

Sisalkraft is helping Britain's Industries



Government Departments, Municipal Authorities, and Public Works Contractors are using all available supplies of Sisalkraft. After the war you, too, will be able to use this tough, waterproof, 6-ply material for partitions, lining, sheathing, insulating, sound proofing, damp and draught proofing, sarking, emergency weather protecting, concrete curing, and 101 other jobs.

SISALKRAFT

TRADE MARK

Sole Distributors for British Sisalkraft, Ltd.

J. H. SANKEY & SON, LTD.

MANUFACTURERS AND DISTRIBUTORS OF BUILDING MATERIALS
SANITARY WARE AND REFRACTORY GOODS SINCE 1857

22, ALDWYCH HOUSE, ALDWYCH, LONDON, W.C.2

Telephone
Telegrams

HOLBORN 6949 (14 lines)
BRICKWORK, Estrand, London

THE ARCHITECTS'



JOURNAL

THE ARCHITECTS' JOURNAL WITH WHICH IS INCORPORATED THE BUILDERS' JOURNAL AND THE ARCHITECTURAL ENGINEER IS PUBLISHED EVERY THURSDAY BY THE ARCHITECTURAL PRESS (PUBLISHERS OF THE ARCHITECTS' JOURNAL, THE ARCHITECTURAL REVIEW, SPECIFICATION, AND WHO'S WHO IN ARCHITECTURE) FROM 45 THE AVENUE, CHEAM, SURREY

THURSDAY, FEBRUARY 26, 1942.

NUMBER 2457: VOLUME 95

PRINCIPAL CONTENTS

News	149
Lord Portal	150
Hatter's Castle	153-156
This Week's Leading Article	151
Notes and Topics	152
<i>Astragal's Notes on Current Events</i>	
Space, Time and Architecture	157
<i>Book Review. By Godfrey Samuel</i>	
Information Sheet	158
<i>Structural Steelwork (855)</i>	
Letters	159
Fire Alarm Building, Texas	160
<i>By MacKie and Kamrath</i>	
R.I.B.A. Reconstruction Committee	162
<i>Interim Report No. 5</i>	
Trade Notes	xviii

THE ANNUAL SUBSCRIPTION RATES ARE AS FOLLOWS :
 BY POST IN THE UNITED KINGDOM..... £1 3 10
 BY POST TO CANADA..... £1 3 10
 BY POST ELSEWHERE ABROAD..... £1 8 6
 SPECIAL COMBINED RATE FOR SUBSCRIBERS TAKING BOTH THE ARCHITECTURAL REVIEW AND THE ARCHITECTS' JOURNAL : INLAND £2 6s. ; ABROAD £2 10s.
 SUBSCRIPTIONS MAY BE BOOKED AT ALL NEWSAGENTS

SINGLE COPIES, SIXPENCE ; POST FREE, EIGHTPENCE.
 SPECIAL NUMBERS ARE INCLUDED IN SUBSCRIPTION ;
 SINGLE COPIES, ONE SHILLING ; POST FREE, 1s. 3d.
 BACK NUMBERS MORE THAN TWELVE MONTHS OLD (WHEN AVAILABLE), DOUBLE PRICE.

SUBSCRIBERS CAN HAVE THEIR VOLUMES BOUND COMPLETE WITH INDEX, IN CLOTH CASES, AT A COST OF 10s. EACH. CARRIAGE 1s. EXTRA

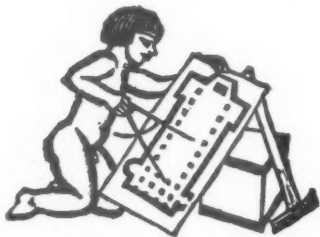
45 The Avenue, Cheam, Surrey
 TELEPHONE : VIGILANT 0087-9 (3 LINES)

The Editor will be glad to receive MS. articles and also illustrations of current architecture in this country and abroad with a view to publication. Though every care will be taken, the Editor cannot hold himself responsible for material sent him.

The fact that goods made of raw materials in short supply owing to war conditions are advertised in this JOURNAL should not be taken as an indication that they are necessarily available for export.

Owing to the paper shortage the JOURNAL, in common with all other papers, is now only supplied to newsagents on a "firm order" basis. This means that newsagents are now unable to supply the JOURNAL except to a client's definite order.

In common with every other periodical and newspaper in the country, this JOURNAL is rationed to a small proportion of its peace-time requirements of paper. This means that it is no longer a free agent printing as many pages as it thinks fit and selling to as many readers as wish to buy it. Instead a balance has to be struck between circulation and number of pages. A batch of new readers may mean that a page has to be struck off, and conversely a page added may mean that a number of readers have to go short of their copy. Thus in everyone's interest, including the reader's, it is important that the utmost economy of paper should be practised, and unless a reader is a subscriber he cannot be sure of getting a copy of the JOURNAL. We are sorry for this but it is a necessity imposed by the war on all newspapers. The subscription is £1 3s. 10d. per annum.



from AN ARCHITECT'S *Commonplace Book*

"And I look upon those pitiful concretions of time and clay which spring up, in mildewed forwardness, out of the kneaded fields about our capital—upon those thin, tottering, foundationless shells of splintered wood and imitated stone—upon those gloomy rows of formalized minuteness, alike without difference and without fellowship, as solitary as similar—not merely with the careless disgust of an offended eye, not merely with sorrow for a desecrated landscape, but with a painful foreboding that the roots of our national greatness must be deeply cankered when they are thus loosely struck in their native ground; that those comfortless and unhonoured dwellings are the signs of a great and spreading spirit of popular discontent; when men build in the hope of leaving the places they have built, and live in the hope of forgetting the years that they have lived."

John Ruskin

NEWS

- ★ Lord Portal, the new Minister of Works and Planning page 150
- ★ Details of two Scholarships tenable at the A.A. page 151
- ★ A correspondent replies to Mr. Hugh Beaver's reply to Federation of Greater London Master Builders page 159

R.I.B.A.

A meeting has been arranged at the R.I.B.A. for 2.30 p.m. on Wednesday, March 4, when the work of the R.I.B.A. Reconstruction Committee is to be reviewed. The Reconstruction Committee has now been working for nearly a year, and it has been decided that the time has come to give members some account, not only of what has already been done, but of the further work contemplated.

It is also desired to obtain comments and suggestions, and for this purpose representatives of other bodies working on reconstruction problems are being invited.

SALVAGE

A recent Drawing Office Search, instituted by a County Surveyor, resulted in the discovery of a large number of cancelled and duplicate copies of linen tracings and black and white linen prints, dating from the beginning of the century. Most of these are quite useless to the Surveyor, but are invaluable as salvaged material for use in the National war effort. It is felt that large quantities of similar old prints and tracings may be found in the thousands of Drawing Offices throughout the country, and the Ministry of Supply urges that a thorough search should be undertaken, and all unwanted linen of this type should be immediately released as salvage.

As linen looks so much like waste paper if bundled together, such linen should be kept separate. Most pulping mills would find difficulty in dealing with it when mixed with paper, and, of course, linen commands a higher cash value than most waste papers.

REGISTRATION OF BUILDERS

Since October 1, 1941, no Building or Civil Engineering Contractor should be carrying on business unless he is registered by the Ministry of Works and Planning. A condition of registration is compliance with the requirements of the Regulation as to terms and conditions of employment, which are that:—

- (a) where the terms and conditions of employment of persons employed in building undertakings or civil engineering contracting undertakings in any class of work in any district or on any site have been fixed by joint agreement in the industry or by arbitration, the terms and conditions of employment of persons employed in that class of work in that district or on that site in any building undertaking or civil engineering contracting undertaking carried on by an applicant for registration shall be neither more nor less favourable than the first mentioned terms and conditions;
- (b) such conditions as to hours of employment (including conditions as to Sunday work) will be observed as the Minister may direct.

Under paragraph 5 of the Regulation, the Minister of Works and Planning has power to revoke a Certificate of Registration or a Provisional Certificate of Registration held by any person or persons who fail to comply with these requirements. The Minister has now decided, after consultation with representatives and officials of the National Federation of Building Trades' Employers and the Federation of Civil Engineering Contractors, to set up a Panel to advise him on questions arising as to whether the conditions prescribed for registration are being complied with and on the action to be taken in cases where these conditions are not being observed, and in general to advise on such other matters connected with registration as he may refer to them.

The Panel will be advisory, and will consist of members nominated by the National Federation of Building Trades' Employers, and by the Federation of Civil Engineering Contractors, respectively, with two officials of the Ministry of Works and Planning, one of whom will be Chairman. The Secretary of the Panel will be provided by the Ministry of Works and Planning.

REPLANNING BRITAIN

Points from a speech by Mr. George Hicks, M. P., Parliamentary Secretary, MOWP, to the London Labour Party.

For what and for whom are we planning? Unless we get the answer to these questions right we shall not get anything right.

If we consider the needs of industry alone



L o r d P o r t a l

Lord Portal, D.S.O., D.L., J.P., who was appointed on Monday last Minister of Works and Planning in succession to Lord Reith. He was born in 1885 and educated at Eton and Christ Church, Oxford, and served throughout the last war in the Life Guards, receiving the D.S.O. and M.V.O. in 1918. His appointments include: Managing Director of Portals, Ltd., the makers of paper for bank notes, Director of Commercial Union Assurance, Gt. Western

Railway and other Companies; official appointments: Chairman, Bacon Development Board since 1935; Trustee of Lord Nuffield's scheme for assistance of special areas since 1936; Chairman, Coal Production Council since 1940; additional Parliamentary Secretary to Ministry of Supply since 1940. He made his name as a public figure when he served as Regional Commissioner for Wales under the Civil Defence Scheme in 1939.

we are unlikely to achieve the best planning from the human point of view. If we start our planning from the point of view of transport, then that might lead us to the development of a transport system so vast that the only way in which we could make it pay would be by adding millions to our already swollen cities. The business of

planning as I see it is that of providing the best use of land for all purposes and an environment which will preserve and increase the beauty of our towns and countryside and at the same time give our people surroundings which make for health, happiness and prosperity. At the end of the last war the cry was for

homes for heroes. Britain, with all its faults, did more between the wars to improve the physical conditions of its people than any other nation in the world. Altogether one-third of the people of the United Kingdom in one way or another were rehoused on a new and better level. That was a great achievement in which

my
an
this
it m
dev
add
they
wer
fac
wor
ide
trin
sho
add
to v
bot
cen
libr
and
mu
dev
war
gar
east
eve
The
reb
onc
and
It i
the
eve
the

D
Arc
teci
A.A
L
pro
cou
qua
yea
It
visi

C
mu
sho
sta
for
sub
Co
M
En
val
tui
Ass
the
the
wh
A
por
Se
36,
Jun
Le
eac
shi
A
ma
Ass
sho

my industry, I am proud to think, played an important part. At the same time all this great development was not so good as it might have been, because it was unplanned development. New housing estates were added to the fringes of the cities so that they became more unwieldy; and they were not always planned in relation to the factories and the offices in which people worked. We must get back to the simple ideas of planning. You remember Geddes's trinity of Place, Work, Folk. A town in short is a place where folk work and I would add live. We must relate living conditions to working conditions and we must relate both to the life of the community—shopping centres, hospitals, schools, cinemas, theatres, libraries, public parks and playing fields, and other amenities of town life; and we must relate all these things to a countryside devoted to agriculture and recreation. We want to see our people in houses with gardens. These houses should be within easy reach of the people's work, and of everything necessary for a full social life. The task of replanning Britain, the task of rebuilding Britain, is a great and inspiring one. It is a task in line with every ideal and principle of the Labour movement. It is an expression of that will to achieve the better and more abundant life for everyone which is now, I believe, part of the idealism of the nation as a whole.

SCHOLARSHIPS

Details of two Scholarships tenable at the Architectural Association School of Architecture, London, have been issued by the A.A. :—

Leverhulme Scholarship.—This scholarship provides the opportunity for students who could not otherwise afford it to obtain qualifying training over a period of five years for the profession of Architecture. It is of the value of £1,000, and its provisions are as follows :—

- (1) Payment of tuition fees (£75 per annum).
- (2) An annual allowance of £10 to cover subscriptions, working materials, etc.
- (3) Maintenance allowance of £10 per month.
- (4) An allowance of £20 for travel in the British Isles during the fourth year.
- (5) An allowance of £40 for travel abroad during the fifth year.

Candidates must be of British Nationality, must not be below the age of 17 years, and should have reached School Certificate standard. They may be required to sit for a written examination on general subjects, and to come before a Selection Committee for an interview.

Minter and Sir Walter Lawrence Open Entrance Scholarships.—These scholarships, value £75 12s., entitle the holder to free tuition for the first year course at the Association's School of Architecture, and they are open to candidates who are under the age of 19 years on July 1 of the year in which they compete.

All entries must be accompanied by a portfolio of drawings, and must reach the Secretary of the Architectural Association, 36, Bedford Square, London, W.C.1, on June 1 in each year in the case of the Leverhulme Scholarship, and on July 1 in each year for the Open Entrance Scholarships.

Application forms and further particulars may be obtained from the Secretary of the Association, to whom all communications should be addressed.

M i n i s t r y o f P L A N N I N G

ON Wednesday, February 11, Lord Reith announced in the Upper House that the Ministry of Works and Buildings, itself a novelty of little more than a year's standing, is to become the Ministry of Works and Planning, with the Town Planning powers previously exercised by the Ministry of Health as the basis of its authority. He promised on behalf of the Government additional legislation at a later date to extend existing powers over the whole country—land remote from development and land already developed alike. He also outlined machinery to come into operation immediately, which would secure co-operation between all the different ministries whose opinions must affect planning decisions: the Ministry of Transport, the Service Departments, the Ministry of Agriculture and so on.

Hard things have already been said about this Ministry-of-a-week by those whose business—or hobby—it is to complain of every move but the next. There are cold-hearted men who repeat sourly that nothing has been changed but a name and what, they ask, is in a name? The JOURNAL (which certainly can't be accused of being blandly uncritical of the Ministry of Works) replies that in this instance there is everything, *absolutely everything*, in a name. Even if nothing else had been changed but the word *buildings*, even if nothing else had been added than the word *planning* to *works*, the action would still be a great one. A year ago the creation of a Ministry of Building, which gave public recognition to the fact that the building industry is vital to the nation in war and peace, seemed something big. Now, we are confronted with an even more remarkable phenomenon than a Ministry of Building—a Ministry of Planning; and a minister who has stated publicly as the opinion of the Government that planning is not a luxury to be dispensed with till the war is won, but a method of economising our resources, an important part of the process by which we are going to win the war.

No fresh powers have been created yet, but new powers are bound to come. The exigencies of the situation will demand economy. In order to make the best use of what we have—the meagre supply of building labour available for maintenance and reconstruction, the buildings already in existence, the transport facilities available—control is necessary. It is not the kind of planning which results in fine vistas, new towns, avenues of trees. These must wait till later. But it is planning for all that; purposeful control of existing resources while the war lasts will not only assist the war effort but is the basis of reconstruction. And so the JOURNAL feels that the mere existence of a

central planning authority is a battle won. We now have a minister on whom new powers affecting the use and abuse of buildings and land can appropriately be conferred, as circumstances make clear the need for them; a minister whose recognized duty it is to direct and co-ordinate steps being taken every day by private persons and government departments (the order of priority is intentional); a minister in short with the right to prepare the stage for one of the great forward movements of history. The only completely baffling thing is why the name of that minister should suddenly be changed from Lord Reith to Lord Portal.



The Architects' Journal
45, The Avenue, Cheam, Surrey
Telephone: V'igilant 0087-9

N O T E S & T O P I C S

HATTER'S CASTLE

I mentioned last week a French Postman's dream castle created out of concrete, shells, fossils and meteorites—a labour of love which took 33 years to complete; 33 years of exhausting work.

★

Exhausting but not dull: not to be compared with the mechanized boredom of placing one brick on another with standard movements at a certain rate per hour according to somebody else's plan and knocking off when the clock strikes—the kind of work that most people do more or less unwillingly, because they reckon the advantage of regular pay outweighs the disadvantages of a boring routine—and a few do with enthusiasm (mostly in Russia) because they appreciate that nationalization, mass production, mechaniza-

tion, or whatever you like to call it, allows society to realize that dream of utilitarianism, the greatest good of the greatest number.

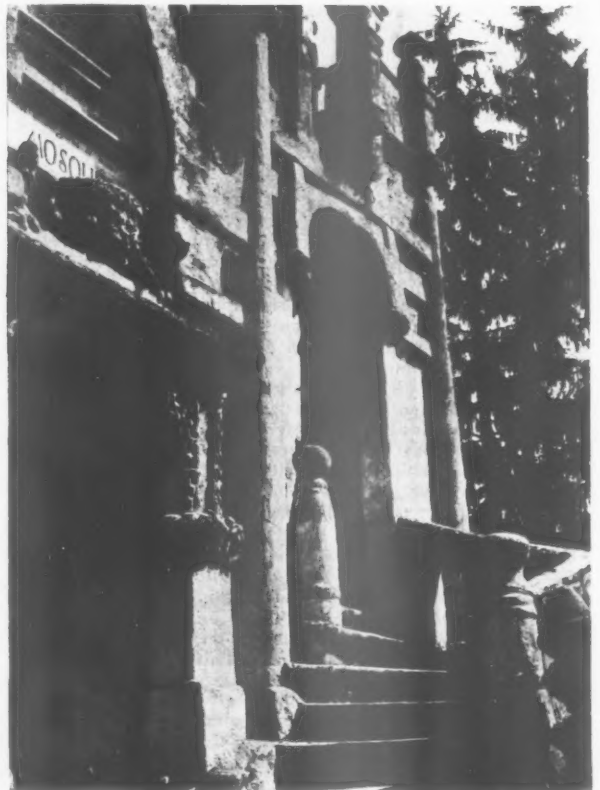
★

Ferdinand Cheval, postman of Hauterives, worked differently. "Throughout the evenings" after tramping his postman's round of 32 kilometres, "tormented, guided by an inspiration that it is difficult to believe remained entirely conscious at the end of a day so full of effort, upheld by a megalomaniac belief in his mission, Cheval busied himself cementing into shape his

fossils and his meteorites. Even nightfall was unable to stop him. He persisted in his toil by the light of a candle." His palais ideal was quite uninhabitable. His work had no sense or purpose. It was its own justification. Here is his account of it.

A country postman, like my 27,000 comrades, I tramped each day from Hauterives to Tersanne (through a district where the sea had left obvious traces of its visit), now amongst snow and ice, now amongst fields covered with flowers. What could one do whilst walking eternally against the same background, unless one dreamed. I used to dream. And what about? Well, to divert my mind I used to construct in a dream a fairy palace; one that would surpass all imagination as completely as the genius of an ordinary man could achieve (with gardens, grottoes, towers, castles, museums and sculptures), seeking to create again all the ancient architecture of primitive times; the whole so picturesque that the vision of it stayed vividly in my mind during ten years at least.

Then, just at the time when this dream of mine was fading bit by bit into the midst of forgetfulness, an incident suddenly revived it: my foot knocked against a stone which nearly made me fall. . . . I felt urged to look closer at this obstacle. . . . It was of a shape so bizarre that I picked it up and carried it away. The next day I returned to the same spot and found there more stones more beautiful still, and these, when placed altogether,



In the village of Hauterives, Drôme, stands the ornamental palace that was built entirely by his own hands by the local postman, Ferdinand Cheval, working only with simple tools and a wheelbarrow, collecting strange stones to adorn it in his postman's bag during his daily round. Two photographs of M. Cheval's castle appeared last week. In response to several requests for further illustrations it is dealt with more fully on pages 153-156, as well as by Astragal.

produced so charming an effect as to fill me with enthusiasm. It was this that I said: "Seeing that nature produces the sculpture, I myself will be the architect and mason"! . . . And as for that, who is not a bit of a mason?

★

In other words his defence against boredom was fantasy and fantasy took possession of him. England and America have their equivalents. What after all is Citizen Kane's Xanadu but a *palais idéal*? What is the average suburb but the same thing by the yard? The chief difference is that while the postman of Hauterives worked his way to fairyland, Citizen Kane and Mr. Smith prefer to pay their money and travel as passengers, each according to his income.

★

Can a *palais idéal* be bought? It's an interesting point. Can one person's fantasy satisfy another? In principle the answer is Yes, otherwise there wouldn't be much scope for professional artists. But very often of course it fails to, as we all know. Well, if fantasy can be bought, is there any logical reason why it should not be mass produced?

★

There are several kinds of fantasy for sale at present. The genuine antique (Citizen Kane's solution) has disadvantages. Apart from the fact that it's seldom available it mixes utilitarianism with romance in a way that usually cramps the former. Fakes have similar failings.

★

But mass-produced modern fantasy, exquisitely designed to suit our circumstances—how about that? Are there any logical arguments against reproducing rustic benches, bird baths, sundials and jardins japonais by the thousand or reprinting startling surrealist pictures by the million?

★

Personally I think fantasy reproduced 10,000 times grows more monotonous than the most prosaic utility in proportion as it is more striking. Mechanical reproduction isn't to blame. Wood cuts are charming. But endless repetition kills the most delicious romance and calls for a classical purity of design which happens, incidentally, to

facilitate mass production in some cases.

★

It's a curious fact, which strikes one immediately one examines the work of any particular period of craftsmanship before mass production imposed limitations, that a high degree of standardization of design was arrived at quite spontaneously. Designs were often elaborate, and to us many of them appear fantastic; the method of thought is different from ours. A gargoyle for instance seems to us a great effort of the imagination, but to a mediæval citizen used to meet the devil four or five times a day, it must have seemed at least as ordinary as a lead rain-water head with a little flower on it does to us. House plans, peasant costumes, pots and crocks, everything was highly standardized.

★

It's one of those illogicalities that keep the world alive, that though highly standardized design was part of the craftsman's tradition, standardized methods of production have set up a contrary reaction; have raised an immediate cry for variety that was quite unknown before: an endless inexhaustible variety that the machinery of mass production can't possibly satisfy—though it will no doubt allow each one of us to concentrate more and more time and attention on the creation of our own individual *palais idéal*—propelled, one hopes, by a frenzy no less intense than that of Ferdinand Cheval.

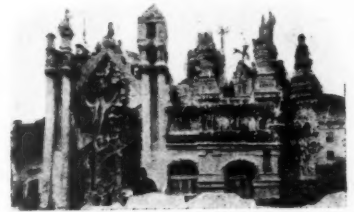
LORD REITH

On Wednesday, February 11, Lord Reith got up in the House of Lords to tell the world he was the new—the first—minister of planning. Twelve days later he was superseded by Lord Portal.

★

Why? Who shall take it upon himself to answer? Many people I think will deplore the loss of Lord Reith, a man of vision, who had spectacular achievements to his credit in the past, and had showed already a wide grasp of the larger aspects of planning. Planning, in his last official words, "is a war aim, a notable and urgent war aim, not a distraction from the war effort."

ASTRAGAL



HATTER'S CASTLE

In last week's issue we reproduced two photographs of a house built by M. Cheval, the postman of Hauterives. He built the house (seen above) by picking up curious stones on his round and bringing them back in his pockets or his postman's bag, and completed the job with his own hands in just 33 years. Publication of these photographs was responsible for several requests for fuller information of M. Cheval's house. Additional photographs and information are therefore published here.





Ferdinand Cheval, who built this palace with his own hands, was born in 1836 at Charmes (Drôme). Formerly a baker, from 1860 onwards he performed at Hauterives the job of postman.

From 1879, when he was 43 years old, Cheval assiduously collected his stones for 27 years, carrying them home in his pockets or his bag while going his postman's round of 32 kilometres; then, after his round was finished, returning with his wheelbarrow for the larger ones.

Throughout the evenings Cheval busied himself cementing into shape his fossils and his meteorites. Even nightfall was unable to stop him, as he persisted in his toil by the light of a candle.

In spite of the ridicule of his neighbours he continued his efforts for 33 years. After finishing the eastern side of the palace and then the north and south sides, he purchased the next-door garden in order to enlarge the palace towards the west, and this portion was completed in 1912.



He was then able to contemplate his immense plaything, its form a mansion entirely uninhabitable, and regard his work as finished; though, in fact, he devoted another eight years to the construction of his own tomb in the cemetery of Hauterives, and he eventually died on August 24, 1924.

The architecture of Cheval resembles in many ways the traditional building construction of the district (walls adorned with pebbles embedded in the cement), and his house resembles the

natural grottoes that abound in the neighbouring mountains of Vercors. The incongruity of architectural style seen in some of the details set into the larger mass are probably explained by the fact of Cheval's habit of rising and executing small portions of the work in the middle of the night, inspired by dreams or visions. The illustrations show different views of the palace, which by the way is a full-size building and not a model, as superficial study might lead one to suspect.



A close-up of one of the walls of M. Cheval's palace, designed as a kind of museum of sculptures and natural objects, a surrealist's paradise. The gigantic figures are about 20 feet high.

S
a
C
[B
" S
Dr.
Han
able
prio
D
the
Ar
tran
oth
from
the
spi
Re
the
M
tho
sub
T
one
mo
tur
bia
can
led
on
blo
an
his
inf
H
he
an
"
no
of
re
ou
in
se
fa
m
an
de
su
tr
th
an
co
d
a
b
th
B
h
c
w
o
h

Space, Time and Doctor GIEDION

[BY GODFREY SAMUEL]

"Space, Time and Architecture," by Dr. Sigfried Giedion, is published by the Harvard University Press and is obtainable from them and Humphrey Milford, price five dollars.

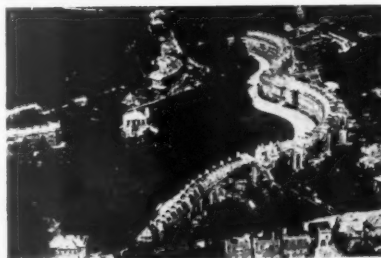
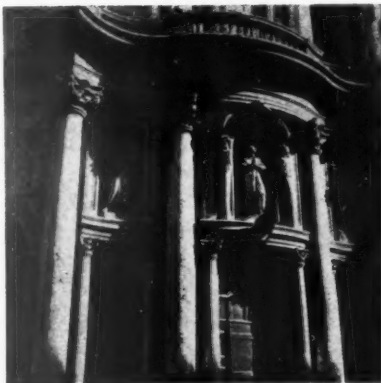
Dr. Giedion, sometime secretary of the International Congresses for Modern Architecture, has suffered two major transposals in life, one spatial, the other temporal. He was wafted bodily from Zürich to Harvard shortly before the war; he had been transported spiritually some years earlier from Renaissance and Baroque studies to the stop-press of contemporary art. Moreover he is not an Architect, though he knows more about the subject than many professionals.

These are good qualifications for anyone who sets out to summarise the more recent developments in architecture. He can detach himself from the bias of purely reminiscent history; he can draw together from personal knowledge the influence of Paris exhibitions on the one hand and American office blocks on the other; his statements and generalisations, as becomes an historian, will be designed rather to inform than to inspire.

His intentions are modest. Although he declares himself in his foreword anxious to find a way out of the present "cultural chaos," this proves to be no more than the fashionable equivalent of a baroque dedication to some reigning prince, and in fact he sorts out with considerable scholarship and insight those architectural events and sequences of events which, behind the façade of revivalism, have contributed most to our present outlook. This is more than enough to make a fascinating and important book, and it is no derogation to say that he has hardly succeeded, if, indeed, he ever really tried to demonstrate any sort of single theme running through the technical and aesthetic movements of the last century and a half.

This careful descent step by step down to the foundations of our present architecture has hardly been attempted before, and although some may prefer the more rapid method provided by the Bannisters, there can be no doubt that he has got there first. None of his chapters is wasted; all of them deal with buildings or builders, movements or events which are clearly important.

Their importance varies more perhaps than Dr. Giedion is inclined to

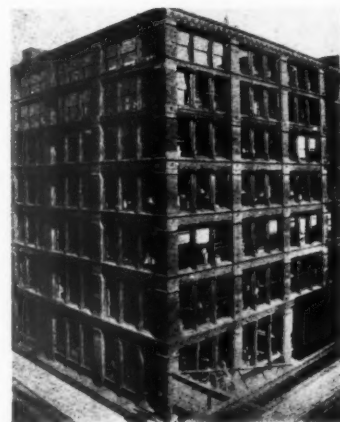


Top: Francesco Borromini. Undulating wall of San Carlo alle Quattro Fontane, 1662-67. This late baroque invention, the undulating wall, reappears in English town planning towards the end of the eighteenth century. Centre: Lansdowne Crescent, Bath, 1794. Its serpentine windings follow the contours of the site. Bottom: Le Corbusier. Scheme for skyscrapers in Algiers, 1931. Late baroque space conceptions came very near to contemporary solutions like this one (from Space, Time and Architecture.)

He is more persuasive in his comparison between modern architecture and modern painting. He points out how the painter's overthrow of Renaissance perspective in favour of interpenetrating planes and multiple points of view is paralleled by the architect's departure from axial design and his demand that the building shall be looked at from all directions before the full value is appreciated. He carries us with him, too, in his diagnosis of the differences between American and European developments as arising largely from much material with little skill on their side and much skill with little material on ours.

admit. His comparison between the intricacies of late Baroque construction against a background of mathematical discovery with the complexity of some modern buildings in an equally scientific age, though full of interest and well illustrated, is not really convincing.

In his treatment of individual achievements he is excellent. Labrouste and the great French engineers, Hausmann with his geometrical brutality, Wright braving the hurricane of classical revival on Taliesin Hill, Maillart and Gropius, these are already established reputations. With others, such as H. H. Richardson, Horta and Berlage, we may feel too much out of sympathy to appreciate the amount of attention bestowed on them, though they were doubtless solid links in the chain. We must be grateful, however, for the introduction to a number of less well-known personalities, especially among

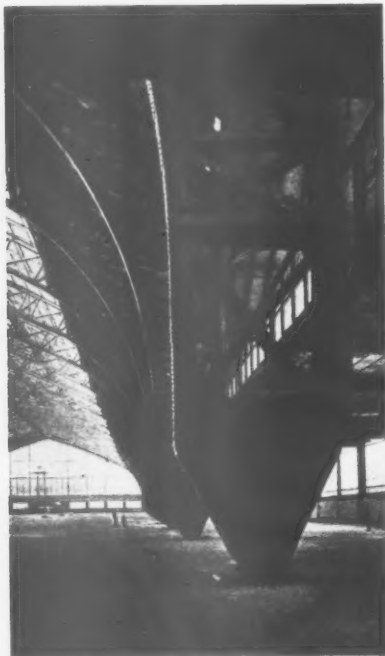


Left: William le Baron Jenney, First Leiter Building, Chicago, 1879. Brick pillars on outer walls; cast-iron columns in the interior. The wide glass openings suggest the "Chicago windows" of a later date. Centre: Burnham and Company, Reliance Building, Chicago, 1894. In its airiness and purity of proportion, this building serves to symbolize the spirit of the Chicago school, whose swan song it was.

Right: Rockefeller Centre, New York City, 1931-39. Air View: The various buildings spread out openly from the highest, the R.C.A. Building, like the vanes of a windmill. Their slab-like form represents a revolt against the old type of skyscraper, the imitation of the Gothic tower or the enlargement of the normal four-storey block to extreme height, without consideration of new conditions.



Left: Edgar Degas, *The Dancer*. Degas, the most daring experimentalist among the painters of the period and the exact contemporary of Eiffel, projects his dancers stripped of all erotic facade. He shows their distended nostrils and all the tenseness of straining effort. Max Liebermann remarks (in *Pan*, the most precious of the German avant-garde reviews) that "he seems to disguise his models and see the nascent prostitute in the young dancer: no other painter has so completely subdued the



novelistic element." This painting exhibits in its field the impersonal, precise, and objective spirit which produced constructions like the *Galerie des Machines*, (right, *International Exhibition, Paris, 1889*). (Base of three-hinged arch)

the Americans, George Washington Snow, inventor of the Balloon Frame, Bogardus the American cast iron fanatic, and William Le Baron Jenney, founder of the Chicago School. Each is mounted in his original surroundings, like specimens in a natural history museum, so attractively that we hope the curator will one day remove some

of the glass cases for a closer examination.

The book is primarily a collection of significant facts, and as such there can be little criticism of it. The deliberate neglect, however, of the whole series of stylistic revivals, though welcome as an antidote to the current conception of the period, is overdone. The revivals

arose from an attitude towards History. To us a continuous process of which we are a part, to them it was a wardrobe of fancy dresses. The idea of a building as a body to be clothed pervaded most of their architecture, and must have been responsible to some extent for technical developments which a more nudist policy would have been, and indeed is, slower to accept.

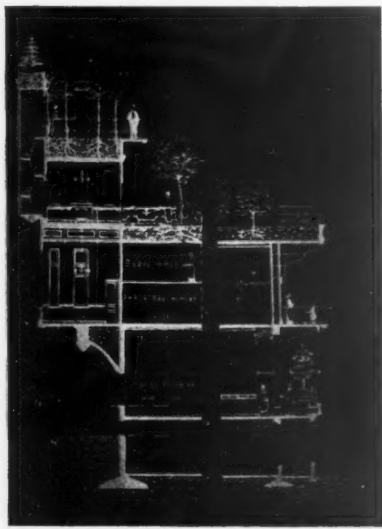
Apart from this and other changes of over- and under-emphasis, some disagreement is invited by the occasional theories which enliven, as indeed they must in any readable history, the more solid statements of fact.

The London Squares, for example, are they really early instances of that marriage of building with nature which is so characteristic of our own ideas, or were they designed more as piazzas in which the London planes grew up almost by accident?

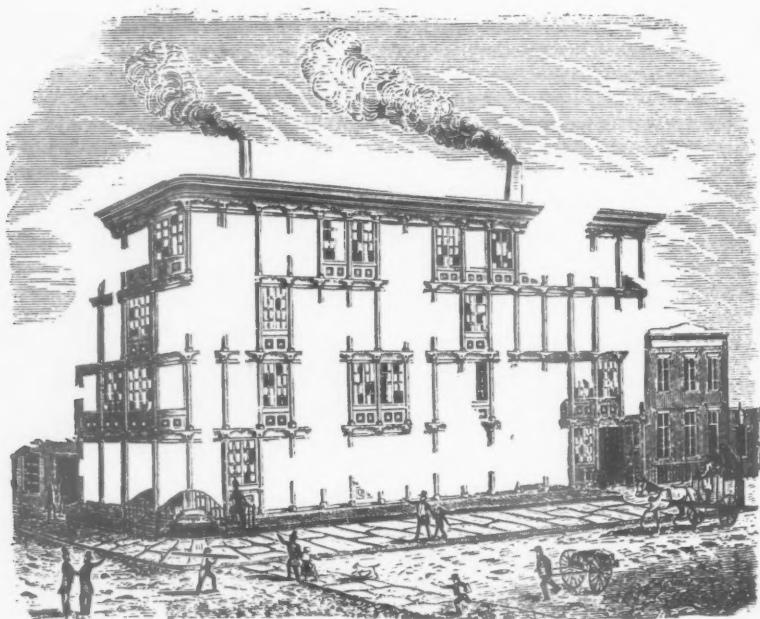
The Amsterdam plan, is it really the last word in town-planning theory, or only a stage in the process, already perhaps a little out of date?

The New York sky-scraper, Rockefeller Centre for instance, is it really the prototype of all coming building, or is it natural only to an island of solid rock, as outward spread may be natural to a basin of clay?

Dr. Giedion rightly presents town-planning as the major architectural development of our own age, but he is inclined to treat it as the culmination of a "period" comparable with similar culminations of the past. This theory is not altogether convincing. It is hard to believe that town-planning receives so much attention to-day (and that is little enough), because we have already established our ideas on the smaller scale of individual buildings, as he suggests, though that may be true of



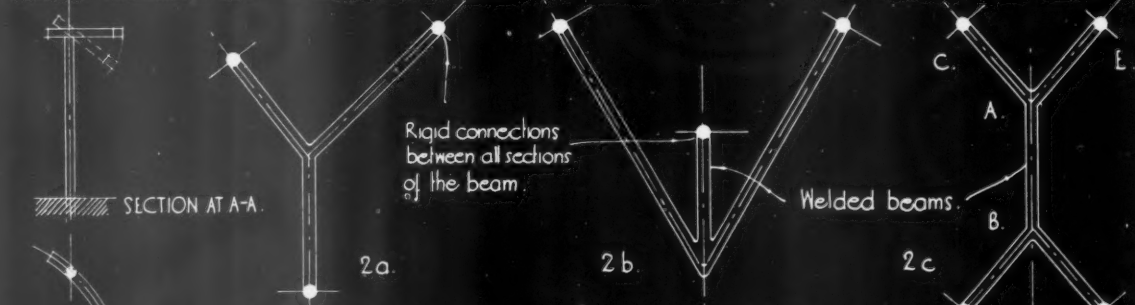
Above: Hennebique, *Residence, Bourg-la-Reine*. Hennebique tries to display in one spot all the potentialities of reinforced concrete but finds no architectural language available beyond the common idea of the late nineties. Right: James Bogardus. Design for a house, 1856, showing the resistance of cast iron.



e
g
t
e
r
e
l
f
-
l
y
e
e
at
h
or
n
p
ne
or
ly
e-
ly
g.
id
be
n-
ral
is
of
lar
ry
rd
ves
is
dy
ler
he
of

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

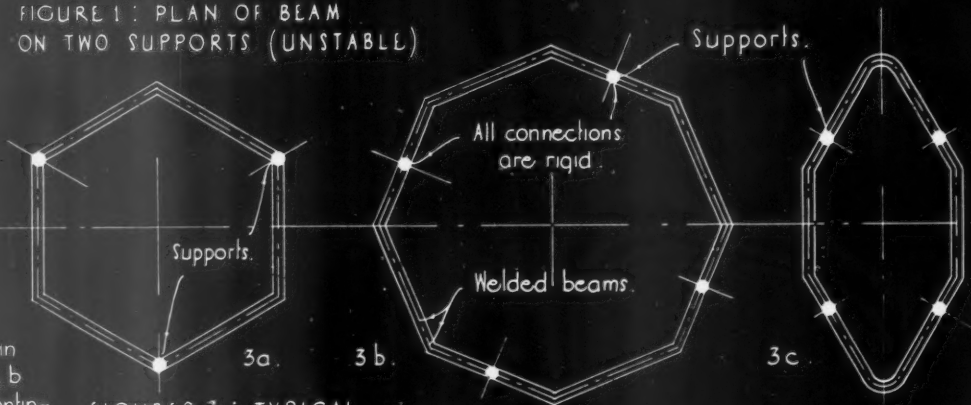
GENERAL CONSIDERATIONS & PRINCIPLES OF DESIGN IN WELDED STEEL N° 15 : HORIZONTAL FRAMES (a) :



FIGURES 2 : TYPICAL EXAMPLES OF STAR BEAMS.



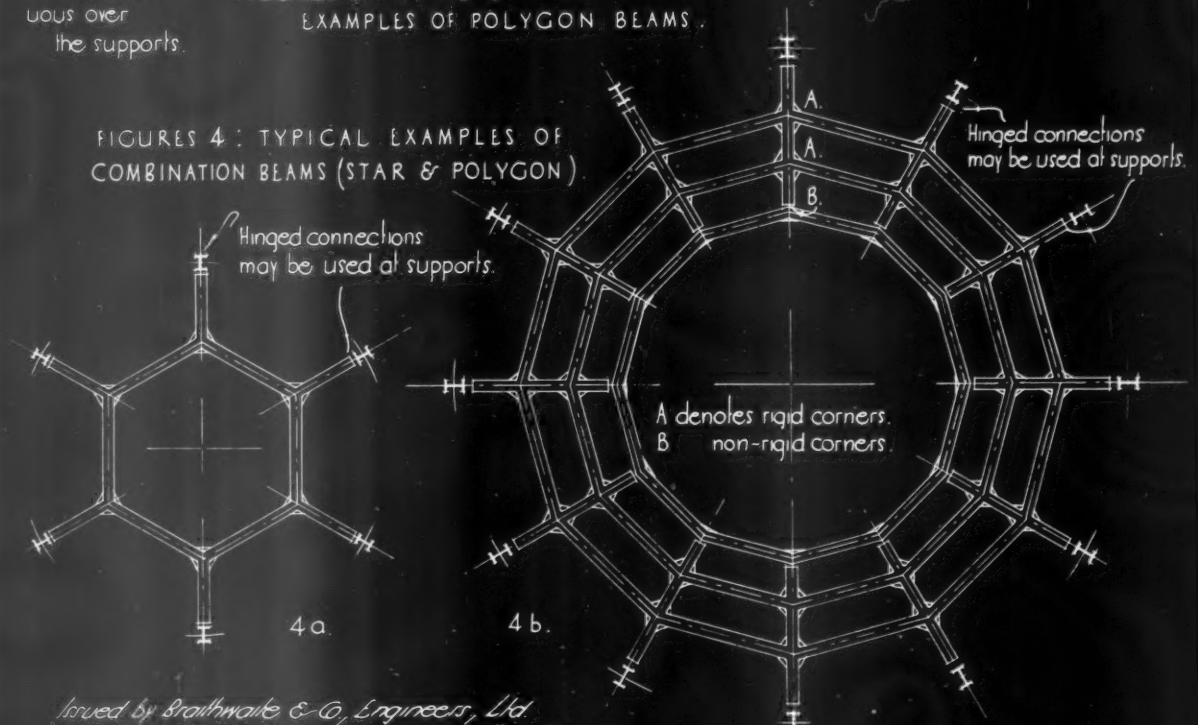
FIGURE 1 : PLAN OF BEAM ON TWO SUPPORTS (UNSTABLE)



The beams in figures 3a, b & c are continuous over the supports.

FIGURES 3 : TYPICAL EXAMPLES OF POLYGON BEAMS.

FIGURES 4 : TYPICAL EXAMPLES OF COMBINATION BEAMS (STAR & POLYGON)



Issued by Braithwaite & Co, Engineers, Ltd.
Compiled by Samuel & Hamann, Consulting Engineers.

INFORMATION SHEET : STEEL FRAME CONSTRUCTION, 69. WELDING N° 25.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS, ONE MONTAGUE PLACE, BEDFORD SQUARE LONDON WC1

INFORMATION SHEET

• 855 •

STRUCTURAL STEELWORK

Subject : Welding, 25 : Practical Considerations and Principles of Design in Welded Steel, 15 : Horizontal Frames (a).

General :

This series of Sheets on welded steel construction is a continuation of a preceding group dealing with riveted and bolted construction, and is intended to serve a similar purpose—namely, to indicate the way in which economical design as affected by general planning considerations may be obtained.

Both the principles of design and the general and detailed application of welded steelwork, are analysed in relation to the normal structural requirements of buildings. The economies in cover and dead weight, resulting from lighter and smaller steel members, are taken into consideration in the preliminary arrangement of the building components in order to obtain a maximum economy in the design of the steel framing.

This Sheet is the fifteenth of the section illustrating the general considerations and principles of design in welded steel, and gives typical examples of the use of beams on three or more supports not in one plane, i.e., horizontal frames.

Ordinary Beams :

By the usual definition, a beam on two or several supports is denoted in plan by a straight line. A beam, however, need not necessarily be straight in plan, and it is merely convenience of production which has standardised this shape. Welding permits simple production of different shaped beams and their application will be found suitable and economical in a number of instances.

Definition of Horizontal Frames :

If a beam, curved in plan, were resting on only two supports, it would have a tendency to capsize when loaded, and a third support must be introduced to provide equilibrium.

Three supports are, therefore, the minimum necessary for any beam which is not straight in plan, and such beams are called horizontal frames (Figure 1).

Composition :

Horizontal frames may be composed of several straight or curved pieces, or they may be made up of a single curved section. The most important applications of frames made up of straight sections are star beams, e.g., Figure 2a, b, c ; polygon beams, Figure 3a, b, c ; and combinations, e.g., Figure 4a and b. In applications similar to Figures 2 and 3, all connections have to be rigid, while with more complicated ones, e.g., those in Figure 4b, simplification in design and execution may be achieved by the introduction of hinges, i.e., points at which bending or twisting moments cannot be transmitted.

Bending and Twisting Moments :

When designing a horizontal frame, it should be remembered that twisting moments may occur as well as bending moments. Twisting moments are moments which are created about the longitudinal axis of a member, and are due to the fact that the supports are often not in the same vertical plane as the axis of this member. In the branches of star members no such twisting moments can occur, and in the systems given in Figures 2a and 2b, they need not be considered. In Figure 2c, no twisting moments would occur in the four branches CA, EA, DB and FB, but with the exception of symmetrical frames with symmetrical loads, twisting moments are to be expected between A and B. Twisting moments occur in all polygon and curved beams.

Previous Sheets :

Previous Sheets of this series on structural steelwork are Nos. 729, 733, 736, 737, 741, 745, 751, 755, 759, 763, 765, 769, 770, 771, 772, 773, 774, 775, 776, 777, 780, 783, 785, 789, 790, 793, 796, 798, 799, 800, 801, 802, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 816, 819, 821, 822, 823, 824, 826, 827, 828, 830, 832, 836, 837, 838, 839, 840, 842, 843, 845, 847, 848, 849, 850, 851, 852, and 853.

Issued by: Braithwaite and Co., Engineers, Ltd.

London Office (Temporary Address) :

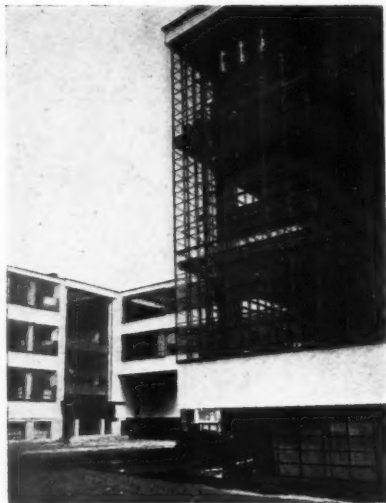
King's House, Haymarket,
London, S.W.1.

Telephone :

Whitehall 3993.



Left: Picasso, *L'Arlesienne*, 1911-12. Oil. "In the head may be seen the cubist device of simultaneity—showing two aspects of a single object at the same time, in this case the profile and the full face. The transparency of overlapping planes is also characteristic." (Catalogue of Picasso Exhibition, Museum of Modern Art, New York, 1939). Right: Walter



Gropius, *the Bauhaus, Dessau*, 1926. Corner of the Workshop Wing. In this case it is the interior and the exterior of a building which are presented simultaneously. The extensive transparent areas, by dematerializing the corners, permit the hovering relations of planes and the kind of "overlapping" which appears in contemporary painting.

some members of the I.C. for M.A. It is surely more because the focal point in social life has become the community, as it had been the individual prince or would-be prince of the previous three hundred years, or the mediaeval church still longer ago. Such a change of focus seems to show itself not only in the obvious attraction of town-planning for the livelier spirits among us, but also in the richer forms developed in large scale design, as compared with those in individual buildings. In the baroque period the exact opposite occurred, and although the one is essentially functional and the other essentially not, Dr. Giedion is right to recall the undulating walls of baroque church fronts in writing of modern parkways and Le Corbusier's famous layout for Algiers. The book is easy to read, and if some passages appear to us a little turgid, this is doubtless due to their translation from the Swiss. The supply of illustrations is so bountiful that one is spoiled by it, and occasionally a reference to some building loses point from lack of a photograph or print. Apart from this, the choice is excellent and there are comparisons introduced which rival "Lilliput" at its best. Herbert Bayer, sometime of the Bauhaus, is largely responsible for the presentation, and it could hardly be better.

In his conclusion, Dr. Giedion attributes much of our present confusion to undeveloped sensibility. "Factual knowledge," he says, "has not been reabsorbed and humanised by equivalent feeling." Books can do much to make good this neglect. Architects' books, like those of Le Corbusier or Wright, are almost designed for the purpose. Architectural histories should

be more concerned with their bit of factual knowledge, but they can contribute much to the humanisation as well, and this one certainly does so. Thank you, Dr. Giedion.

LETTERS

Mr. Hugh Beaver

Sir,—Mr. Hugh Beaver, Director-General, MOWP, has been described as the lynch-pin of the national building organization, and for good or ill he carries a major part of the responsibility for deciding in what form the building industry shall continue and if it has to be reduced, the form that such reduction shall take. Bluntly, the life and death of each component part, of each firm, of each merchant, of each sub-contractor, of each manufacturer, is virtually in his hands.

It is, therefore, of paramount importance that we should study closely his pronouncements, consider their probable effects on the industry, and where we feel that they reflect an attitude or policy detrimental in the main to the interests of the industry as a whole, we should unhesitatingly criticize them.

Mr. Beaver is a civil engineer, and as such has been concerned presumably with civil engineering. Architects have nothing against the civil engineer, and I think have generally recognized that he has a special sphere to which his knowledge and experience entitle him to lay claim as his midden. Recent tendencies, however, have shown that the con-

verse is not equally true; that when the civil engineering contractor completes and the building contractor commences it is not always appreciated that new and entirely different conditions arise. Now in the main and comparatively the civil engineer deals with construction in the mass—huge areas of concrete, large cubical contents in dams, harbour works, bridges and the like—so that a comparatively simple designing and constructional work may entail a correspondingly large expenditure. Certainly on the whole the scale of expenditure in comparison with normal building works is comparatively larger. Out of this, in my view, an entirely erroneous conception of the civil engineer as the only executant capable of efficiently controlling large-scale expenditure has arisen.

Having got in on the ground floor, as it were, and carried through very properly the foundation and railway work, say, on a factory site, the engineer has been too often given his head to design and control the remainder and has applied the standard and procedure of the civil engineering contractor to the building contractor. No amount of employment of architectural assistants mitigates such a procedure, for it is the direction which is too often at fault.

From dealing with a few large items and a few trades, the problem changes to the handling of a multitude of small and complex items and many inter-related trades. In fact the change is from engineering to building; but the change is also from a normal large firm of contractors to a normal small firm of contractors.

Against this background, therefore, let us examine in detail some of Mr. Beaver's points in his reply to the open letter of the Federation of Greater London Master Builders.

- (1) "To a large extent these war works have in fact been beyond the capacity of many competent builders." Yes, but not beyond the capacity of a very large percentage individually so far comparatively unused, nor beyond a number working collectively.
- (2) "Air-raid damage concealed the true state of affairs . . . but this is no longer the case." This is very true, but do not let us lose sight of the fact that these conditions may obtain again. Reduction, therefore, of the industry beyond a certain minimum cannot be countenanced as a measure of direct war policy. For this work furthermore the local contractor is more flexible and locally knowledgeable than the larger firm.
- (3) "We have given much thought to the idea of grouping small builders . . ." Yes, but little encouragement from head-

quarters and apparently with little result.

(4) "We have further laid down within our own Ministry a procedure to secure preference to local firms for contracts up to £25,000, which I would add carries with it the counter obligation that these firms shall give us truly competitive and reasonable prices and adequate service." There are two cats out of this bag. Firstly, the local contractor's limit is £25,000, is it? and in war work with costs double the normal! Many in pre-war days undertook £100,000 without turning a hair. Secondly, "tenders are to be competitive and service adequate." Quite right, but do these same tenets apply to the larger contractor? I have yet to hear of even one of them being turned off a job in spite of widespread criticisms on both these grounds. This is not to condemn the large contractor as such, but merely to point out that there are inefficient large contractors—a fact too often overlooked.

(5) "It (the responsibility presumably for obtaining work to keep going) lies with you and the industry rather than with the Government." Really, Mr. Beaver! And who has distributed Government contracts if not the Government? And who has redistributed labour to the recipients of those contracts if not the Government? That may be claimed as of the past, but the damage has been done and can it honestly be said that there has been recently a radical change of policy? Hardly, Mr. Beaver!

For this is the crux of the matter, and whilst I acknowledge the value of registration, the surprising figures must be viewed in their proper perspective. I have said repeatedly since their publication that this is a record of the industry now, after over two years of war, and must not be confused with the normal. Indeed, it may be looked upon as an indictment of Government policy or lack of policy for the industry. Only 1,257 firms are shown to have over 100 employees, but probably we shall never know how very many more had comparable establishments reduced through the adopted system of contract distribution. Nor is it likely ever to be disclosed how largely the figure of the total employed by these 1,257 fortunate firms has increased through this same system since the war began. We cannot know, we can only suspect and form our opinions from our own experience and observation in our own districts and as we travel about. An

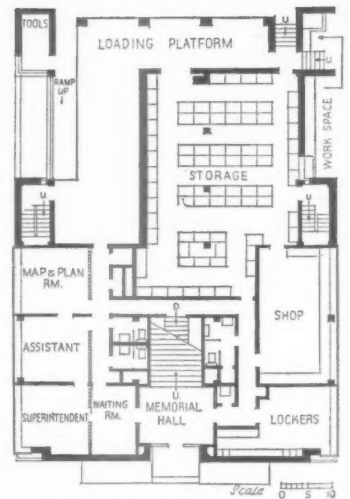


alternative policy through regional direction by Local Building Councils has been consistently advocated by some of us for over two years, so that as one of those supporting this conception of organization I can claim to have been at least a constructive critic.

Lest I be now accused of too sweeping an attack, let me add that I fully appreciate the endeavours made by the Ministry to improve conditions in the industry—some good, some not so good. Nor can the blame of much that we deplore be laid entirely, or even mostly, at the door of the new Ministry. The Central Government itself must bear the major responsibility for terms of reference which, by giving permissive powers over other building departments instead of obligatory powers, largely tied Lord Reith's hand before he grappled with these enormous problems.

Nevertheless, there is, in my view, legitimate criticism of policy, as I have tried to show, and whilst that policy and direction are largely controlled by those whose vision apparently is limited by the sort of views expressed by Mr. Beaver, by so much must the general good of the industry be limited.

"ST. GEORGE"

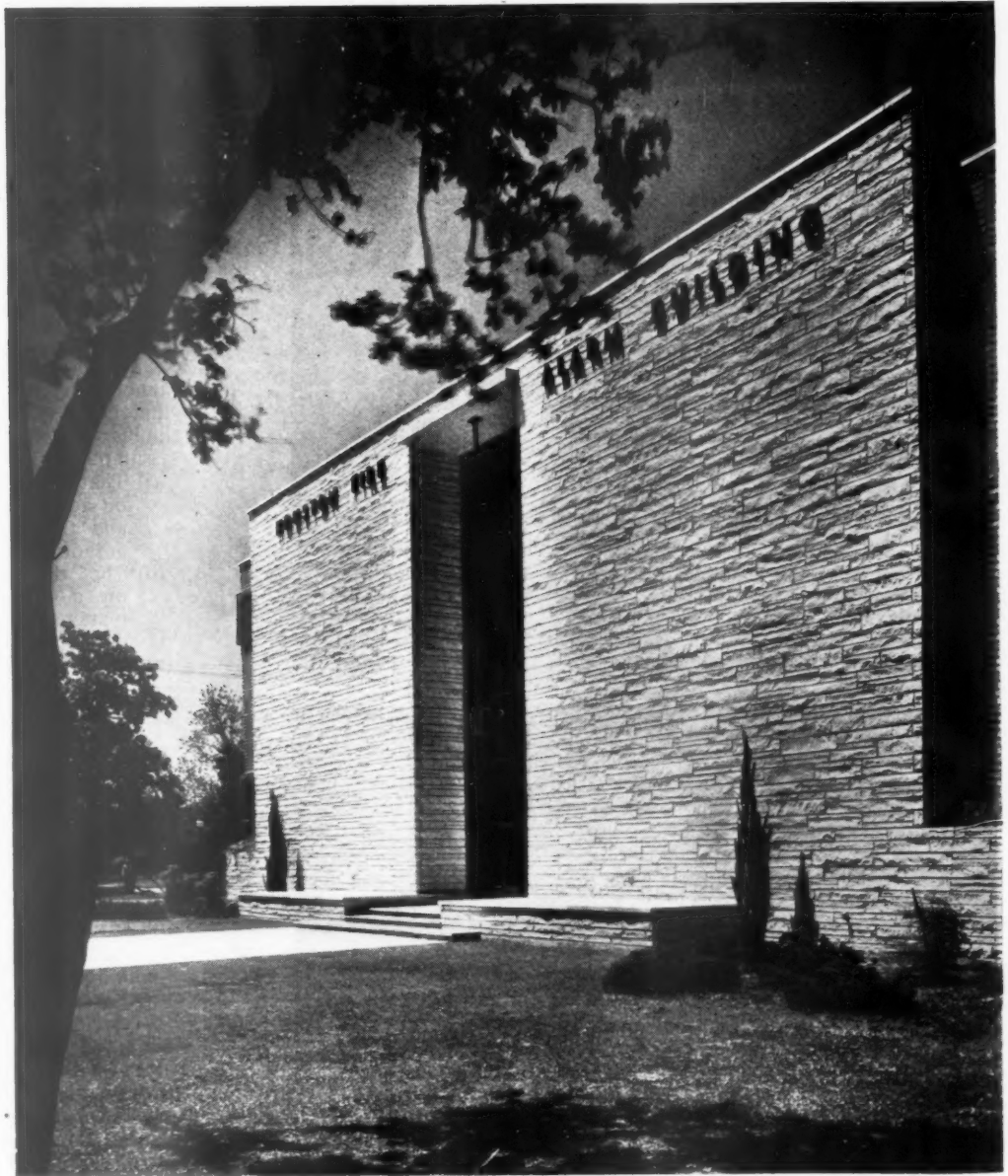


GENERAL AND SITE. — This building houses the entire fire alarm control of the city of Houston, Texas, Houston, U.S.A., and provides space for the control of additional alarm systems to take care of a future population of one million people. Since the

FIRE HOUSTON

func
to t
com
boa
wate
PLA
room
depa
wate
locat
On
tion
room
for
men

A
B



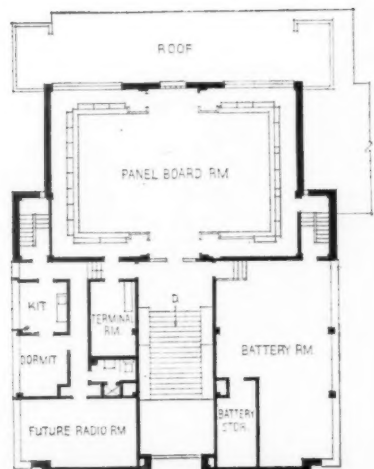
functions of the building are vital to the community, it was made completely fireproof, with a panel board level above any possible water limit of periodic floods.

PLAN. — Offices and drafting rooms for the city's electrical department and the locker and water and storage space are located on the ground floor. On the first floor the accommodation comprises the panel board room, eating and sleeping quarters for engineers and maintenance men, the radio control room and

the battery room, which supplies current for signal operation independently of public service.

FINISHES. — The architects felt that the exterior should have a monumental character, partly because of its importance and partly because it forms part of the new Civic Centre. To this end splitfaced limestone, brick and concrete were combined. (Photos: *Architectural Forum*).

Facing page: View of flank wall; above, the entrance front.



ALARM BUILDING

BY MACKIE AND KAMRATH



Top, view from Memorial Hall, looking towards panel board room; bottom, the panel board room.

FIRE ALARM BUILDING

R.I.B.A.

Reconstruction Committee's Interim Report

The R.I.B.A. Reconstruction Committee's Interim Report No. 5 was issued a fortnight ago. It deals with Legislation Affecting Town and Country Planning. Recommendations in the Report were published on page 131 of A.J. for Feb. 12; below is Part I of the Report.

Introduction.

On February 26, 1941, Lord Reith announced in the House of Lords that he was "authorized in the preliminary work to proceed on certain assumptions:—

- (i) That the principle of planning will be accepted as a national policy and that some central planning authority would be required.
- (ii) That this authority will proceed on a positive policy for such matters as agriculture, industrial development and transport.
- (iii) That some services will require treatment on a national basis, some regionally and some locally."

In view of the changes likely to be brought about by this national policy, we have considered in some detail the present legislation affecting Town and Country Planning and the changes desirable therein.

PART I.

A. Town and Country Planning Act, 1932.

The Statutory Authorities for the purpose of planning in London are the London County Council and City of London, and outside the Metropolis the various Boroughs, Urban and Rural District Councils. Power is given to these Authorities, if they so wish, to delegate their powers by agreement to a County Council or to a joint committee (following on the Local Government Act, 1929).

Combination of Authorities for purposes of planning schemes is very desirable, and it appears probable that schemes of a regional nature will be largely used to supplement or implement the national planning policy to which the Government is committed for post-war planning.

Regional devolution of Government functions and decisions with regard to planning is obviously desirable. The necessary procedure should be simplified with a view to reasonable expedition in the preparation and approval of schemes.

Present Procedure.

The procedure at present necessary is generally spread over many years, and is briefly as follows:—

1. A resolution to prepare a scheme in respect of a defined area. Such resolution before coming into effect requires the approval of the Minister (of Health). This limitation should

be removed if all land is to be brought under control.

2. The preparation of a draft scheme (including clauses and draft map), which, after adoption, is placed on public deposit and duly notified to all persons registering their names for this purpose, whose objections are duly considered.

3. The preparation of the scheme proper, which is forwarded to the Minister, and after similar procedure by the Authority, is the subject of a local enquiry by the Minister, and ultimately is usually placed on deposit again in its final form, and after being laid before Parliament receives official approval and becomes operative.

4. Supplementary schemes may, from time to time, become necessary, involving much the same lengthy procedure.

The matters to be dealt with by Planning Schemes are set out in the Second Schedule to the Act, and in general include all phases of development, except those of Government departments, and to a large extent those of Statutory undertakings.

The reservation of land for agriculture might well be included in the objects of a scheme. It is clear that in any National Planning Scheme there must be no exemptions from reasonable control.

During the long process of the preparation of a scheme, "interim development" may be permitted by the Local Authority, subject to such conditions as they think proper. If no consent or refusal is given within two months from the receipt of the application, consent is deemed to have been granted unconditionally. This provision cannot be regarded as satisfactory in its present form. The right given to re-erect a building which has been destroyed or demolished is also one which will require reconsideration, and the action taken by the War Damage Commission to restrain hasty rebuilding is one which must commend itself to all interested in re-planning. A time limit might well be set to such rights. The provisions to be inserted in a scheme with respect to buildings and building operations may (Section 12):—

(a) Prescribe the space about buildings.

(b) Limit the number of buildings.

(c) Regulate the size, height, design and external appearance.

(d) Impose restrictions upon the use.

(e) Prohibit or regulate building operations.

Such provisions do not, however, apply to agricultural buildings, thus creating a very important exemption.

There should be no exemptions in a national plan.

The provisions of Sections 15 and 16, dealing with General Development Orders and power to permit building

operations pending such order, have been found of great use in checking premature development in areas where public services are lacking. The proviso, however, that an authority shall not refuse an application unless other land suitable is available on reasonable terms is difficult of interpretation, and has been the cause of many disputes. Its deletion is desirable. Section 17 empowers the Local Authority to make orders for the preservation of any building of special architectural or historic interest. Such orders, however, may involve the payment of compensation, and are therefore too seldom used.

COMPENSATION. Section 18 provides that claims for compensation may be made by any person:—

(a) Whose property is injuriously affected, or

(b) Who suffers damage by any action taken to bring it into conformity with the scheme, or

(c) Who has incurred abortive expenditure on account of the scheme or its subsequent variation.

Section 19 gives power to the Minister to exclude compensation in certain classes of cases (where he is satisfied that it is reasonable and expedient), especially those as to space about buildings, limiting the number of buildings, regulating the size, height, design, etc., temporary restriction or permanent prohibition on grounds of injury to health, or excessive expenditure of public money, etc.

Section 20 excludes or limits compensation in certain cases affected by other Acts.

BETTERMENT. Section 21 enables the responsible authority to make a claim for betterment up to 75 per cent. of the increased value, where property is bettered by the operation of any provision or the execution of any work under a scheme.

Such claims must, however, in general be made within twelve months, and on appeal may have to be renewed at any time within fourteen years. Betterment is from its nature very elusive in character, and the provisions are so hedged about they have little practical application except as a possible set off against claims for compensation.

The Uthwatt Committee has been specially appointed by the Minister of Works and Buildings to report on the questions of compensation and betterment, as affecting the acquisition of land for public purposes. The price of land as between private persons does not appear to come within their present terms of reference. Some form of national arbitration court and possibly a Court of Building is worthy of consideration in this respect.

CLAIMS. Section 22 deals with procedure as to making claims for compensation or betterment.

Section 23 leaves the determination of claims to the decision of an official

arbitrator. Even after the award of compensation, however, the responsible authority may, under Section 24, withdraw or modify the provisions of the scheme and submit a varying scheme for the approval of the Minister.

PURCHASE OF LAND. Section 25 gives power to the responsible authority to purchase by agreement any land required for the purposes of the scheme. Where they are unable to purchase by agreement they may be authorised to acquire the land by "compulsory purchase order."

Section 26 gives similar powers to all authorities for the acquisition of land for open spaces or playing fields within the area covered by a planning scheme.

NOTE.—The foregoing sections dealing with Compensation, Claims, Betterment and Purchase of Land (Sections 18—26) will be more fully dealt with in the financial section of our report.

DEPARTMENTAL PROVISIONS. Sections 27 to 32 include general provisions: Limiting street work charges to normal bye-law width, giving power to authorities to contribute to expenses of owners' schemes, power to County Councils to incur expenditure in assisting local councils, power to Local Authorities to contribute to the expense of schemes, power to Statutory Undertakings to contribute to Local Authorities' Schemes for the application of betterment, or the sale of land, as capital.

AGREEMENTS. Section 33 gives power to public departments, subject to the approval of the Treasury, to enter into agreements with any responsible authority, but does not make it compulsory on them to do so. Under any National Plan there should be no exemptions.

Section 34 enables agreements to be entered into with owners voluntarily restricting their land or any part of it, either permanently or for a specified period.

Such agreements have been widely entered into, and may be found of considerable service to estates desiring to continue their private character, without undue fear of death duties.

To ensure that such agreements are in conformity with national policy, they should receive regional approval.

GARDEN CITIES. Section 35 gives special powers, carried forward from earlier enactments, for Local Authorities including County Councils, to purchase and develop land as a garden city. Such powers have, however, not been found sufficient inducement for Local Authorities to act on them to any appreciable extent. If new towns are to be formed they must, in our view, be part of a national planning policy.

GENERAL. The remainder of the Act is largely made up of detailed points of administration. Powers of the Minister, regulations, local enquiries, legal proceedings and appeals, Protection of Statutory Undertakings,

Consultation with Commissioners of Works, Works below High Water Mark, Saving for the Postmaster-General, etc.

The preservation of trees or groups of trees is made possible by Section 46. This procedure, however, is cumbersome and involves the scheduling in detail of particular trees or groups of trees. It is suggested that control should be much more general, and that consent should be required to the felling of any tree exceeding, say, 30 ft. in height or 3 ft. in girth, except when it is part of a woodland permanently maintained and replanted under the rules of good forestry.

Advertisement control under Section 47 is limited to advertisements or hoardings which seriously injure the amenity! The control of advertisements may also be effected by Bye-laws made by County Councils or the larger Local Authorities under the Advertisement Regulation Acts, and in this case the word "seriously" does not occur. It is desirable that there should be one general standard in respect of this matter.

Section 50 makes special provision as to the administrative County of London, under which the L.C.C. and the City of London Corporation are separate planning authorities.

B. *The Local Government Act, 1933*, consolidated the general law for the purposes of local government in England and Wales, exclusive of London.

C. *The Restriction of Ribbon Development Act, 1935*, is a purely highway act "enabling highway authorities to acquire land for the construction or improvement of roads, or for preserving amenities or controlling development in the neighbourhood of roads."

1. Highway authorities may, by resolution, with the approval of the Minister of Transport, adopt any of the following standard widths as respects any road: 60 feet, 80 feet, 120 feet, 140 feet, 160 feet.

2. Highway authorities are given power to control the use of the frontages on all classified roads and on such other roads as the Minister may approve; it is unlawful without their consent:—

- (a) To construct or lay out any means of access to such road.
- (b) To erect or make any building within 220 feet from the middle of the road.

The general effect of this Act is to give powers to the highway authority to control the development of a strip of land on each side of all important roads. In rural districts this gives a general power to the County Council, as the highway authority, to over-ride any previous planning proposal of the Local Authority. It is essential, in our view, that all proposals affecting planning should be under one administration, and that there should be no over-

lapping between different forms of control by different departments.

It should be noted that Section 13 of this Act gives power to any highway authority to acquire any land within 220 yards from the middle of the road, or proposed road. This power to acquire land for parkway purposes had been possessed by the Ministry since the Development and Road Funds Act, 1909, but never used. It remains to be seen whether any highway authority will be courageous enough to put it in force. In our view, this power should be an essential for any national planning authority.

D. *The Trunk Roads Act, 1936*, transferred to the Minister of Transport the powers as highway authority for the principal trunk roads, set out in the first schedule to the Act.

This Act, valuable as it is, adds a third authority invested with powers of control over long strips of land fronting on to these important roads.

We are of the opinion that a national system of trunk roads is an essential part of any national plan, and that in suitable cases new national highways for fast motor traffic should be planned and constructed as part of the national plan. Owing to the exigencies of war, all work on trunk roads is for the moment held up, but much research work is necessary before any complete system of national highways can be put in hand. We desire to stress that this preliminary work should be begun now, so that this essential part of the national plan can be put into operation immediately the end of hostilities is in sight.

E. *Private Street Works.*

Outside London the making up of Private Streets by Local Authorities is carried out either under the powers of the Public Health Act, 1875 (Section 150) or under the adoptive powers of the Private Street Works Act, 1892, the latter method being in more general use.

I. *Public Health Act, 1875, Section 150*, gives power to an Urban Authority to compel the paving and sewerage of Private Streets by notice addressed to the owners or occupiers. Before giving such notice the Authority must prepare plans and sections to a scale of 88 ft. to 1 inch, together with an estimate of the probable cost. These are deposited at the local offices for inspection. If such notice is not complied with, and it very rarely is, the Urban Authority may, if they think fit, execute the works and may recover the expenses from the owners in a summary manner, according to the frontage of the respective premises.

Places of worship are exempted from such road charges (see 151). When the street works and sewers have been completed to the satisfaction of the Urban Authority, they may, if they think fit, declare the street to be taken over as a highway repairable by the

inhabitants at large (see 152).

II. *The Private Street Works Act, 1892*, is an adoptive act. The procedure under this Act empowers Local Authorities to prepare plans, specification, estimate and provisional apportionment of the estimated expenses, having regard not only to frontage but the degree of benefit to be derived. Copies of the resolution and provisional apportionment are served on the owners. During one month owners have a right of objection to the proposed works on certain specified grounds, including a right to contest the degree of benefit which they are likely to derive. This particularly applies to long flank frontages which frequently occur at both ends of a street. On the application of the Urban Authority, such objections may be heard by a Court of Petty Sessions.

The Authorities are authorized to include a commission not exceeding 5 per cent. on the cost of the works, in respect of plans and supervision, and final apportionments are served on the owners from whom the expenses are ultimately recovered.

In the event of the expenses not being paid by the owner, especially in the case of vacant plots, a charge may be retained on the premises until such time as it is developed.

Railways and canals are not chargeable with Private Street Works unless they have direct communication with the street, and the whole expenses in such case may be charged on the other owners.

III. *In London*, private streets may be made up by the Metropolitan Borough Council under the Metropolis Management Acts.

The Metropolis Management Act, 1855 (Section 10), the Borough Councils are empowered from time to time to execute any necessary works of repair to private streets (not sewers), and the owners of the houses forming such street may be required, on demand, to pay the amount of the estimated expenses in advance of the actual work, any difference in actual cost being adjusted on completion.

Fortunately the number of private streets still remaining in the County of London is limited, but it will be seen from the above summary that some codification applicable to the whole County of the Private Street Works procedure on the general lines of the Private Street Works Act, 1892, is desirable.

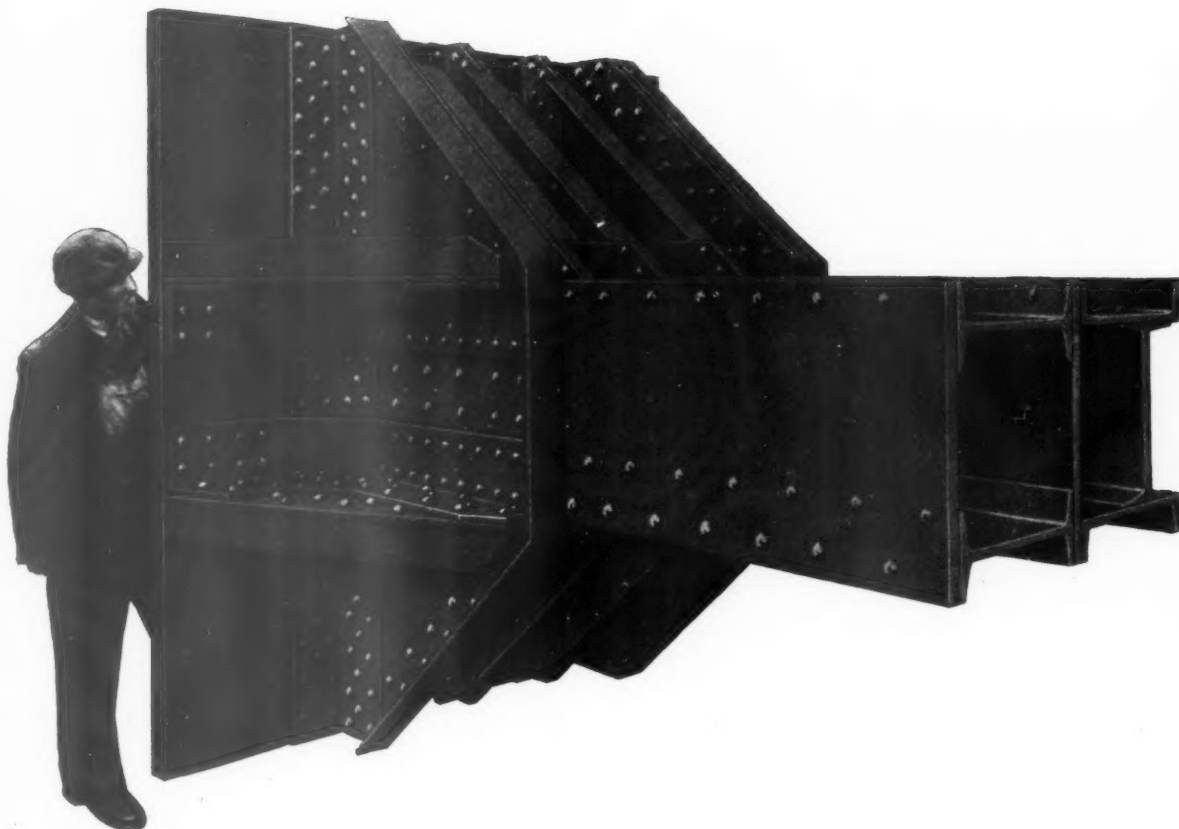
F. *General Building Control.*

I. **BUILDING LINES.** Under the Public Health (Buildings in Streets) Act, 1888, "it is not lawful in any urban district, without the written consent of the Urban Authority, to erect or bring forward any house or building in any street, or any part of such house or building, beyond the front main wall of the house or building on either

STEEL
STRUCTURAL
STEELWORK
STEEL



BASE OF A STANCHION WEIGHING 18 TONS



COMPETENT TECHNICAL STAFFS AVAILABLE IN LONDON,
BIRMINGHAM, COVENTRY AND DARLASTON

MAY WE OFFER OUR FACILITIES FOR
YOUR NEW FACTORY REQUIREMENTS?

RUBERY·OWEN **ECO LTD**
DARLASTON SOUTH STAFFS

LONDON: IMPERIAL BUILDINGS, 36, KINGSWAY, W.C.2. BIRMINGHAM: LOMBARD HOUSE, 61, CHARLES ST. COVENTRY: BRITANNIA WORKS, PAYNES LANE

side thereof in the same street, nor to build any addition to any house or building beyond the front main wall of the house or building on either side of the same."

Strict compliance with this may result in a very irregular line of building and Local Authorities are now enabled to prescribe definite building lines either on existing or proposed streets. Rigid building lines are, however, not always desirable, and provision should be made for breaks to secure architectural effect. Such powers might well be clarified in any general revision of the planning law.

II. HEIGHT OF BUILDING IN RELATION TO WIDTH OF STREET. In London, in any street laid out since 1862, the height of building on any street of less width than 50 feet, must not, without the consent of the L.C.C., exceed the distance of the front wall from the opposite side of the street (*i.e.*, an angle of 45°).

In older streets, the general limit of height is now 80 feet, but consent to greater height may be given in exceptional cases. Some angular measurement giving a general proportion in relation to street width is common in Town Planning Schemes, and might well be more generally used.

III. SPECIAL ACTS RELATING TO STREET WIDENING. The Metropolis Paving Act, 1817, commonly

known as Michael Angelo Taylor's Act, gives to Borough Councils, and now also to the L.C.C. as successors to the original Parish Vestries, a power unique to London, to secure land required for street widening or extension without the necessity for a special Act of Parliament.

IV. CONTROL OF PETROL STATIONS. County Councils and Borough Councils are empowered by the Petroleum (Consolidation) Act, 1928, to make bye-laws to regulate the appearance of petrol filling stations, or to prohibit such petrol stations, "For the purpose of preserving for the enjoyment of the public the amenities of any rural scenery or of any place of beauty or historic interest, or of any public park or pleasure promenade, or of any street or place which is of interest by reason of its picturesque character."

This power of making special bye-laws for particular objects such as Petrol Stations or the Control of Advertisements might well be combined with any new legislation affecting Town and Country Planning.

V. AERODROMES. Under the Air Navigation Act, 1920, power was given to County and Urban Authorities to provide and maintain aerodromes and any necessary subsidiary business ancillary to an aerodrome.

Some few of the more wealthy

municipalities have undertaken municipal aerodromes, but it is clear that an efficient transport service of this character is a matter of national concern which can only be efficiently carried out as part of a national plan.

The Town and Country Planning Act, 1932, Second Schedule, enables a planning authority to reserve land as a site for an aerodrome.

This carries with it a general power to restrict the height of buildings bordering on such aerodrome, in order to provide safe flying.

The location of aerodromes should therefore be considered very carefully as part of a local planning scheme, both to provide for ready access to the aerodrome and not unduly hamper the development of the urban area.

TRADE NOTES

We have received from the British Rubber Publicity Association a copy of a chart entitled "Rubber Data for the Engineer." Copies are obtainable, free of charge, on request to the Association at 19, Fenchurch Street, London, E.C.2.

A four-page leaflet issued by Sealocrete Products, Ltd., of Atlantic Works, Macbeth Street, Hammersmith, W.6, explains how the incorporation of Sealocrete in the gauging liquid when pouring concrete enables this work to be carried on even during frosty weather, provided the aggregates are kept free from frost and the work is covered up at night.

GALVANIZED TANKS CYLINDERS & CALORIFIERS



More than 250,000 are in use testifying to the quality of articles carrying this brand. See Information Sheet No. 598

Robert Jenkins & Co. Ltd.
IVANHOE WORKS ROTHERHAM
Est'd. 1856

Sealed-in SMOOTHNESS



● THE moment you start using a TURQUOISE Pencil you'll appreciate its superlative smoothness. The easy flow of line from its smoother lead makes for swifter, more effortless drawing. To ensure that they remain satin-smooth to the last inch, TURQUOISE leads are impregnated with a blend of rare waxes until every microscopic particle of graphite glides on a film of lubricant. Accurate grading, exceptional point strength and perfect blue printing quality, are other advantages that will delight you. Please write on business heading for FREE SAMPLE SET, stating degrees required and name of your usual supplier.

★ Why Turquoise are better

The lead in every pencil bearing our Registered Trade Mark "Chemi-Sealed" is covered with an impervious film (patented process) to which glue adheres perfectly thus bonding lead and wood into a single unit so strong that point-breakage is normally impossible.

5d each. 4/8 dozen. (including Tax.)

From your usual Supplier.



MADE IN ENGLAND BY EAGLE PENCIL COMPANY, LONDON, N.1

17 DEGREES: 6B 5B 4B 3B 2B B HB F H 2H 3H 4H 5H 6H 7H 8H 9H

-
n
s
al
y
i.
f,
a
a

o
g
le

d
ly
h
ne
ne

er
ed
re
he
n,

ete
th
he
ng
rk
er,
om

S



eciate
other
t they
preg-
cle of

inting
te on
d and



, N.I
4. 9h