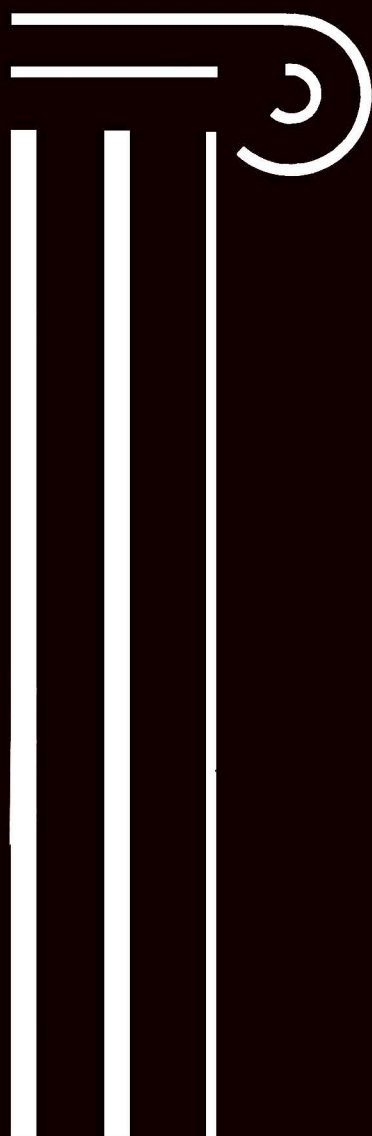


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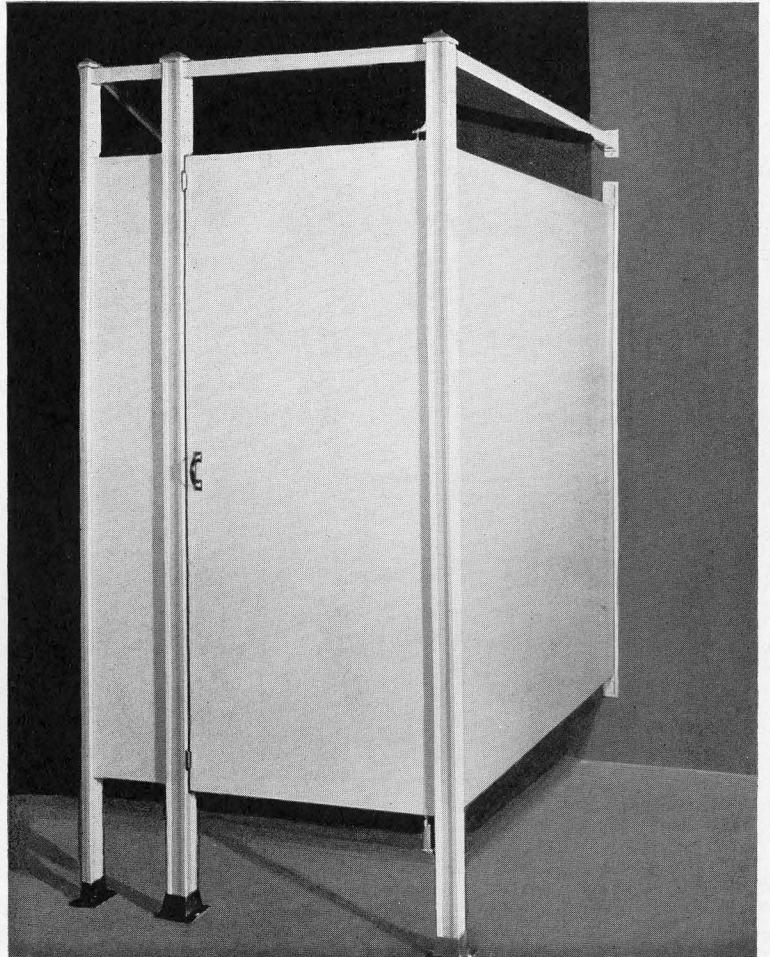
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IN thinking about the Town Planning which must precede Post-War Reconstruction we must rid ourselves of any of those old ideas which originated in the Beaux Arts in Paris, and were carried out by scores of Town Planning Commissions on this continent. Generally speaking it was the kind of planning that centred on the City Beautiful. We hope that the older architects who went to the Beaux Arts or, like ourself, to schools, whose training was based on that system will realize that inherent weakness. If any wish to argue the point, the pages of the *Journal* are available to them. We cannot imagine as a prelude to Dominion wide planning a more profitable discussion. The planners of the City-Beautiful see the city only as a background on which they may draw axes of unbelievable ingenuity and complexity without regard to where people will live and play or where they will work in office and industry. In their zeal to emulate Rome of the Caesars and Paris of Napoleon 1st, the common man is ignored. They forget that military considerations dictated the plans of Rome and Paris, and that pageantry and the courtly life governed the planning of all the Renaissance cities whose squares and broad boulevards they would seek to impose on a Twentieth Century Society. They would argue, of course, that they are producing beauty in chaos or on the dullness of the gridiron, and that they are solving traffic problems. We are compelled to admit that the Streets of Paris are beautiful, but too often they were produced at the expense of the working man in congested areas that became more congested on the flanks of the boulevards that passed through them. We object to the type of beauty that is entirely divorced from use; the beauty that is produced by opening up a vista on a public building, or by the application of the spokes of a wheel on an area wholly unfitted to receive them. Those geometric wonders are delightful to work out, but in this day and age they have only one place in which they fit, and that is the exhibition ground. For that purpose the old methods of planning are admirable. The designer is dealing with a "town", but it has no political significance. It is no expression of a democratic society in which people live, because no one lives in it. It is a place for people to play; and new visitors every day come prepared to be astounded by vistas of fountains and of buildings; the streets are laid out for pageantry and for bands and, since all are pedestrians, no traffic crises occur. People get lost, but that is part of the fun.

What about traffic in the City-Beautiful? Since beauty was the primary aim (freely confessed) of its exponents, we can only assume that the alleviation of traffic congestion, where it was alleviated, was accidental. We shall, in the future, have to deal with traffic in ever greater and greater volume, but we trust that it will be done only in terms of the city as a whole. We shall have to find out where people shop, where people work, the trend of industry to new areas and estimate its growth, before traffic problems can be solved. If a beautiful street system is the result it will be a higher form of beauty because it will arise from the "rightness" of the system, and not from beauty as an end in itself. It will also save the taxpayers a lot of money.

We were impelled to embark on this theme because the first drawings of reconstruction that we have seen from England have just been given publicity throughout the world. They are the fruits of years of labour by the Royal Academy Planning Committee. London is quite able to take care of itself by blitzkrieg of bombs or Royal Academicians, and we did not feel concern for its future as we would if the subject were Toronto or Winnipeg. In those drawings we saw all the follies of the last fifty years and all the follies of the schools. We saw ourself again as a student designing a vast building to commemorate the universal adoption of the Greenwich Meridian on a conveniently level island on a beautiful, nameless lake, and we had a vision of elderly academicians doing an "esquisse en loge", for London without a care in the world—without even a programme.

As an antidote to raids and destruction we can imagine the sheer joy of reproducing Apsley House to match the other on Piccadilly; and the ingenuity and solemnity of the two garages to house the Royal barges at the foot of the new mall to St. Paul's is a town planning tour de force. State barges and gondolas, manned we hope by Nazi slaves, float majestically on the placid waters of the Thames.

The Royal Academy City Beautiful has been called in England "a masterpiece of ineptitude", but because of its monumental scale it will have little influence here. The menace that we see from that sort of thing is that it represents a type of mind that still sees Town Planning in terms of an unreal beauty. To plan as though people were pawns is an undemocratic anachronism which no paper that we saw in North America found it necessary to expose. On the contrary we saw "the new London" praised, and heard it referred to by reasonably intelligent citizens with suitably bated breath. We are not concerned about its effect on the students of any of our schools of architecture.

ENGINEERING AND ARCHITECTURE

By H. S. GOODHART-RENDEL, Past-President, R.I.B.A.

Being a Lecture in the series of Lectures on Engineering Economics Management, and Aesthetics arranged by the Council of The Institution in conjunction with the Senate of Cambridge University.

Until about a century and a half ago, the title of this Lecture would not have been generally understood. Till then there was between engineering and architecture no generally accepted distinction. Four centuries ago it would have been understood even less. Before the establishment of Renaissance ways of thought, there was not only no distinction generally accepted, but also there was none in fact. There was no engineering that was not architecture, and no architecture that was not engineering. The science and the art could not even be said to be fused: they were identical.

At the Renaissance, however, a new conception became prevalent of what architecture really is. Architecture came to be thought of as an intellectual and aesthetic exercise, an art that could exist almost as well on paper as in stone, concrete, and brick: an art that made construction its servant rather than its master, and that often treated its servant rather badly.

A great many writers have recognized, more or less, this essential difference between the Renaissance notion of architecture and all notions of architecture that preceded it. Many have also perceived that the Renaissance notion is still held, consciously or unconsciously, by most people today. I do not know that they have realized the full consequences of what they have perceived, that they have realized the radical change the Renaissance made in the very nature of the architectural art. Most of them, I think, have merely observed a change in externals, a revival of ornamental forms belonging to the past, a continuous kaleidoscopic changing of architectural fashion. In old days, they will say, one style always was universal, and constantly developing; in the last four centuries styles of all kinds have existed together at one time, and have succeeded each other not by development but by capricious choice. In fact, most people think of "style" as an essential element in architecture; they think of it as having been spontaneous and involuntary before the Renaissance, and as having been conventional and considered afterward.

Now, I maintain that we can never understand the nature of architecture in the least until we grasp that the notion signified by the word "style" is not a natural one; that before the days when "styles" were deliberately adopted there had been no such thing as "style" at all. The Pantheon is a Roman building, not a building in the Roman style; the Pennsylvania railway station is a building in the Roman style, but is a monument of modern America.

What was the Renaissance invention in which this notion of style has its roots? It was, I think, the discovery that architectural forms and masses, composed for their pictorial effect, can often be made sufficiently convenient for use as buildings. It was the discovery that buildings of diverse character can be collected behind a uniform mass that has no detailed relation to what lies behind it. It was the destruction in architecture of the causation between reality and appearance; in other words, the practice of forcing complex buildings willy-nilly into shapes considered to be beautiful in the abstract.

We can all recognize extreme cases of this practice, such as the British Museum, packed tidily away behind its porticoed screen, or Liberty's shop with its sham domestic casing. Both exhibit masks, not faces: the one classical, the other romantic.

No Grecian would ever have dreamed of veneering a many-roomed museum with the processional portico appropriate to the rites of his religion. No Tudor builder would ever have dreamt of veneering the large departments of a modern shop with the complexity of a many-roomed manor-house. The illogicality of these examples is flagrant and unlikely to be denied; but I doubt if many people realize that the same illogicality in less degree permeates most of our modern architecture. Even the go-as-you-please little picturesque house that we build in such numbers seldom really goes as it pleases, throwing out a gable or sending up a chimney where it would be comfortable for it to do so. No; its gables and its chimneys generally go as the architect pleases, being coaxed slightly out of their natural positions to suit his preconceived notions of picturesque arrangement. Equally, if the style of the house be what is known as "modern", there will be a great deal more glass surface than is really suitable, and a good many things cantilevered over nothing that could more simply have been supported from the ground.

I believe the fact to be that architecture nowadays is usually something added to rather than something derived from construction. If this be so there is nothing unaccountable in the divorce that has taken place between the profession of the architect and that of the engineer. Nothing unaccountable, certainly, but not the less to be regretted. Let us examine some of its consequences.

The first requisite of any entirely satisfactory structure is skilful planning; the second skilful construction; the third skilful architectural expression. These requisites interlock. Skilful construction is hampered by inept planning; skilful architectural expression needs something well conceived to express. The designer of a great Roman bath establishment, of a mediaeval castle or college, was competent in all three requisites. He planned for convenience and just proportion, with constant forethought for constructional simplicity. He constructed for stability and permanence, with constant care that these qualities should be apparent. He completed his work by emphasizing its essentials and minimizing its non-essentials to the eye, using mouldings and carvings and other architectural means so that everyone might read clearly what manner of building his was.

Before the Renaissance, the planner, the constructor, and the architect were one. After the Renaissance, they may have remained one for many years, but their separate activities began to diverge. New notions sprang up of planning, of construction, and of architectural expression, which tended to become more and more independent of each other. Planning ceased to be the combination of simple units, each visible as a unit and serving its particular purpose, and became the partitioning of large architectural shells into specially appropriated compartments. It ceased to be the putting of things together, and became the cutting of things up. The shapes chosen to be cut up were not often so fanciful as the triangular Longford Castle (symbolizing the Trinity), or the house in John Thorpe's sketch-book whose block plan was its owner's monogram; but they were arbitrary and usually rigidly symmetrical.

Obviously over this sort of wilfulness, construction had little influence. Plan was determined largely by fancy, and construction had to do the best it could. Moreover, construction itself had to learn a lot of queer tricks to supply the demand of new fashions in expression. Horizontal architraves and lintels, longer than any procurable single stone, had to be held up somehow;

enormous cornices had to be anchored down so that they should not tip over; heavy domes had to be gripped with metal at their springings to stop them bursting the drums on which they stood. Planning and architectural expression often became at loggerheads with the laws of gravity, and construction had to reconcile them somehow.

Here, already was divorce between engineering and architecture (if engineering may be defined as the science of construction, a sense the word now commonly bears). It did not prove to be divorce between engineer and architect, because neither the science nor the art was then complex enough for one man not to be able to master both. Sir Christopher Wren, primarily, I think, an engineer, performed prodigies of ingenuity in pitting construction against architectural conventions and allowing complete victory to neither. Others, more prudent if less gifted, designed straightforward Palladian buildings and built them in a straightforward way. The design had not much influence upon the method of building, nor the method of building upon the design; one man might have been responsible for one, and another for the other, but it was not beyond an ordinary man's powers to undertake both.

From the general tone of my remarks so far you have probably gathered that I think the turn architecture took at the Renaissance was the wrong one. I should not like, however, to seem to disparage the many noble buildings the experiment produced. The system of planning by sub-division was bound to arrive, sooner or later, as human requirements became more complex; and although this system encouraged a false relation between internal arrangement and external appearance, it did not necessitate it. There is something to be said for making a building a beautiful box or case, which, if it tell nothing of what is within it, nevertheless tells no lies. Yet, obviously if this is to be the process of architecture, the man who puts the box together need not collaborate very closely with the man who packs it. The two men may be one, but may equally well have separate identities as the engineer and the architect.

The words "box" or "case" suggest primarily a receptacle having some regular geometrical form; and after the Renaissance the exteriors of buildings remained regular and geometrical until the coming of Romanticism. I hope I shall not strike you as pushing a simile to absurdity if I remind you that a Noah's Ark is also a box, and that money-boxes and fancy tins for biscuits have often taken the form of picturesquely irregular little houses. Romanticism adored the picturesque and the irregular and was thoroughly weary of classical symmetry. It might have attained the picturesque and the irregular in architecture by natural means, that is to say, by allowing the nature of buildings to decide their shape. Architects, however, had become too wilful for that. They had become accustomed to preconceiving classical forms for their buildings, and now they preconceived romantic ones. They thought of a picturesque composition; and forced what they were required to design into the shape of their thought. They stopped making their biscuit-tins cubes and began making them models of Ann Hathaway's cottage.

Now, the essential wrongness of this process lies in the fact that the picturesque is governed by no logic, by no geometry. It arises from chance; and the picturesque composition that springs unprompted into the mind of an architect is no more than his unconscious memory of some happy incident. Being an accident, it will be extremely difficult to reproduce on purpose. The world is full of buildings whose disagreeable appearance is due to their architect's muddled memory of something he has seen and sketched in his youth. To preconceive a composition like that of the British Museum is one thing; the formal merits of the design might be held to outweigh any inappropriateness there may be in it for its purpose. To preconceive a composition like that of Liberty's shop is another thing altogether; the design has no formal merits, but merely an undecided picturesqueness that is a poor return for its essential incongruity.

How far this sort of wilfulness has sent architecture from engineering could nowhere be better seen (and I imagine can still be seen) than in an astonishing railway station I remember at Gourrock, in Scotland. Here an ordinary collection of glass-roofed sheds was enclosed in red brick walls, supporting numbers of half-timbered gables complete with bargeboards and domestic windows. In producing such a monstrosity the engineer and the architect might have worked on different planets for all the converse they can have held together. Yet what an interesting time they might have had working together to produce the ideal terminus on a quay, the railway terminus on a quay that would have looked like a railway terminus on a quay, and like nothing else! The Gourrock railway station cannot have been built much more than fifty years ago, so that it is pretty certain that the engineer was one man and the architect another. Yet if it had been done entirely by an engineer or entirely by an architect, I dare say that the result might not have been any more logical. Before the complete divorce of the professions, the science and the art had long been living apart; Sir Joseph Paxton, the engineer of the Crystal Palace, was a beneficent Dr. Jekyll, Sir Joseph Paxton, the architect of Mentmore, a sinister Mr. Hyde. Although his dual personality might occasionally unite, his two activities were almost permanently separate. Yes, the evils we suffer from today are of long standing.

I have now attempted to trace the steps by which architectural expression has become the uncertain art it is at present, wavering between reason and fancy. I have pointed out that before the Renaissance every major part of a building kept its identity as a unit, and that the total appearance of the building was the sum of the appearances of the units composing it. In great Roman compositions (like the baths of Caracalla) the symmetrical arrangement of the units would produce a symmetrical group; in great Gothic compositions (like any large abbey) the units, arranged according to their nature and use, would produce a group that appeared irregular. In short, the exterior appearance of any complex building followed naturally from its components until, at the Renaissance, architects hit on the idea of designing simple exteriors for buildings that were made complex by subdivision.

I have pointed out also that this practice of theirs could be justified, so long as the simple external form had in itself regularity and general suitability and did no violence to the parts it hid beneath its surface. The unjustifiable practice began when the external form was made capriciously irregular, natural irregularities being suppressed and others imposed by the whim of the architect. Of this the railway station at Gourrock is probably an extreme example. We can all probably think of a good many others; the houses in most suburbs of recent date will provide us with an almost infinite number. In the nineteenth century the average architect became, what many an architect continues to be, a fanciful, unaccountable man, having more or less skill as planner, more or less taste as decorator, more or less skill as constructor, but with no fixed plan of action, no grounding of sound architectural doctrine, no habit of logical thought.

What did the average engineer become during the same period, a period during which those engineers that were lifted by their powers above the average performed such prodigious feats? I am afraid that the average engineer became a very dull and stupid fellow indeed. (I speak here of our own country, in which engineers of reputation could get away with things like the Hungerford Bridge at Charing Cross and the Ludgate Hill Viaduct: other countries were less tolerant.)

I have said already that I regard Sir Christopher Wren primarily as an engineer because I think that he was more constantly interested in construction than in any of his other activities. Yet look at the range of those activities and the breadth of his field! He understood planning pre-eminently

well, although in the planning of buildings he was liable to abuse his powers by contriving barren ingenuities. Few artists, whether painter, sculptor, or architect, have ever had so exact an appreciation of artistic balance and ratio as he had. In all the scientific speculations of the Royal Society he could take part without fear of rebuff. He had also a superlative cleverness that enabled him to find brilliant, if not always satisfactory, ways out of architectural difficulties which he often contrived himself for the fun of the thing. Compare with Sir Christopher the late Sir—but I will not name him—the defunct engineer who inflicted upon London the Hungerford Bridge!

The only thing that can be said in favour of that bridge, so far as I know, is that it has no decoration applied to it by an "architectural assistant". In that it is superior to the Tower Bridge, and also, as I think to Lambeth Bridge and the forthcoming Waterloo Bridge, both of which have been sent as high as to the Royal Academy to be trimmed. It is honest enough, no doubt, but what a blundering thing it is! What can have happened to the science that began with the mediaeval cathedral builders, that persisted with Sir Christopher, and that declined into bathos like this?

What happened to it, I think, was that its scope was so limited as to make normal growth impossible. As I have said earlier, the three requisites of any entirely satisfactory structure are skilful planning, skilful construction, and skilful architectural expression. When the business of architecture was divided, only the second of these—skilful construction—was allotted to the engineer. Planning and architectural expression were left in the architect's hands, and were omitted from the engineer's training. The engineer still was prepared to try his hand at both, relying upon the light of Nature to guide him. Naturally, he made a terrible mess of them, which he was no longer himself well enough educated to realize. The public, however, did realize what a mess he made of architectural expression so that, on all important occasions, he was forced to submit to "architectural collaboration", which usually meant that some popular architect was called in too late for him to be able to do much good. The public realized also what a mess he made of planning, but was not convinced that any popular architect would do it much better. The engineer, therefore, was left to carry on and, by his muddled inconsequent planning, sowed the seed of many of the inconveniences and discomforts that complicate the daily life of all of us.

Discredited aesthetically, and suspected as a practical planner, the Victorian engineer had nothing left as his proper function but construction. Now, it is very difficult to construct well without the mental equipment of planning ability; and it is very disheartening to construct what you know is going to be covered up and disguised by somebody else's notion of architectural adornment. If the ordinary constructional engineering of today is pedestrian and conventional, it is because most of the fun has been taken out of the jobs. If the ordinary architectural expression of today is weak and illogical, it is because it is too little related to construction.

I suspect that the days of the self-sufficient engineer-architect are gone, never to return. M. Perret, one of the best living architects, is also an engineer, as San Micheli and Wren were, but such men must always be exceptional. M. Perret, however, has worked with his brother as a firm, and I believe that the days of the engineer-architect firm are very soon to come. By the "engineer-architect firm" I do not necessarily mean a firm of which one member would be an engineer and another an architect, though such an association would often work well. Probably a much better firm would be one of which each member was something of both. The only reason why both functions should not be undertaken entirely by one single man is that his life would be too short, for all he would have to learn and do. Yet any specialization of function leads inevitably to limitation of outlook, and limitation of outlook is the chief

malady from which the modern engineer and the modern architect alike are suffering. My ideal association would be that of a man who could properly be called an engineer-architect with one who could properly be called an architect-engineer.

The chief reason why such men are hardly ever to be found nowadays lies in the unhappy divergence of the ways in which engineer and architect are educated. The architect's education covers a field too wide for thoroughness, whereas the engineer's education is too much specialized altogether. Any approximation between their curricula could be nothing but pure gain. It has long been my cherished hope that such an approximation might take place, and the course of Lectures to which this one belongs gives me great encouragement. The ultimate goal of my hopes is the closest practicable reunion of the science and the art; but if we can produce by education good architect-engineers and good engineer-architects I think we need look no farther than that. Once produced, they and the work they do will come together in their own way.

Towards this end we can work effectively only if we face and accept unpleasant truths. In these days of war, countless admitted failures in matters of organization and administration have undermined our national superstition that Almighty God is always on the side of the man who refuses to plan. If I were to tell you the sorry tale of the failure of efforts with which I was associated as President of the Royal Institute of British Architects, of efforts to induce certain government and other departments to meet this inevitable war with some degree of architectural preparedness, I should only be telling you what all other men in positions similar to mine would tell you as well. No suggestions were entertained, no advice was sought, no remonstrances were heeded, except in so partial a way as hardly to mitigate the blind stupidity with which, in this country, public works have so often been conducted. I am afraid that if we have refused planning in this wider sense it can surprise no one that we have refused planning also in the special sense that concerns engineers and architects. Now, however, with a Ministry of Building, and a public indignant at the way in which its money has hitherto been spent, it looks as though planning of all kinds will be allowed or even encouraged. This probability forces us to put, and answer, the question whether planning in the past has not been refused also by architects and engineers. If we are called to supply it, how far can we do so?

Fifty years ago, the science of planning either towns or buildings was hardly understood in Great Britain at all. A few architects knew a great deal about it—Alfred Waterhouse, for example, and John Burnet and Henry Florence (the last two having studied in Paris). Most other architects, however, ignored its principles, and no engineer, on the available evidence, seems to have known that such a science existed. In consequence, the average new British building was like a hastily-packed suitcase—most things crushed in somehow, with a few sticking out, and some things forgotten altogether. Occasionally, though not often, an architect's plan was saved from utter badness by an ingenuity that, given a proper approach to the problem involved, never ought to have been necessary. An engineer's plan seems almost invariably to have been inexpert and puerile.

This is plain speaking about the past, and I propose to speak no less plainly about the present. I know that since they became two separate persons, the architect and the engineer have fallen into a rivalry in some directions that has made for sore and angry feelings when one has criticized the works of the other. I am sure that we all feel, however, that such soreness or anger springs from a rather vulgar professional outlook which honest seekers for truth must disregard. It is my hope, as I have said, that all possibilities of rivalry will some day be removed by reunion, and my belief that the first step toward that happy end must be taken in the field of education. And first of all first steps I put the necessity of teaching young engineers to plan.

The few architects that knew how to plan fifty years ago, have now become relatively many; a fact almost entirely due, I think, to the coming of the architectural schools. In these schools a large amount of time throughout the whole of a five-year, or, at any rate, a three-year course, is given to planning, which is systematized, illustrated, and continually tested by experiment. Students can learn thereby how to reduce the tangle of various requirements in which every planning problem begins to a classified and graded table of desiderata; how to decide internal lines of communication, that skeleton which rooms and corridors will flesh over; when and how to subject minor advantages to major ones; and how to discover the spacing for points of support that will crystallize the plan into orderly perfection.

In Great Britain, engineering students are still taught none of these things. I say "still", because I cannot doubt that instruction in them will come, as it has come to architectural students, who in my young days were nearly as ignorant of them as engineering students are still. Not all architectural students have profited by their instruction, but no engineering student has had any such instruction to profit by. Now, the scientific planning of towns and buildings is not a mystery that architects should keep to themselves, but a branch of knowledge that should be as widespread as possible. Engineers must learn it, and, with architects, must convince the nation of its indispensability.

This Lecture has been written in a place where during the past two years a large collection of temporary structures has been assembled, apparently without any general design whatever. I do not imagine that the question ever arose whether a trained and competent planner should not have been employed to lay out all that ever might be required, with a view to its partial or complete realization by stages. Yet the payment of his fee and the following of his counsel would have halved, at least, the cost of what has been done, and have doubled—but no, you cannot double what does not exist!—it would have produced convenience. I should like to think that the existence of the Ministry of Building, with its indefinite programme of terms of reference, will prevent the multiplication of misdeeds like this in our post-war rebuilding. Remembering the fate of the Bressey report, I am not greatly encouraged. The shelves of Parliament are piled high with good resolutions.

When including the planning of towns as well as that of buildings within the province of my ideal architect-engineer, I have not forgotten the existence of the modern specialization called "Town-planning". "Town-planning" is a courageous attempt to correlate all the studies, historical, economic, sociological, statistical, and architectural, that concern the distribution and accommodation of population. From the standpoint of research, this correlation is of great value, but the variety of the subjects embraced suggests that education in "town-planning" is more likely to make advisers than creators. The mere technique of practical planning takes so long to acquire that it is not reasonable to expect the practical planner to divide his time between it and the processes of research, of which he needs only the results. These results the ideal architect-engineer should be competent to test; but to expect him to arrive at them himself is rather like expecting a pianist to build his own pianoforte.

When from planning I turn to construction, I turn from a subject in which the architect rules to one which is the undisputed kingdom of the engineer. Yet if I call planning "*what to build*", and engineering "*how to build*", how closely interlocked the two are seen to be! Every right decision as to *what* shall be built must be greatly influenced by *how* it is to be done. We want no more careless or fanciful designing that sets a host of unnecessary thankless problems for the constructor to solve. Furthermore, a right decision as to *how* to build is most likely to be made when the person making it is listened to if he suggest modification in *what* is proposed.

Construction *alias* Engineering, is not an exact science in

which every question has one true answer and one only. If it were, there could be only one accurate engineer in the world, because the same problem is never solved by any two engineers in exactly the same way. Constructors of genius rely no more upon their calculations than upon what you can either call their subconscious memories and perceptions or—more simply—their "hunches". Most of these "hunches" arise from nothing more than the rhythm set up in a man's mind by the constant exercise of logical thinking. Planning is, above all, logical thinking, and a mind trained by it will appear to one not so trained as miraculously intuitive. In other words, a man is likely to decide better *how* to build, if he is familiar with the fine mental processes called for in the scientific decision of *what* to build.

If British building construction of today is timid and conventional, as I think it mostly is, the blame for this must fall no less upon the architect than upon the engineer. Together they have failed to agitate effectively for the reform of Building Acts and by-laws that preclude many, if not most, of the experiments that ought to be made. Together they have allowed their resources to be limited by fashions, constructing at one time with solid brickwork, at another time with cast-iron stanchions and bressumers, at yet other times with framed steel, with welded steel, or with reinforced concrete, but at no time with any recourse to an outmoded material for particular things which that material still could do best. A structure battering inwards like the Eiffel tower would sustain the successively receding storeys that in a street building the angle of light often requires. I have never seen the experiment tried. Small tentative departures from rectangularity have been made lately, but there seems to be no general interest in the open question whether the pervading rectangularity of our structures is anything more than a survival from the days of universal pitched roofs. Possibly if we developed fully their implications, flat roofs might in the end turn most of our planning trapezoidal.

I suppose that what I call architectural expression is what most people who do not look below the surface consider to be architecture. I suppose that the Lecture they would expect an architect to give upon engineering and architecture would deal chiefly with how to make a compromise between a science and an art, supposed to be normally at loggerheads. I feel sure they would expect me to say what I think of the power station at Battersea. You will have gathered already that I do not think the science and the art easily separable—much less in opposition; so I could not fulfil the first expectation even if I wished to do so.

I am, however, perfectly prepared to say of the Battersea power station that it seems to me a specimen neither of engineering nor of architecture, but of scenic contrivance. As such I think it effective, but a very poor substitute for what might have resulted from a real grappling with the aesthetic problems its contriver has evaded. Tall furnace chimneys running down to the ground like scaffold-poles beside rectangular masses of thin-walled lightly-roofed sheds—there is material in this for a new and noble composition, appropriate to its purpose and revealing it to the eye. Instead we have yet another variant of the popular composition rather unjustly belittled by Ruskin, that of the table turned upside down with its legs in the air. The legs are nicely shaped and serve to contain half of the chimneys, the remainder of which must be buried in the high rectangular blocks that have rather the effect of elongated pedestals to funereal columns. The sheds are screened by imposing walls as massive in appearance as if they were rock-cut; in fact the whole design is magnificently mausolean. On the opposite side of the river stands an older and less ambitious work of the same kind—a pumping station. Here the engine house is divided externally into two imaginary storeys of domestic architecture, the chimney taking the form of a square Italian campanile, with a fringe of roof and an iron balustrade around the top. If it is held that these buildings are both specimens of architecture, then they are specimens of the architecture of escape.

Of all the examples of aesthetic cowardice that have betrayed the mental inertia of the period which Sir Charles Petre has named our "twenty years' armistice", perhaps the most lamentable are our grand Thames bridges, constructed in one way and venerated to look as if they were constructed in another (in at least one case in a way that with the material applied would have been impossible). How well our engineers can do when not forced into fancy dress is shown by the only really good-looking bridge that London now has—excepting London Bridge—I mean the new one by Chelsea Barracks. I do not applaud the heraldic decorations, but these probably were not the engineer's fault. Vauxhall Bridge, of earlier date, has very little nonsense about it, but no very great positive merit.

I hope that when I condemn unreal buildings for their timidity, I shall not be misunderstood to be condemning them for their unreality. If, of two buildings exactly alike to the eye, only one were constructed in the way in which it pretended to be, it would be ridiculous to call that one beautiful and the other ugly. If our eyes are delighted by what appears to be an exquisite Grecian temple, it would be absurd to turn off our satisfaction like a tap directly one finds out that it is an American banking house. The fault in these instances lies not in the things made, but in the makers, who have doomed themselves to artistic sterility by choosing to repeat rather than to create. The problem of the power station at Battersea contained, as almost all problems do, the germ of a new architectural effect peculiar to itself. That germ was allowed to perish, and was entombed in an extremely tasteful monument made up of familiar elements (of course with a difference—we never copy ourselves exactly nowadays).

Ours is an age in which new architectural developments are inevitable; they will germinate whatever we do; and our choice is between allowing them free growth and crushing them into deformity. In the eighteenth century, when the few types of building generally undertaken were familiar and almost standardized, it was possible for construction and architectural expression to pursue their accustomed courses without continually renewing contact with each other. Certainly there are types of building almost standardized today, but few of these types do not need critical overhauling, and beyond them lies a welter of opportunist thoughtless structures, hastily called into being for new purposes and serving those purposes very ill. It is my firm conviction that order can be brought from this chaos only by the engineer and architect working hand in hand.

To say this is to postpone our salvation, since I believe the number of engineers and architects now in practice who are capable of fruitful collaboration to be small. It is to the next generation that we must look for better things, and that is what makes the education of the next generation so important. Until young engineers acquire some knowledge of the science of planning, they can hope to see nothing but the gradual monopolizing by young architects of all planning, including that which is still left at the moment for engineers to do. Until young architects concentrate their too extensive survey of construction into a thorough practical understanding of the engineer's simpler tasks, they will give trouble and not aid to the engineers they work with. Between them they have to discover the appropriate architectural expression of what they build, and to do this the young engineer must get rid of his usual notion that architecture is a fanciful addition to construction and the young architect must get rid of his usual notions that all sound construction looks like M. le Corbusier's, and that any other is out of date.

The processes of architectural expression are not very easy to define. I suppose that if they were, everybody with a logical mind could set up as an architect. Nevertheless I shall not let difficulty deter me from trying, at any rate, to approach a definition. First, I should say that architectural expression begins with the choice from among forms equally useful of the one that signifies its function to the eye. Let me explain what I mean by

this at a little greater length. If you look at any collection of machines at a standstill, you will observe that some of them look as if they were going to move in exactly the way in which they can move actually, whilst others offer no such suggestion. Very frequently a machine will have several forms equally eligible for it, of which one will suggest its function and the others will not. What is true of machines is true also of the beam, the pillar, the cantilever, the strut, and what not; each one of these has many possible forms, of which some are expressive and others inexpressive. Architectural expression will obviously prefer those that are expressive.

Recognition of this expressiveness is a capacity denied to nobody in some degree, but one that is much stronger and more acute in the great architect than in his less distinguished brethren. It is a capacity that can be cultivated; indeed, its cultivation should be one of the chief aims in any artistic education. It calls into play subconscious as well as conscious mental processes, and grows as experience of life accumulates. It is an important component in what the Victorians used to call creative "genius".

When we have planned well, keeping our eyes upon construction all the while; when we have constructed well, suiting our methods to the plan in which they have been foreseen; when we have chosen in all doubtful matters the course that seems to explain best to the eye what it is we have done; then shall we be a long way on the road to good architecture. We still may wreck everything, however, if we fail to obtain in our work that internal consistency, the need of which is a rule of all art.

Here, I am afraid, is another hard saying which I must try to elucidate by an example. When the British Broadcasting Corporation announces that "it is revealed in London that the streets of the metropolis are emptier of traffic than has ever previously been the case in the British capital", we know that it means London all the time. The B.B.C. is practising what in speech and literature Mr. Fowler ironically calls "elegant variation". Now, "elegant variation" of this sort, although unfortunately it has to be tolerated in speech, can never be tolerated for a moment in the visual arts. It leads to a confusion that is the end of all expression. In architecture particularly, in any one building the same thing must always be done in the same way. In another building you can do that thing in a different way if you choose, provided that you stick to your choice throughout. But the messages of architecture are, as it were, written in code, and although there may be no fixed code, there can be no mixed code if they are to be decipherable. A "style" is a code of a sort, and though I have pointed out that the notion of style is an arbitrary one and the thing itself unnecessary, there is nothing to prevent good work from being done within its limitations. The ideal, however, would be to let every building make its own style—simple, appropriate, and unequivocal.

Having established consistency—for example, having determined in a masonry building that arches shall be used only for spans too great for lintels; that the arches shall *all* be round, or elliptical, or parabolic, or pointed, but not mixed; that all stonework surfaces horizontally exposed shall be steeply sloped (or having determined otherwise—it doesn't matter, within the bounds of common sense, what you decide, provided that you stick to it)—having established consistency, there really remains nothing more of architectural expression to be done except the application of ornament. This is a matter into which I cannot now enter. It is of all architectural processes the least important, and one with which engineering has little to do.

It is often said that the most important element of all in architectural expression is what is called "good proportion"—and you may perhaps wonder why I have not mentioned this element until now. The reason why I have not done so is that I regard "good proportion" as no matter of architectural expression, but as a certain result of proper planning and construction. "Good proportion", after all, consists of little more than the

existence of simple intelligible ratios between the various parts of the building, the due subordination of minor parts to major, and perhaps the application of a little solid geometry in the discovery here and there of a third dimension harmonious with the two dimensions already given. When the exteriors of buildings were regarded as being independent of what lay behind them, the established proportions of the Classical Orders of architecture supplied a rule where all natural rule was lacking. When, however, the exteriors of buildings are regarded not as masks, but as faces growing on bodies, we shall expect in them not icy regularity of features but the expression of individual character. The good proportion in the face of the pugilist is not the good proportion in the face of the vestal virgin; the good proportion in the facade of an armoury is not the good proportion in the facade of a votive chapel. The simple but intelligible ratios I have postulated will arise inevitably from the adoption of a fixed unit in good planning and good construction, for without such adoption of a unit the planning and construction are unlikely to be good at all. "Good proportion" will therefore be inherent in our building before we come to consider architectural expression, and our only care need be not to spoil it.

I have now taken my imaginary engineer-architect and architect-engineer through the three processes of building design, and I hope I may have persuaded you that each of these men is needed all the way. Each must have an education differing from that which he has at present, and the provision of such education is an urgent need the post-war age must face. When France is restored to independence we shall find

that much has been done there from which we can learn; the French architect-engineer has been in existence for some time, and some of his work comes very near to what the world is needing.

In the meantime we can—and, I hope shall—do much good by setting our faces against the most vicious of all results of the present maladjustment between engineer and architect; we can kill by protest, by ridicule, by any lawful means whatever, the practice of calling in an architect to veil and disguise the barbarities of the engineer. We must also stop the engineer's himself paying an architectural assistant to provide him with this protection. Engineering works must become always what they are now too seldom, things that everybody wants not to have covered up but to look at and enjoy. They were that in ancient Rome, many are that in modern France and Italy; Sweden, Russia, and Germany—with many other European countries—show that in the appearance of bridges, railway stations, and other such works, our own country is the most backward of all. Of our quite recent achievements in the kind, I can think of nothing very easy to look at except the bridge I have mentioned at Chelsea, some of the London tube stations, and the Mersey tunnel (I speak of its structure and appearance, not of its planning, which seems to me all wrong on the Liverpool side). Europe challenges us to improve, and I believe that young architects and young engineers must take up the challenge together.

Reprinted from the Journal of The Institution of Civil Engineers, London, England.

FURTHER LIST OF MEMBERS OF THE R.A.I.C. ON ACTIVE SERVICE

Missing

Capt. John A. Willis, Essex Scottish Regiment.

Prisoner-of-war

Lieut.-Colonel Douglas E. Catto, Royal Regiment of Canada.

ONTARIO

Flying Officer F. C. Etherington, R.C.A.F.

Flying Officer A. C. Rieder, R.C.A.F.

Second-Lieut. J. Sugarman, R.C.E.

QUEBEC

Lieut. V. P. Belcourt, Adjutant, University of Ottawa, Contingent, C.E.O.C.

Pilot Officer Jacques M. Morin, R.C.A.F.

D. K. Gowans, R.C.E. (Sapper)

SASKATCHEWAN

Flight Lieut. F. J. Martin, R.C.A.F.

Second Lieut. D. H. Stock, O.T.C. (W.C.)

This list has been prepared by Provincial Associations. The "Journal" will be glad to correct any errors or omissions which may have occurred.

SEPTEMBER ISSUE ON RECONSTRUCTION

LETTERS OF APPRECIATION

The Honourable R. F. McWilliams, Lieut.-Governor of Manitoba

It appears to be one of the pleasant perquisites of a Lieutenant-Governor that he receives complimentary copies of the journals of many professional and business organizations. Thus it comes that for the past two years I have been enjoying the handsome *Journal* of the Royal Architectural Institute of Canada. I read it every month with much interest and would like to compliment you both on the material and on the form and appearance of the *Journal*. While I can make no pretensions to any professional knowledge of architecture, it is a subject in which I have always been interested. That may be because it appeals to the mathematical mind but, perhaps, more because the work of the architect is essentially constructive. I have been particularly interested in your special September number dealing with plans for reconstruction after the war.

I am especially interested in town planning. I was for several years Chairman of the Winnipeg Branch of the Town Planning Institute of Canada, and worked on many plans for the improvement of this city and district. One group of our members living in the adjoining municipality of St. James had better success and it is to their foresight and vision that we owe the fact that we now have a very fine airdrome, capable of indefinite expansion and only three miles from the centre of the city.

I think it is most important that the members of the architectural profession should be devoting themselves to a study of plans for the days after victory. With all the will in the world to help the war work there still remain many of us who have the time and the training necessary for the working out of future plans. The architects of this country will have a great opportunity when Canada turns its attention and devotes its money to reconstruction and the building of a better living in times of peace. Housing, town planning, parks, churches, schools, squares, factories, highways and many other works will call for the best brains of your profession. They will call also for a sound balance between the ideal and the attainable. It will be useless for the experts to work out plans if these plans are too expensive or too far beyond public appreciation. A half loaf that is within reach, is better than a whole loaf that is beyond our reach.

It seems to me that the time has come when we should be developing types of architecture distinctly Canadian. It may be that as yet the country is too divided and scattered but on the other hand we have an ever-growing national consciousness and pride. In the Prairie West we naturally think in terms of space — wide streets, long vistas, open squares, magnificent sunsets and northern lights. In British Columbia they naturally think of massive mountains and valleys and snow and ice and grandeur beyond description. In the less favoured East there are likewise innumerable stimuli to conceptions of beauty. The architecture of the country should be the product of the life of the people and of the conditions in which they live, if it is to be a permanent expression of the national life. May I urge upon all your members that, setting aside the present modernistic absurdities, they devote much thought to plans for the days of reconstruction that will become permanent memorials to the peacetime aspirations of the Canadian people, worthy to be set along side their wartime achievements.

Again with much appreciation of your courtesy in sending me copies of the *Journal*.

The Honourable Ian Mackenzie, Minister of Pensions and National Health

Upon my return after a few days' absence, I am in receipt of your letter of September 30th, in which you were kind enough to send me a copy of your special Reconstruction number.

I had already seen a copy of this excellent number and have read it with the greatest interest. Please accept my congratulations upon its quality. It is a real contribution to a real problem.

Raymond Eudes, Esq., Member for Hochelaga (Montreal), House of Commons, Ottawa

I have received your special "Reconstruction" number of the *Journal* of the Royal Architectural Institute of Canada.

As a member of the Post-War Reconstruction Committee of the House of Commons, I was particularly interested at the reading of the useful and practical ideas expressed in your *Journal*, which ideas cover the various fields of social and technical activity.

I beg to offer you my most sincere congratulations and my thanks for your kindness.

R. H. Shreve, Esq., President, The American Institute of Architects

A day or two ago the *Octagon* forwarded to me your letter of September 30th covering the transmission of the Reconstruction number of your *Journal*. Last evening I had an opportunity to look it over carefully and I would like to congratulate you on the thoroughness of your discussion of the subject. The document sets a standard for the rest of us and I appreciate very much your letting me see it.

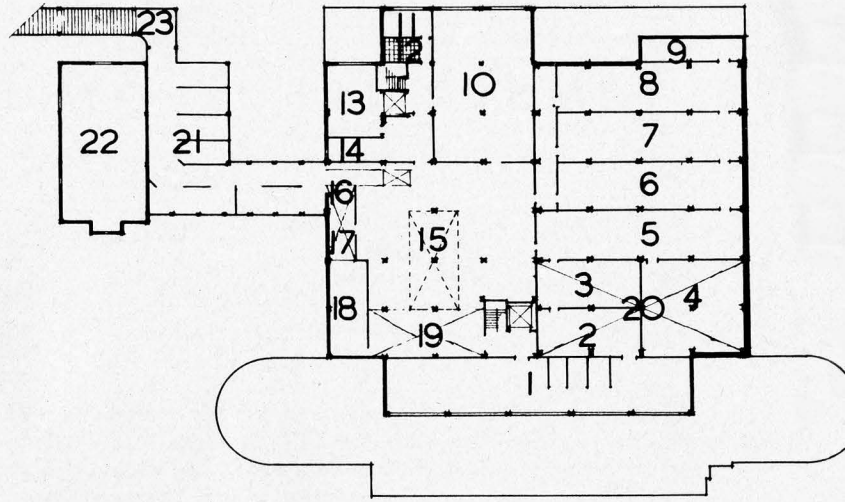
J. W. Estey, Esq., Attorney General, Province of Saskatchewan

I am in receipt of your favour of the 5th, enclosing a copy of the special "Reconstruction" number of the *Journal* of the Royal Architectural Institute of Canada. I appreciate very much your sending me this publication, which I feel certain will make a constructive contribution to the very important problem of post-war planning and reconstruction. May I take this opportunity to congratulate all those responsible for the very splendid issue of the *Journal*.

C. J. Mackenzie, Esq., Acting President, National Research Council, Ottawa

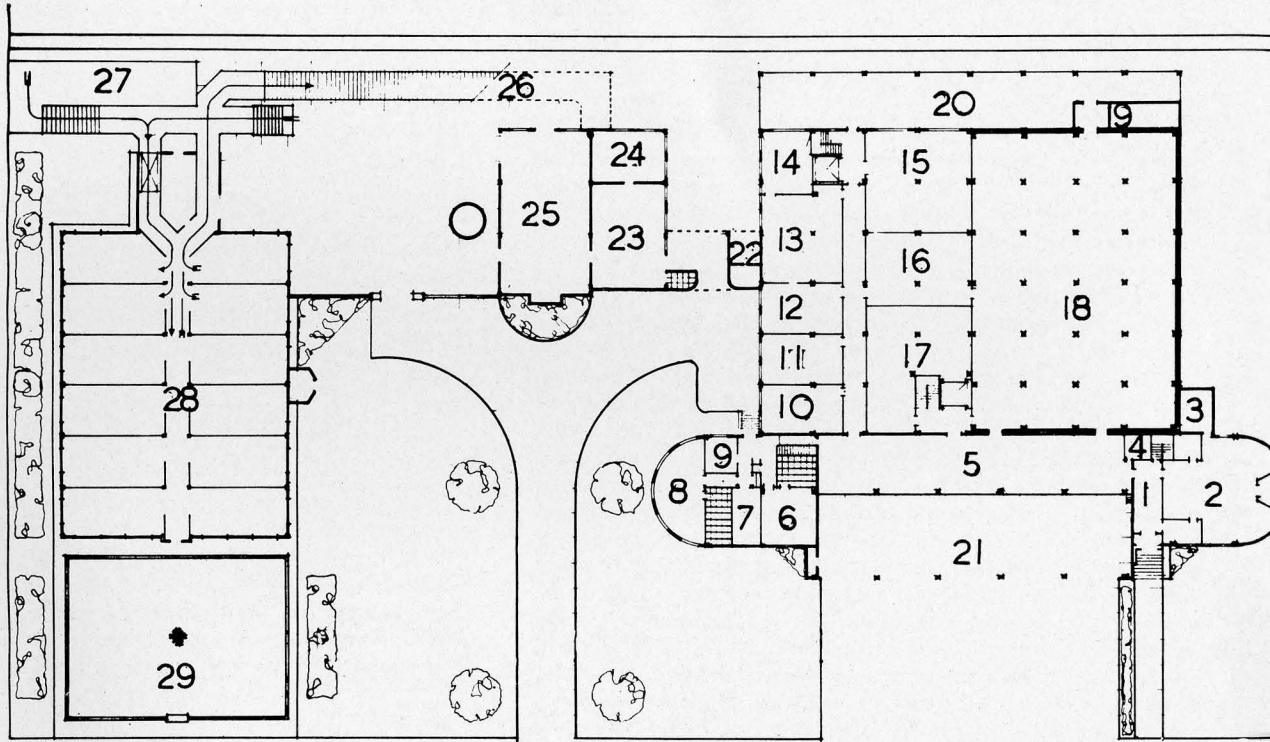
Thank you very much for your letter of September 30th, with the enclosed September number of the *Journal* of the Royal Architectural Institute of Canada. I would like to congratulate you and the *Journal* for another excellent issue. I have read the articles with a great deal of thought and interest and I do think your Society puts out a most interesting and attractive journal.

1. Sausage Department
2. Sausage Curing
3. Offal Cooler
4. Freezer
5. Cutting, Trimming
6. Hog Coolers
7. Hog Coolers
8. Beef and Small Stock Cooler
9. Conveyor-Down
10. Refinery
11. Laboratory
12. Men's Lavatory
13. Inedible Department
14. Paunch Department
15. Killing Floor
16. Hog Hoist
17. Bleeding Railover
18. Hog Room
19. Gambrel Storage Over
20. Storage Over
21. Holding Pens
22. Boiler Room
23. Ramp-Down



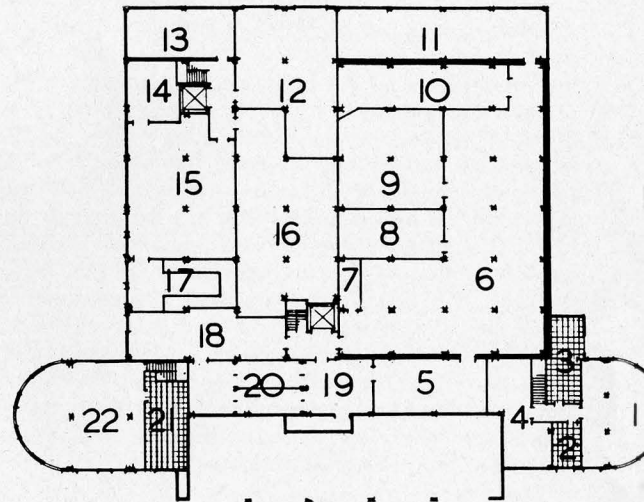
SECOND FLOOR PLAN

1. Lobby
2. Office
3. Vault
4. Shipper
5. Shipping Dock
6. Government Inspectors
7. First Aid
8. Women's Locker
9. Superintendent
10. Butter
11. Eggs
12. Storage
13. Rendering
14. Blood Room
15. Refinery
16. Lard Draw off
17. Smoked Meats
18. Market Cooler
19. Conveyor-up
20. Shipping Dock
21. Garage and Shipping Court
22. Paunch Manure Disposal
23. Engine Room
24. Machine Shop
25. Boiler Room
26. Ramp-up
27. Receiving Dock
28. Livestock Pens
29. Spray Pond

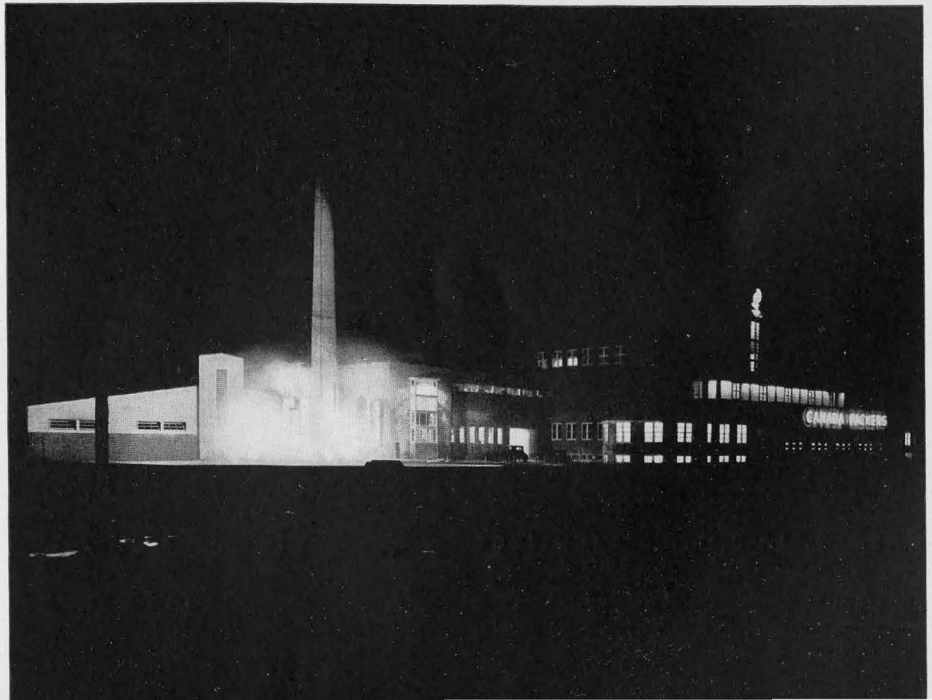
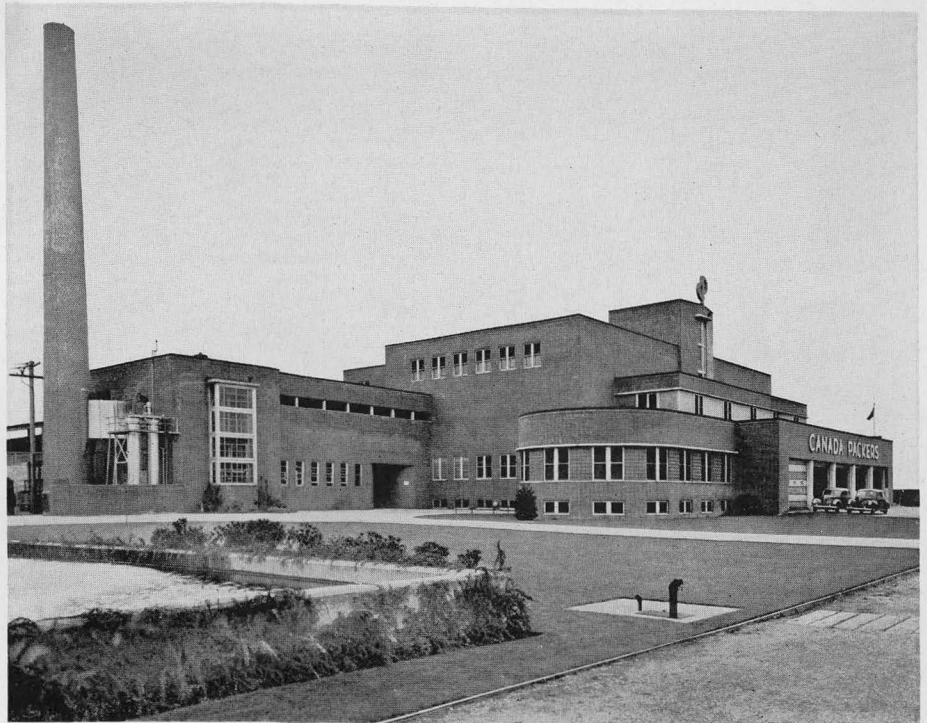


PLOT PLAN AND FIRST FLOOR

1. Conference Room
2. Men
3. Women
4. Storage
5. Soaking, Washing
6. Meat Curing
7. Scale Office
8. Casing Storage
9. Holding Cure
10. Bunkers
11. Salt Storage
12. Refinery
13. Hide Salt
14. Blood Storage
15. Inedible Storage
16. Hide Cellar
17. Catch Basin
18. Smoked Meats
19. Smoke Equipment
20. Smoke Houses
21. Men's Lavatory
22. Men's Lockers



BASEMENT PLAN



CANADA PACKERS LIMITED,
VANCOUVER, BRITISH COLUMBIA
ARTHUR, FLEURY AND PIERSOL, ARCHITECTS



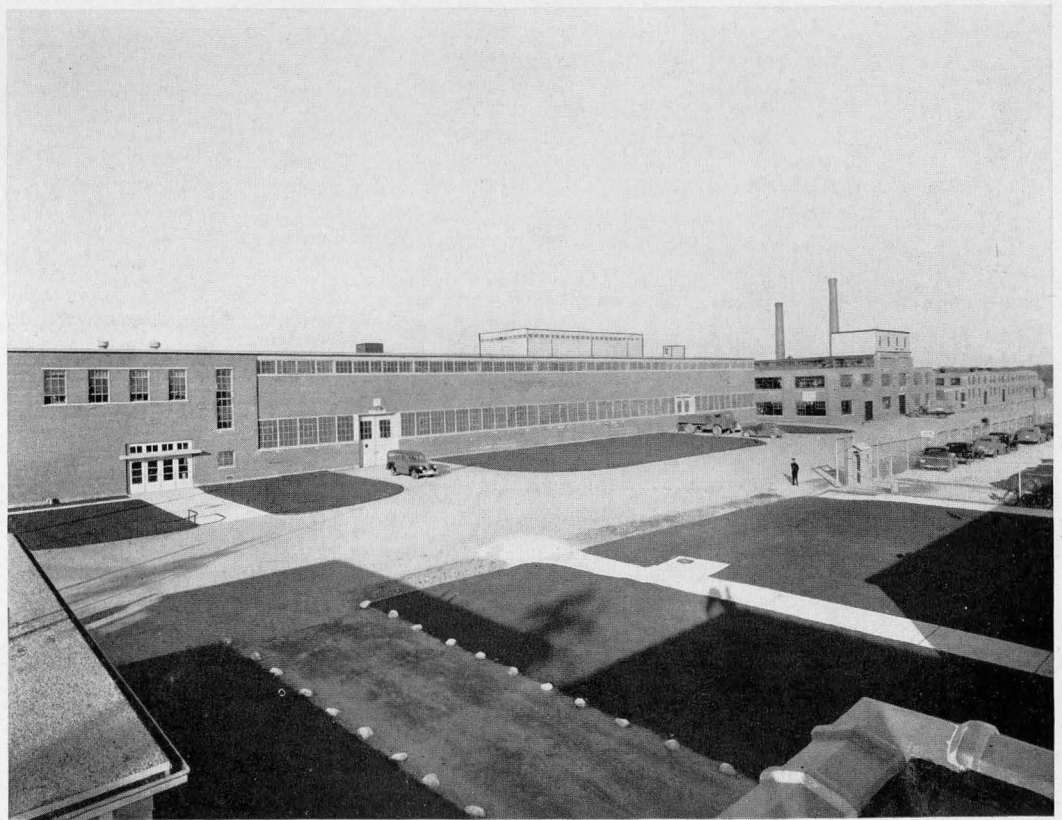
WILLIAM NEILSON LIMITED, TORONTO, ONTARIO
MATHERS AND HALDENBY, ARCHITECTS



VICEROY MANUFACTURING COMPANY LIMITED, TORONTO, ONTARIO
HAROLD J. SMITH, ARCHITECT



GENERAL MOTORS OF CANADA LIMITED
ALLWARD AND GOUINLOCK, ARCHITECTS



RESEARCH ENTERPRISES LIMITED
ALLWARD AND GOUINLOCK, ARCHITECTS

PROVINCIAL PAGE

ALBERTA

There has been much searching of heart on the part of the city council of Edmonton on the subject of housing. The city has been inundated by thousands of more or less temporary residents, due to the enormous operations on the great Alaska Highway, on hundreds of miles of new oil pipe lines, on airports and other related operations. In many cases not only have officials themselves come in but they have brought also their wives and families. These do not lack money to rent and even to buy houses, but the supply is short. Not only houses, but also office and storage accommodation is strained. At least three motor car companies have leased their premises to these incomers. In some cases this was perhaps a welcome relief to companies whose business had shrunk. One curling rink has been taken over for storage and others may soon follow. A one storey building, just completed at the beginning of this year, is now having a second storey added to it.

In addition to the higher officials themselves, the whole office staffs frequently arrive with their stenographers. These ladies, being highly paid members of their class, naturally want the accommodation that they have been accustomed to with separate bathrooms and all conveniences. The city can hardly be expected to cope with this great influx and threats have been heard that, if this city cannot do it, then headquarters will have to move to some other city. Calgary is the obvious alternative. It is quite doubtful if Calgary is any better able to take the extra strain. Perhaps the load may be divided up.

Meanwhile, behind all, remains the general permanent problem of improving accommodation for wage earners. It is not sufficiently realized that our economy does not admit of a desirable standard of housing for that large class. They simply do not get enough income to pay for it. They never have had it in the past. They now want to have it and, in justice, they should get it. This is a new demand created by our progressing civilization. It has become necessary to face this reasonable demand. No existing suggestions on cheaper methods of building have succeeded in solving the problem. Some solution must be found. It will probably be arrived at by several methods of approach. Housebuilding may be lowered in cost; but that of itself is not enough. Taxation proportionate to the necessities of large families may also help the situation. Low interest helps some of the better off. But the average income of the wage earner will not pay for the building and living expenses of his housekeeping, even if all interest charges were eliminated. Cost of land may be reduced or even in needful cases altogether discounted. Artisans putting their own labour into their homes with mutual exchange of services is a method which in Sweden is said to have reduced cash outlays as much as 30%. All these expedients and others must be explored and, even then, it may be found that the housing of large families in the wage earning class must be looked upon as a necessary public utility and subsidized accordingly.

— Cecil S. Burgess.

BRITISH COLUMBIA

Apart from one or two firms and those actively engaged in the services or working in civilian capacities, for government sponsored organizations, the Architects in private practise, have become almost an extinct species.

Our local chapter finds it very difficult to carry on its activities these days as most of its membership is absent. However, it is quite possible, in the near future, many of them will be

returned to Vancouver and it is to be hoped, if such is the case, that our Vancouver chapter will again function as merrily as it has done in the past.

—Harry Barratt.

MANITOBA

Apart from the continual Army, Air Force and other government works, building activity has fairly well stopped in this district. There are many people who have building to do, but government restrictions, high costs and some material shortages all combine to prevent any action. About half of our active membership are employed in government offices or companies and six are on active service with the Army or Air Force. Some offices still have work to finish up which has been in progress for some time, employment in a professional capacity on government work, has been very limited and Architects generally are not too busy.

There has been much talk of how we should devote this time to post-war planning and the leading place Architects should take in such plans. The September issue of the *Journal* was an excellent step in this direction. There are no doubt numerous organizations across Canada working on post-war planning. Winnipeg has a committee of this type with one of our council members representing the Architects of the city. It seems to me that all such work should be co-ordinated under the Dominion Government if it is to be effective. The recommendations of the Executive Committee in urging the government to create the necessary organization to utilize the construction industry for immediate post-war employment should be given as wide publicity as possible.

Not all our members are aware of the efforts of the Executive Committee to further the interests of the profession. This applies particularly to the West where the *Journal* is our only contact with the R.A.I.C. I would suggest that highlights of the activities of the committee be published in the *Journal* each month so that the members can appreciate what the committee is doing and can lend their support.

The *Journal* might also publish each month a summary of new government regulations on construction, employment, etc., together with brief explanations of how they affect Architects. There are so many regulations and restrictions made into law these days that it is quite impossible to keep up to date and any of us might suddenly find ourselves in the hardened old criminal class without ever being aware of our talents. Some of our better chronic complainers have long held that the government should support all worthy Architects, but it is doubtful if even their wildest dreams include a government supported stay in the local bastille.

Favorable comment continues to be heard on the A.R.P. and September number of the *Journal*. This demonstrates again the valuable service the *Journal* performs in keeping our work before the general public as well as serving our own membership. Matters affecting post-war reconstruction and the Architects' place therein, plus practical assistance in keeping us informed on current matters during these difficult times should take precedence over aesthetic or purely academic subjects.

—Robert E. Moore.

ONTARIO

It is not easy to write these notes, with the air full of red-hot news from North Africa—news so stirring that even a decision to clean out Toronto's slums and construct its sewage-disposal plant would look like small change by comparison. The daily

round, the common task, however, have to be carried on; so we begin by noting the appointment of Martin Baldwin as executive secretary of the Town Planning Board for Toronto. Mr. Baldwin gave up practice some years ago to become Curator of the Art Gallery, in which post he has done a great deal to stimulate public interest in good architecture, both as an art and a civic asset.

Another appointment which will interest many members of the profession is that of Frank M. Jeffrey (of Aikenheads Ltd.), as lieutenant in the R.C.N.V.R. He is one of a group of "old salts" who have rejoined the service to take up administrative and instruction duties; and there is no doubt that his new job will give him something worthwhile to do until we can again put decent hardware into decent buildings.

Whether or not the strain of wartime business affairs had anything to do with it, the death of A. Ross Robertson must have come as a shock to his very wide circle of friends. As a member of the staff of the old structural steel firm of McGregor and McIntyre, Limited, and later as the Ontario division manager of the Dominion Bridge Company, he was a familiar figure in architects' offices whenever problems of structure or delivery had to be solved.

Slowly but surely the war is bringing home to many people a few truths that seemed to be beyond their comprehension in the days of peace. For example, this quotation from T.R.H. in the Toronto "Evening Telegram": "As a matter of fact it would be a good time to start over by abolishing all signs overhanging the streets. They do nothing but clutter up the scenery, anyway, because the effect of any one is cancelled by all the others." Thanks, T.R.H.! We seem to remember something of the sort in an O.A.A. broadcast a few years ago. And another from the same source: "Of course in days gone by when it was only money the city was wasting, it might not have mattered so much—but in wartime we cannot afford to waste *material*." (Our italics). It is only a step from that to the realization that we cannot afford to waste human skill and energy in times of peace—and that knowledge may prove vital when reconstruction finds itself opposed (as it certainly will) on financial grounds. We may safely assume that after the war, we shall be told that Canada is insolvent, or next door to it, that reconstruction is therefore out of the question; and if we are not prepared to show that that is nonsense, we might just as well stop planning now.

—Gladstone Evans.

CANADA

The entire September issue is devoted to the Brave New World which the Canadian Institute hopes will emerge from the war. And not only is there considerable discussion of what the Canadian portion of that world should look like; there is much speculation on the architect's place in it. We are told on the contents page that "The Institute does not hold itself responsible for the opinions expressed by contributors" but the fact that the *Journal* includes them indicates their importance. An interesting comparison can be made with our own chaotic lack of planning for war's aftermath.

Taken from the New Pencil Points, October, 1942, Page 84.

NOTICE

We have been asked by one of our advertisers, Spun Rock Wools Limited, to state that the CBC announcement that their plant was damaged by fire beyond repair, is untrue. The plant is fully insured, and will be out of commission on batts only, and in that department for a few weeks. We are glad to know that this is the situation on a vital industry.

THE PERIODICALS SHELF

By ANTHONY ADAMSON

The October "Architectural Record" is a stimulating number. The editorial is recommended to all architects who by age or fate cannot contribute directly to the war effort. It, as so much these days, is a plea for architects to understand and to learn what is happening to the democratic fabric of our world so that our profession, now neglected, may not be found wanting when opportunity offers. An article in this issue entitled "Education and the Architect" should be read by all connected with architectural and allied education, both by students and by teachers. It is by J. Hudnut of the Harvard School of Design. One of its pleas important to all architects is for unification and understanding between all members of our industry. Two other articles are excellent: "Lessons from Swedish Schools" and a whole section devoted to methods of providing commercial facilities for wartime housing and new factory districts, finished with some details of shop front modernization without metal. The illustrations of Swedish public schools, though not new to many, is comprehensive and of interest.

"Country Life" for October 9th has the plans and pictures of the new London recommended by the Royal Academy. These should be seen to be believed. The R. A. Committee was headed by Sir E. Lutyens and it followed the 1938 advice of the Ministry of Transport concerning traffic, but it all gives the impression of the early 18th century, ducal houses, gilded barges and all. Doubling Apsley House and the Hyde Park Screen just for symmetrical effect and providing spaces for Royal Progresses to railway stations appear to me no less than ludicrous. The ornamental "City" gray with "State Barge Houses" could only be used for the introduction of hippopotami into the Lord Mayor's Show.

NOTICE TO ARCHITECTS OF MILITARY AGE

Instances have been brought to the attention of the Institute where young architects need guidance as to the claims of the Bureau of Technical Personnel and the Army. In such cases where the Military call comes first, the architect can do no more than report immediately to the local representative of the bureau; or where there is no such representative he should write to the bureau in Ottawa. He will then report for military duty, and the authorities will decide where his greater usefulness to the country lies, and place him accordingly.

OBITUARY

BIOGRAPHIE DE MONSIEUR JULES CARON,
ARCHITECTE, TROIS-RIVIERES

Né à Athabaska en 1885; fils de Louis Caron., architecte.

Après des études à Nicolet et au collège de Victoriaville, il décida d'étudier l'architecture devenue une tradition des Caron.

Avec l'expérience acquise auprès de son père et de ses frères, il s'établit aux Trois-Rivières en 1915.

Pendant 28 ans de pratique, il fit un nombre considérable de travaux: églises, hôpitaux, écoles, couvents, maisons privées et appartements, partout dans la Province de Québec.



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