cared for with the utmost efficiency. Nothing is ever out of place. Not a single superfluous article finds its way into those connected cells that are lit and warmed with such technical skill. If men were sexless and disembowelled so that they resembled the Martians described by H. G. Wells in *The War of the Worlds*, and were thus "lifted above all . . . organic fluctuations of mood and emotion," they might fit naturally into the boxes of steel and glass and concrete that M. Le Corbusier regards as so nourishingly logical in his architectural exploits. His logic is unimpeachable, for he wants to "create the mass-production

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“Bubble Houses” in an American village. Architect : Wallace Neff. A house unit is shown above, and below a single bubble unit. (From *House Out of Factory* by John Glog and Grey Wornum, 1946. Reproduced by courtesy of George Allen & Unwin Ltd.) Compare these forms that result from the spraying of inflated fabric with a hard-setting material with the stone-built, uncemented beehive houses shown opposite.



spirit,” and “the spirit of living in mass-production houses.” “All men have the same organism, the same functions.” From this he apparently concludes that “All men have the same needs.”

He is in love with the superficialities of his age, and he wants to bring order out of industrial chaos; and he is passionately sincere. But he can only see industry as a master, not as a servant. He accepts unquestioningly the emptiness of the industrial ethic: produce and consume. His affection for the apparatus of civilisation is immense; and it is difficult to discover from the emotional platitudes with which he occasionally lards the denunciations and proclamations that fill his chapters, how far he sees beyond apparatus.

In the foreword of *The City of To-Morrow*, he is emotionally introspective. He reveals the nature of his sensations amid the rushing traffic of the Champs Elysees. He almost falls down and

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worships the power that animates the cars and their shining headlights. How much better are the things man has made than man himself. If men could emulate these machines M. Le Corbusier does not actually say that, but his work suggests that he would welcome an approach to mechanical efficiency on the part of men and women and children; for he is prepared to treat them as robots.

Let not the historian commit the impiety of hinting that the civilisations of the past have held anything finer than this ecstasy of speed and noise that the city of to-day and the road of to-day and the music of to-day can provide. Let us all make the bright young sound of trampling on tradition. Man in his climb to Heaven must therefore stay for ever admiring the mechanical perfection of the ladder he has made.

We are to abandon, then, every principle of proportion, every concession made to human scale. Instead of retaining what is best in the past, and allowing Greece and Rome and the Italian Renaissance to contribute their architectural wisdom to our problems, we are to believe that because new and flexible materials are available and science has been applied to the purely commercial business of manufacturing commodities, the aim of architecture and the proportions that comfort and delight the eye have changed.

“Proportion in architecture results from compliance with the principles of Number, Punctuation, and Inflection; and as far as the formal attribute of buildings is concerned, every fault in proportion can be set down to a violation of one or other of these principles.”¹

Buildings are not things of rushing movement, to be streamlined, like aeroplanes, speed-boats, and racing motor-cars. Must architecture abandon those well-named attributes, “Commodity, firmness, and delight,” because the modernists of France and Germany are intent upon suggesting kinship between the things that they build and the machines they admire? Their windows no longer smile: they grin with an aimless horizontal expansion. They are not interested in devising any vertical reliefs from the oppressive horizontality of their domestic buildings.

Hundreds of photographs of these modernist buildings show them in sunlight with sharp patches of shadow to emphasise the brightness of their stark surfaces. Hard, unpunctuated, and ill-proportioned, they lose their superficial glitter when the sunlight deserts them. Ultimately they may gain something from colour, and their

¹*Architectural Style*, by A. Trystan Edwards, Chapter V, pp. 122-3.

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descendants may become humanised. Norman Douglas once devoted a few sentences in one of his essays to describing the process of humanising buildings. His subject was an old farmhouse at Sant' Elia, which was "a sturdy little building and simplicity itself as regards architectural ornament and inner arrangement; a genial simplicity, born of rustic needs and corrected and recorrected by ages of steady thought, which discarded all superfluities and culminated, at last, upon a note dignifying the lowliest things—fitness. There is a beauty in fitness no art can enhance."¹

But there is little beauty in the fitness of French and German modernist architecture, possibly because it is fit only for machines, and not for men.

In *The City of To-morrow*, M. Le Corbusier describes and illustrates his ideal city. It is built about a rectangular group of twenty-four dismal skyscrapers, all cruciform in plan, all exactly alike. They are the only vertical relief this city has, and they are intended to house the business community. Their designer has ignored the awful traffic problem provided by groups of these tall buildings when their inhabitants arrive and leave. He is thinking, perhaps, of standardised men whose work could be arranged in shifts to suit traffic; but if he was designing a city for men as they are, he might have learned something from the unsolved traffic problems of New York and other American cities that compress commercial activities vertically into the sky. All the other buildings in M. Le Corbusier's city are urgently horizontal. But Mr. Trystan Edwards has said all that need be said about *The City of To-morrow*. "It is much too easy," he writes, "to design ideal or Utopian cities if the artist concentrates upon two or three of the factors to be considered and rejects all the others. M. Le Corbusier's city is a dead city and it represents nothing more or less than architectural nihilism."² But then M. Le Corbusier always seems to be designing for the standardised mechanised beings that are so much more efficient than untidy but lovable humans. He and his disciples are creating the architecture of inhumanism.

Perhaps M. Le Corbusier suffers from the zeal of those who accept his books as the gospels of modernism. As a leader he resembles

¹*Siren Land*, Chapter VII, "The Cove of Crapolla." (New Adelphi Library edition, 1927.)

²From an article entitled "The Dead City," published in the *Architectural Review*, September, 1929.

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our East Coast, which (according to the advertisements) is "so bracing," but which is also (although the fact is not in the advertisements) rather bleak. Under the stimulation of his telegraphic sentences and fragmentary thinking, his disciples preach fearful austerities.

It is perhaps the fate of the disciples of any master that they should flutter like a cloud of moths about the light that attracts them, and so distort and dim its radiance.

As for the English imitators of M. Le Corbusier, they remind me of a tiny child I once saw standing admiringly in front of a blind man who was playing an accordion, and copying with empty arms the movements of the player. Neither of them made any music.

CHAPTER XII

THE FUTURE OF ARCHITECTURE

ONE OF the old established methods of writing about the future is to hold a magnifying glass over the qualities we admire and the abuses we deplore in contemporary civilisation, and to present this compound of prejudice and exaggeration as a plausible prediction. But there have been some distinguished departures from this method. G. K. Chesterton's ideas of dealing with the future were set down many years ago in that delightful piece of fooling, *The Napoleon of Notting Hill*. He deprecated the magnifying glass formula, and amid the blaze of paradoxes which illumine (and sometimes obscure) his meaning he drew a future world after his own heart, in which vanished mediaeval pomps were embarrassingly resurrected by a whimsical monarch, and hansom cabs and horse buses still crawled about the London of futurity.

Those who have accompanied H. G. Wells on *The Time Machine*, and have seen the sunset of mankind and have stood on the desolate sands of the earth's last days by an oily sea under bloodshot skies, may have patronised the other excursions he subsequently arranged. *The Sleeper Awakes*, a two-century prediction of profound pessimism, reflected a passing mood of despair that shadowed the mind of that gifted young man at the end of the Victorian period. Industrialism momentarily depressed him; a gloomy vision of its growth was therefore recorded, and touched on again in "A Story of the Days to Come," in *Tales of Space and Time*: then came two glimpses of the near future, both hinging on the colossal powers of destruction that science had given to the war offices of the world. *The War in the Air* and *The World Set Free* were both nightmares. The first has been partly fulfilled, and almost became a complete and disastrous experience for humanity in the second world war; and when I wrote this book in 1930, I was able to comfort myself with the statement that nightmare number two could not occur until scientists discovered how to release atomic energy. But since this devil has been let out of its den, there is nothing left in the civilisation of the mid-twentieth century which allows anybody to maintain a comfortable frame of mind.

How greatly the world has changed in less than twenty years, is disclosed by the confident feeling most of us formerly enjoyed about the ultimate benefits we should derive from the work of scientists and the basic benevolence of science. Here, unaltered or revised in any way, is how this chapter continued for four paragraphs in the first edition of this book :—

Since the war we have been taken twice to a kindly earth that has outgrown its troubles, and in *Men Like Gods* and *The Dream*, we are shown what civilisation could be like after generations of selective breeding and real education had dissolved the fears and suspicions that preserve hostility among men and nations. We are given to understand that science has done its work of smoothing and ordering Nature; but Mr. Wells has ceased to be specific about the evolutionary processes that produce his delectable utopias.

For the latest scientific forecasts we must turn to Mr. J. B. S. Haldane, who writes and thinks with such boundless animation that one is half persuaded that he is recording facts and not dealing with optimistic possibilities. *Daedalus, or Science and the Future*, and the essay entitled "The Last Judgment," in his book *Possible Worlds*, indicate a robust faith in the ultimate order and power humanity will enjoy. Dealing with millions of years, his imagination leaves its anchorage of twentieth century science, and always makes a prosperous and heartening voyage, bringing back golden cargoes of hope from those remote coasts of future time whose inhabitants are as mentally strange to us as we are to the great apes.

Mr. Haldane's radiant appreciation of the potential powers of science reminds us that no attempt to examine the future of any art, craft, industry, or profession can be made without regard to this tremendous creative force. It seems to us, living in this unrestful but most stimulating and exciting age, that science with its enlarged freedoms and rapidly accumulating knowledge must continue to release fresh and perturbing discoveries upon an unready world. The ruthless disrespect of science for coded thought; the liberal interchange of ideas it has established on a world-wide basis; the abolition of its own departmental frontiers so that specialists can fuse their activities and the researches of a chemist in a New York laboratory become pregnant with significance for a biologist in Budapest; the faith it has engendered, the brains it can command, have made it the most potent power in the modern world, to be ranked before international finance and industry. As these words are written some laboratory may be the scene of an experiment that successfully concludes a research, the fruits of which may alter the

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face of the earth in fifty years and necessitate such readjustments of human life that every social tradition we know will have to be modified, and the way of life recast for all mankind.

With this salutary knowledge of the impermanence of our social, moral, and intellectual conventions, we may approach this largely aesthetic enquiry regarding the future of architecture.

* * * * *

Those last four paragraphs and the comments and conclusions they embody are suffused with an optimism that was common to my generation, and was nourished by a belief in the integrity of science and a sturdy expectation of continued progress in material accomplishments which would raise standards of living for everybody. This optimism was derived from the rationalism of Victorian times, the robust child of those far from incompatible bedfellows: idealism and common sense. Now, there is a world shortage of common sense, and idealism has been ousted by ideology. Though it is impossible to revive the rapturous optimism of the early nineteen thirties, and though most thinking people are now convinced about the impermanence of our social, moral and intellectual conventions, many of the benign influences that existed then still exist, and are capable of affecting the character of architecture.

We may consider the ramifications of a big, medically-sponsored movement that has for its object the safeguarding of health. As this movement has a visible physical effect, and that effect has been approved both by men and women, its ultimate acceptance as a civilised habit is probable. The sunlight cult, powerful on the Continent, is still embryonic in England, where climate and the vestigial respectability that still denotes our Victorian ancestry check its development. Nevertheless, many people unconnected with medical work are now actively conscious of the therapeutic benefits of natural ultra-violet radiation, conferred by sunlight and all unobstructed daylight. The dissemination of this knowledge has had structural reactions on industrial and commercial building. This movement may lead to a popular demand (a genuine one, not a press or, worse, a political stunt) for the enforcement of anti-smoke laws, which would banish chimneys and corrosive filth, and it has already increased the area allotted to window space in the walls and roofs of factories. This latter tendency has been accelerated by the invention of glass that admits a large proportion of the ultra-violet rays in daylight, and the modern window may continue to expand for health as in the Gothic churches it expanded

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for holiness. The factory, then, becomes a cage, not of stone, but of steel and concrete, a transparent hive that soaks up through its glass skin the gifts of sunlight.

Whether such glittering factories and the mess and muddle that almost invariably attend industrial plants will continue to appear on the visible surface of the earth depends on the artistic sensibilities of future generations. In a once beautiful land, only beauty spots may remain, salvaged by public-spirited individuals and societies organised for rural preservation, or deliberately scheduled by acts of parliament that enforce regional planning. Excavation and extensive tree planting may prove to be the solution for civilising the external signs of industrial prosperity. Great areas could be sunk and encircled by plantations, so that deep behind green walls industry could flare and flourish, and the operatives could live out of sight of their factory, but near enough to walk to work through wooded belts. This counter-sinking of factories, so that their roofs were at ground level, would increase their likeness to glass hives, for the roof would tend to become a glazed dome, through which sunlight radiated to the innermost cells. Galleries grouped about a central ventilating and daylight distributing shaft might be a standardised form, where the process sequence of mechanical production did not demand a continuous floor level.

The whole character of industrial building might be changed by some new source of power, and a great extension of cheap electric power would naturally follow the use of atomic energy for generating electricity. Those who abuse the cable-bearing trestles that stride over our hills and valleys might occasionally recollect their mission, which is to bring nearer an age of abundant power, when the fuming factory chimney would become an archaic absurdity. Industry could then regain its old prosperous levels and even surpass them, so that money might be found for the ultimate removal of the trestles and a decent burial for the cables, though, of course, long before that happens all cables may be rendered obsolete by the perfection of some method of broadcasting power from a central station.

With the cheap distribution of power, industrial architecture may invade every corner of England. Much of it will be dismally untidy; it will be erected without regard for the character of the country or the architectural amenities of the neighbourhood; and the commercial blocks that squeeze their way into city sites will behave in the same boorish way. It seems to be our doom. When the

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Committee of the House of Commons on the Charing Cross Bridge Bill was sitting, Sir Edwin Lutyens, in replying to the questions of counsel for the promoters of the Bill, condensed into two sentences the architectural history of England for the last century.

"Counsel then referred to the site, comprising the proposed buildings between the County Hall and the new station [Waterloo], and suggested that it was a difficult site to deal with.

Sir Edwin: No, it is rather a nice site.

Counsel: Only so long as it can be dealt with as a whole? . . . No; that would not make it more difficult, but only more English.

What does that mean? . . . That it would be more haphazard."¹

The serene certitudes of Georgian England are forgotten; a polite and not entirely superficial acquaintance with architecture no longer adorns the education of the English gentleman; we have had a century of glorious moneymaking, and we stand among the ruins. Money talks, and its speech is uninspired. We were once a nation that regarded towns as ordered and beautiful additions to a countryside. For a hundred years we have allowed our towns and cities to grow anyhow, and whether we shall prolong this haphazard tradition or raise to the surface of our national life that submerged responsiveness to the harmony of surroundings, depends again on the sensitiveness of future generations to art. This is partly dependent upon the extent to which architectural education can invade those training preserves of the governing classes, the public schools, where even the young of the self-made can become more finished than their fathers, and which turn out that most agreeable, athletic and trustworthy human pattern: the English gentleman.

If a new generation of industrial and commercial administrators could be educated only to the stage of reading and understanding one or two books such as Mr. Howard Robertson's *Architecture Explained*, or *The Pleasures of Architecture*, by Clough and Amabel Williams-Ellis, then hundreds of planless muddles would be avoided. In few periods has the architect really enjoyed his own educated way. With the exception of law and medicine, there are no professions, arts, or crafts that are immune from the uninstructed censorship of the man who pays the bill. A smattering of architectural knowledge derived from some half-comprehended lectures

¹Report of proceedings in committee, *The Builder*, April 11, 1930, p. 724.

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about styles might be even more obstructive than blank ignorance; but a patron, whether he was a director of a large industrial concern, a bank, a chain of multiple retail shops, an hotel company, or a nationalised industry, would be a better servant to his organisation and to his fellow men if he recognised the civic obligations of architecture, and was familiar with the broad principles of architectural composition.

Between the world wars, patronage was largely in the hands of industrial and commercial interests. Some of these were progressive and enlightened. To the enterprise of a great firm of shopkeepers, the John Lewis partnership, London owes one of the finest modern buildings in England, or Europe for that matter, in the Sloane Square premises of Peter Jones; designed by Messrs Slater and Moberly, associated with William Crabtree and Professor Sir Charles Reilly. It was hoped by many a forward-looking young architect that patronage under a socialist government would be more enlightened than anything that industry or commerce could offer, and that the new nationalised industries would set new standards in architectural and industrial design. But socialism cannot work without bureaucracy, and bureaucracy cannot apparently work with imagination, and no socialist minister, apart from Sir Stafford Cripps and Herbert Morrison, has displayed much interest in the design of anything; while the nationalised railways have given the travelling public "olde-worlde" taverns on trains, with imitation brickwork on the outside of the coaches, and sham-Tudor-roadhouse effects inside.

Patronage has not been in the hands of architecturally educated people for over a century. But despite the lack of informed patronage, there was between the wars a growing consciousness of architecture, and an appreciation of its importance to the community. Also, during that period, the training given in architectural schools was much improved; and while it was recognised by those in charge of architectural education that there would always be stylemongers, mere antiquaries who find it more congenial to delve than to design, the duty of studying contemporary needs was impressed upon all students.

There was a receptive, though woefully ignorant, public; but the public can seldom influence patronage for architecture. The public remain the mute victims of what old-fashioned people—such as the state railway pundits who thought of the taverns on the trains—think they will like, or what the reforming, intellectual designers think they *ought* to like. Public attention was focussed upon archi-

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ture between the wars, particularly by the virtual rebuilding of London in the nineteen twenties, and by the huge housing schemes which expanded the suburbs of many towns and cities. The development of motor traffic awakened people to the fact that nowhere in England is anybody more than twenty miles from some thing of beauty in brick or stone: it may be a sedate Georgian manor, or a towering Gothic church or cathedral, but there it stands for the delight of our eyes, and we used to drive to it over tarred and crowded roads, between ribbons of jerry-built "villas" and bungalows with their punctuation of petrol-pumps, corrugated iron tea shanties, enamelled signs and hoardings, for such is the kingdom of commerce. Haphazard it is and haphazard it will remain until there is an effective partnership between art and industry. The future of architecture is intimately connected with the success of such a partnership, and the architect should be (and usually is) deeply interested in its promotion.

Now it is usual for writers with artistic sympathies to assume that commercial and industrial activities are controlled exclusively by yahoos, and that the poor, shrinking artist is a persecuted genius, debarred from participation in modern industry because business men are invariably discourteous, dishonest, grasping and altogether impossible. Without indulging in that painstaking analysis of the perfectly obvious to which industrial apologists and political propagandists so often address their energy, we can summarily dispose of this assumption because it is based on prejudice and not on fact. "Partisanship is our great curse," writes James Harvey Robinson. "We too readily assume that everything has two sides and that it is our duty to be on one or the other. We must be defending or attacking something; only the lily-livered hide their natural cowardice by asking the impudent question, What is it all about?"¹

When we examine the conditions that keep art and industry separate and hostile, we are confronted with the widely established belief that art and business are, quite properly, unrelated. It was founded in an era of simple social classifications: the artist wore his hair long and was given to Bohemian practices; the business man wore his head bald and supported the respectable virtues. Both knew their place in the scheme of things. They sneered at each other with becoming virulence. The artists made little worlds

¹*The Mind in the Making*, Chapter VIII, Section 15.

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of their own, and thanked God in their studios that they knew nothing of business; and in the offices and factories men said that art, and particularly artists, were unpractical. So hundreds of thousands of houses were just muddled together with bricks and mortar and stucco, and their rooms made desolate with furniture, carpets, wallpapers, fabrics, glass, and pottery that had been produced without art and often without common sense.

Business men, not unnaturally, retained the habit of dispensing with the services of creative artists. Indeed, they never realised that those rather difficult people could provide any service. In woodwork, metalwork, and textile manufacture, the revival of interest in antique styles, which followed the teaching of William Morris, enabled them to give employment to hacks who copied anything they were ordered to copy, and as for originality . . . well, if you *had* to have *that*, you got it from the Continent. And this attitude towards the buying and selling of things, with which art should have had some concern, still remains to the detriment of our overseas trade.

In the United States there are also conventional suspicions about art and artists, established perhaps more firmly and obstructively than they are in Britain. The Puritan curse has come down to both countries; and as the descendants of the Pilgrim Fathers and the rest of the "unco guid" brood that founded the American colonies were never relieved mentally and loosened morally by the fervour of Carolian gaiety, the unfortunate American of to-day gets his Puritanism neat, as it were, unadulterated by the easy virtue of the Stuarts or the urbanities of the Georgians. The sour souls were driven into back-street tabernacles in England, there to proclaim the righteousness of their restrictions and to worship the dust and ashes of their choice; but in America they flourished, they were listened to, taken seriously, given power; and shouting their psalms against freedom they destroyed by law in the name of decency many of the conditions that make decent life possible. To the hundred-per-cent. Puritan, Art and Sin are Siamese twins, and the thought of any surgical severance is wrong. Whom Hell hath joined let no man put asunder.

The artist is not respected in a country where Puritanism is rampant, or where money making is acknowledged as man's noblest calling. A certain Mr. James Montgomery Flagg, who may possibly be a famous American, once told the world with virile frankness, that "To the ordinary business man in America, an artist is a sort of harmless pansy who sits around in a velvet jacket with

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a bowl of cocaine on one knee and a nude model on the other. And if he makes good money, he is a good artist; otherwise he is a Pom-eranian in pants."¹

The industrialist is often insensitive to the artist's values, and he speaks a different language. He has a habit of bracketing art with the technical side of his business; but really the artist has only himself and his kind to thank if at first he is regarded as a sort of a lesser engineer. From the earliest days of machine craft the artist has been unhelpful, and it is but natural that directors of industry should have concerned themselves almost wholly with methods of production when the men who could have deflected some of their interest towards the design of the objects produced only sneered at the new and largely uncomprehended force that had thrust itself into civilisation. Technical execution has commanded inventive genius and engineering skill for more than a century; the machine is guarded by battalions of experts who know exactly what cannot be done; and the vitality of machine craft is preserved and its progressive development largely maintained by the man of business who insists that what is alleged to be impossible is occasionally attempted.

The designer has two authoritative advocates who can put the case to industry for using his services. Their suggestions have multiplied the opportunities of productive collaboration between art and industry. All their diplomacy has been mobilised to modify the superiority complex of the designer and to dispel the resentment of the business organiser, who is apt to question the utility of people who openly declare their hostility to commerce and industry. The first of these advocates is the architect. An old and devoted friend of the artist, he has vast powers of recommendation. He is respected as a practical man; there are tangible proofs of his capacity; and he *has letters after his name*.

The other advocate, whose importance is growing, and whose sense of responsibility to industry is intelligently active, is the practitioner in advertising. Usually he is thought to be either a billposter or an inventor of exasperating slogans; for many educated and intelligent people are ignorant of the economic function of advertising, and incontinently damn it root and branch because some of its manifestations are unsightly, which is as silly as damning all architecture because jerry builders erect Swiss-Tudor bungalows.

¹In an address to the St. Louis Advertising Club, reported in *Printer's Ink*, June 19, 1930, p. 88.

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Apart from the opportunities he provides for designers, illustrators, and typographers in the actual physical production of advertisements, the advertising practitioner has an even closer association with industry than the architect. His advisory powers are developing, and they are concerned with the actual products of industry. He can introduce capable designers to manufacturers; he can plead for the use of artists in a consultancy capacity in the making of simple, everyday things, pointing out that improved design could at least furnish additional selling points for exploitation when goods are put on the market. He is gradually smoothing the way for an extensive commercial acceptance of the artist's work; for he is trying to prove that collaboration with the artist pays. He knows from the character of his own business that such collaboration can be effective and profitable, and he preaches a wider application of that knowledge.

In *Men and Machines*, Stuart Chase suggests a more intelligent control of the gigantic powers machinery has released; and although his recommendations are not elaborated in detail, he says: "You must forbid machines to make flimsy or adulterated goods. You must eject them from all manufacture of near-art objects."¹ This is a significant admission for an American writer to make. If we assume that the term "near-art" applies to industrial products that could have been designed by an artist but were not, Mr. Chase's dramatic survey of machine craft and the power behind it is disappointing, because he does not examine the possibility of a partnership between art and industry. He promises salvation through suffering rather than through the felicities of compromise. "The machine has ruthlessly destroyed a whole age of art, but is busy creating a new age, which already, in architecture and design, has achieved distinction. The process furthermore is by no means complete; give the machine a few more decades."²

Clearly he does not expect craftsmen and designers, schooled in older knowledge, to regard the machine as a super tool, which, by right of their creative gifts, they could control and put to great uses. Are we to take the view that a craftsman is essentially a survival from a world of fewer needs and fewer people, and that he is now perforce an uneconomic factor in civilisation? It is difficult not to accept that view if we think of craftsmen only in terms of handicrafts; but we are not looking at modern life and industry very

¹*Men and Machines*, Chapter XIX, p. 340.

²*Ibid*, Chapter XVIII, p. 328.

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clearly if we map out productive activities into rigid sections, and ignore the promise of creative association between handicraft and machine craft.

Henry Ford, thinking solely from the machine craft point of view, has said: "The easy course is always to substitute machine effort for a hand effort, and the full value of power is not then realised. The hard course is to start at the beginning and evolve a method which, instead of substituting the machine for the hand, takes for granted that a method can be discovered by which the entirety may be done by machinery and the man considered only as an attendant upon the machine. This is the machine concept of industry as opposed to the hand concept."¹ And this concept of machine craft eliminates the skilled craftsman and suggests those uncomfortable questions Samuel Butler set down in the Erewhonian *Book of the Machines*: "May not man himself become a sort of parasite upon the machines? An affectionate machine-tickling aphid?"²

There is, however, a fresh extension of skill even in the Ford idea of machine craft, and in *To-day and To-morrow*, we find the following: "Many people thought that machine production would destroy craftsmanship. Exactly the reverse has come about: we now need more expert machinists than ever we needed—we can always use more tool-makers."²

Even when seeking for a simple definition of a craftsman under twentieth century conditions, we may become involved in the shouting conflict that rages about methods. A craftsman brings skill to the planning or executing of any piece of work. It is the skill that constitutes the craftsmanship and its practice that makes the craftsman. The particular way in which that skill is expressed does not matter. Given skill, it is perfectly possible to produce beautiful and desirable things by machine craft. We know that fine things can be made by hand; but sentimental devotees of handicraft sometimes forget that mass production has not the monopoly of muck production. The amateur who fiddles with the attempted revival of some branch of handicraft may be responsible for flashy rubbish just as bad as that turned out by a factory where machinery is misunderstood.

It is unlikely that any satisfactory industrial society can evolve without the co-operation of men and women with original creative gifts. As Sir William Bragg has pointed out: "Mass production is

¹*To-day and To-morrow*, Chapter V.

²Chapter IX.

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in its way splendid, ministering to the necessities and conveniences of many who must otherwise have gone without. But if it is brought to such a pitch that its processes call for little intelligence in their working, then cheap people of little intelligence will be found, in the end, to be in charge."¹

That endless multiplication of shoddy things under the direction of shoddy minds is a horrible possibility, unless designers and artist-craftsmen are prepared to study mechanical production and make themselves masters of machine craft. Neither industry nor art can grow if they remain isolated. It is even doubtful if they could survive. Certainly they would degenerate, for art unrelated to life withers, and industry which cannot assimilate new thoughts sinks into bankruptcy. Machine craft has come to stay. The re-establishment of handicrafts is a dream that can come true only if it is preceded by a nightmare; for only a worldwide plague, which science was unable to arrest, or a worldwide war, which science spread to the uttermost limits of destruction, could lower the standards of civilisation and the size of the population to levels compatible with the productive capacity of any handicraftsmen who happened to survive. Unless the artist discards his prejudices and makes his peace with business, industrial and artistic initiative may pass from this country, and architecture will reflect the loss.

Can architecture advance from that state of pre-occupation with utility to which the modern movement is guiding it, if the background afforded by contemporary life is uncoloured by artistic understanding? For too long we have supposed that art can be stored in galleries; and if this segregation persists and industry rejects the diverse gifts of creative designers, then the raising of standards in every department of decorative and industrial design is discouraged. Widespread competence in design is perhaps an essential preliminary for any great movement in art: it was the plinth of the Renaissance.

We have seen how the English Renaissance of the sixteenth and seventeenth centuries was preceded by a period of great common art, which had given to the commonplace objects of life not only functional fitness and good workmanship, but agreeable shapes and apt decoration. Is there to-day sufficient artistic vitality to sustain another burst of architectural development, comparable with the Renaissance? The modernists may perhaps believe that a new Renaissance could draw health and strength from the common

¹Presidential Address to the British Association, September 5, 1928.

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mechanical aptitude of our time; but that belief grows from machine worship and a desire to mould man in the likeness of their metallic deity. They see homes as garages, and regard churches, galleries, and theatres merely as parking places for human robots: art is for adornment: it ceases to be an intrinsic factor of design. The structural engineer stretches the canvas, and the artist decorates it. This conception is made plausible by the freshness and vitality of pictorial and decorative art to-day; and although there is no element of partnership in this association of the builder and the artist, it might lead ultimately to an effective dominance of building by the artist, who would concern himself not only with titivating the interior walls, but with giving life and colour and interest to exterior surfaces. He might not be content to embroider those concrete clothes; he might design the cut of them, and so make the engineer his slave instead of his employer. In half a century or so we might be entertained with the spectacle of a Rex Whistler creating a great pictorial building while a Corbusier worked out the framework of steel and concrete that could best accommodate the fanciful turns of the artist's invention. This development of the structural revolution would be unhealthy, for the principles of architectural composition might become submerged and the follies of the nineteenth century repeated on a grosser scale.

Whether they are encouraged or retarded by their aesthetic environment, modern architects are certainly not reluctant to make experiments. At some future time, perhaps, those who employ them will be like-minded; but even between the wars, amid the senilities of commercial classicism, the structural frankness, urged by M. Le Corbusier and his disciples, was occasionally visible. Perhaps the forms influenced by the assertions of this school of thought may become the matrix of another Renaissance. The great god stunt, who came down to earth for a few months during the Paris Exhibition of 1925, and who put in an even more dramatic appearance at the New York World Fair in 1939, still attracts too many worshippers for us to be certain of the sincerity of every architect who joined the modern movement. The barren declaration of the functional purity of its motives, and the delight of its exponents in having a "functional" explanation for every line and detail, achieves little beyond a blameless utility. The moral earnestness with which this inhumanist school of architecture confuses mechanical engineering and architectural composition has already given to their proclamation of aims a misleading air of finality—an impression which may be corrected by this passage from *The*

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Architecture of Humanism: "The art of architecture studies not structure in itself, but the effect of structure on the human spirit. Empirically, by intuition and example, it learns where to discard, where to conceal, where to emphasise, and where to imitate, the facts of construction. It creates, by degrees, a humanised dynamics. For that task, constructive science is a useful slave, and perhaps a natural ally, but certainly a blind master."¹

A new Renaissance may distinguish the second half of this century; but whenever it comes it certainly cannot live and attain a noble and adventurous expansion upon new materials alone. The negative utilitarian ideas of the modernists may represent a stage in the preparation for the new Renaissance; but their flavourless functionalism no more resembles a creative adventure in architecture than an aperient resembles an aperitif. Although the modernists suggest by their work and their sermons that means are an end in themselves, another generation may recognise aims less shallow, and may weave into a coherent design the tangle of part-worn and half-formed faiths that has for a quarter of a century confused architectural thought. Meanwhile, a developed regard for utility under the intelligent direction of architects may encourage the gradual repair of those devastated areas in our towns and cities that followed the battle of the styles in the nineteenth century. The second world war effected some spectacular clearances; but bureaucracy—always unadventurous and obstructively conservative whatever political party is in power—may prevent us from re-planning and rebuilding with vision.

The adjustment of the modern street to the needs of modern traffic; the convenient disposition of the commercial, administrative, and shopping centres of the cities of the future; and the guardianship of the natural beauties of the countryside are essentially the responsibilities of the architect. The nineteenth century builders, accepting the faith of their architectural evangelists, thought that salvation lay in adornment; the missionaries of modernism believe that a stark confession of purpose suffices. Both the romantic antiquary and the scientific functionalist despise or ignore the fact that there are principles of architectural composition attuned to humanistic values, that their application ennobled the cities and buildings of Europe in the past, and that their power to-day is unchanged. Only if they are humanised can the austere experiments

¹*The Architecture of Humanism*, by Geoffrey Scott, Chapter IV, p. 120. (1924 revised edition, published by Constable.)

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of the present prepare the way for an eventual coherence in architectural taste and a new majesty of form. What strength and beauty that form embodies must reflect, as architecture has always reflected, the honour in which those qualities are held by contemporary society. The people that honour these things would understand that civilisation does not end with the provision and consumption of commodities, and by virtue of their understanding they would inherit the earth.

EPILOGUE

Three thousand years hence a few voices only may have survived to tell posterity about the early twentieth century; and their immortality may be due to the chance discovery of the metal plates from which their books were printed. Paper perishes; unlike the ancient Egyptians, we do not make enduring museums of our tombs so that books and documents can be preserved with our dead.

Steel and concrete may have only a short life. Time and the destructive wars of the future may leave a few heaps of rusted girders buried in rubble to perplex humanity when again civilisation reaches the stage of practising archaeological research.

Students of history in the fiftieth century may have such fragmentary misguidance to the life of our world as . . .

§ 1

"It's a pity that records are so limited," said the archaeologist. He happened to be a very famous archaeologist indeed, and the young man who was working with him was proud to be a humble student.

"At least we know there was a bridge here once," said the young man, glancing at the interlacing trenches which had been dug over the site that they were exploring. The digging had been made across the centre of a valley that had been washed out by a broad river, centuries before. Low, heather-covered hills sloped away on either side of them. The country was desolate, and if, as the student said, there had once been a bridge across the valley, no sign of a roadway remained.

"Yes, but what kind of a bridge?" the archaeologist demanded. "One can estimate the period roughly from the coin finds—have you sorted the coins we found yesterday?"

The young man nodded. He wanted to speak, for he had developed a theory; but the archaeologist was curt with other people's theories.

EPILOGUE

"Do you think all these coins were dropped here by accident?" he said at last.

"Certainly," was the reply.

"There are a great many of them."

"This country was populous."

"Might there not have been a—a river god to whom travellers crossing the bridge paid a tribute?"

The young man was getting red about the ears as his imagination overflowed into words.

"The idea is sixteen or seventeen hundred years too early for the period," was the dry objection; "you forget that the people who built and used this bridge were Christians, of a kind. What put the fancy into your head?"

"Only one of the coins I put aside to show you specially." And the young man placed a little disc in the archaeologist's hand.

§ 2

Miles Tarrant had saved the situation. All the newspapers he owned said so. They published signed articles on the front and leader pages by Miles Tarrant, and as their net circulations totalled over six million in London and the provinces, it followed that a large number of quite honest and innocent people thought that Miles Tarrant was calm and wise and intellectually omnipotent.

The situation had been a political one, and as it had been planned originally by Miles Tarrant, "saving it" was not really difficult.

He was accounted a great man by his century. He had a flair for dramatic vulgarity, reinforced and rendered practical by financial judgment and a gift for choosing the right men and inspiring them to work with flaming enthusiasm for transitory causes. Caricaturists could never quite decide whether he more nearly resembled a pig or a gorilla. Their pencils seldom flattered him; but that did not matter in a century which took men at their cash rather than their face value. The circulations of his newspapers grew and grew, while the revenues from advertising bounded up after them.

But fame and posing in the public eye had their penalties. Even a rigged political crisis and the solving of the long foreseen results therefrom demanded concentration: and there had been a succession of crises lately. Circulations had continued to grow. There were occasional sub-leaders on dictatorship in the Tarrant Press. Members of Parliament who wanted personal publicity coupled Tarrant's

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name with Mussolini's in their speeches. A peerage would have been easy; but there was some distinction in being the only commoner who owned a group of newspapers. Press peers were getting too ordinary.

It was annoying to be compelled to rest when one's plans for greater fame were shaping so well. Domineering fellows these doctors.

"Go north," was the order.

"Why?" asked Tarrant.

"Bracing air—long tramps—Scottish hills, move your blood about a bit, man!" That's what old McAllister had shot out at him.

Into the Highlands.

Come to think of it, he'd never been north of Edinburgh.

Well, he wasn't going to move without his staff. Anderlin, his secretary, would arrange everything. A useful, oily creature, Anderlin. Lots of brains. Knew everything: uncanny, such universal knowledge. Leave it all to him.

He felt terribly tired.

"This comes," said Miles severely, "of serving one's country." And he believed it: that was his strength. So did millions of his countrymen when his enforced holiday was announced: that was their weakness.

The *Flying Scotsman* to Edinburgh. A gilded night in a mammoth Americanised hotel. A bubbling jazz band, cabaret, miles of nickel plated bathroom fittings, and waiters who respectfully muted their alien voices in the presence of his millions and his power and his prestige. On by train next day out of Waverley to the far north.

A spreading estuary; an arching network of girders, and then Anderlin by his side as the train began its rumbling passage of the Forth Bridge, saying:

"I think it's the first time you've ever crossed the Forth Bridge, sir?"

"Eh?" said Tarrant; "how did you know that? But you're right."

"It's customary to throw a coin into the river for luck," said the secretary smiling, as he opened the window by Tarrant's side. "Here's a penny, sir: it's a new one and I've had your name scratched on it."

Miles Tarrant saw his name cut deeply into the shining copper between Britannia's trident and the word "Penny," and he laughed as he leaned out of the window and tossed the coin through the shouldering latticework of steel into the distant water.

EPILOGUE

“What a stir that will make among archaeologists a few thousand years hence,” said Anderlin. “Imagine the thrill of recognition, sir, when they see *your* name linked up with the date on the penny.”

Tarrant was suddenly irritated. The tactful Anderlin had reminded him that, in spite of all his greatness, he must die; though to be sure it was comforting to know that his name would live on and on in the minds of men.

§ 3

The archaeologist examined the coin which the student had given to him.

“Mid-twentieth century,” he said. “Copper penny. Well preserved.”

Suddenly he held it closer to his eyes.

“Inscription on the Britannia face,” he continued. “Only scratched, but still easy to read. M-I-L-E-S T-A-R-R-A-N-T. Evidently a name. Oh, so you thought that this coin might have been thrown into the water by some worshipper of a river god who scratched his name on it first so that the god should know the sender? No, no, no—it’s much more likely to have been engraved and cast into the stream by some simple creature who wanted his name handed on to the future. As you know, an age that puts its faith in paper and steel has left few traces—hardly more than its silver and copper coins and the plates from which a few of its books were printed.”

With a flash of typical archaeological imagination, he added: “Perhaps this man trusted his name to copper because he realised that paper would perish . . .”

Those who have read (or skipped) the twelve chapters of this book may wish to try a more technical, or at least a more detailed, type of architectural reading. They may, of course, conclude that architecture is a dry subject, and that the effort of struggling through the foregoing pages has not been worth while. That being so, they should do their future reading in the streets—any streets, in any town or city, anywhere. There is always something to read in the buildings that line them, as this book has attempted to show. But if they are still patient with books this incomplete list will be of interest.

It is not a bibliography: it is a stimulating selection, supplemented by a few works of technical weight.

Any list of this sort should begin with the books of Mr. A. Trystan Edwards. The principles of architectural design are expounded with the knowledge of the architect and the erudition of a profound scholar in his book, *The Things which are Seen*, (now re-issued by Tiranti) of which his later work, *Architectural Style* (Faber and Faber) is a partial amplification, treating in greater detail that section of the earlier book which dealt with "The Grammar of Design." Mr. Edwards has assessed the values of our scientific commercialism, which we mistake for civilisation, with bitter penetration in *Good and Bad Manners in Architecture* (re-issued by Tiranti in 1944). It is an entertaining book, critical and clear and written in a most agreeable style.

Another entertaining book is *The Pleasures of Architecture*, by Clough and Amabel Williams-Ellis (Cape). Blandly discursive and witty, it presents architecture as a really gentlemanly pastime, and both the writing and the thinking recall the easy assurance of cultivated eighteenth century minds, when architecture engaged their interest. It is an excellent book for "beginners"; so, too, is Mr. Howard Robertson's *Architecture Explained* (Ernest Benn); but one of the most compact, most lucid and informative books on the subject is Mr. Christian Barman's essay, *Architecture*. This is probably the cheapest book ever published on architecture, for its price was sixpence. (Benn's Sixpenny Library).

APPENDIX : A NOTE ON SOME ARCHITECTURAL BOOKS

Two books on architectural design which are worth reading are: *Architectural Composition*, by Nathaniel Cortland Curtis (Cleveland, 1933), and *The Principles of Architectural Composition*, by Howard Robertson (the Architectural Press). Mr. Curtis is an American professor of architecture, and his book is well arranged, logical and aptly illustrated; but it is not an easy book to read. Mr. Howard Robertson's work, which covers much the same ground on a rather different plan, is easy to read, and explains with illuminating simplicity many matters which baffle the layman.

One of the greatest books on architecture ever written is *The Architecture of Humanism*, by Geoffrey Scott (Constable). It was first published in 1914, and a second edition appeared ten years later. It is a book to which the more unreasonably ardent advocates of bleak modernism might with propriety devote some attention, although for an adequate comprehension of its chapters a background of architectural knowledge is necessary.

An Introduction to Modern Architecture, by J. M. Richards (Pelican Books), is a comprehensive and objective study, and is highly recommended.

Books which are concerned with the historical aspects of architecture are not so exciting as those that come roaring from the Press to join some controversy, or which seek to explain and solve contemporary problems of building.

Perhaps the most useful reference book is Sir Banister Fletcher's *History of Architecture on the Comparative Method* (Batsford). It is a huge and well planned volume of facts about building and architects. The manifest utility and irreproachable accuracy of the book have earned for it the title of "a standard work."

W. R. Lethaby's *Architecture*, which originally appeared as one of the volumes in the Home University Library, is reliable and most readable, but the author regards the Renaissance as a disaster, and his heart is in the Middle Ages with the craftsmen who are carving and colouring and singing and doing all the things that William Morris loved so well. His chapters on Romanesque art, the Saxon and Norman schools, and French and English Gothic, are excellent.

An Outline of European Architecture, by Nikolaus Pevsner (John Murray), is an illuminating work, written by a great scholar who is also a master of a singularly limpid style.

The Works of Man, by Lisle March Phillipps, is a study in the revelations—racial, social and moral—of architecture throughout the ages. A companion volume by the same author, *Form and Colour*, while not wholly devoted to architecture, examines the artistic and

cultural influences that affect architecture. (Both published by Duckworth).

There are innumerable books on different periods of English architecture; and the large collection of illustrations contained in the various volumes published under the title of *English Homes* (Country Life Ltd.) enable the whole history of domestic building in this country to be studied with the assistance of magnificent photographs. I have attempted to trace the history and development of domestic architecture from Romano-British times to the present day in my book, *The Englishman's Castle* (Eyre & Spottiswoode).

Several authors have been attracted by the life of Sir Christopher Wren, but the best, accurate, and most interesting life of Wren was written in 1923 by the late Sir Lawrence Weaver. Sir Lawrence was an architectural critic of distinction, and was an admirer of the designer of St. Paul's in an intensely personal way, although in his *Life of Sir Christopher Wren* his admiration never obscures his judgment. (County Life Ltd.).

Several monographs have been written on the lives of the architects of the English Renaissance, and *Inigo Jones* is the subject of an essay by Stanley C. Ramsey. *Sir John Vanbrugh*, by Christian Barman, and *Nicholas Hawksmoor*, by H. S. Goodhart-Rendel, are interesting sketches, accompanied by collections of photographic plates. Mr. Trystan Edwards has also written one of these monographs on *Sir William Chambers*. (The "Masters of Architecture" series published by Ernest Benn Ltd.). A more extensive study of eighteenth century architecture will be found in John Summerson's *Georgian London* (Pleiades Books): an admirable book by a scholarly writer.

Civic and national responsibility for good conduct in building is the subject of three books of outstanding merit: *Some Architectural Problems of To-day*, by the late Professor Sir Charles Reilly (University Press of Liverpool); *Fine Building*, by Maxwell Fry, (Faber and Faber), and *Building for the People*, by Richard Sheppard (Allen & Unwin).

Finally, some constructive thoughts upon everything concerned with building are to be found in *Balbus, or the Future of Architecture*, by Christian Barman (Kegan Paul), and in *Architecture Arising*, by Howard Robertson (Faber and Faber).

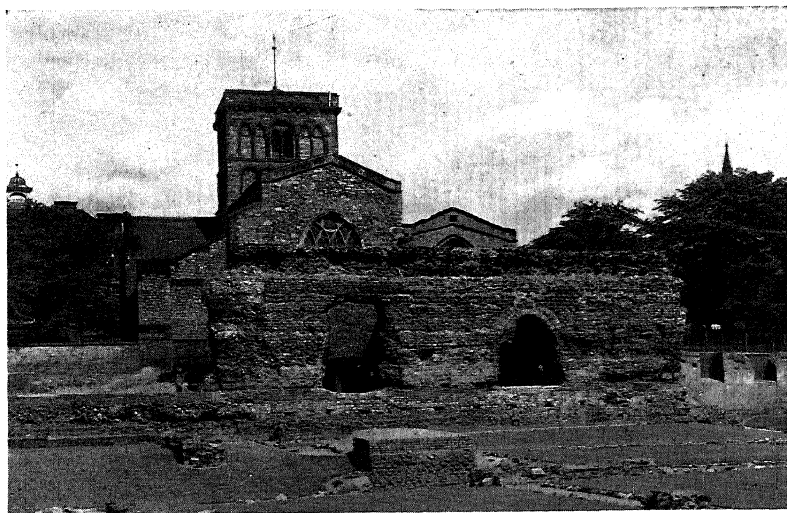


PLATE 1. Originally the façade of the Roman basilica at Leicester, this has for some centuries been known as the Jewry Wall. The excavations in the foreground are on the site of the Roman forum. In the background is St. Nicholas' Church, a Norman edifice, with the remains of Saxon work in the nave. (Reproduced by courtesy of the City of Leicester Publicity and Development Department.)

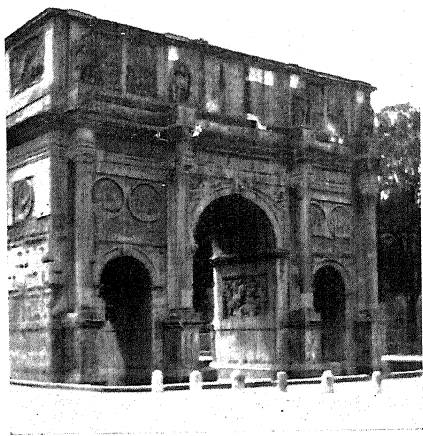
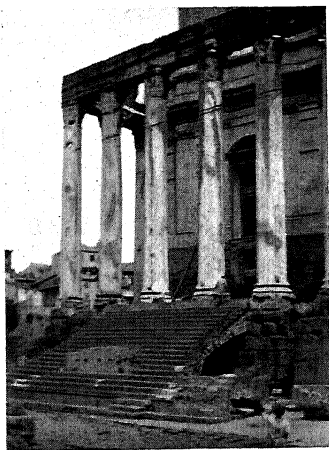
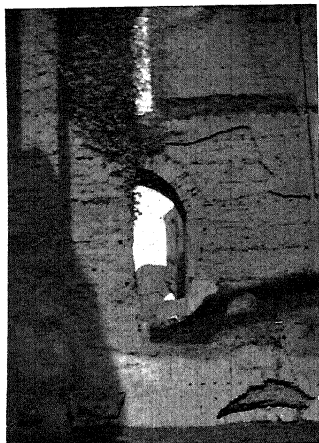


PLATE 2. Roman remains gave architectural continuity to Italy. One of the well preserved examples in Rome is the Arch of Constantine (above to the left).



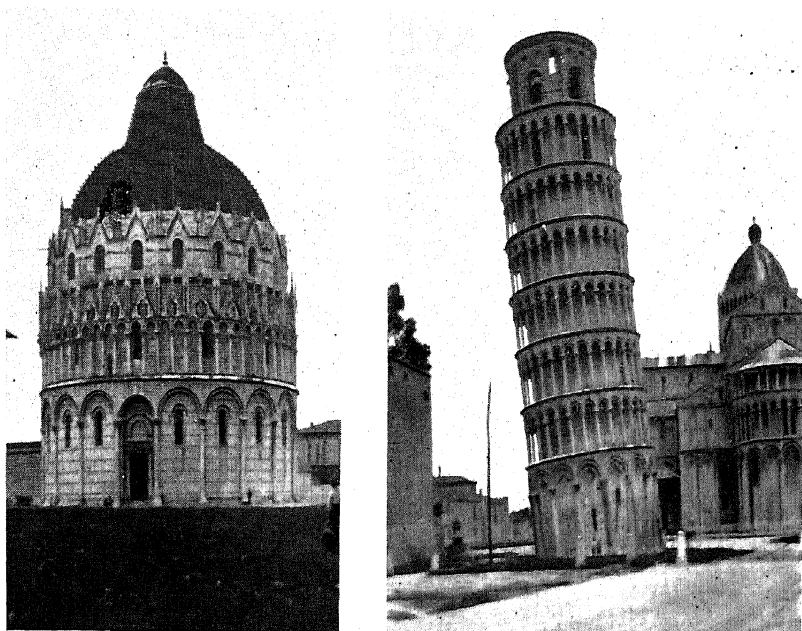
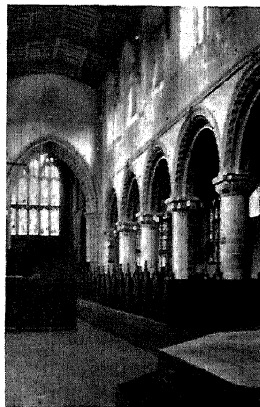
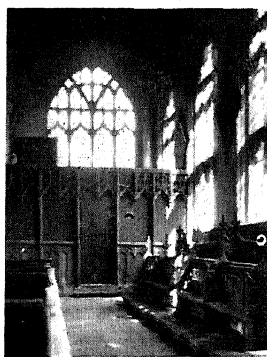
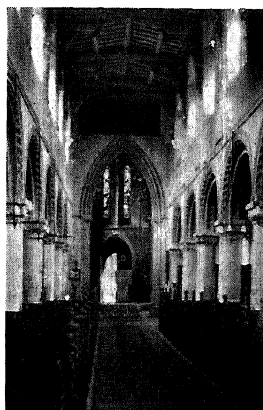


PLATE 3. Italian mediaeval building naturally took a different form from that in countries less directly influenced by Roman remains. Above : the baptistry at Pisa (Dioti Salve, 1153-1278), and campanile at Pisa (1154). In England the simplest and most characteristic forms were often to be found in the parish church. (See pages 53 and 55.)



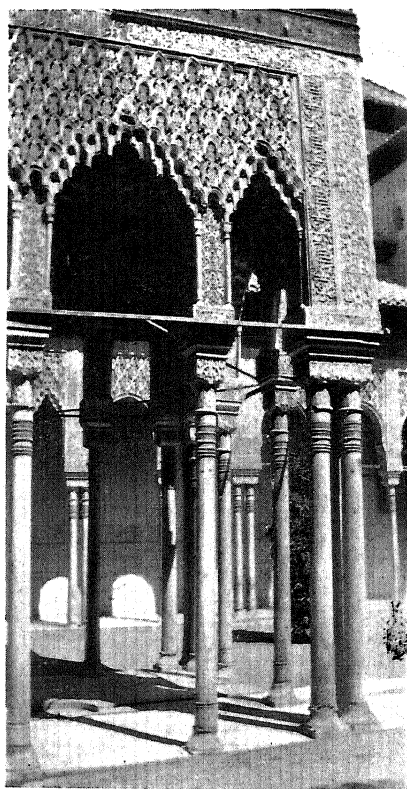
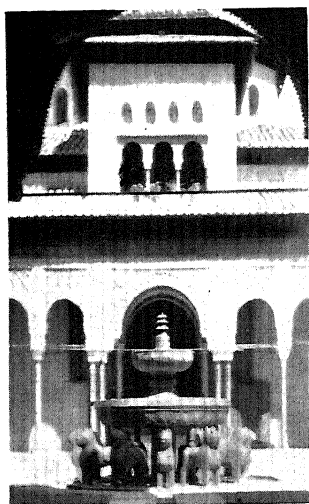
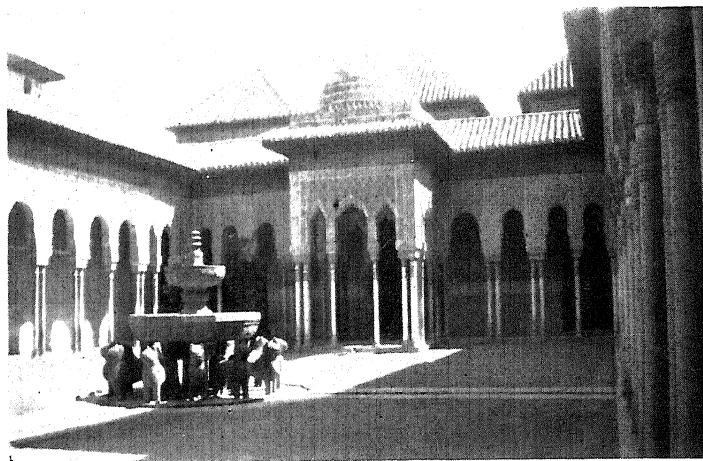


PLATE 4. But there were influences other than Roman in Europe during the Middle Ages. Arabic civilisation flourished in Spain, and created such buildings as the Alhambra at Granada.

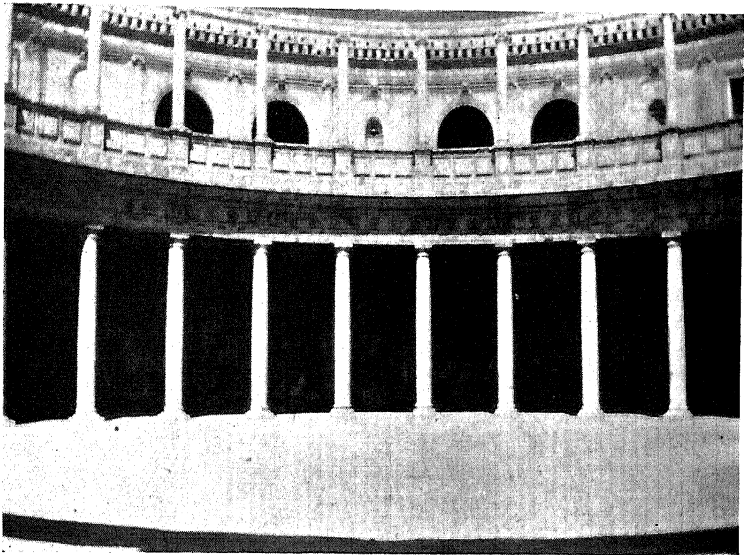
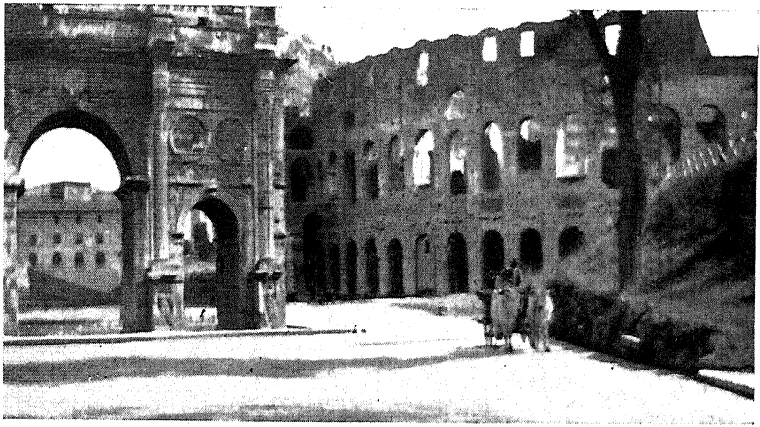


PLATE 5. But Rome ousted such alien oriental influences: when the palace of Charles V was built adjoining the Alhambra, the classical orders of architecture inspired the design. The ruins of Italy were more potent architecturally than the brilliant Arabic civilisation of Cordova and Granada. Above: ruins of the Colosseum with part of the Arch of Constantine. Below: part of the Palace of Charles V at Granada.

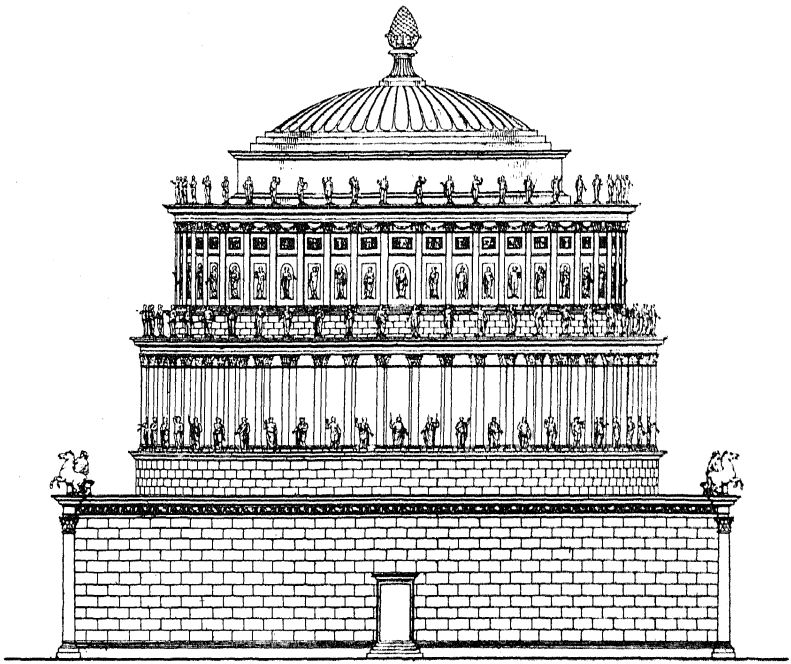
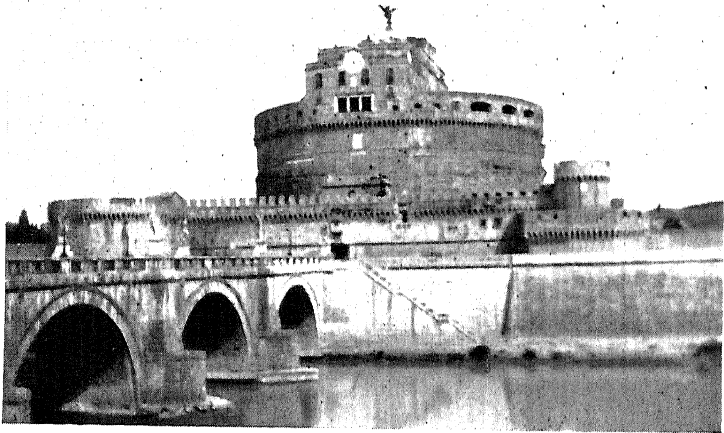


PLATE 6. Above, an early 19th century reconstruction of Hadrian's tomb : below, how it appeared after it became the castle of St. Angelo.



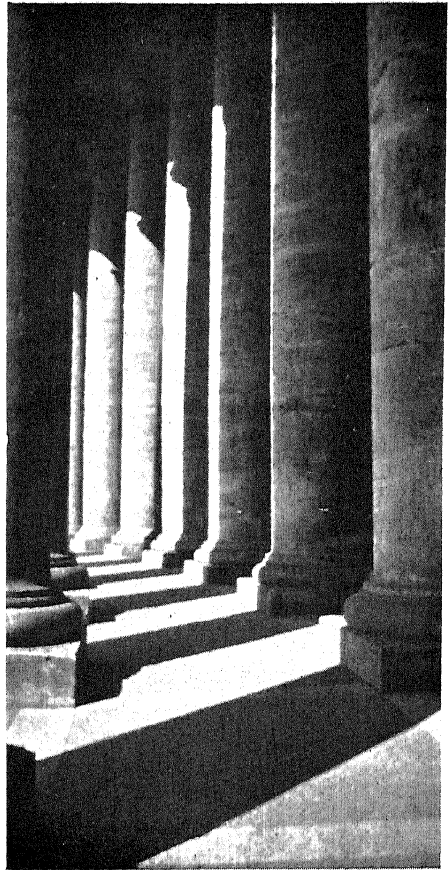
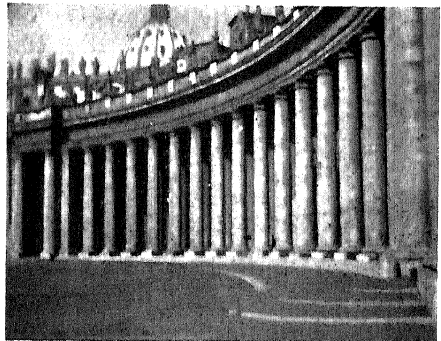


PLATE 7. The classical architecture of Rome was resurrected and given fresh and brighter life by the great architects of the Italian Renaissance. Bernini in the 17th century created the great colonnade of St. Peter's at Rome. "The old, reserv'd Italian" whom Wren interviewed in Paris, had already won a European reputation with this work.



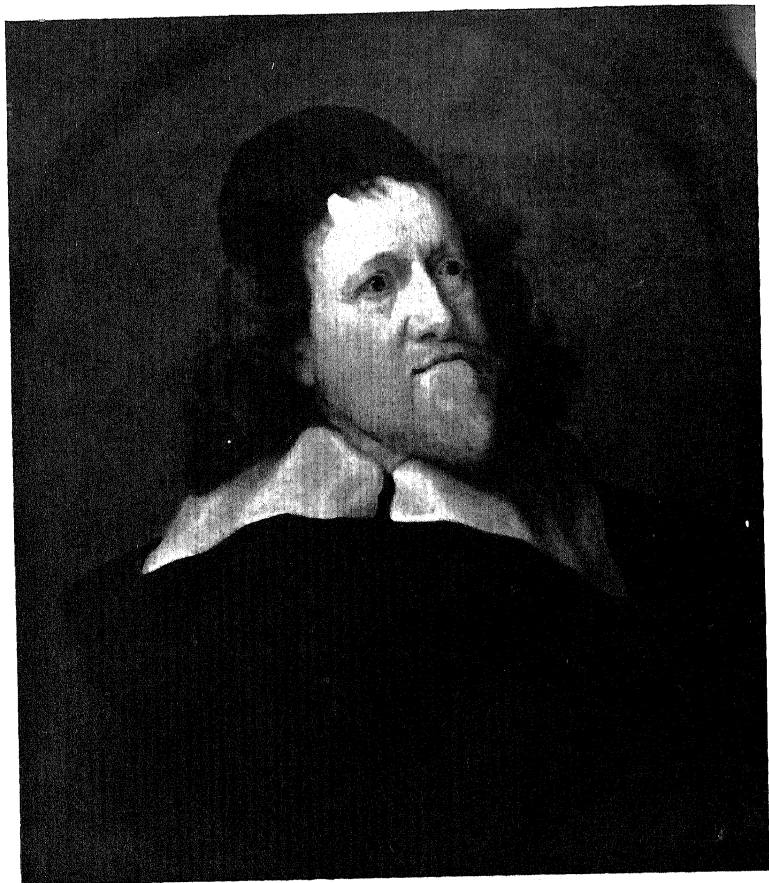


PLATE 8. The first lucid interpreter of Renaissance in England : Inigo Jones, 1573-1652.
(Reproduced by courtesy of the Trustees of the National Portrait Gallery.)

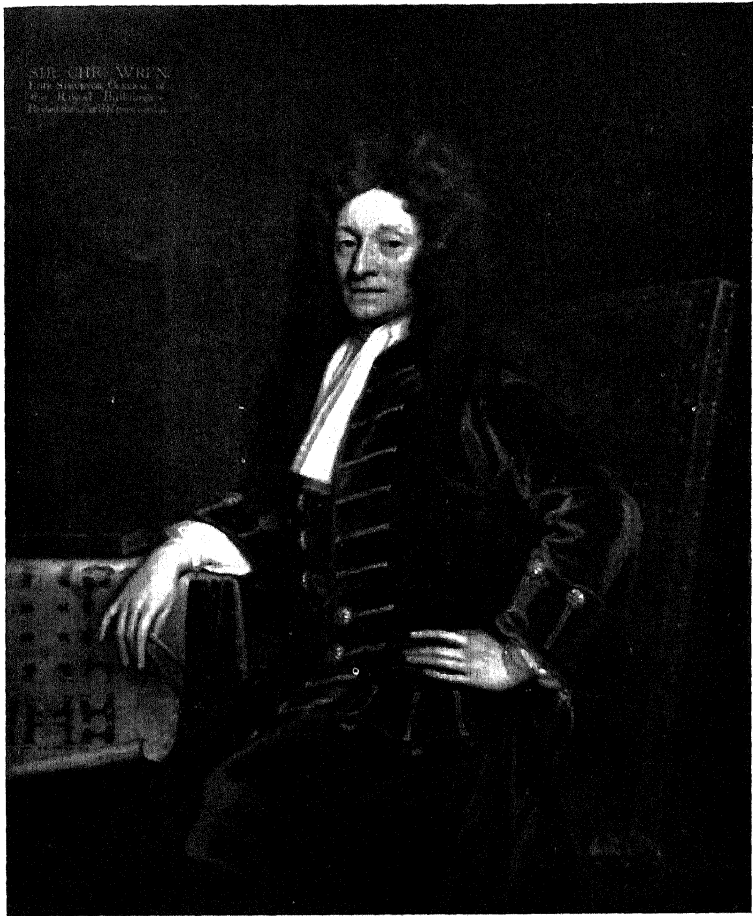


PLATE 9. The greatest English architect, Sir Christopher Wren, 1632–1725, by Kneller. (Reproduced by courtesy of the Trustees of the National Portrait Gallery.)



PLATE 10. Detail of the additions made to the west front of St. Paul's, by Inigo Jones. From a contemporary print.

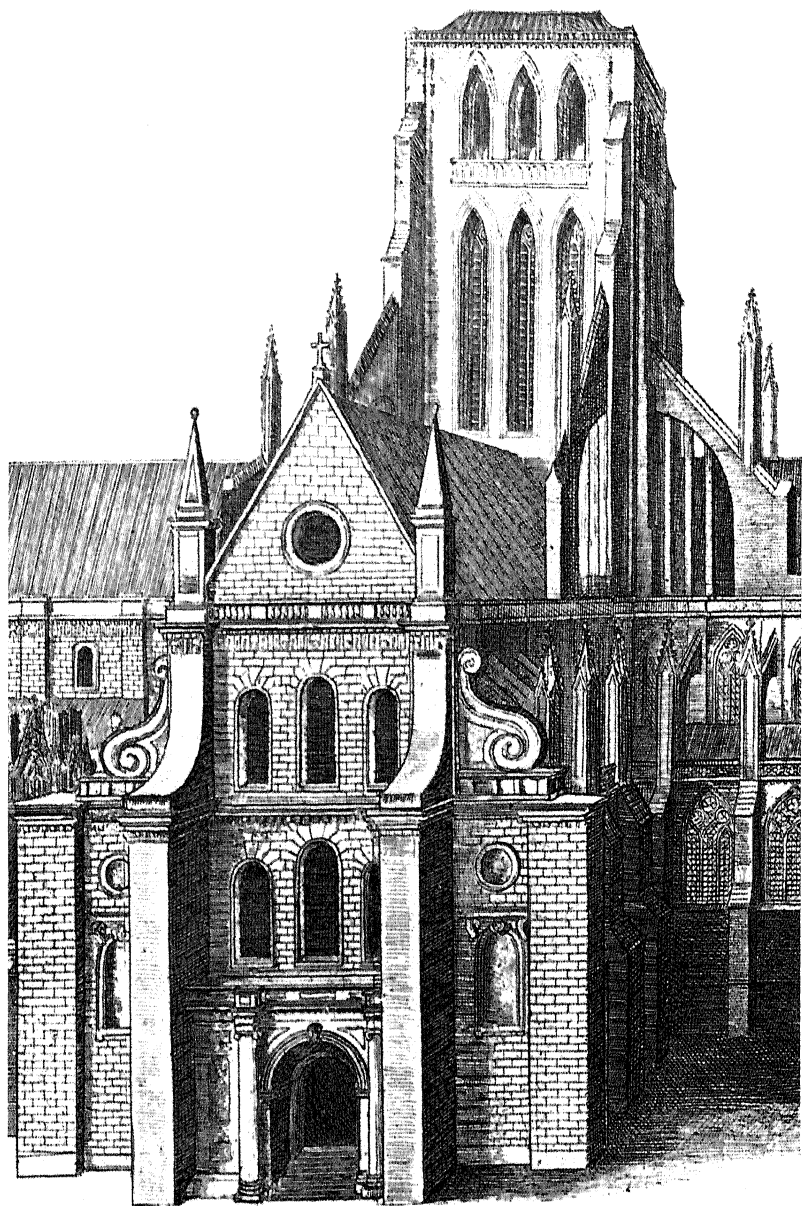


PLATE 11. The classical additions, pasted on to the old Gothic fabric of St. Paul's, by Inigo Jones, could never have been more than an unhappy process of patching.

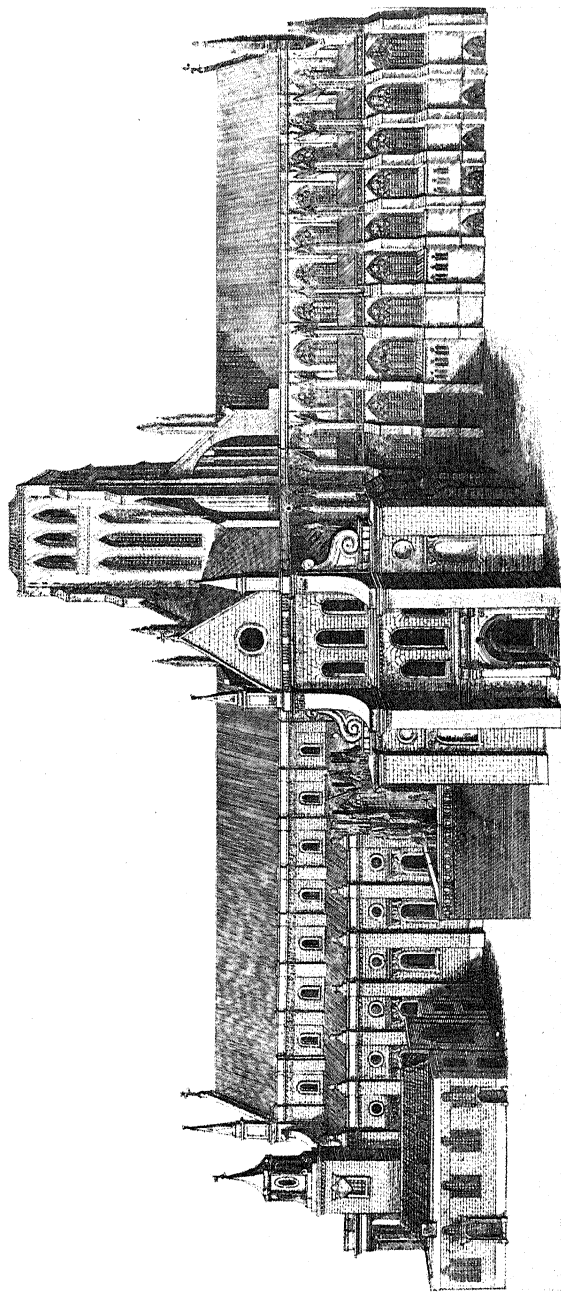
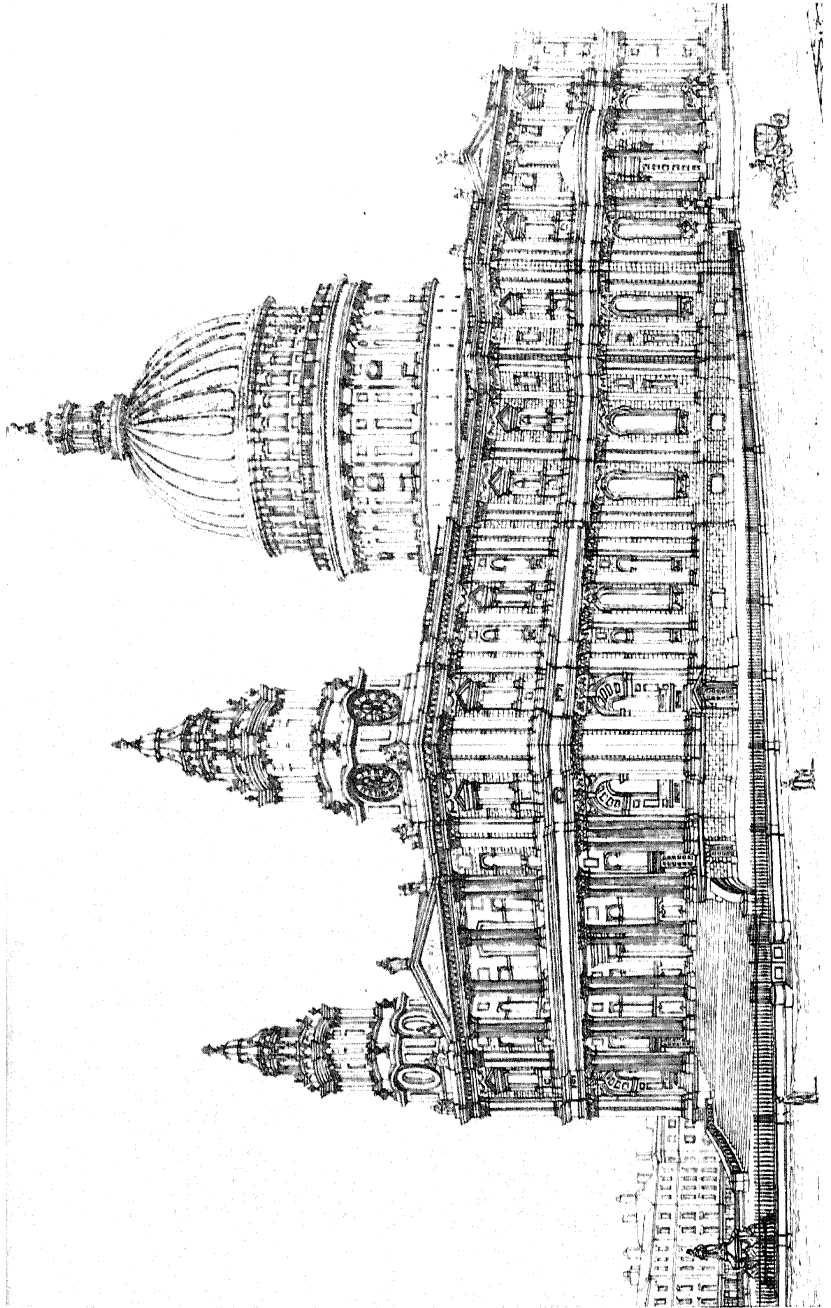


PLATE 12. Old St. Paul's. The spire, once the highest in Europe, fell on June 4th, 1561. Here is the complete building from the south.

PLATE 13. (*Opposite*) St. Paul's Cathedral, designed by Sir Christopher Wren.



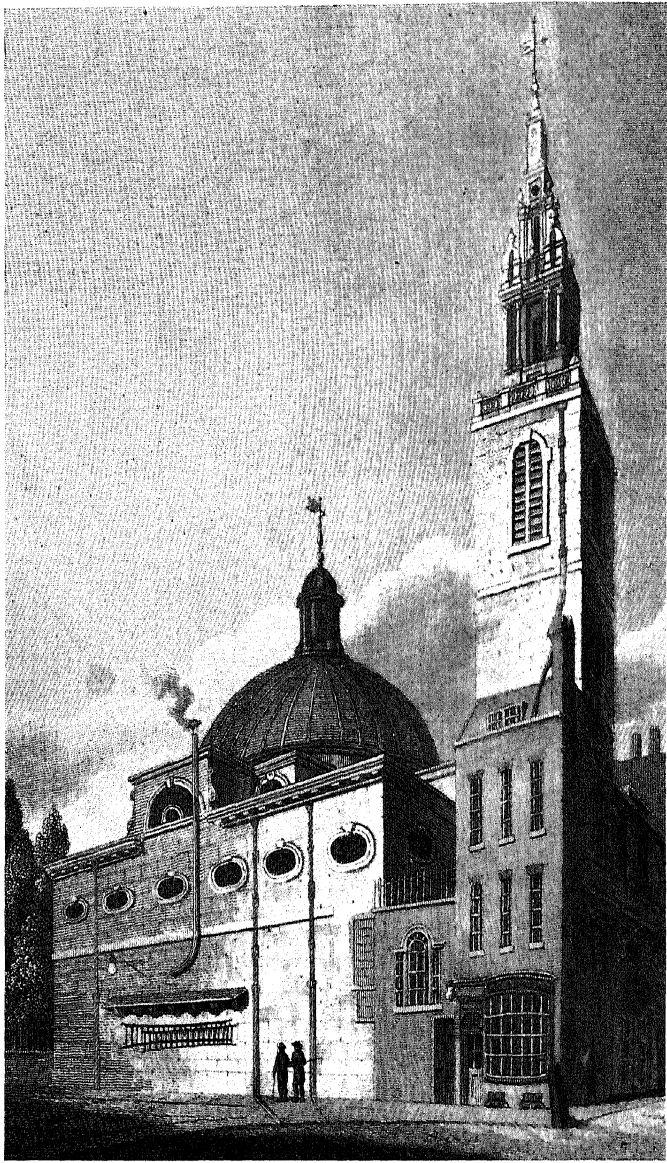


PLATE 14. St. Stephen, Walbrook, by Sir Christopher Wren : exterior. This was a small scale preliminary model for St. Paul's.

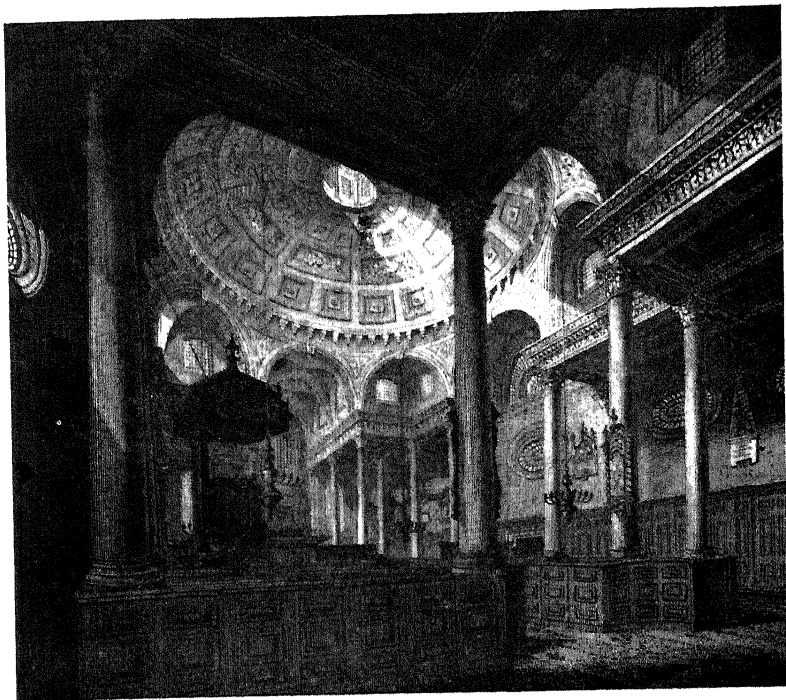


PLATE 15. Interior of St. Stephen, Wallbrook. Compare this with the interior view of St. Paul's on Plate 17.

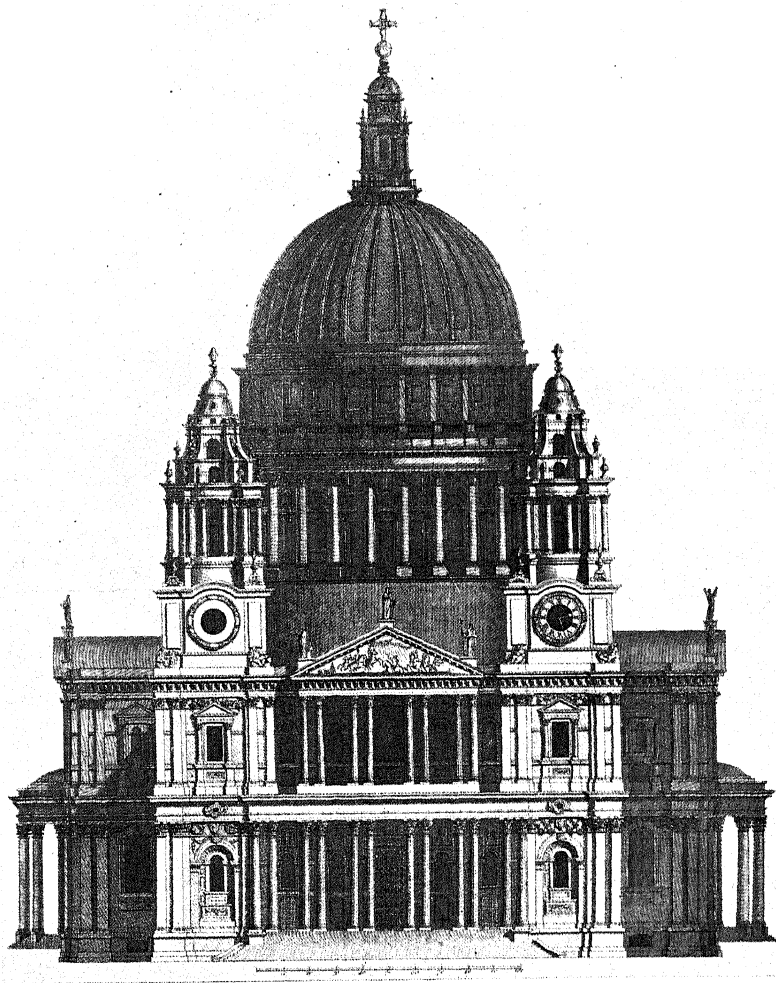


PLATE 16. Elevation of the west front of St. Paul's Cathedral.

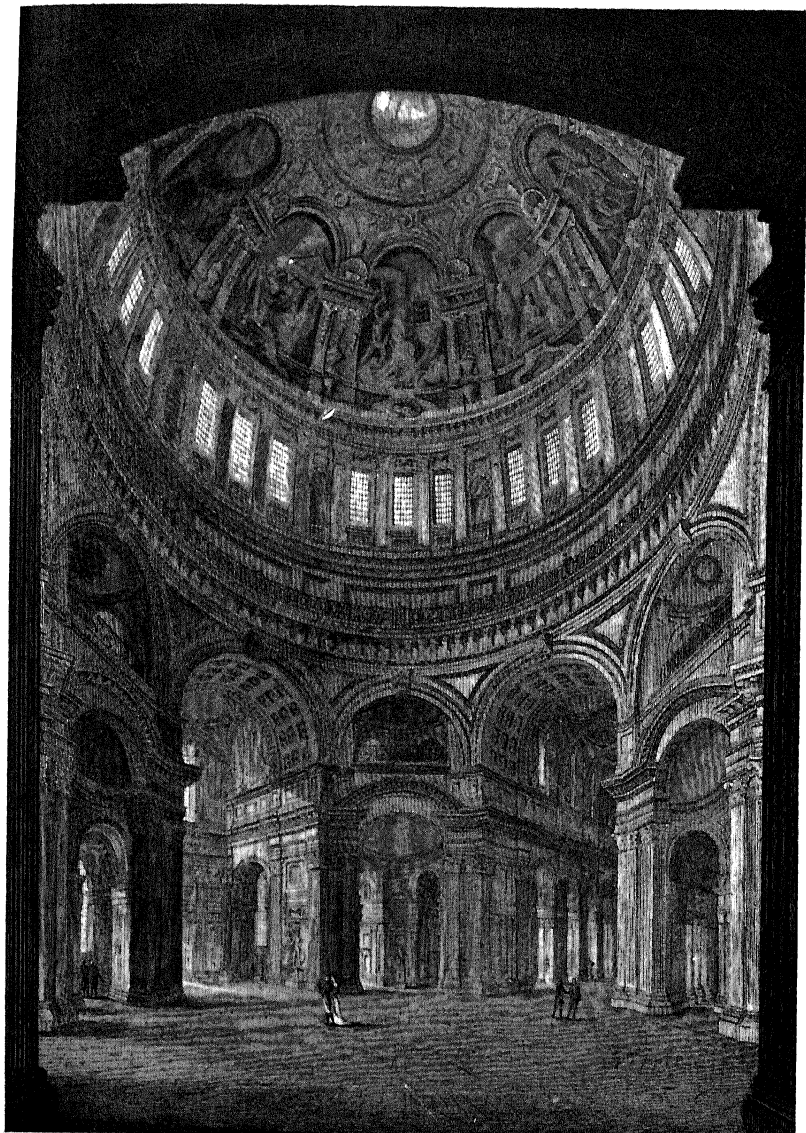


PLATE 17. Interior of St. Paul's Cathedral below the dome.

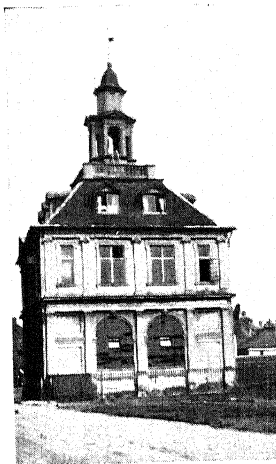


PLATE 18. Some civic buildings of the 17th century. Above left, the Town Hall at Windsor, by Sir Christopher Wren, built 1688. (Reproduced by courtesy of the National Buildings Record). Above right, the Customs House at Kings Lynn, by Henry Bell. (Photo by J. Gloag). Below, general view and detail of the Banqueting Hall, Whitehall, by Inigo Jones. (Reproduced by courtesy of the Architectural Association.)

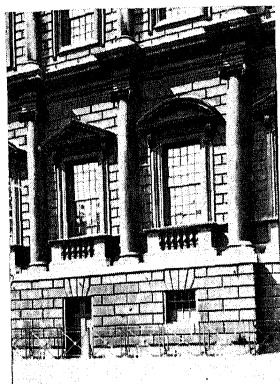
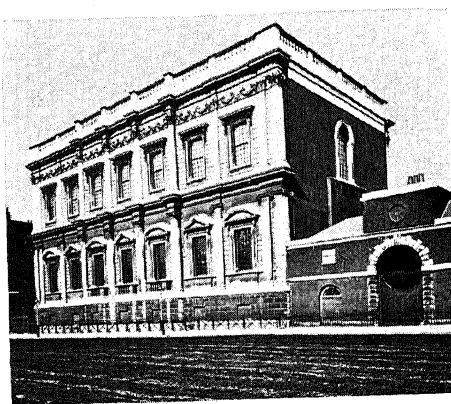




PLATE 19. Buildings by Nicholas Hawksmoor, 1661-1736. Above right, Christ Church, Spitalfields. Below left, entrance detail of St. Mary's, Woolnoth. Below right, Greenwich Hospital, detail of east front, Queen Anne's block. (Reproduced by courtesy of F. R. Yerbury and the Architectural Association.)

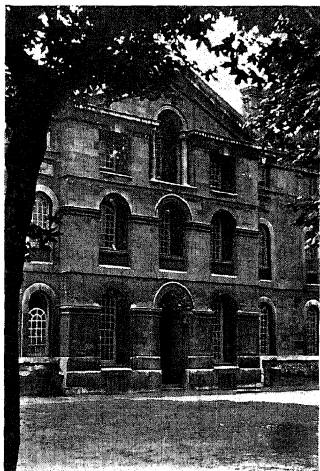
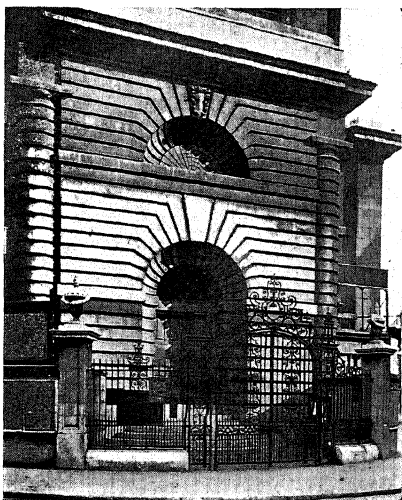




PLATE 20. St. Martin's-in-the-Fields, by James Gibbs, built 1721.

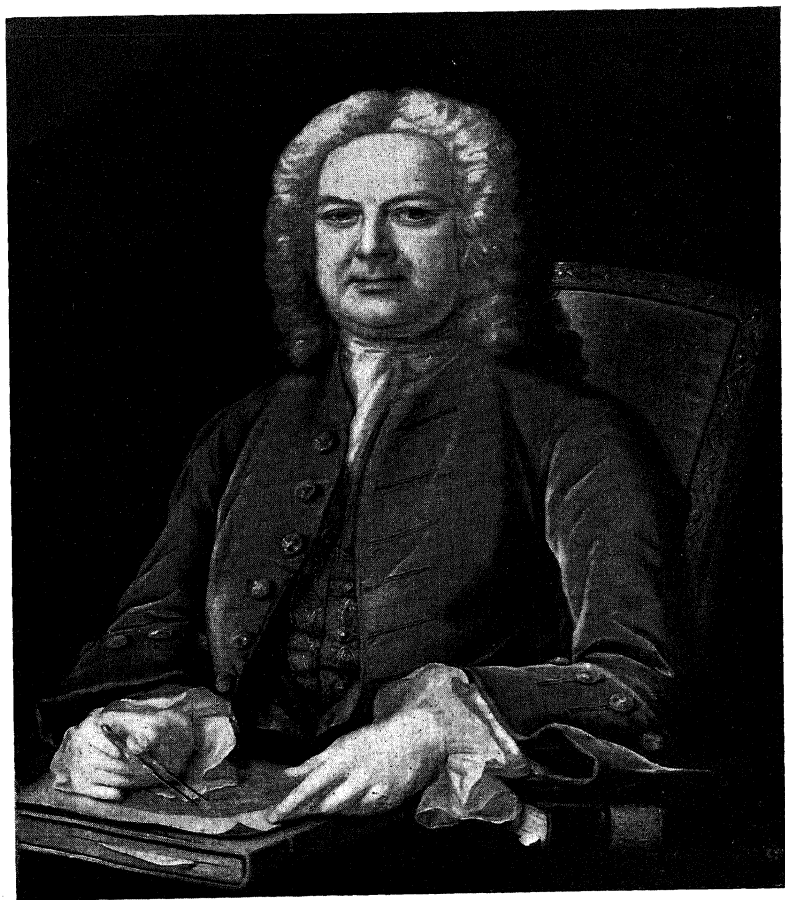


PLATE 21. James Gibbs, 1682-1754. (Reproduced by courtesy of the Trustees of the National Portrait Gallery.)

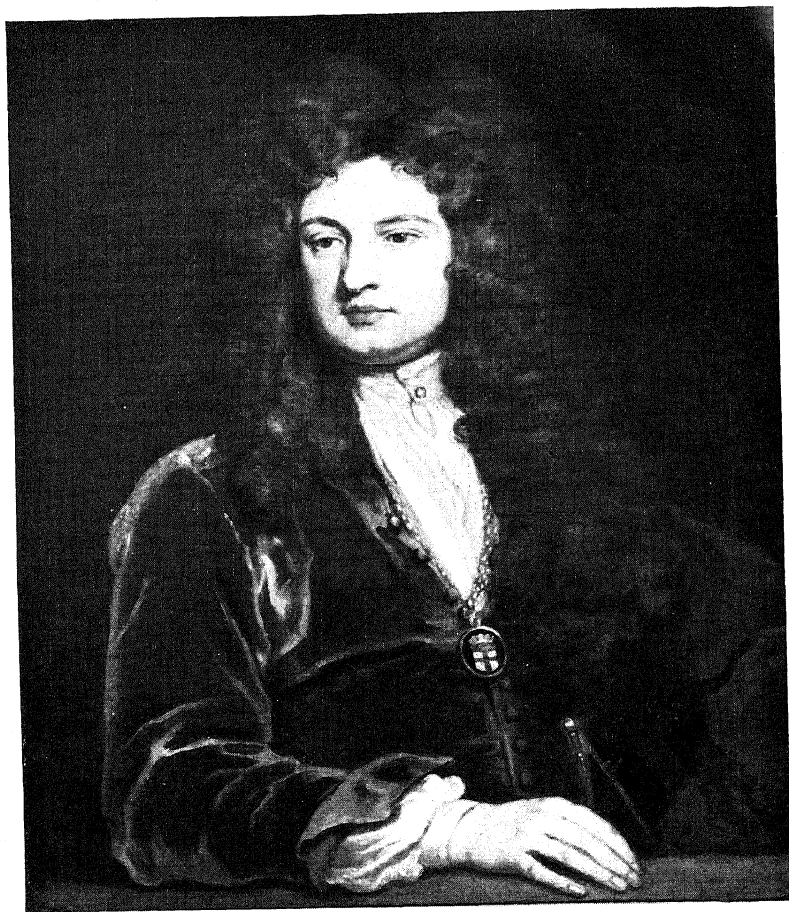


PLATE 22. Sir John Vanbrugh, 1666-1725. (Reproduced by courtesy of the Trustees of the National Portrait Gallery.)

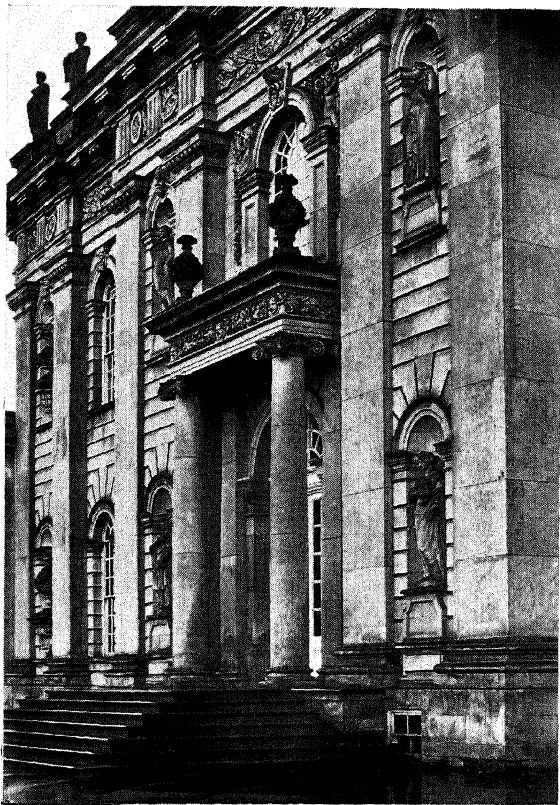
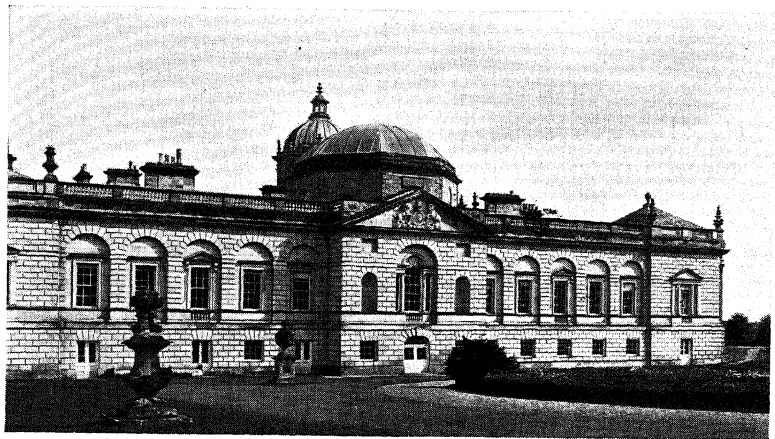


PLATE 23. Two views of Castle Howard by Sir John Vanbrugh. (Photographs reproduced by courtesy of F. R. Yerbury.)

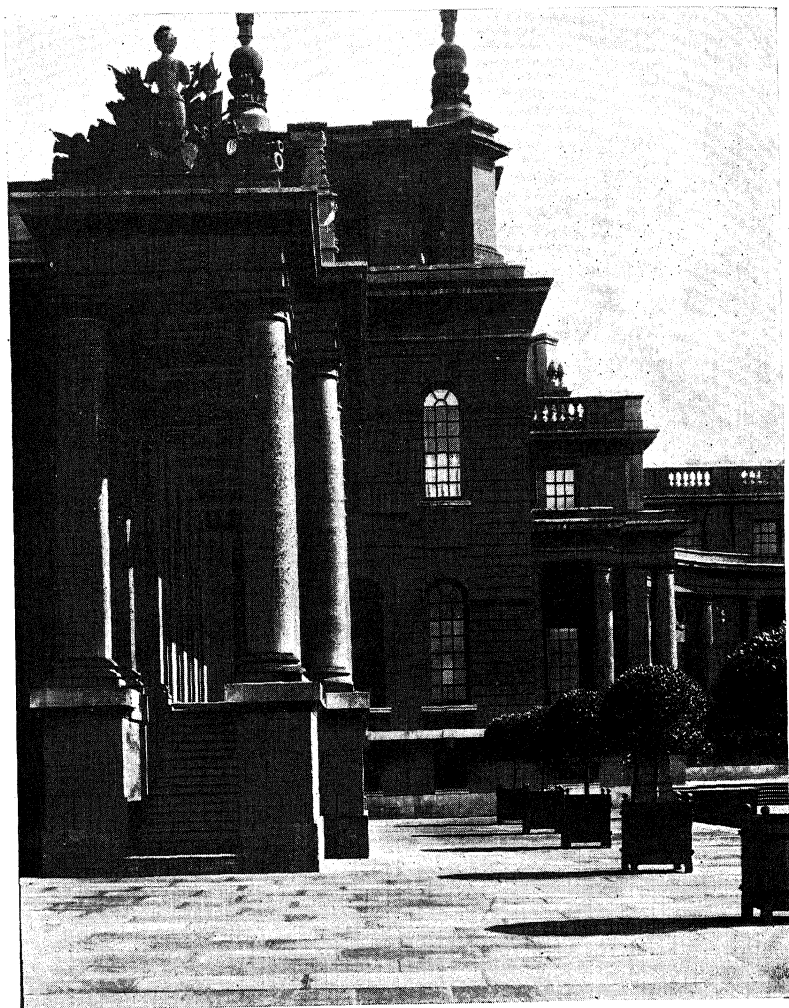


PLATE 24. Blenheim Palace: Vanbrugh in his grandest manner. (Photograph reproduced by courtesy of F. R. Yerbury.)



PLATE 25. Richard Boyle, 3rd Earl of Burlington, 1695–1753. The great patron of architecture, whose work revived and stimulated interest in Palladio. (Reproduced by courtesy of the Royal Institute of British Architects.)



PLATE 26. William Kent, 1664-1748. (Reproduced by courtesy of the Trustees of the National Portrait Gallery.)

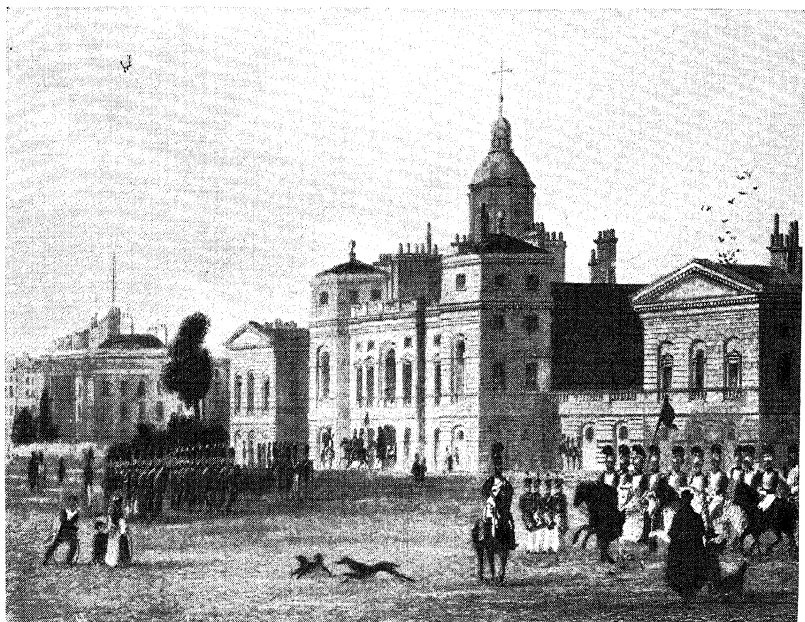
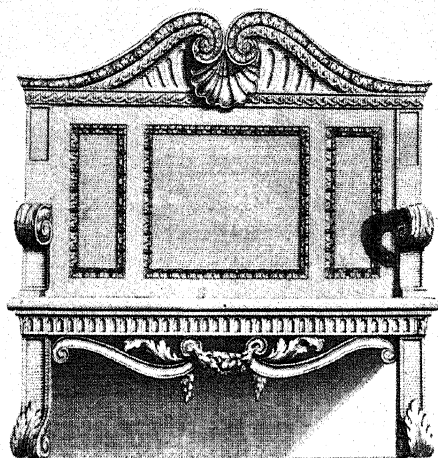
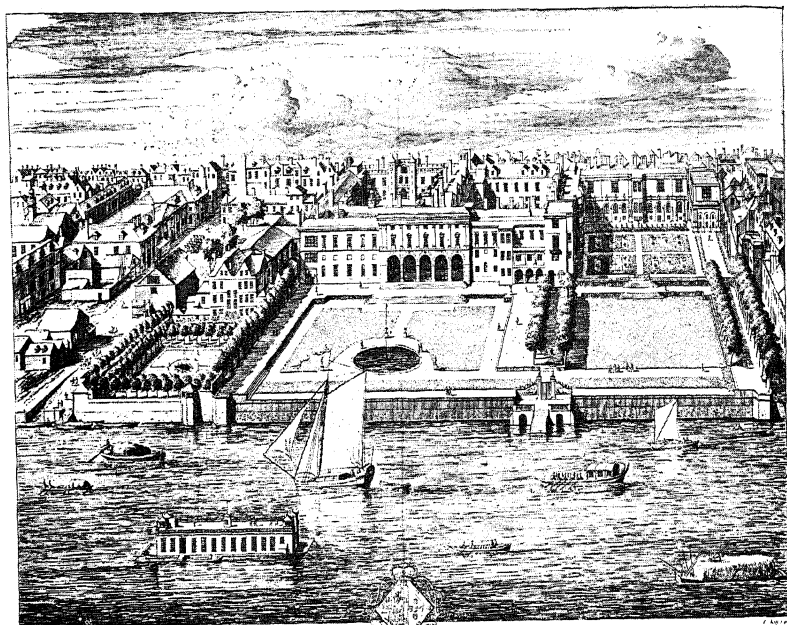


PLATE 27. Above, the Horse Guards, 1742, by William Kent. Below, one of his designs for furniture, from *Designs by William Kent*, published by John Vardy, 1744.





Somerset
la Maison



House
de SOMERSET

PLATE 28. Old Somerset House, as it appeared in the year 1700.

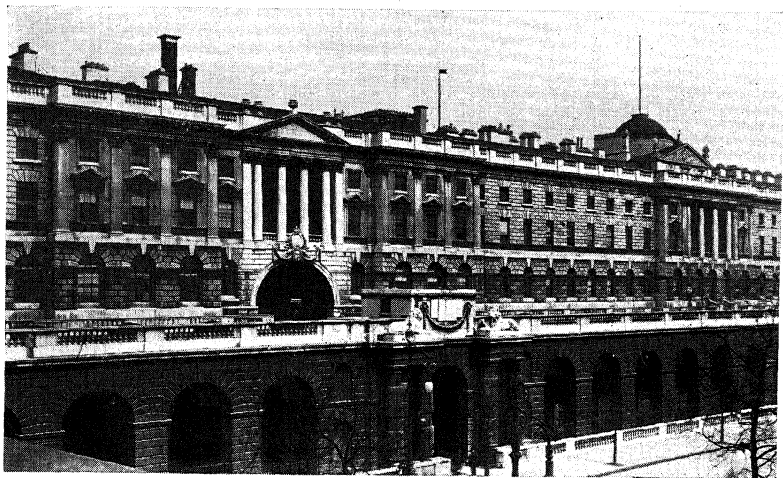
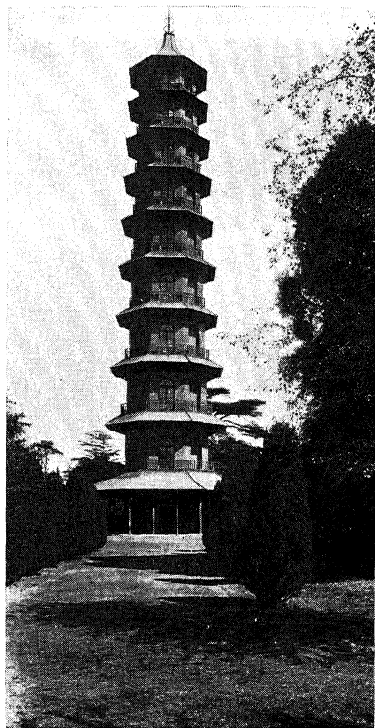
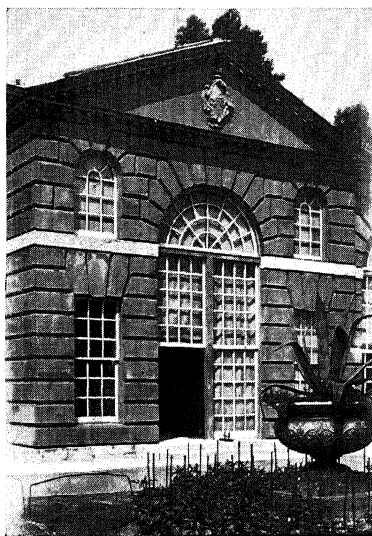


PLATE 29. Somerset House, designed by Sir William Chambers, and begun in 1776. When the Victoria Embankment was completed in 1870, the proportions of the lower part of Somerset House were adversely affected. (Reproduced by courtesy of F. R. Yerbury.)



PLATE 30. Three examples of the work of Sir William Chambers. Right, the pagoda at Kew Gardens, built between 1757 and 1762. Below, the orangery at Kew Gardens, built during the same period. Bottom right, the Albany in Piccadilly, 1770. (Reproduced by courtesy of F. R. Yerbury and the Architectural Association.)



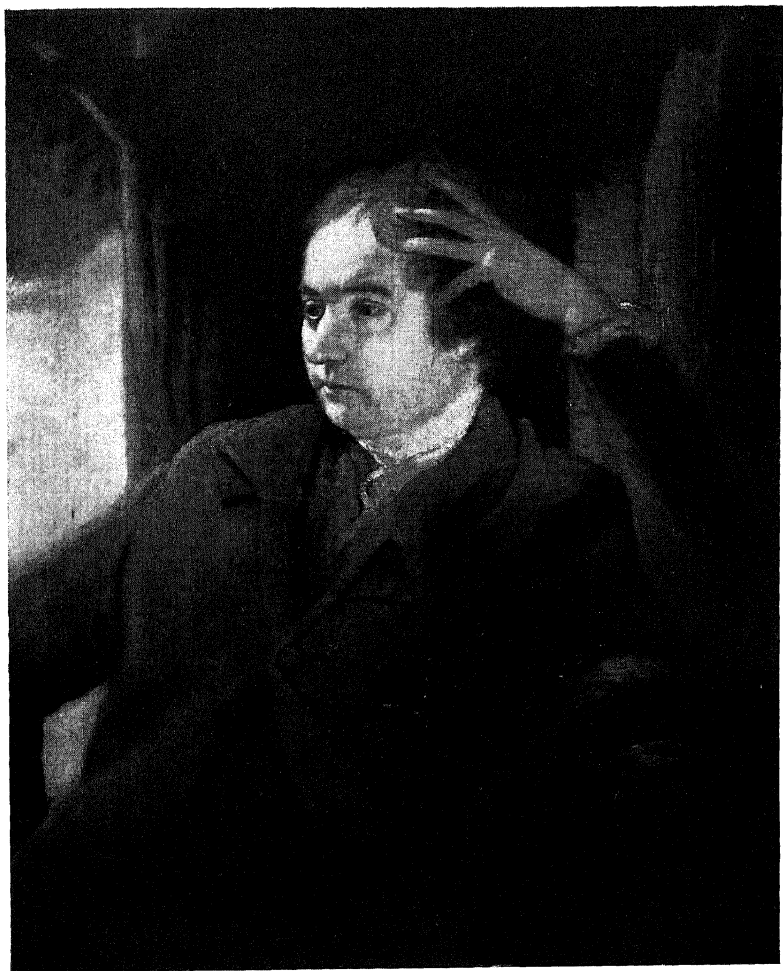
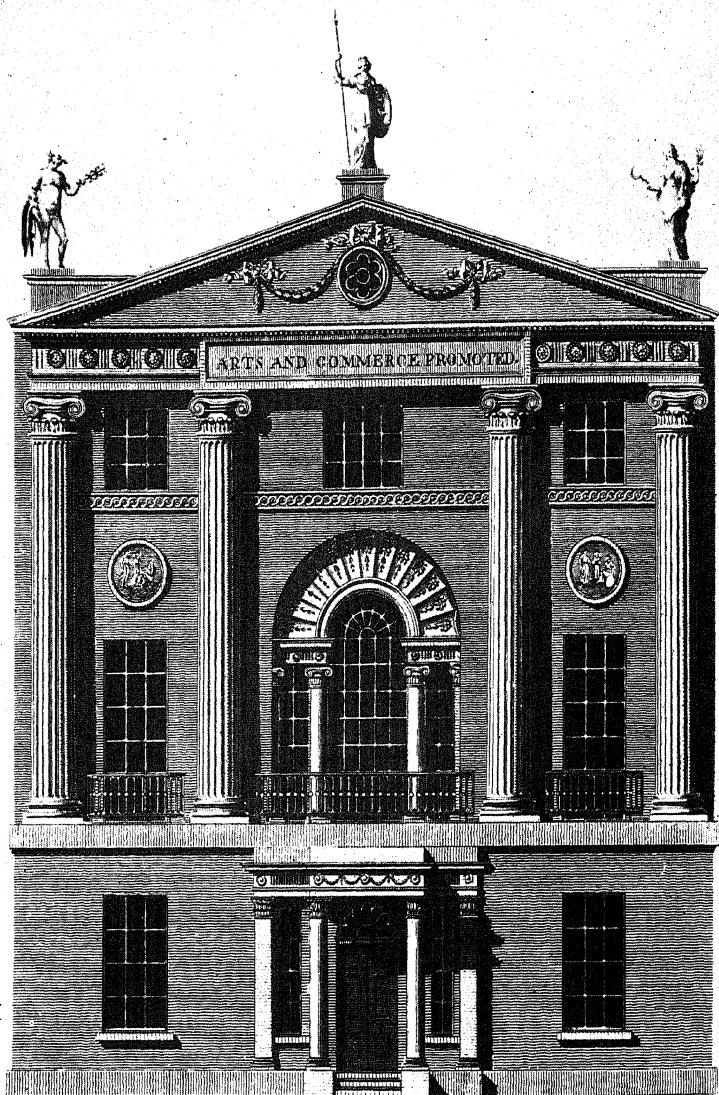


PLATE 31. Sir William Chambers, 1726–1796. (Reproduced by courtesy of the Trustees of the National Portrait Gallery.)



J. Taylor Sc.

*Elevation of the Society's House,
designed by ROBERT ADAM ESQ.^r*

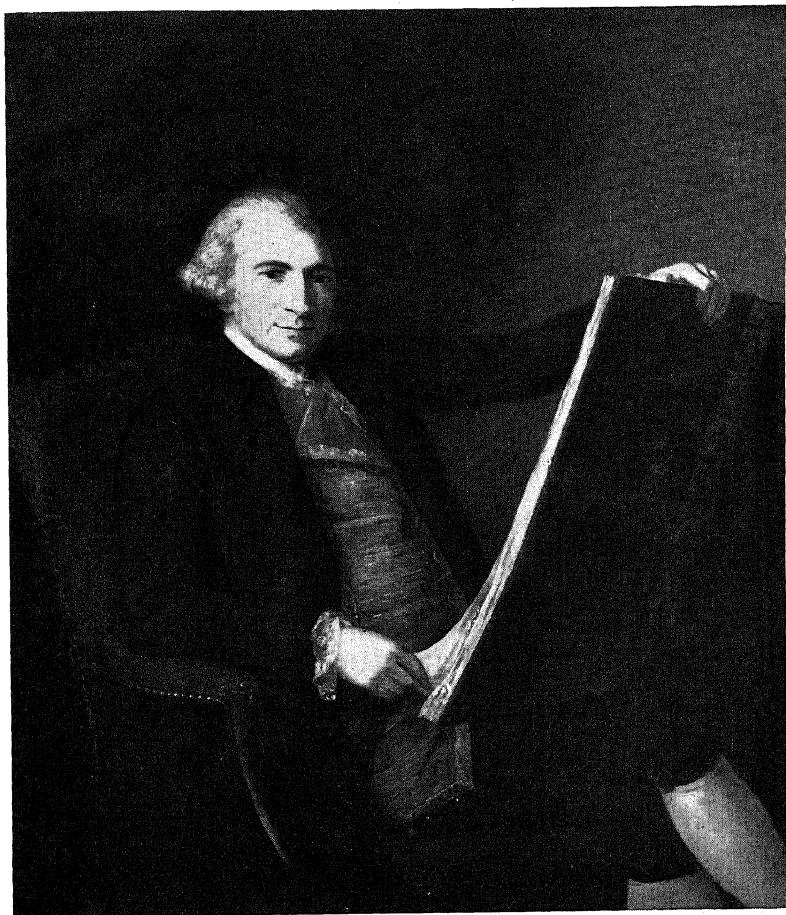


PLATE 33. Robert Adam, 1728-1792. (Reproduced by courtesy of the Trustees of the National Portrait Gallery.) Opposite (Plate 32), is the building he designed for the Society of Arts, which was built in 1772-74. (From an original engraving, which is reproduced by courtesy of the Royal Society of Arts.)



PLATE 34. Sir John Soane, 1753-1837. (Reproduced by courtesy of the Trustees of the National Portrait Gallery.)



PLATE 35. Two views of Pitzhanger Manor at Ealing, designed by Sir John Soane, reproduced from original drawings made by Soane's office. (By courtesy of the Trustees of the Sir John Soane Museum.)

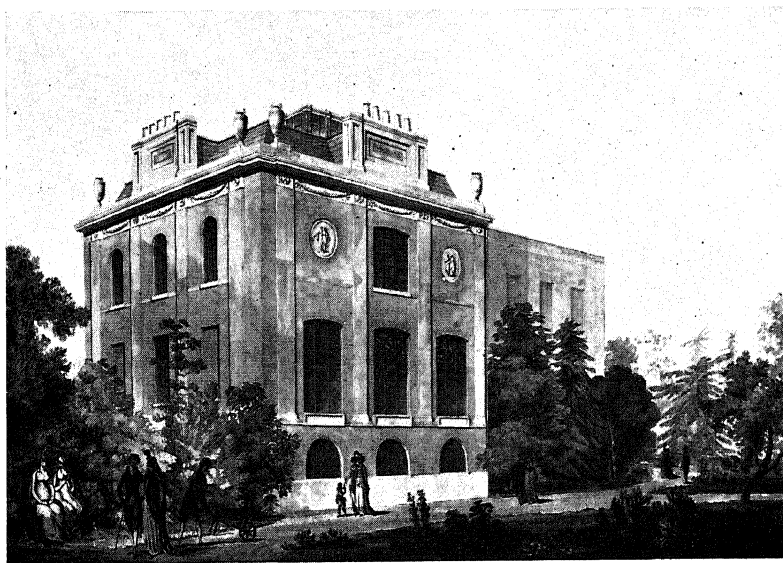




PLATE 36. The progress of the street. Above, unity achieved by the use of a common material : houses built of Cotswold stone in the High Street of Chipping Campden, Glos., beginning with the house of William Greville (late 14th century), on the left, and ending with 19th century houses on the extreme right. (Photograph by J. Gloag). Below, part of the High Street at Oxford, showing individual good design, but collective disunity. (Reproduced by courtesy of the National Buildings Record.)

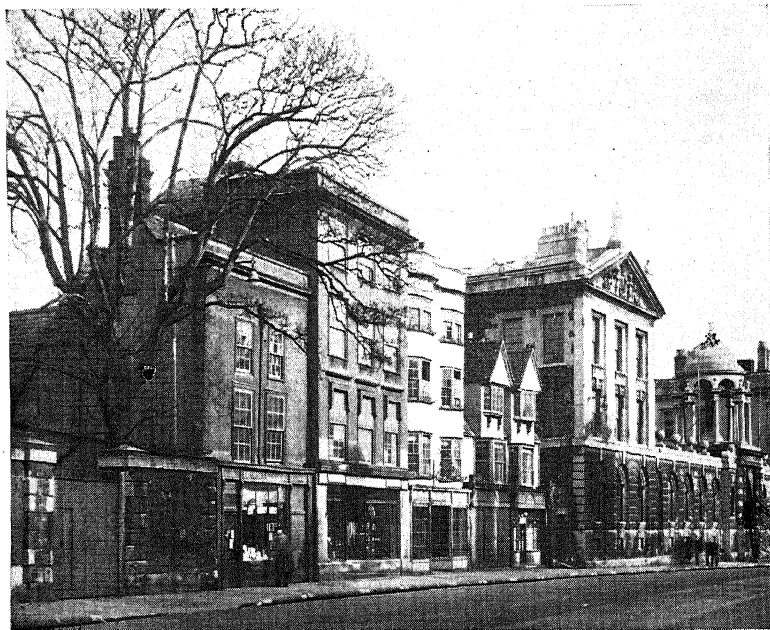




PLATE 37. The circus and the square demanded horizontal continuity, and from the 18th century until well into the 19th, that was obtained with classical elegance. Above, the Circus at Bath, designed by John Wood the elder; originally called the King's Circus and built between 1753 and 1768. Below, Hamilton Square, Birkenhead, designed and built by Gillespie Graham, an Edinburgh architect, as part of the plan made for Birkenhead in 1826. (Reproduced by courtesy of the National Buildings Record.)

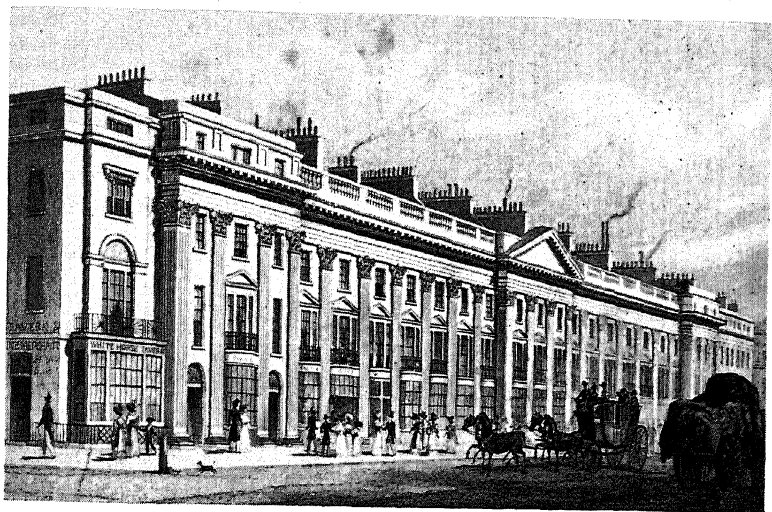


PLATE 38. Residential development in the 18th and early 19th centuries was, for the most part, well designed, although the development was planned in a piecemeal fashion. Above, houses in Bedford Square, built during the seventeen eighties. (Reproduced by courtesy of F. R. Yerbury and the Architectural Association.) Below, Regency Square, Brighton. Most of the buildings had an external finish of painted stucco, which Clough Williams-Ellis once described as "the fine, white wine of Regency architecture." (Reproduced by courtesy of the National Buildings Record.)





PLATE 39. Shopping streets of the early 19th century, when they were designed, as Regent Street was designed, by one architect, had spaciousness, coherence, and, to some extent, horizontal continuity. John Nash, 1752-1835, designed Regent Street as part of a town planning scheme: it was built largely between 1817 and 1823. (See pages 142 and 143.)



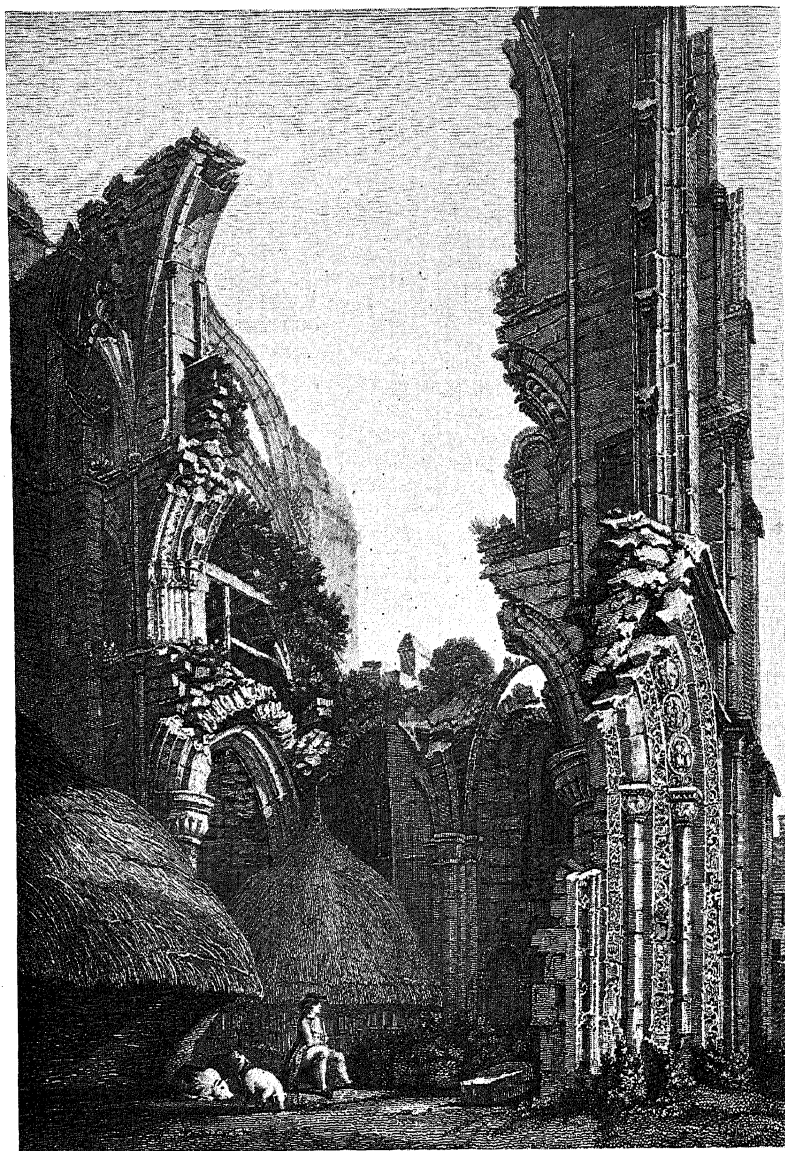


PLATE 40. During the golden age of classical design, in the 18th century, a romantic interest in mediaeval ruins had been growing. What Piranesi did for the ruins of Rome by his drawings, innumerable draughtsmen did for the ruins of the abbeys and castles of England. Above, an 18th century picturesque view of a fragment of Malmesbury Abbey.

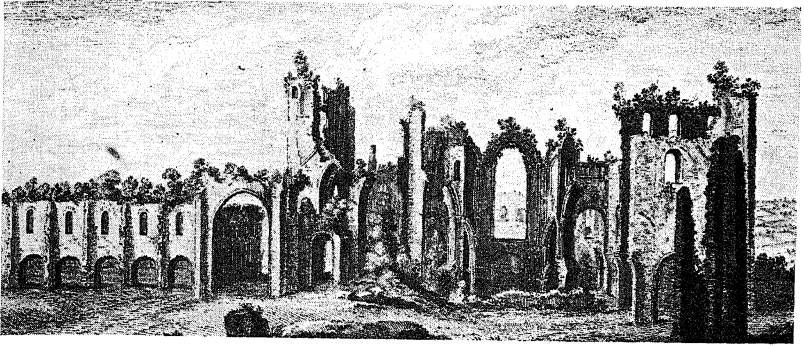
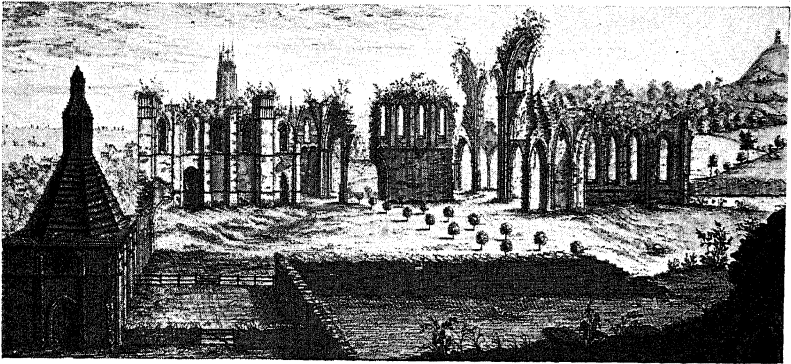
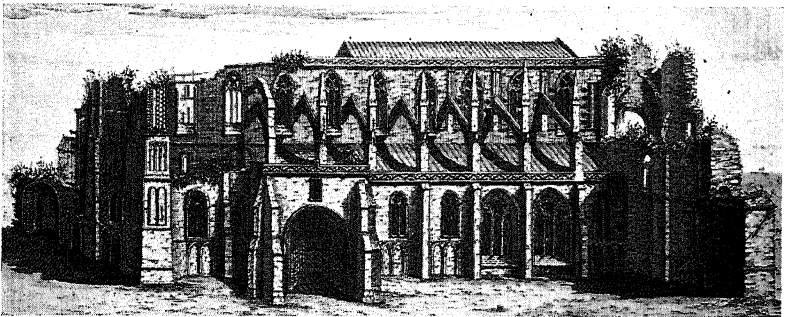


PLATE 41. The ruins of Castle-Acre Priory, Norfolk.



The south-view of the ruins of Glastonbury Abbey, Somerset.



The south-west view of Malmesbury Abbey, Wiltshire. These are three examples of popular pictures of ruins, taken from Buck's Views, which were published during the seventeenth thirties.

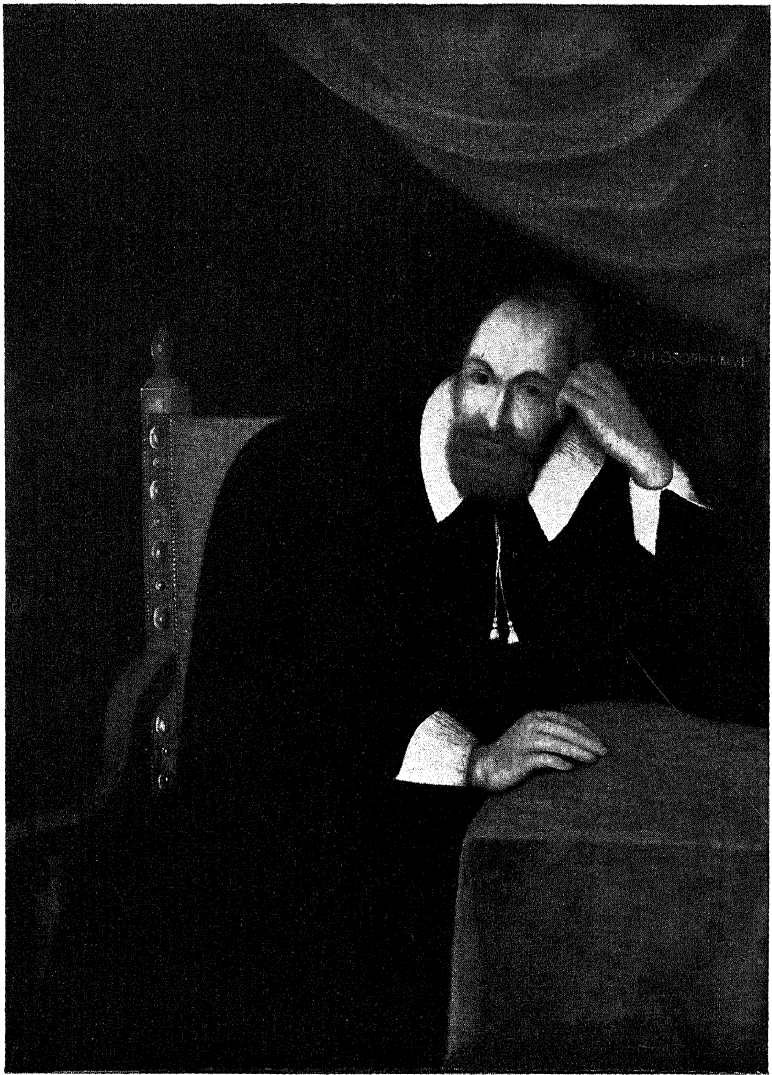


PLATE 42. Sir Henry Wotton, 1568-1639, the author of *The Elements of Architecture*. Wotton is living in his own day, wearing the costume of it, thinking its thoughts, and interpreting the architectural precepts of classical antiquity for the enlightenment of his contemporaries. Compare this portrait with the engraving which forms the frontispiece. (Reproduced by courtesy of the Trustees of the National Portrait Gallery.)



PLATE 43. Augustus Welby Northmore Pugin, 1812–1852. Pugin is obviously living out of his own day, and not even wearing the costume of it. Dreaming of the past, he is attempting to interpret the precepts of mediaeval building for the architectural enlightenment and spiritual uplift of his contemporaries. He preached the Gothic revival, but was perplexed and indeed irritated by many of the interpretations of his sermons. See pages 147 to 148. (Reproduced by courtesy of the Royal Institute of British Architects.)

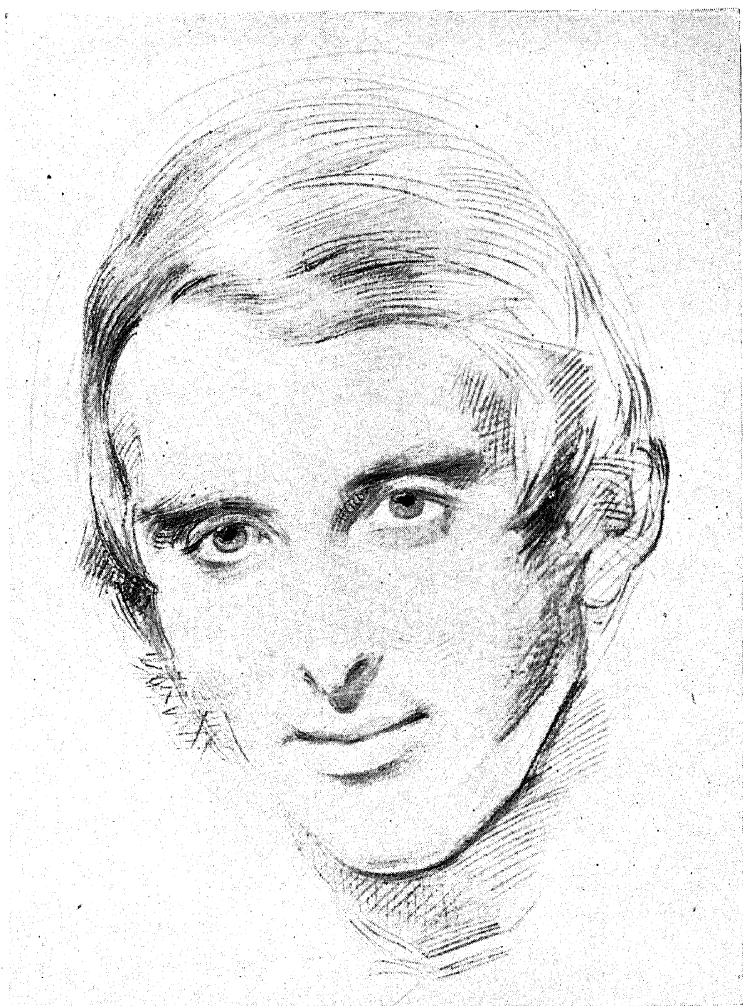


PLATE 44. John Ruskin, 1819–1900. He was a great confuser of issues ; and he helped to restore the architectural chaos of the pre-Inigo Jones and Wotton period, by such pronouncements as “ Whatever has any connection with the five orders, or with any one of the orders, whatever is Doric or Ionic or Corinthian or Composite, or in any way Grecised or Romanised ; whatever betrays the smallest respect for Vitruvian laws or conformity with Palladian work—that we are to endure no more.” The battle of the styles was on. Ruskin, like Pugin, looked back to the Middle Ages, and to mediaeval methods of work. This encouraged a handicraft revival. (Reproduced by courtesy of the Trustees of the National Portrait Gallery.)

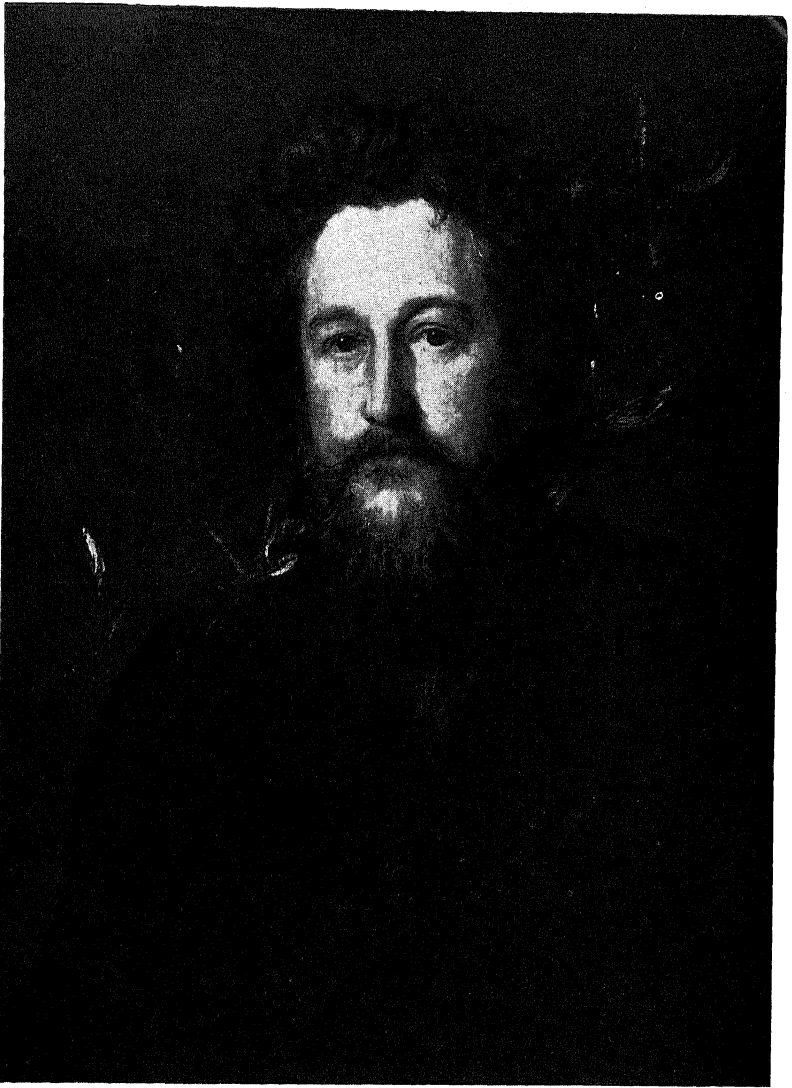


PLATE 45. William Morris, 1834–1896, craftsman, poet, parlour Socialist, and the driving power behind the handicraft revival in the second half of the 19th century. Both Morris and Ruskin, like Pugin, encouraged a mediaeval note in design, both architectural and industrial, which was first sounded in the late 18th century. They were too preoccupied with the unreal battle of the styles to bother about new structural experiments. (Reproduced by courtesy of the Trustees of the National Portrait Gallery.)

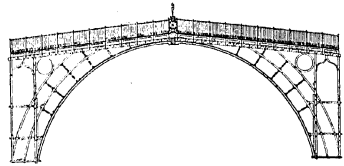


PLATE 46. The first structural experiment with cast iron was the bridge over the Severn at Coalbrookdale, opened in 1779 : the last great cast iron structure was built seventy two years later, and was Paxton's Crystal Palace.



Above : Thomas Farnolls Pritchard who designed the first cast iron bridge. (From a portrait in possession of the Royal Institute of British Architects, by whose courtesy it is reproduced.)
 Right: Sir Joseph Paxton (1801-1865), designer of the Crystal Palace. (Picture Post Library.)



Handwritten signature of Sir Joseph Paxton.

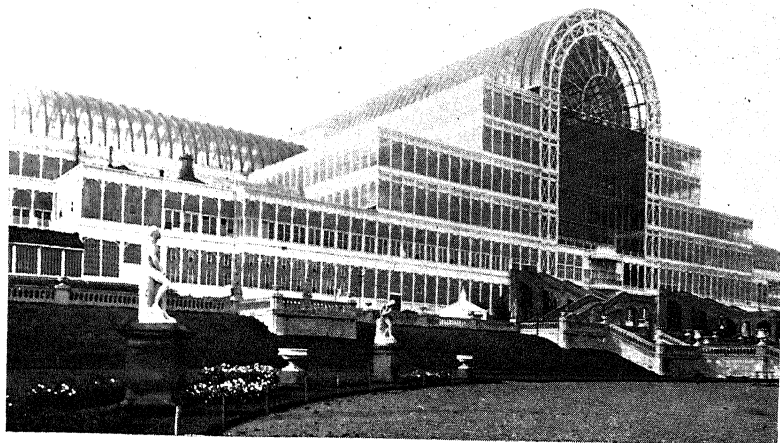
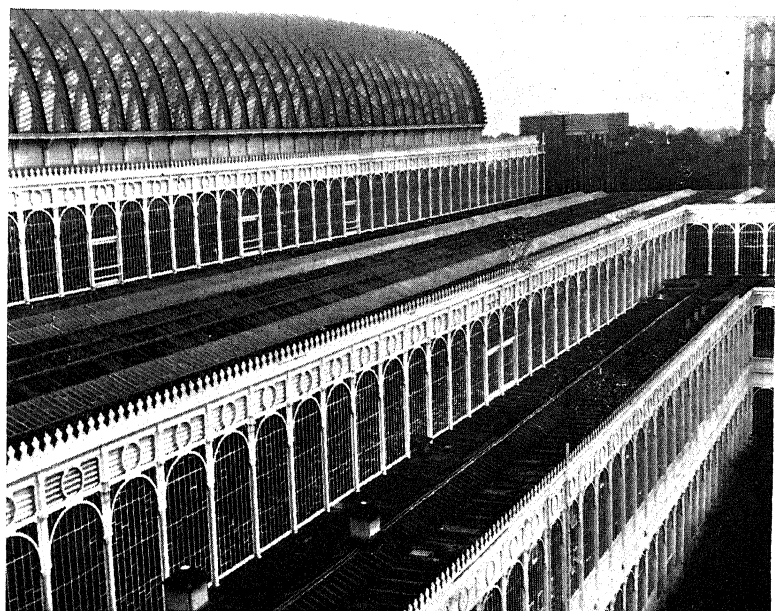
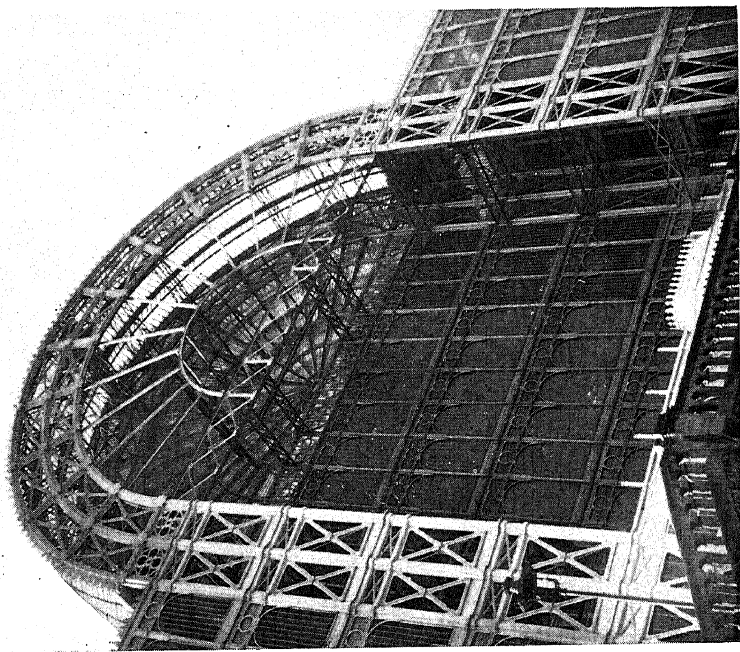


PLATE 47. The Crystal Palace, built in 1851 of pre-fabricated iron and glass units.
(Reproduced by courtesy of F. R. Yerbury.)



PLATES 48 and 49. Left, detail of the arch above the entrance of the Crystal Palace. (Reproduced by courtesy of F. R. Yerbury.) Below, on the opposite page, is the New York Crystal Palace, which was an imitation of Paxton's Crystal Palace, and was designed to house the New York World Fair of 1853. It is described in the *New York City Guide* (published in 1939) as "an inferior copy of the London structure." It was completely destroyed by fire in 1856. Many concessions to traditional ideas were made in the design of this building: it was essentially an imitation and not an innovation.



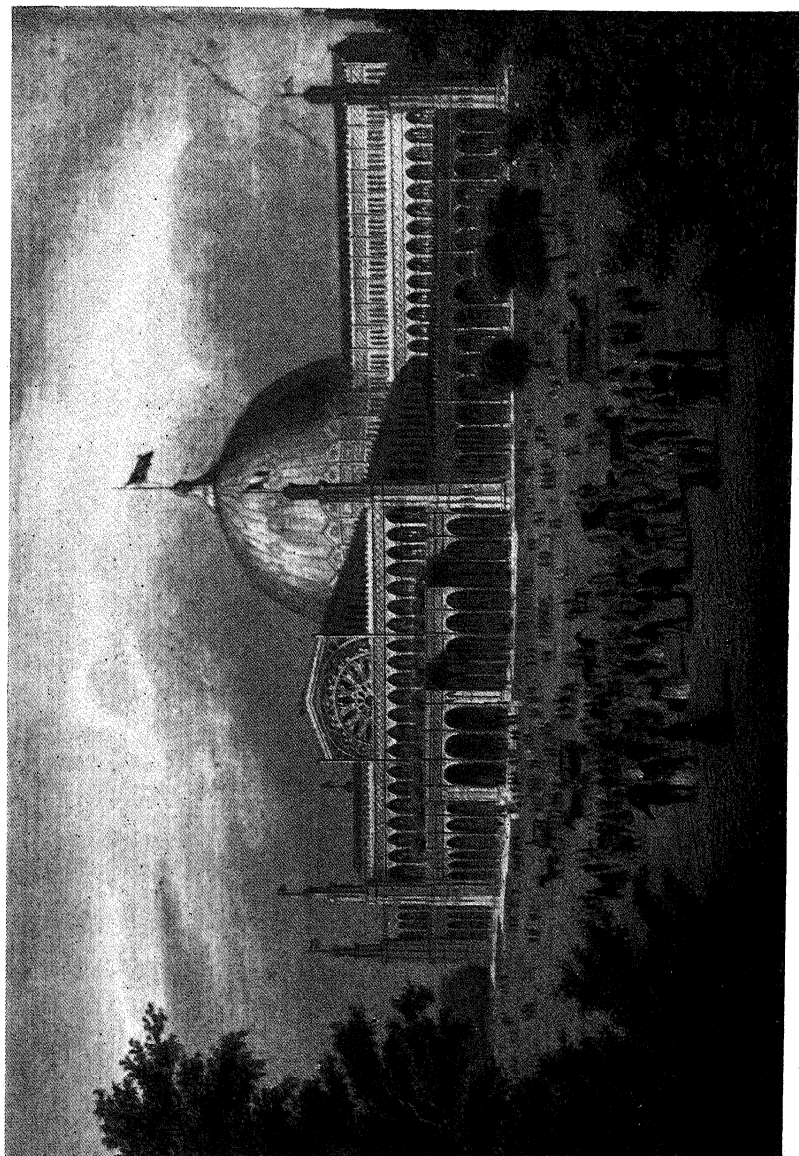




PLATE 50. Interior view of the Crystal Palace. (Reproduced by courtesy of F. R. Yerbury.)



PLATE 51. The metal and glass structural technique of modern industrial building which has been derived from the original example of the Crystal Palace. This is an interior in a factory at Wolverhampton, designed by Howard Crane for Bayliss, Jones & Bayliss Limited.

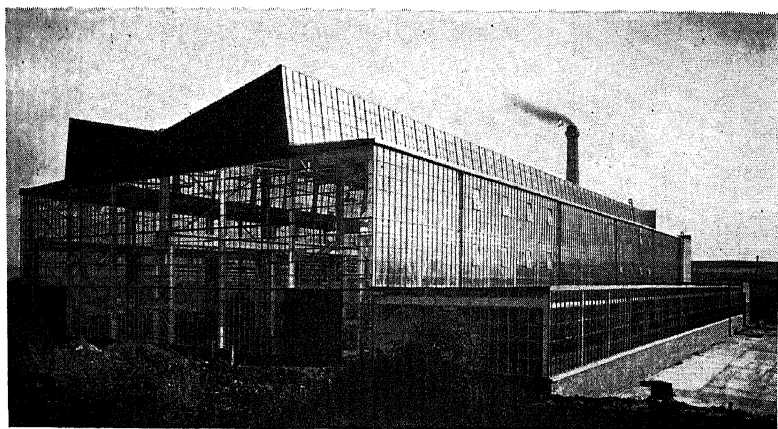


PLATE 52. Two exterior views of the factory at Wolverhampton designed for Bayliss, Jones & Bayliss Limited, by Howard Crane. (See Plate 51.)

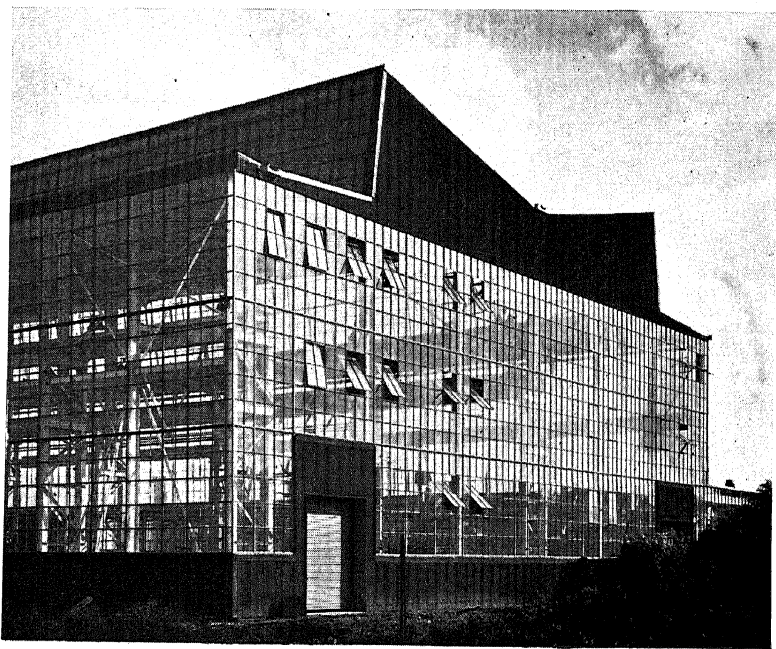
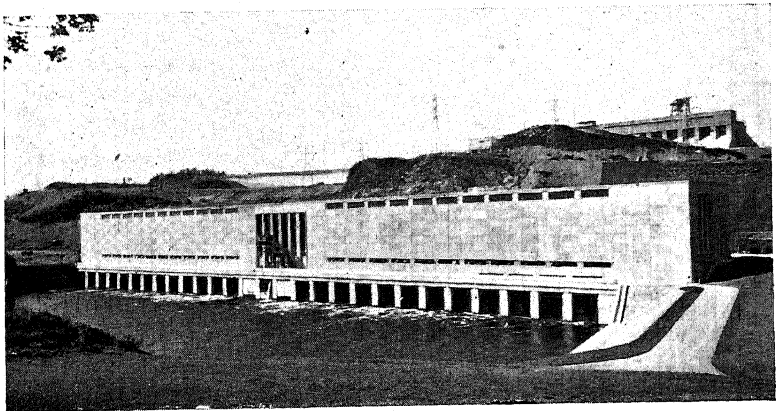




PLATE 53. We pass into an age of architectural engineering, when great buildings and power houses take the landscape into partnership. Here are two examples : above, the power house at La Tuque, Quebec, part of the development of the St. Maurice Power Corporation, a company owned jointly by the Shawinigan Water and Power Company and Brown Corporation. (Reproduced by courtesy of the Shawinigan Water and Power Company.) Below, No. 2 Power house, which is part of the Alcan power development at Shipshaw, on the Saguenay river, Quebec. (Reproduced by courtesy of the Aluminium Company of Canada Limited.)



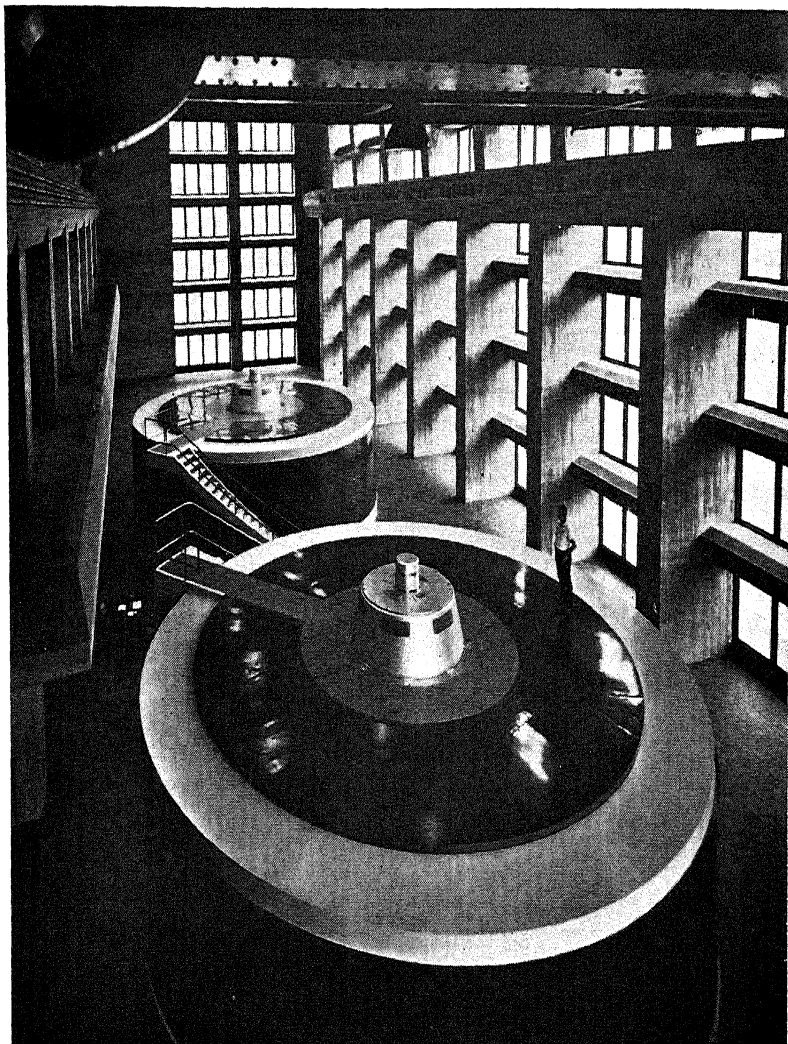


PLATE 54. The interior view of the power house at the Fontana dam in North Carolina, U.S.A. Two generators are installed with space for a third. The walls and the transomes and mullions of the windows are rough-surfaced concrete. The exterior view is shown on the page opposite. This is one of the Tennessee Valley Authority projects.

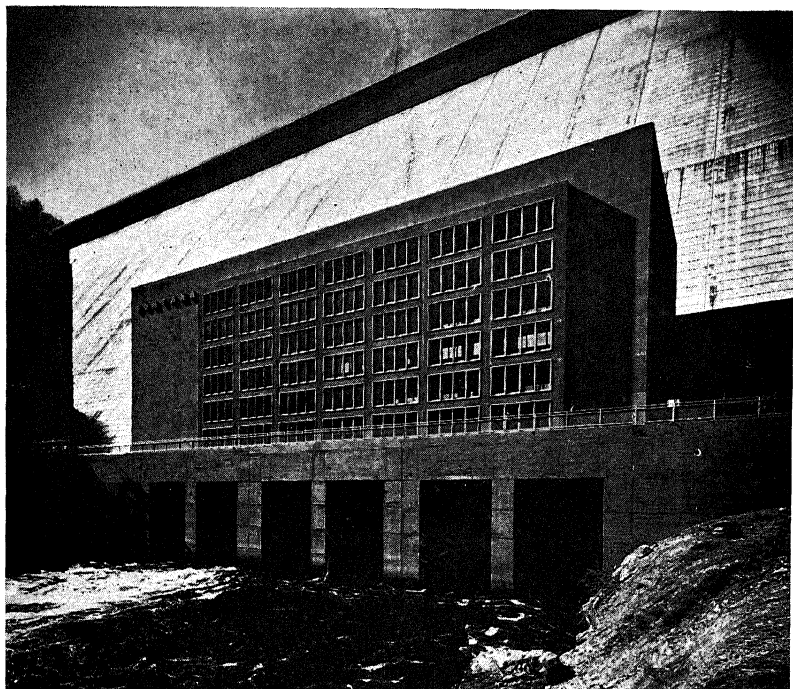
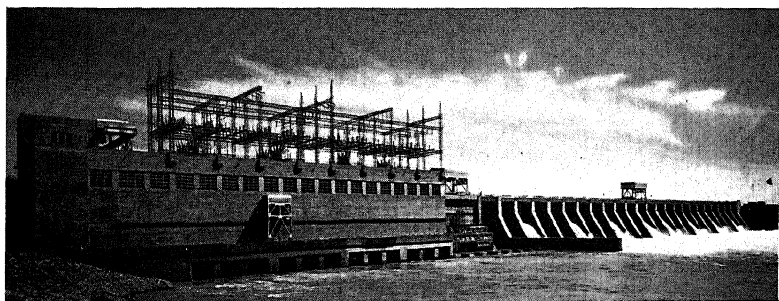


PLATE 55. The power house and dam at Fontana, North Carolina, is shown above : an interior view of the power house is shown opposite. Instructive examples of team work by architects and engineers are provided by some of the great hydro-electric power schemes, designed and carried out in the United States and Canada. From them has arisen a characteristic architecture, enormous in scale, and as impressive as the natural features which have been adjusted to their power-producing needs. Dams, generating stations, and majestic streams are brought into placid partnership in many Canadian and American river valleys. (See Plate 53.) Below is the Pickwick landing dam, in South Tennessee, near the Alabama border, U.S.A., another of the T.V.A. projects.



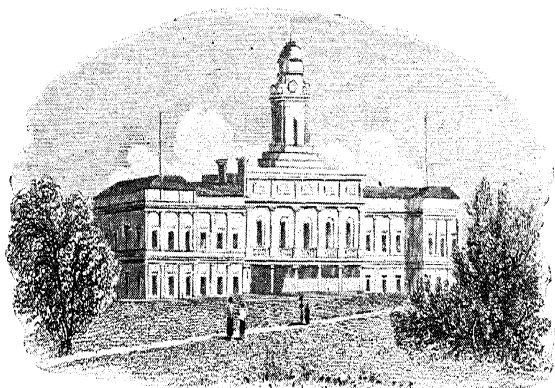


PLATE. 56. The growth of New York is entirely the result of the structural revolution and the invention of efficient lifts. New York was like any other Georgian seaport in the 18th and early 19th centuries. Above, is the city hall and its surroundings in 1840 : below, is a view of Lower Broadway from the Park, as it was in that year. But New York had two great advantages : as early as 1811, its future development was planned : it grew along the island of Manhattan, on a pre-arranged grid of streets : and presently it went up and up and up, splendidly demonstrating the spirit of American enterprise which found expression in a superb architectural adventure.

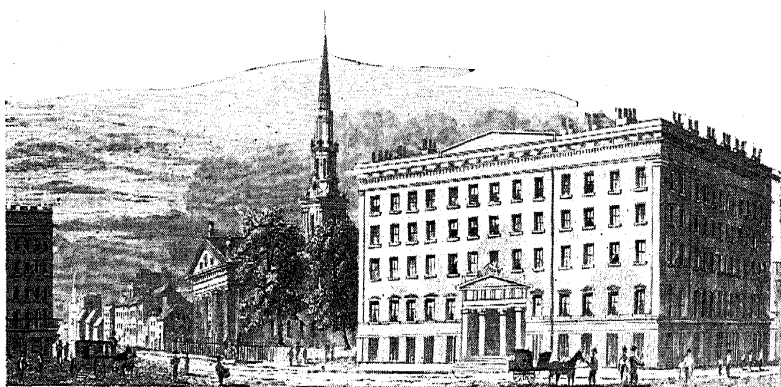




PLATE 57. The city of New York was laid out on paper in broad avenues and narrow cross streets, nearly as far as 145th Street. Above, and on the two pages that follow, the actual and potential growth of the city is shown in a map dated 1840.



PLATE 58. Here, the streets of New York had already overtaken the Bowery district, but the grid plan, with its avenues and cross streets, really began at this point. The Harlem railroad ran down 4th Avenue into the Bowery, and is shown above by a thick line in the middle of the road, which, like many American railways, it occupied.

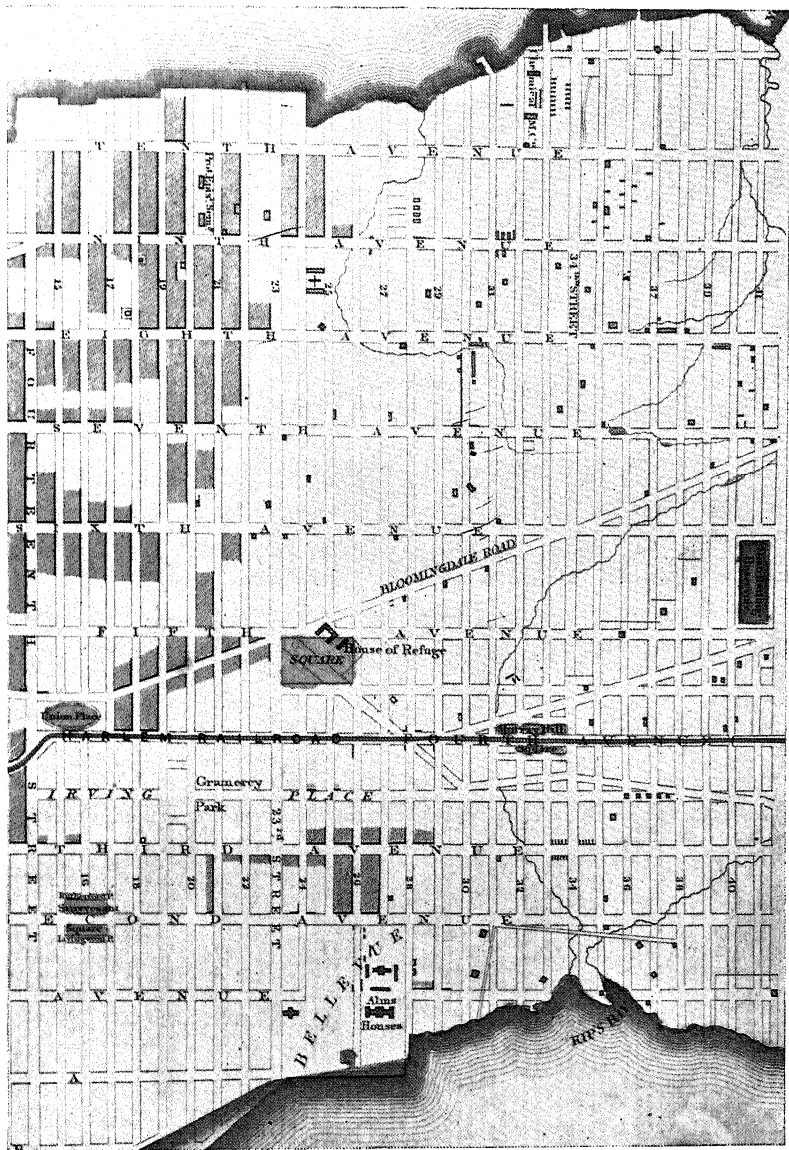


PLATE 59. Here is the northward continuation of the map of 1840, showing the early patchy development. As the grid plan was carried out, Broadway, which is here called Bloomingdale Road, was the only irregular interruption to the geometric layout. Some others are indicated in the streets shown above, but they have disappeared completely from modern New York.

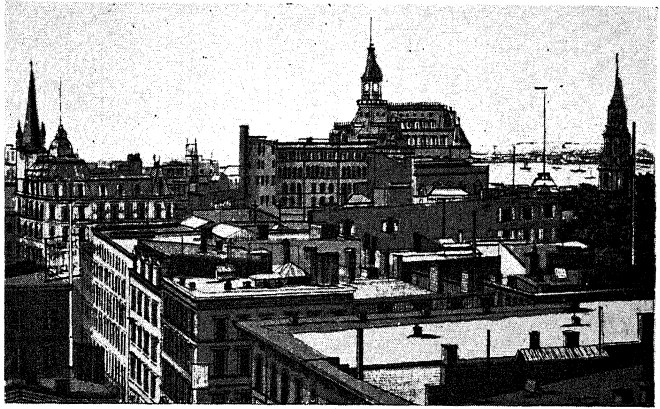
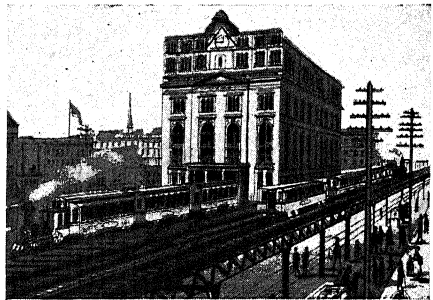
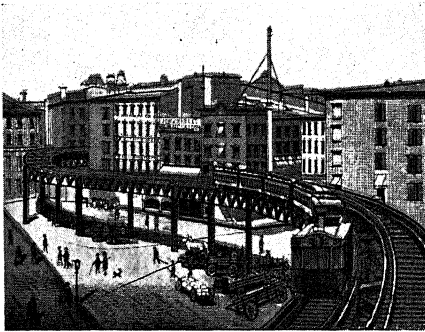


PLATE 60. By the eighteen eighties, New York was still a city with a few towers and spires, as shown by these views, taken from a souvenir guide to New York : top, panorama from the Tribune Building : right, Wall Street : left and below, two views of the elevated railroad.



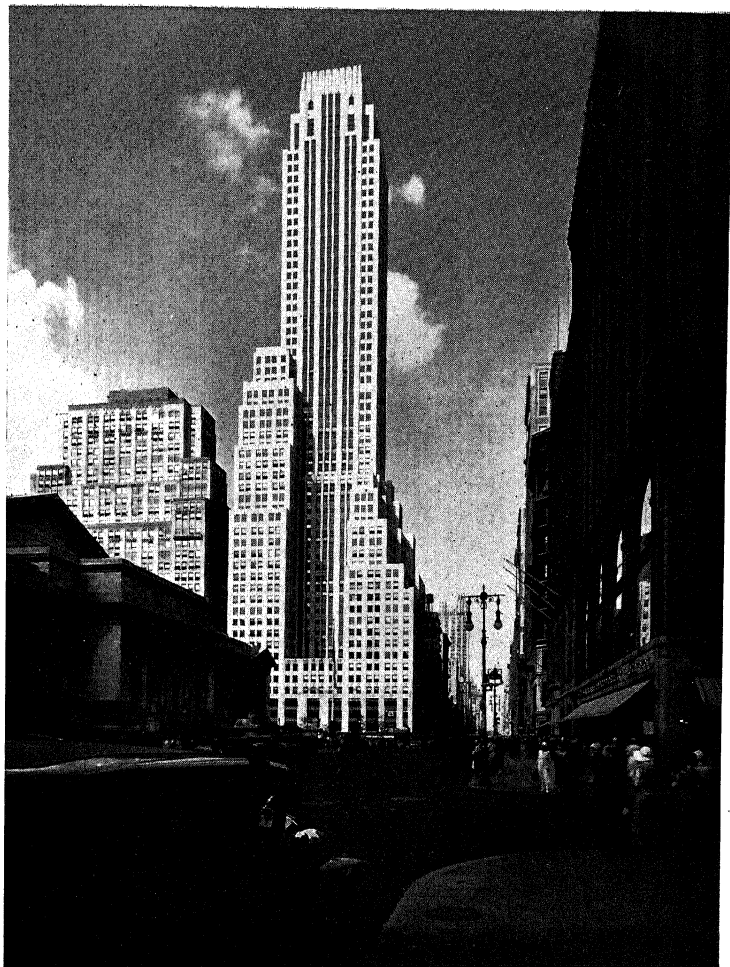


PLATE 61. Left, Fifth Avenue, with the Windsor Hotel in the foreground, as it appeared in the eighteen eighties : above, Fifth Avenue to-day with the New York public library on the left. (Photograph by F. S. Lincoln of New York.)

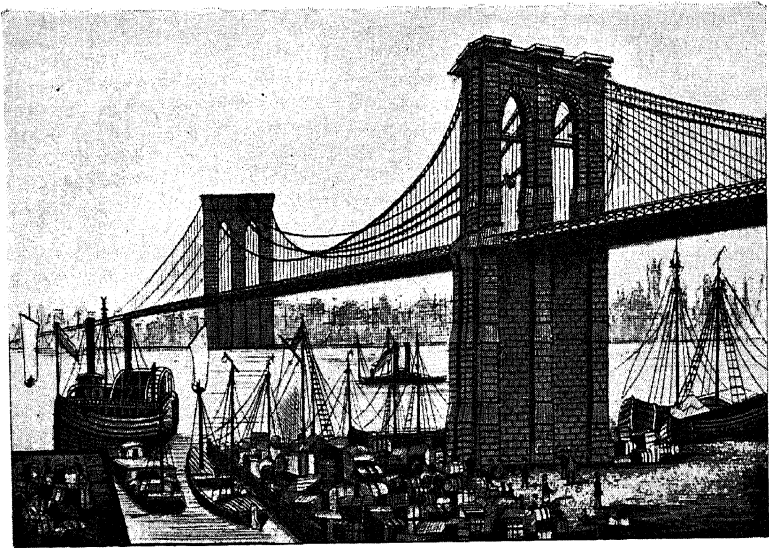
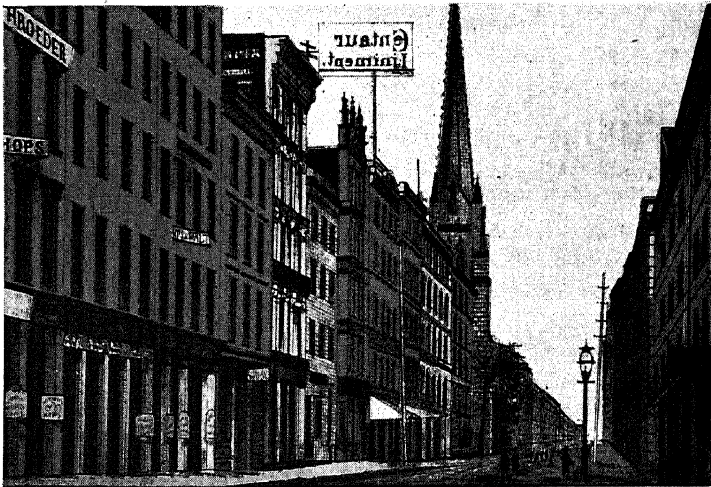


PLATE 62. Above, Brooklyn Bridge, with the skyline of New York as it was in the eighteen eighties. Below, Trinity Church, designed by Richard Upjohn, and completed in 1846 in the American rendering of the Gothic Revival. The spire was 280 feet high.



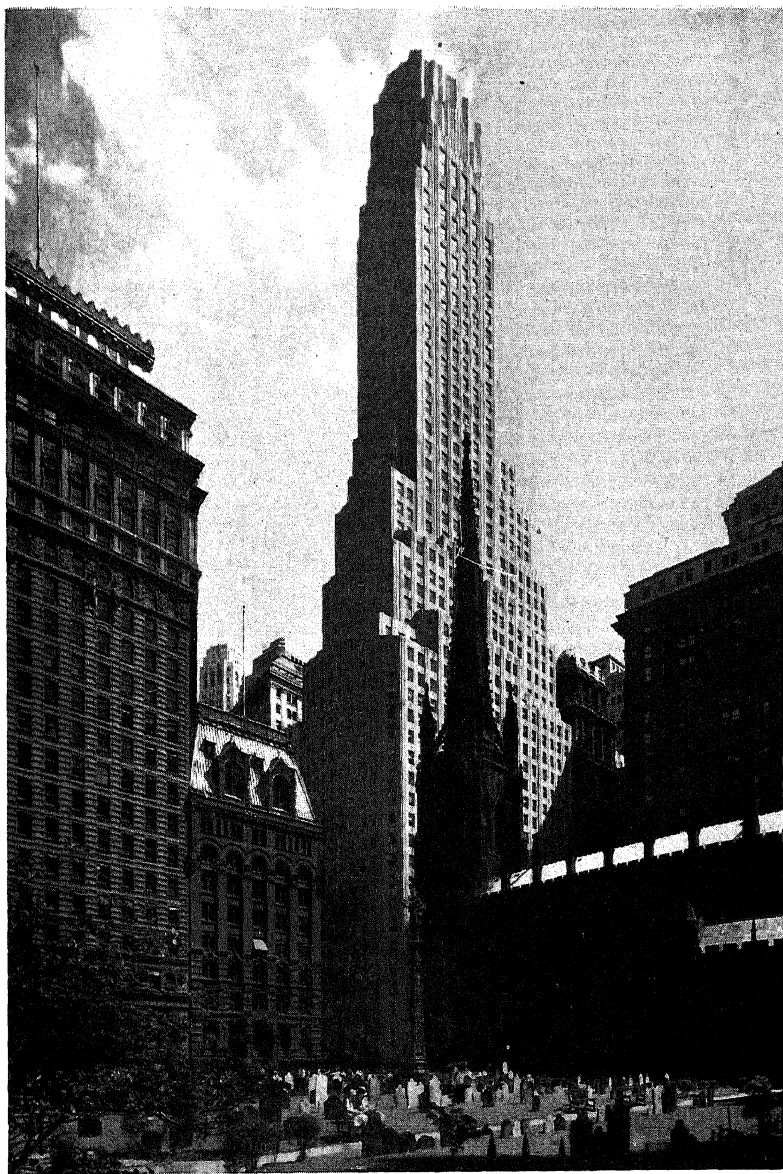


PLATE 63. Trinity Church, dwarfed by the fifty storeys of the Irving Trust Company's building, that was completed in 1931 from the designs of Voorhees, Gmelin, and Walker. (Photograph by F. S. Lincoln, New York.)

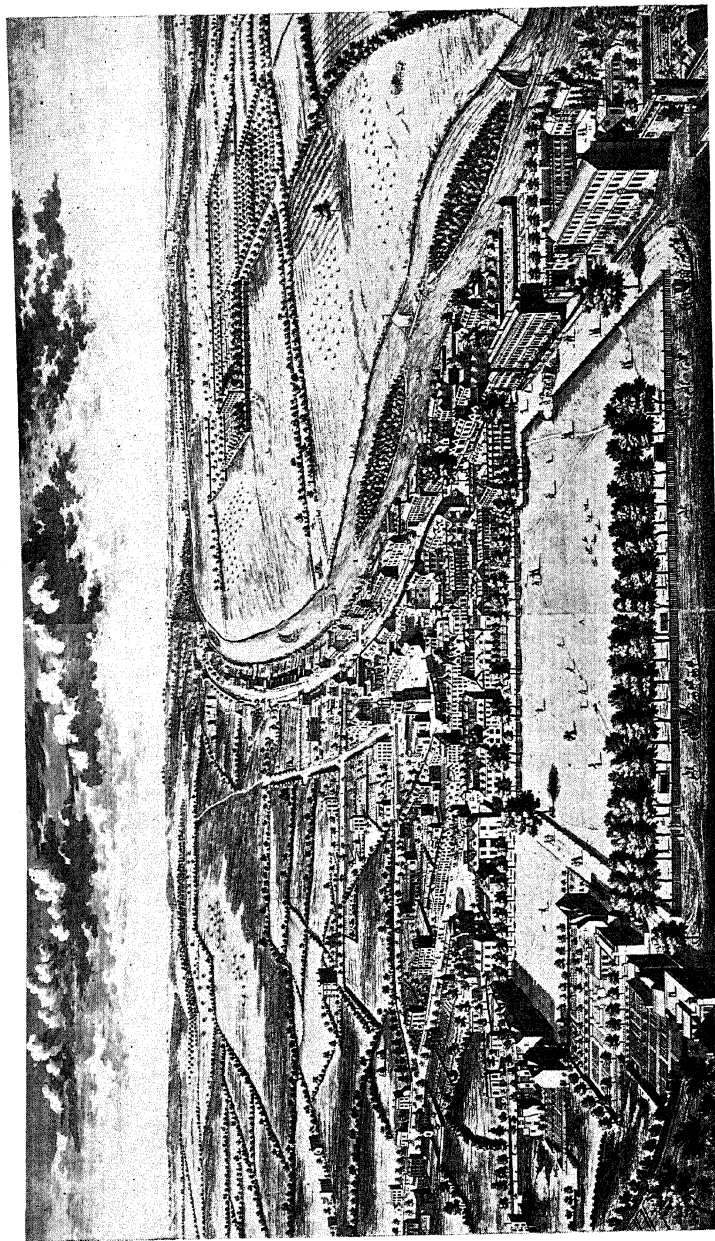


PLATE 64. Can modern men and buildings ever recapture the serenity which made towns and cities of the golden age of English building so gracious, so free from visual imperfections? This is a bird's-eye view of Richmond in Surrey, as it appeared in 1730. Many features of this little riverside town have survived: the Green is still there, so is a fragment of the Palace, and innumerable Queen Anne and Georgian Houses. (Reproduced by courtesy of the Richmond Public Library Committee.)

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