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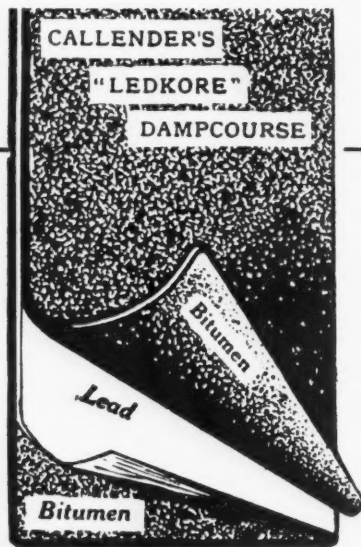
Vol. LXXIV

October 1933

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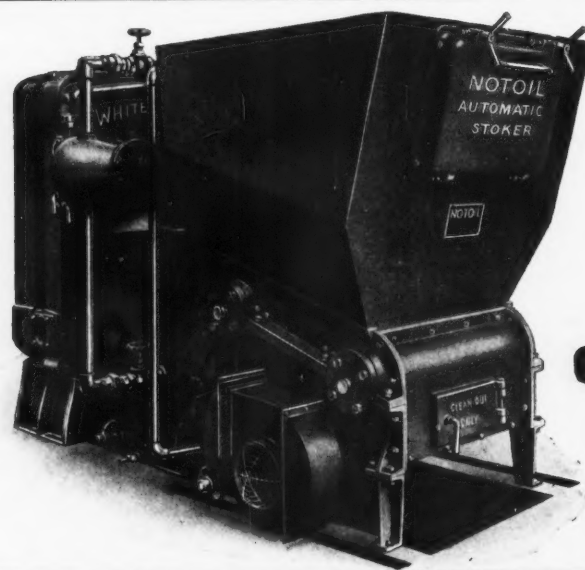
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Plate i

L E E D S

(See pages 129—133)

October 1933

WILBERFORCE COUNTRY,

1833—1933

THE West Coast of Africa is a featureless outline, with flat jungle endlessly fringing the beach. But when you come to Sierra Leone, a group of mountains rises steeply out of the sea to a height of two or three thousand feet, and Freetown spreads upwards from beneath them, many of its official buildings plastered against their slopes like the look-out posts of a battleship. The change of altitude is a welcome relief from that low line of jungle.

Not that there is any proportionate sameness about the West Coast ports you have already visited. Each has a distinct personality. It was at Cotonou, in Dahomey, that I first struck the coast (or rather The Coast, in deference to all those hard-bitten regulars for whom it is the proverbial White Man's Grave). Cotonou, being French, is a sort of imitation Arcachon, with pretentious villas among the palm trees and a brand new concrete esplanade, incongruously bordering a beach where surf and sharks alike make bathing impossible. There is a *Grand Hotel de la Plage*, with an up-to-date and deafening ice machine—but no bedrooms. In the steam heat, English shipping clerks play tennis in neat white flannels; French colonials loaf around in the pyjamas they wore the night before.

Lagos, like a snobbish next-door neighbour, affects hardly to have heard of Cotonou: Lagos is awfully-sorry-old-man, but can't change your French West African money; as soon ask Lagos to change roubles: Lagos, with its well-laid streets and Morris Oxford cars, its uniformed negroes and public-school-tied Englishmen, its "imposing" blocks of offices and its exclusive clubs with green lawns.

How different again are Takoradi and Accra: dumps of corrugated iron, Gold Coast "toughs" consuming whisky after whisky and never-mind-about-the-soda-old-scout-we've-time-for-another-round-before-she-sails.

None of this quite prepares you for Freetown, Sierra Leone. Freetown belongs to the natives. Moreover, it belongs to the educated native, an individual whose manners may be in question, but whose superior status cannot. Sierra Leone, originally the chief English slave depot on the Coast, became the first settlement of liberated slaves some fifteen years before the abolition; hence the seat, this autumn, of Wilberforce celebrations and centenary stamps.

After the American War, in 1783, London found itself overrun with unemployed negroes. A committee established to cope with the problem shipped a lot of them off to Sierra Leone, there to form a free colony. But the less felicitous addition to the cargo of a batch of undesirable women doomed the venture to failure. It was not until 1791, with the establishment of the Sierra Leone Company, that Freetown was successfully founded, a settlement of over a thousand negroes and a hundred or so Europeans. More than any of the other West African dependencies it was always in the true sense of the word a colony, but a colony of blacks, not whites.

And the blacks still rule the roost. To walk in the streets of Freetown is to shed all preconceived illusions as to the firm hand of the British Raj. It is customary for visitors to excite a certain amused curiosity from the inhabitants of any African town. But the educated native of Sierra Leone, vaunted product of the mission schools, is literally doubled up with mirth at your demeanour. He greets you

with a torrent of rich, mocking laughter. He follows you around in crude imitation of your gait, making rude noises of incredible volume behind your back. He dances, jeering, in front of you. He is the most impudent, undisciplined and odious of schoolboys. In Freetown you see what the Southern States of America might have become had there been, after the abolition of slavery, no racial feeling to keep the negroes in subjection. For it was liberated negroes from across the Atlantic who formed its nucleus.

Yet it is this very fact, that its atmosphere is transatlantic rather than African, which gives an unsuspected attraction to Freetown. A vivid impression of Uncle Tom's Cabin accompanies you on your molested promenades. The natives are darkies callin'. Ironical as their greeting may be, you still are "Massa," and "Boss" (or rather "Baass.") Coal-black mammies shake their elephantine sides in the doorways of the wooden shops. But they are coal-black mammies for all the ribaldry of their laughter. Not even the crocodiles of screaming little black girls in their mission school uniforms—blue, piped with magenta, and straw hats with a magenta band—can destroy the Dixie flavour.

You are back in the early years of the nineteenth century, sixty years before Lagos and jingoism were thought of, thirty years before the invention of that public school tie which was subsequently to bind our Empire. There are relatively few modern buildings, and such as there are have followed eighteenth-century proportions. The houses are of weather-boarding, like those of a similar period in Kent or Essex, with tall sash windows. Sometimes they have balconies of Regency ironwork and other scraps of ornamentation like the terraces of Brighton. Even the strips of corrugated iron (shades of Takoradi and Accra!) which climatic exigencies demand as protection for the windows, succeed in becoming an embellishment. There is a musty air as of old London shops, very different from the up-to-date plate-glass efficiency of Lagos. Down an alley is a sign, "GEORGE WASHINGTON, TAILOR," in dignified, eighteenth-century print.

And in a main street, in lettering designed to catch every eye, is the unique apologia of Mr. Bungie, Mortician:

SYMPATHETIC UNDERTAKER
BUILDER FOR THE DEAD: REPAIRER OF THE LIVING: CORPSE WASHED
AND DRESSED
ALWAYS BE PRAYING FOR A HAPPY DEATH, THEN A DECENT FUNERAL (sic)
BY BUNGIE
EAT AND DRINK GOOD STUFF: SAVE SMALL: BUNGIE WILL DO THE REST
FEAR GOD: HONOUR YOUR KING: BE JUST TO MANKIND: SAYS BUNGIE
READY-MADE COFFINS: SHROUDS, GLOVES, STOCKINGS: ETC. ETC. ETC.
THAT'S BUNGIE.

DO NOT LIVE LIKE A
FOOL
AND DIE LIKE A BIG
FOOL



EAT AND DRINK
GOOD STUFF
UNDERTAKER'S
ADVICE
—THAT'S BUNGIE.

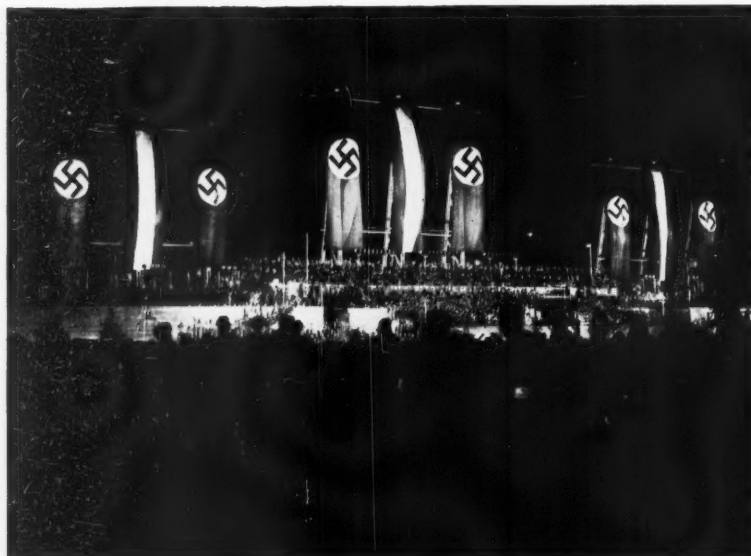
As I returned to the ship *Lord John Brown*, a coal-black darkie in a top hat, a celluloid collar, a tie, and nothing else, was diving into the sea for coins, cracking Biblical witticisms to the amusement, and often embarrassment, of the passengers. "He's an old hand," said one of them. "Been at it ever since my first trip, forty years ago. What do you think of Sierra Leone? Not much of a hole, is it? Hardly worth going ashore. Now at Takoradi. . ."

Patrick Balfour

ARCHITECTURE OF THE N

MAY 1933 • AND BEFORE

ALBERT SPEER, ARCHITECT
NATIONAL LABOUR DAY, BERLIN, MAY 1ST, 1933
The chief speakers' platform in the Tempelhofer Field



At last, after six months of Nazi Government, it is becoming possible to distinguish some of the forces that are going to shape the architecture of the new Reich. In the survey here published an attempt has been made to gather together the whole of the concrete indications now available. They are neither very numerous nor very definite: nevertheless, a clear trend is, we think, already to be observed. Recent political developments have suggested the direction in which things were likely to move, but these are the first specific examples collected together to show what Nazi architecture is actually going to look like.

There can be no question, of course, of a body of entirely new work erected during the Hitler régime. The chief examples of such work are brought together on page 124. In the main, our picture has been built up from specimens of the past work of those architects who are the acknowledged leaders today. The accuracy of the picture is none the less for it being largely retrospective. It must be remembered that the idea of individual leadership is given great

prominence in German political life today. The men who are placed at the head of affairs today will have a far greater influence on public taste than the men who occupied corresponding positions a year ago. In the Nationalist Socialist Party today there are Kulturorganisationen closely dovetailed into Government Departments and official bodies, and the chiefs of these bodies are expected to function not as officials only, but as "spiritual pastors and masters" to the rank and file.

Circumstances such as these give special weight to the first or retrospective part of our outline. The architects whose work is shown are among the men whose buildings will be often seen and widely followed. The specimens we give of the work of each architect have been chosen as typical of the man. Part two contains a number of buildings and projects that have come into being since March of the present year. The smallness of this section shows how acute must be the depression in the German building trades today.

We offer no comment on the pictures that follow. They are presented as information merely. Some readers

A country house, looking through the entrance gate with the garage on the left. Notice traditional materials



A country House in Elsass



PAUL SCHMITTHENER, ARCHITECT
The entrance to a school in Stuttgart-Zuffenhausen, with a gymnasium in the background



PAUL BONATZ & F. SCHOLER, ARCHITECTS
The Railway Station, Stuttgart, built 1914—1922 A gymnasium in Aalen, Würtemberg, erected in 1927



NAZI ARCHITECTS

PAUL SCHMITTHENER • Professor at the Technical High School of Stuttgart. One of the most influential teachers of the German high schools. His pupils form a distinct and very extensive "school." In former years he was one of the most prominent opponents of exaggerated Modernism. The artistic value of his buildings has always been recognized even by his own opponents. In the new Germany he is one of the most quoted and influential personalities among the architects. In Würtemberg special powers have been

NAZIS

of THE ARCHITECTURAL REVIEW will greet them with delight. Others will regret them. Both kinds must judge for themselves. We have heard it said that the Nazi school of architects are setting up our current English architecture as an example. That is probably true. For this pictorial cross-section we are chiefly indebted to Herr Josef Umlauf, who has had valuable assistance from C. Ch. Lörcher, Director of the *Deutscher Werkbund*, and of the Brandenburg National Group of the *Bund Deutscher Architekten*, and from Professor Winfried Wendland, of the Prussian Ministry of Religion and Education in Berlin.

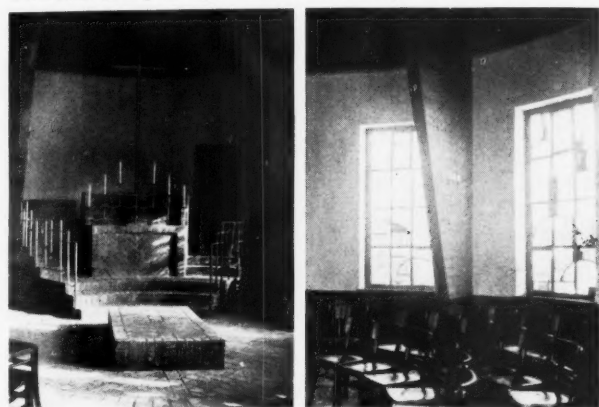
The Central Savings Bank in Munich



E. HÖNIG & K. SÖLDNER, ARCHITECTS
A Riding-School in Munich



WINFRIED WENDLAND, ARCHITECT
The Mortuary Chapel at Stahnsdorf, Berlin



ALBERT SPEER, ARCHITECT
A House for two families in Heidelberg



The Munich Broadcasting Station



POST OFFICE ADMINISTRATION, ARCHITECTS
The Village Post Office, Kreuth, Bavaria



given him in connection with building matters. The "Kampfbund fuer deutsche Kultur," the great cultural organization of the National Socialist Party, has made him the leader of the technical group of fine arts. He is a member of the Board of the "Deutscher Werkbund."

PAUL BONATZ ● Also a professor at the Technical High School of Stuttgart. Very influential as artist and teacher. Has done little in the way of politics.

ALBERT SPEER ● Young private architect in Berlin. Now prominently engaged in the Ministry of Propaganda.

WINFRIED WENDLAND ● Young private architect in Berlin. Now Art Reporter at the Prussian Ministry of Science, Art and National Education (Ministry of Religion and Education) in Berlin, and Professor at the Berlin Academy of Arts. Member of the Board of the "Deutscher Werkbund."

EUGEN HÖNIG ● Professor in Munich. President of the "Bund Deutscher Architekten" (B.D.A.). One of the leading personalities in the development of the B.D.A., to make it the sole standing organization for all German architects, all the preparatory

work for which is completed.

HEAD POST OFFICE, MUNICH ● This Post Office Administration combines in its buildings traditions and modern in an exemplary manner, each one in its proper place. It has made a special reputation for itself in Germany, through the practical character of its buildings and the careful treatment of "small details." Its Director for many years, ministerial councillor Pöckerlein, has brought up a generation of young architects under his administration, who form a "school" in Germany which is gener-

ally recognized and appreciated. At first, when they leave the High School, they are trained in practical work and instructed in small problems (see illustrations). Every small village Post Office is studied in its smallest details with the same care as for a pretentious building in a large city. This method has an educational effect, shared between practical work and planning work, which has been extremely fruitful for both sides. Moreover, it gives a unique aspect to those buildings of the Head Post Office, which are entirely modern and untraditional in general design.

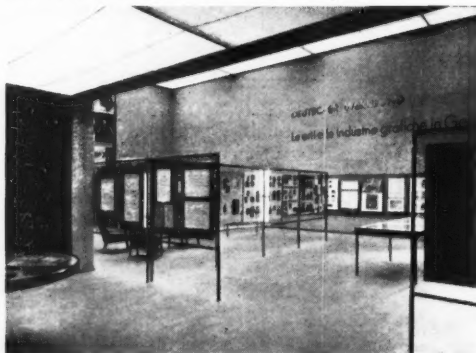
ARCHITECTURE OF THE NAZIS

THE BEGINNINGS

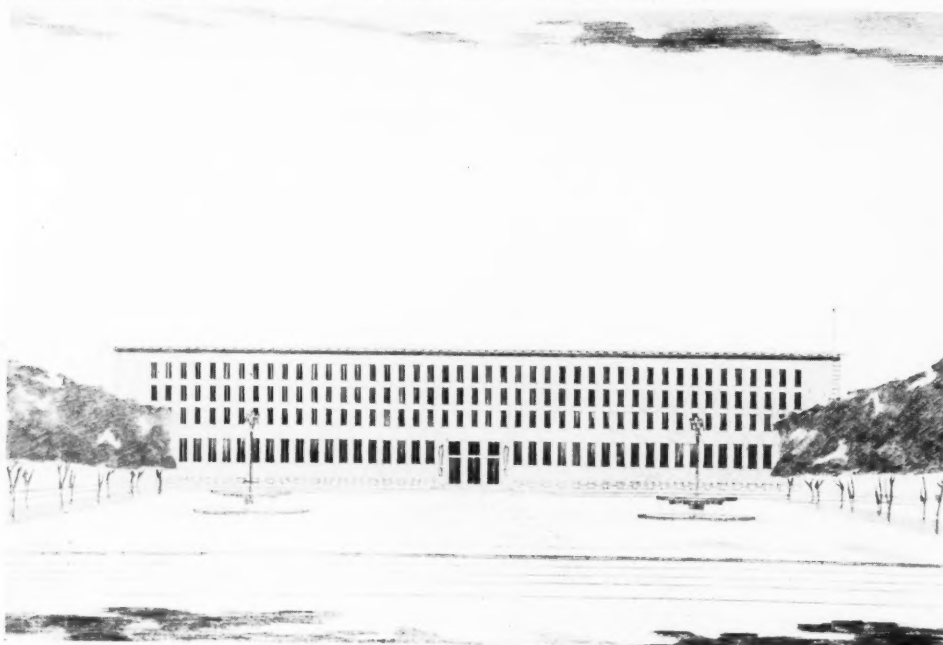
C. CH. LÖRCHER, ARCHITECT
A Smallholder's house in Mecklenburg.



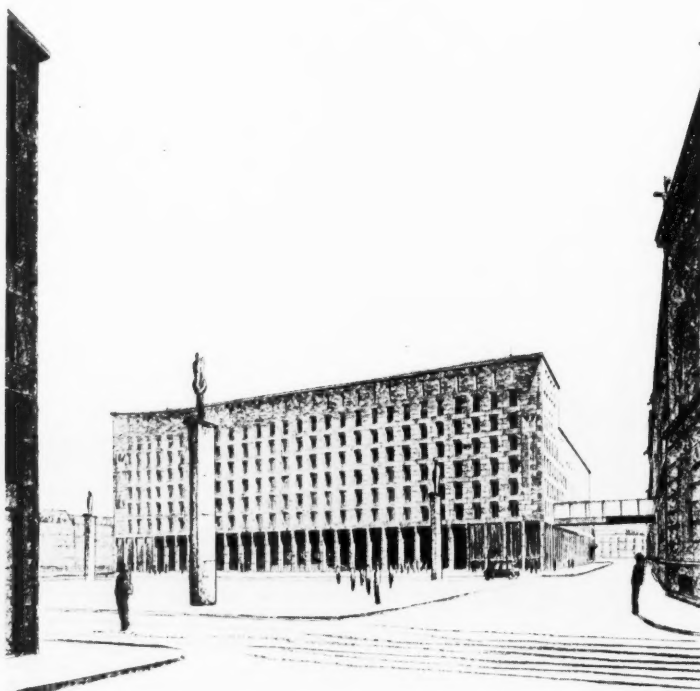
WALTER SCHMIDT, ARCHITECT
The *Deutscher Werkbund* Exhibit in the German Section of the Milan Triennial Exhibition, 1933



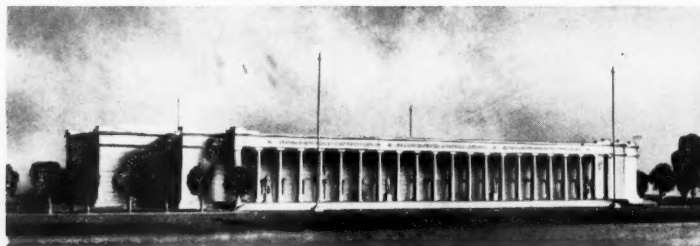
PINNO AND GRUND, ARCHITECTS
Another suggested design for the Reichsbank extensions, Berlin.



KURT FRICK, ARCHITECT
A suggested design for extensions to the Reichsbank, Berlin



PAUL LUDWIG TROOST, ARCHITECT
A model for the proposed House of German Art in Munich to replace the Palace of Glass burnt in 1932.



C. CH. LÖRCHER ● Private architect in Berlin. Mainly known for his work as town planner and housing scheme expert. Director of the "Deutscher Werkbund" and of the Brandenburg National Group (including Berlin) of the "Bund Deutscher Architekten."

WALTER SCHMIDT ● Distinguished young architect (Munich) from the Head Post Office School of Munich.

PAUL LUDWIG TROOST ● Very influential private architect in Munich.



COLIN LUCAS. "The Hopfield," near Wrotham, Kent.



FRANCES HODGKINS. "Arum Lilies."

UNIT ONE

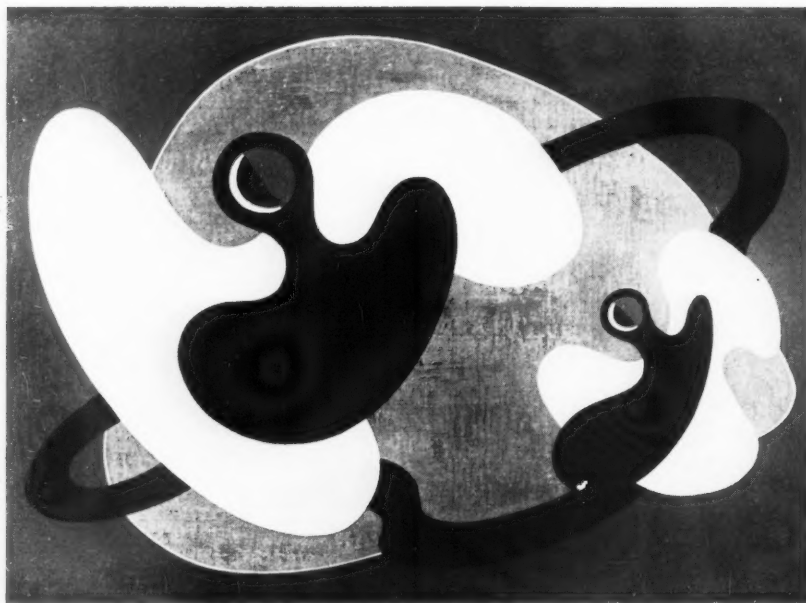
BY

HERBERT READ

UNIT ONE is the name of a new group of English artists—painters, sculptors and architects. It is not a group of new artists; most of the eleven constituent members already have established reputations. Nor does it stand for any new principle in art. What, then, is its justification, its *raison d'être*?

Before we answer this question, we might consider the part played by groups in the development of art. The modern artist is essentially an individualist: his general desire is not to conform to any pattern, to follow any lead, to take any instructions but to be as original as possible, to be himself and to express himself in his art. But the original artist, as Wordsworth was at pains to point out, must create a public to appreciate his art. He must be, not merely a poet or a painter, but also a propagandist of his poetry and painting. Since it is generally considered questionable taste for an artist to employ a publicity agent and openly advertise himself, he must devise subtler and more suggestive means of arousing an interest in the always apathetic public.

One of these methods is to join together in a band: a band of instrumentalists not only makes more noise than a solo player—it can do interesting things as a band which cannot be done by the players separately. But though, to make the simile perfect, a group of artists ought to get together and combine on a single work of art (and there is no reason why a group of painters, sculptors and architects should not co-operate on a single work of art), yet that is not their real purpose. Practical things they can do in common: they can have a central office, an information bureau where the enquirer can find out about the nature of the works done by members of the group, their whereabouts and prices. Unit One has such an office at the Mayor Gallery in Cork Street, London. They can hold joint exhibitions and share the expenses connected with such exhibitions. There may be other practical means of co-operation, but the essential bond in such a unit is spiritual. I use the word "spiritual" fully conscious that such a word makes the Englishman a little uncomfortable.

EDWARD WADSWORTH. *Composition.*

But it is important to imply that the bond in such an association is not in any sense technical. These artists have not agreed that any one method of painting or carving or building is the right method; they have not even agreed that their art should express a common sentiment or even a conscious direction. In this sense Unit One differs from a group like the Surréalistes in Paris, which has its manifestos and

programmes, and openly declares itself "au service de la révolution"—the revolution in this case being the Communist one. Unit One has no such pretensions. The most we can say is that, in the words of Paul Nash, one of its founders, "Unit One may be said to stand for the expression of a truly contemporary spirit, for that which is recognized as peculiarly *of today* in painting, sculpture and architecture." This contemporary spirit may be distinguished by certain features—by a general abandonment, for example, of the "truth to Nature" criterion in painting, and of historical styles in architecture. Mr. Nash has gone so far as to characterize the aims of the group as "design, considered as a structural pursuit; imagination, explored apart from literature or metaphysics;" but even this particularization might

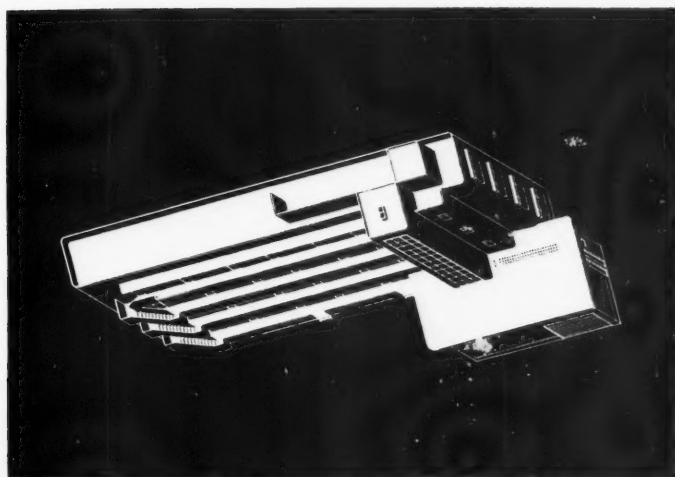
seem a little too narrow to include the work of at least one member of the Unit, Mr. Burra.

Quite frankly, then, the aims of the Unit are strategical: to form a point in the forward thrust of modernism in architecture, painting and sculpture, and to harden this point in the fires of criticism and controversy. Such an aim is not only perfectly legitimate: it is commendable. Lacking

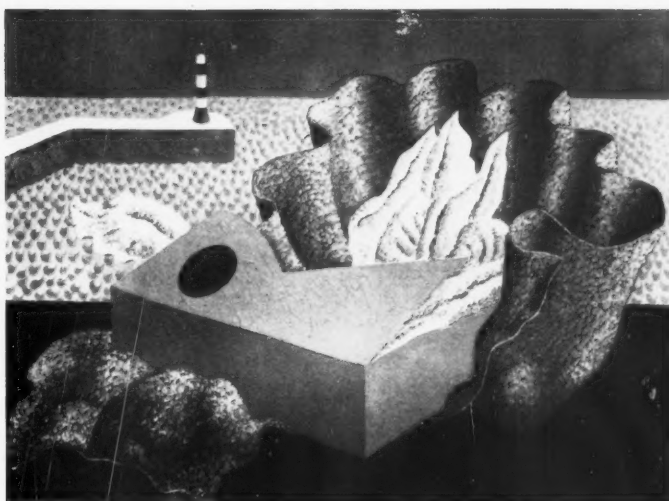
BARBARA HEPWORTH. *Carving in Ancaster Stone.*HENRY MOORE. *"Mother and Child," in Green Horton Stone.*



EDWARD BURRA. "Variety."



WELLS COATES. A block of flats.



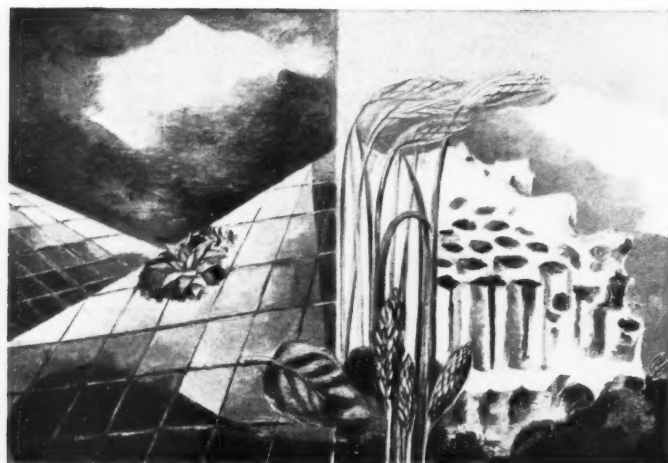
JOHN ARMSTRONG. Composition.

the protection which a universal religion used to give to art in the social structure, lacking a corporate existence of any kind in the State, artists must combine to give their individuality a semblance of order. Though as persons each artist is a *unit*, in the social structure they must, to the extent of their common interests, be *one*. From this point of view the name of the new group is extremely apt.

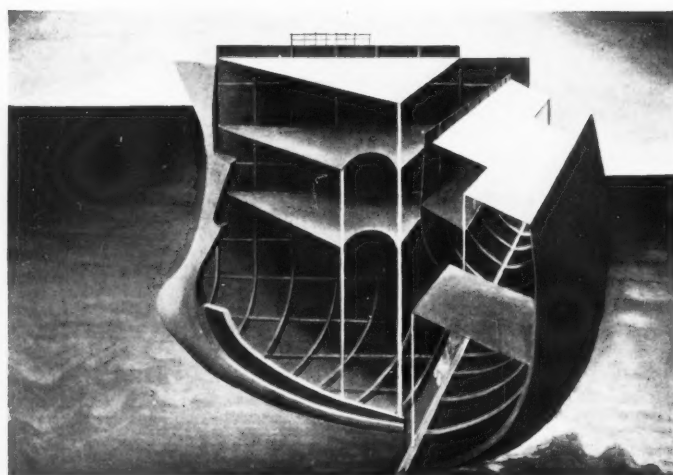
It is not the purpose of this article to give any appreciation of the various members of Unit One. The point of view of the two architects, Wells Coates and Colin Lucas, will be familiar to the readers of THE ARCHITECTURAL REVIEW. The two sculptor members, Henry Moore and Barbara Hepworth, both represent with the same integrity that development in sculpture which is at once a return to the technical virtues of direct carving and an advance into the experimental field of abstraction. The painter members reveal less consistency. Edward Wadsworth and Ben Nicholson, in their latest work, are wholly devoted to abstract art—that is to say, their work, though it may bear some remote relation to natural archetypes, is carried out solely for the satisfaction to be derived from pure design. With them may be associated John Bigge, a younger artist working on experimental lines, but fairly consistent in his devotion to abstract patterns. The work of Paul Nash is too well known and too various to be served by a brief description: whilst the structural pursuit is always paramount in it, it covers the whole range of expression between abstraction and representation. Frances Hodgkins is consistently representational, expressing a lyrical feeling for landscape and still-life with a very pleasant personal sense of colour and design. Edward Burra represents, in the group, the strongest tendency towards pure phantasy, whilst John Armstrong concentrates more on the decorative uses of design. These are necessarily brief labels which do much less than justice to the characteristics of each member of this team of eleven: a sporting journalist might do better. But what is really important is not the individuality of each member of the group, but the coherence of the group as a whole. As a militant unit it will not only focus the attention of an English public on the most experimental tendencies of modern art, it will also convince a much wider public on the Continent and in America that England is art-conscious and has this advance-guard of working artists, whose development promises to be as interesting and important as that of any group in Paris.

The future of the group will depend on its

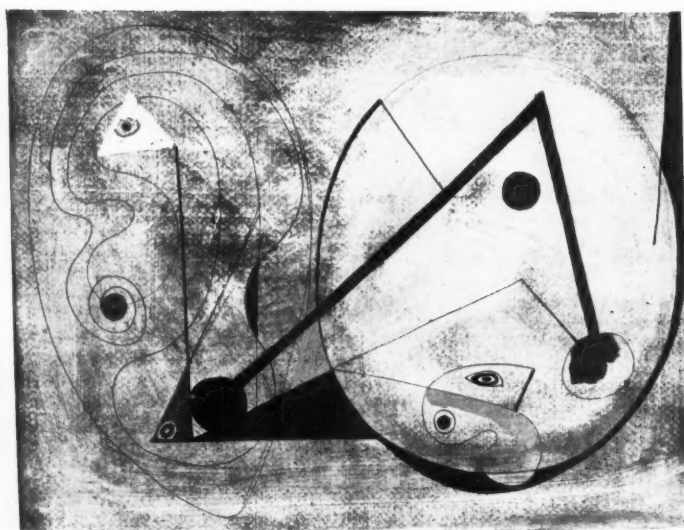
UNIT ONE



PAUL NASH. "Summer."



JOHN BIGGE. "Leviathan."



BEN NICHOLSON. "Picture painted on receiving a cheque for a £100."

continued vitality and coherence, and I understand that its constitution allows for the flexibility necessary to the life of such a group. What matters is not the permanence of the individuals composing the group, but the maintenance of the spirit which led to its formation. Eleven may be an arbitrary number, but anything much larger would become unworkable. A certain personal bond, the old idea of a brotherhood, must prevail if such an association is to be an organic unit. But to prevent such a group degenerating into a happy and oblivious family, the members must live under some discipline, must subscribe to some faith, and be prepared to make way for new members when they feel they can no longer serve the interests of the group as a whole. That "faith" the members of Unit One do not wish to make more definite than a belief in "the expression of a truly contemporary spirit," the expression of "that which is peculiarly of today in painting, sculpture and architecture." What that is can never, in fact, be defined. It depends on a certain sense in the artist, an instinct which has nothing to do with formal questions and articles of faith, an instinct for possible extensions of human sensibility—in short, the creative instinct.

Apart from this immediacy, one possible development may be forecasted. Academies have perhaps survived their useful function in contemporary life, but if only as a national or official recognition of the arts, they seem justified and necessary. The existing academies in all the arts are disastrously out of touch with the spirit of the age, and the breach is widening. I do not see how it can possibly be made good: the principles involved on each side are irreconcilable. We must therefore look forward to the creation of new academies, which at some future date will take over the functions of the old ones. Unit One cannot at present lay any claim to infallibility in its representational rôle: in that, as in other respects, it must stand the tests of time and experience. I am merely throwing out the suggestion, which may be quite fantastic, that the very potent wine of modernism will never be poured into the old bottles of the academic tradition. A new tradition is involved, a tradition of which the form and lineaments can be traced in literature and music as well as in painting, sculpture and architecture, and this tradition, as it grows and becomes established, will require the organization and formulation which it is the business of academies to provide. "Academic" has become a term of abuse, and it may never be possible to redeem it; but in so far as the functions of an academy are necessary, these may in future be fulfilled by groups of the type of Unit One.



LEFT. Leeds under snow, taken from the offices of the "Yorkshire Evening Post". RIGHT. A night view of the City Square, Leeds, with the Post Office on the right, taken from the Standard Buildings.

LEEDS

A CITY OF CONTRASTS

BERNARD SHAW said something about Leeds—that it ought to be burned down, or words to that effect; of course, expressed with more epigrammatic force, and probably rather more kindly. And this is not surprising. Leeds is not a city for Mr. Shaw; it caters for communists or conservatives. An individualist would not understand it. So individualists have no right to criticize it. It is as though an art critic, walking through a spinney, were to object to the contours of a mound made by wood ants. The person to examine the heap should be the entomologist: the person who ought to examine Leeds should be the town-planner. An æsthetic appreciation of Leeds is of little value, because Leeds has little use for æsthetics. For this reason the Civic Hall at Leeds must only be regarded as a symbol of the Civic Pride of the Conservative party in that city.

By likening Leeds to an ants' nest, I do not mean to decry the city or its inhabitants, but rather to show that Bernard Shaw went no deeper than an art critic.

To understand Leeds, even to understand its Civic Hall and the regrettable Headrow, one must acquire a Leeds sense of proportion. And this is only done by realizing the two factors which have made Leeds. First, it is a Victorian city. Secondly, it is parochial. These two qualities are far more blessed than is generally supposed. Today, when cosmopolitanism is still the rage, parochialism, and all that goes with it, is unpopular. Leeds does not

attract tourists. There is not even a guide-book to the City. Life in Leeds must be unbearable for the Londoner.

Leeds is a Victorian city. Once the train gets past Grantham, the character of England changes; you enter a foreign country. Disused branch lines, now only sidings, are full of empty trucks labelled L.N.W.R., G. & S.W., N.B., G.N.R., M.R., memorials of happy days before the railways amalgamated. Even the large gaslit stations, with their smoking-rooms, buffets, first class, second class and general waiting rooms, whose green sunless walls once sheltered varying degrees of commercial prosperity, are still plastered with notices belonging to the old railway companies. And when here and there some modernistic poster has been introduced on to black platform or into high secluded refreshment room, it is as though a woman with make-up had entered with harsh giggles and puffed cigarette smoke into that ordered Victorian life.

And outside the stations, the train, on high embankments, spreads out the country like a map. Large mills, with square panes broken, stand up among strips of houses, stretched around them, "TO LET," "THIS CONVENIENT FACTORY FOR SALE"; the owners of old-established firms have gone bust or sold out and retired to simple cottages in the South, their large Italianate mansions in Woodhouse, Headingley, and Allerton, once silent wealthy suburbs, pulled down, and the gardens

chopped up into building estates. Meanwhile, the workmen have remained, living in rows of back-to-back houses around the factories and the mills, because they cannot afford to live elsewhere, and hoping that some rich man will come and open again that gaunt and empty building which once brought them and their families a livelihood. And between the industrial communities, scattered in the southern suburbs between Wakefield and Leeds, are a few smoke-blackened farms, with paper-strewn pasturage, whose fences are gapped and footpaths well trodden by the feet of the unemployed. And somehow in Leeds itself, the rain seems always to be falling, gathered on the Northern hills around the moors—the moors which not even streets and mills can shut out, reminders to the citizens of a hungry freedom beyond.

You leave the Great Northern Station and turn to the right down Wellington Street, and in no time you are in the City Square. It is just such a City Square as you would imagine Leeds would have. Alfred Drury's lamp standards, nudes representing *Night* and *Morning*, hang gracefully over the balustrade holding arc lamps now fitted with drawn-wire bulbs. But nudity still shocks many of the inhabitants. The General Post Office, a large and vulgar affair, the Queen's Hotel, the Ritz of Leeds, equally large and vulgar, and some offices in Portland stone reminiscent of Oxford Street, flank all sides of the square save one, where still stands the Mill Hill Unitarian Chapel; the same chapel in which Priestley preached, an eighteen-forty reminder, in black Protestant Northern Gothic, of the Non-conformist conscience which has made Leeds what it is. Almost hidden, too, are the impressive simple entrance piers to Wellington Station. Trams, trains and tricycle bells and gear changing—if these are the times, then Leeds moves with them.

Yet, what *were* the times of Leeds. If you walk a short distance from the City Square you will come to Park Square, a delightful eighteenth-century group with Brodrick's fine Town Hall (1858) rising up behind it, black above the pink brick of the earlier houses. And down by the brown waters of the Aire and Calder Canal you will still see only nineteenth-century mills and warehouses, whose undiversified and solid exteriors are the cathedrals of the industrial north. Beside them, even the black, locked, Protestant churches with their commodious galleries, Church of England baize and marble monuments to departed manu-

facturers, are less places of worship. "I can't recollect the time when I did not go to the factory. My father used to drag me there when I was quite a little fellow, in order to wind reels for him."* Life centred round the factory all right, and God spake out from the pages of the Old Testament. At the end of the eighteenth century the factories were placed at the east end of the town and the west end was residential. Park Square, Hanover Square, Bedford Place, and Queen Square became engulfed in the westward spread. Let me first consider the nineteenth-century development of Leeds architecturally. For the social aspect must come under the heading of parochialism. On airy Richmond Hill, at the east of the town, houses were built, close up against the factories, for the workers. Rows of two-storied houses, built back to back, with no gardens at all, and only the cobbled street and the houses opposite to look at. Several families lived in each two-roomed house. Take the car to the bottom of Nippet Lane and see what the old speculators did. A man named Weller bought a small bit of ground. On it he crammed as many houses as possible, running in straight lines off the main street, Weller Avenue, Weller Grove, Weller Mount, Weller Place, Weller Terrace, Weller Road, Weller View. Sometimes, with touching parental affection, he would bring his children in—Nellie Grove, Back Nellie Grove, Archie Street, Archie Place, Doris Crescent, Back Doris Crescent, or use long words—Stipendiary Street, Industrial Street, Back Cemetery Lane. But the houses would be very much the same, just as crowded, only a little more or a little less pretentious, according to their dates, and always among them, like the house of God, black mills and blacker chapels and churches.

So much for the industrial dwellings. The main streets are different. The Kirkgate and the Briggate, once plain shopping districts intersected by shambles, not unlike the streets of Cork or Limerick today, cast off their Georgian glory and assumed the Jacobean, the Romanesque, the Holbein-esque, the Early English,

the Perpendicular and the neo-Georgian, in Leeds phorpres brick and stone and terra-cotta. If you wait, sheep-like, in the long queue for the Roundhay tram, you will see more of this, the other side of the picture. Grass appears—and I should think Leeds must have less grass in it than any other city—the houses spread out, they are higher; they are detached: some have

* *The Heart of John Middleton.*
Mrs. Gaskell. 1850.



LEEDS TOWN HALL, built 1853-1858 and designed by Cuthbert Brodrick. The belfry tower was a later addition by the architect to his original design.



LEEDS—AN INTIMATE VIEW

TOP, LEFT TO RIGHT. An early nineteenth-century warehouse on Warehouse Hill, by the banks of the Aire and Calder Canal. Protestant Gothic (c. 1830), the spire of St. George's Church, near the Town Hall; The Wellington Restaurant, City Square, outside which

on the day this photograph was taken, a man was found with a fracture at the base of his skull. BOTTOM, LEFT TO RIGHT. One of the richer people's houses, "Lyndhurst," North Grange Road, Headingley, now converted into the local headquarters of T.O.C. The style is characteristic Leeds

suburban; Leeds less suburban—a scene near Victoria Bridge in a poor quarter, where a boy was drowned on the same day as the man fractured his skull; The cobbled roadway of a typical back-to-back street in the Richmond Hill Ward, a grassless playground.



C. 1800. The north side of Park Square which, according to the 1815 map, formed the western outskirts of Leeds.



C. 1840. Bedford Place, Leeds, one of the few genteel streets in the late Georgian style in the city.

turrets, some have towers, and the larger, finer ones have become municipal property. There was a time when Mr. Peter Fairbairn's house, Woodsley, was the most lavishly decorated in England. At that time Queen Victoria stayed in it to open Brodrick's Town Hall. *The Illustrated London News* shows her admiring a pair of vases, a bust and a portrait in the presence of the owner (later Sir Peter Fairbairn), who was Lord Mayor of Leeds. Those were the days! Melon à la Coburg: Saumon-Balmoral: Bœuf Victoria: Fraises (out of season) Albert Prince Consort: Champagne, Lemonade, Selzer, Claret, Burgundy, Punch. Sitting on a packing case in McConnel's wine shop you can still imagine it all, while old men who once sent sherry to the grand merchants' houses hand out double scotches to commercials.

It was in these great days of Leeds that Cuthbert Brodrick was given his opportunity: he built the Town Hall, by far the finest building in the city, the Corn Exchange, the Leeds Institute, the King Street warehouses, and several private houses. It is unlikely that one whose tastes were for the monumental would have concerned himself with housing, but what Brodrick did accomplish is the best monument a Victorian industrial city can be expected to have, a sequence of noble public buildings, in the grand classical manner, before it died down into contemporary blatancy or "naicenesses."

And now for Leeds parochialism. It is a long story based on temperament and surroundings. Let me take surroundings first. Leeds has a population of a little under 500,000. It is not a very overcrowded city, it is merely appallingly badly housed. About 400,000 of the population are workers or unemployed workers. There are* about 125,000 houses in Leeds, of which 75,000 are on the back-to-back system. You should know what a back-to-back house is. The Medical Officer of Health for the city in his special report says:

"The oldest type, those built prior to 1872, and now numbering about 33,632, is built in long, unbroken rows, and abuts on to streets few of which exceed 22 ft. in width. They consist of two rooms—a living room opening directly upon the street, and a bedroom. There is also under the living room a cellar—usually unlighted—used for storing coal. Owing to the design, ventilation is bad in both living room and bedroom, whilst not infrequently the lighting is likewise inadequate. The only provision for the storage of food is a cupboard in the living room, or, alternatively, shelves fixed on the stairs leading to the cellar. Personal and domestic washing must be done

in the living room, where as a rule there is an earthenware sink with cold water laid on, and a set-pot for boiling the clothes.

"There is no water closet in the house, and no accommodation for the storage of household refuse. Water closets are provided outside, usually in blocks of two, four or six, either sandwiched in between two houses—often under bedrooms—or built at one or other end of the row. The entrance to these conveniences is usually narrow and dark, and the conveniences themselves are of the old trough type situated on an inside wall. Generally speaking, the ratio of conveniences to houses is one to three—not infrequently one to four—which, judged by modern sanitary standards, is totally inadequate. Domestic refuse is deposited in an ashpit adjoining the sanitary conveniences, access to which is obtained through a small door from the dark and narrow passage referred to. In many cases the ashpit is situated under the pavement, in which case the entrance is through a trap door flush with the foot-path.

"With the passage of time the walls, roofs, and woodwork of the houses show unmistakable signs of decay. In some cases the walls are bulging, and have to be tied, whilst in others it is only by constant repair that the structure can be held together and kept weathertight. Owing to the deterioration of the structure and the absence of damp-proof courses, evidence of dampness on the inside walls and bedroom ceilings is general. A house of this type, as will be readily appreciated, lends itself to congestion, and in many parts of the city the number of these houses to the acre is as many as 70 or 80. One might also mention that in certain districts of the city—particularly Hunslet and Holbeck—there still remains a number of enclosed courts and yards—some of them extremely narrow and most of them unpaved, on which houses of this type abut.

"The conditions as regards size, structure and lay-out are somewhat better in the intermediate type—those built between 1872 and 1890, numbering 28,154. Instead of in long rows, the houses are built in blocks of eight, with the sanitary conveniences situated in the gaps between the blocks. The streets are wider, averaging from 36 ft. to 42 ft., but the objectionable feature still remains of the living room opening directly on to the street.

"The houses consist of living room, scullery, and two bedrooms, with occasionally an attic in addition. There is also a cellar under the living room for the storage of coal. In this type of house the domestic and personal washing is done in the scullery, and not in the living room, whilst food is stored either in a cupboard in the living room or in the scullery. The houses, generally speaking, are in a better state of repair, and signs of weathering and dampness are not so obvious. Domestic refuse is deposited either in an ashpit of the overground type, or in ashbins placed in the space between adjoining blocks. The sanitary conveniences were until recently of the old trough type, but most of them have now been converted into modern pedestal w.c.'s. The ratio of w.c.'s to houses in this type of houses is one to two. As regards congestion, whilst this is not so marked as in the case of the old type, nevertheless, the number per acre is still from 50 to 60."

On the deaths from tuberculosis, the infant mortality, and the results of compulsory constipation it is needless to expatiate. The City Council, however, is not without its resourcefulness. Under the 1930 Act it decided on a five-year programme. Over 2,000 of these bad houses were to be demolished in this time, and an adequate number of houses erected to replace them. In the first two years of the

* *The Architects' Journal*, June 22, 1933.



C. 1870. A typical back-to-back street of the later type built of red brick diversified by yellow stone dressings.

plan, 25 were demolished and 942 new ones built. Possibly 1,200 back-to-backs will be demolished by the end of this year. At the best it will take 190 years to clear the city of backs-to-backs. I do not know whether the back-to-backs just recently erected at Beeston are intended to replace the old.

The peculiar conditions in what Queen Victoria called "this great city" naturally make its poorer inhabitants aware of one another's lives. You *have* to know your neighbour opposite on the first floor, when you want to string a clothes line across the street to dry your own washing. Each house has its doorsteps yellowed on the edges: thousands of people are content to wait in queues. Leeds is indeed an ants' nest. And when the King and Queen came last August to open the new Civic Hall (quite forty houses must have been demolished to clear the site), some of the saddest, dingiest little lanes had their decorations, and hardly an exhausted wolf cub or irritated infant was without its red, white and blue favour or Union Jack. I was wandering about in the little lanes of the Richmond Hill Ward (average 2.17 per room) as the guns went off which announced the Royal entrance to the city. The courts and alleys where I stood were deserted. Every one had gone to see the King and Queen. Suddenly bells pealed out under the clouds and even louder than the bells came the cheering. When I approached as near to the centre as I could, through the crowds, suddenly the sun came out, and down the steps of the Town Hall came the Queen in white: the cheers were deafening, hats and flags were waved. The city was alight with excitement. And then when the rain fell in the evening, after the Royal visitors had driven away, back went the crowds to their back-to-backs. "Long Live the King," "God Bless our King and Queen." "It is my earnest hope and prayer that today's ceremony may prove the beginning of increased prosperity for this great city." That should be proof enough of Leeds loyalty: and like a loyal parish Leeds did not expose its blemishes that day. It smiled through its illness. I think a city which has such remarkable people should take better care of them.

The remarkable people are only one side of the picture. There is the University, unlike Oxford and Cambridge, closely identified with the city which gave it birth. Here the intellectual life of the north, which produced most engineers, philosophers and poets, of nineteenth-century



WAITING FOR THE KING AND QUEEN. A side street near the new Civic Hall decorated for the recent celebrations.

England, finds inadequate embodiment. Some idea of the size of the proposed extensions of the University is conveyed by the lay-out plan on page 138, some idea, too, of the strength of Leeds intellectual conviction during industrial depression. There also is the other fifth of the population which rules the four-fifths. They are Yorkshire people, too, and just as loyal, and still parochial. If you go out to dinner with one of them up in Roundhay—"dinner is served between 5.30 and 7.30" throughout the town—you will get an insight into their lives. A comfortable semi-detached residence in the Tudor style will welcome you; for in these hard times we cannot afford a detached mansion in its own grounds. And there will be a look round the garden and the wireless after dinner, and talk about Leeds this and Leeds that. The Town Hall is third longest in the world, the cloth output is the largest in the world, the new Civic Hall is the most beautiful Civic Hall in the world.

And from this talk there naturally arises the question of new buildings. The best architects must be got for the best city. So Sir Reginald Blomfield is chosen from London. His Headrow, a bold new street, cut with fine imagination and foresight, right from the Town Hall to St. Peter's Street, is not yet complete. What there is, is in a style which has made him familiar to Londoners. The Headrow consists of shops with offices above them. The buildings are constructed of steel and subsequently ornamented with brick and Portland stone, the parapets being diversified by urns. The incline of the Headrow from Victoria Square to the Briggate, where much of the building has been completed, is rather severe. Here the effect of the stepped roof lines is unpleasing, and there can be no denying that Sir Reginald's architectural decoration does not look at home in homely Leeds. And I found on enquiry that the Headrow was not popular. One can only wonder that the architect did not follow the early nineteenth-century industrial tradition of Leeds, of which there are plenty of examples in side streets and in old engravings and photographs, with Trinity Church as a superb example of the use of local material.

But that is perhaps a personal issue. I came to Leeds to see the Civic Hall, and I saw there was no seeing the Civic Hall without seeing Leeds at the same time. One can understand why Mr. Vincent Harris was chosen as architect. He had designed the Sheffield Town Hall, and Leeds was not going to be outdone by Sheffield. A site was chosen near the Town Hall, but

higher up, so that the new building was bound to dominate the old. Should it attempt to harmonize or give up the struggle? Mr. Vincent Harris is not a Brodrick, and that he was of two minds as to what to do is as obvious as are the two steeples with which he has terminated his main façade. The result is that the building, looked at with the Town Hall in the foreground, is out of place. Its twin steeples are more elaborate than that

on the Town Hall (they are a cross between St. Vedast's, Foster Lane, and St. John's, Waterloo Road), yet their effect is nullified by the older building. Its plain returns and wings look well, but the portico, a necessary justification for twin steeples, mars the otherwise plain and harmonious front. There has been much adverse criticism of the building, particularly from those who have not seen it. But photographs have not done the building justice. The entrance front is rarely seen in its entirety. The busy streets of Leeds are below. Two main ones almost converge on the building, so that as the sightseer wanders among the hotchpotch of commercial styles around Infirmary Street and the City Square, he suddenly catches a glimpse of one or another brilliant white steeple, rising above tram lines and turrets, terminating an otherwise dreary street. He never sees both steeples at once. What the effect will be when the Portland stone is blackened I cannot say. But I think the odd effect of a close view of the exterior is justified. For the style of the extraordinary gilded clocks I can see less justification. Of the interior of the Civic Hall, Plate iii speaks for itself.

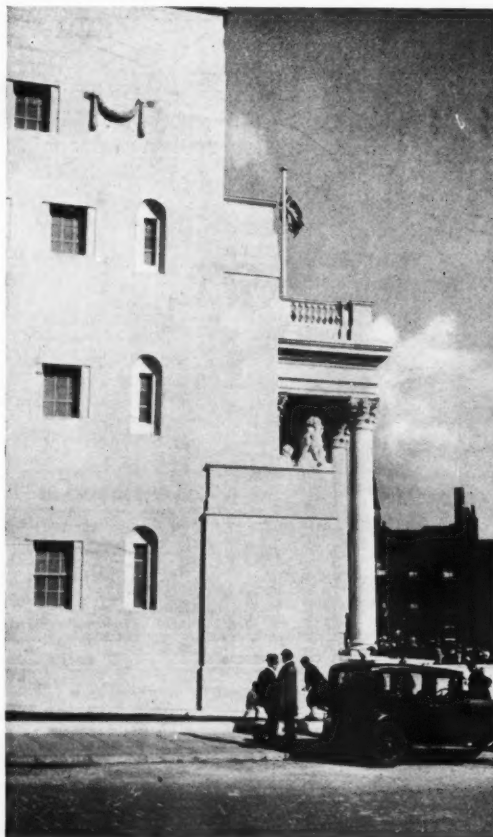
Yet the shrewdest remark of all came from a Yorkshire builder in the bar of the "Golden Cock," in Kirkgate. "The Civic Hall—you know what that is—a structure of steel; but the Town Hall—that's architecture, that's craftsmanship. It's grown up. There's no more



INDUSTRIAL. A view of Spring Grove Street, Richmond Hill Ward, a typical back-to-back area of the earlier and more insanitary type.

than the suburbs: the rest of the population should have its say. There was all that Civic Sense there, which in times of deep depression had the vision to cut a street like the Headrow, to rebuild the University, as yet too incomplete to justify criticism or receive adequate illustration, and which finally started out on an expensive undertaking like the Civic Hall. "Ah wish ah'd 'ad that film, ah'd

'ave used it on the Civic buildingg" said someone near me in the crowd. Everyone in Leeds takes a pride in what he can have an excuse for being proud of. But the Civic Hall is a mere horseshoe tie-pin under the butterfly collar. There is the man to consider as well as his clothes. Or, since it is easier, let me close with my opening analogy of the ant heap. The workers are there, the land is there, the materials are in abundance, and, most important of all, the opportunity of rebuilding the heap is there, because Leeds is still a parochial community centring round itself. And work has started, possibly at the wrong place, for ants and men generally build what is important to them as soon as they can. What Leeds needs is decent housing and a plan that takes a shorter time to complete than an hundred and ninety years. And Leeds, more than most English towns today, has the chance of moving rapidly by reason of the possession of Civic Sense. Leeds is, thank heaven, Victorian and parochial, an amenable living that awaits an enterprising Rector, a heap without a queen. **JOHN BETJEMAN**



MUNICIPAL. The Leeds Civic Hall from Calverley Street, a view of the west wing of the south front.



LEEDS CIVIC HALL

E. VINCENT HARRIS, Architect

This is the main elevation of the building, which is a steel-framed structure faced with Portland stone and roofed with green Westmorland slates. It stands at the top of a rising approach. The twin steeples, which look somewhat incongruous in a view of the whole elevation such as this, are primarily designed to be seen singly from two main streets of the city which converge on the Civic Hall from the valley below.

PLATE ii

October 1933





LEEDS CIVIC HALL. The Reception Hall

This hall forms the connecting space between the principal staircase and the assembly hall. It has a floor of black marble, and walls of Hopton Wood stone in alternate light and dark bands. The three saucer domes which form the roof are decorated with coloured mosaic and have concealed lighting round their base. Architect: E. Vincent Harris.

PLATE iii

October 1933



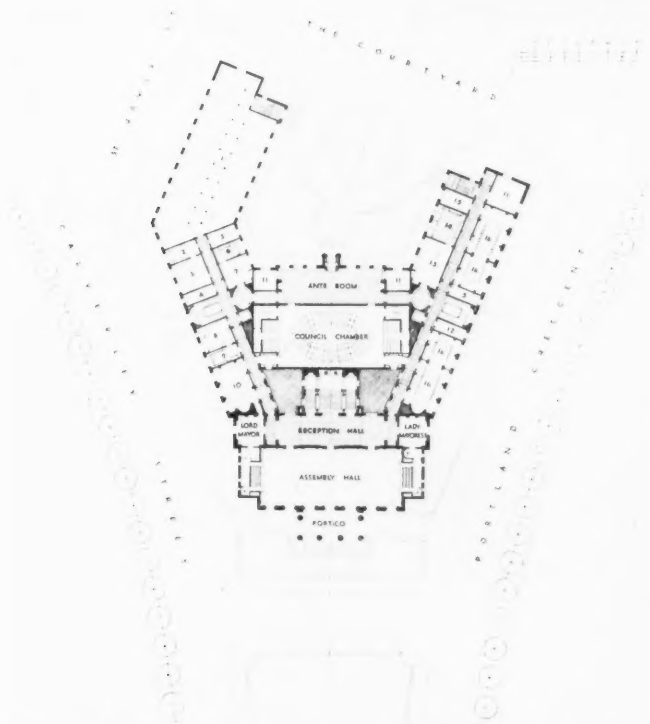
LEEDS CIVIC HALL

E. VINCENT HARRIS
ARCHITECT

THE COUNCIL CHAMBER (right). The walls are finished with walnut panelling up to door height, and in acoustic tiles above. The frieze is in walnut, decorated with heraldic panels.



A COMMITTEE ROOM (below). In the committee rooms the finishings and furniture are in limed oak, with a beige carpet and blue curtains. There are four committee rooms, grouped in pairs, with sliding doors so that each pair can be thrown into one.



This LAY-OUT PLAN also shows the planning of the first, or ceremonial, floor. The numbers on the plan refer to rooms as follows:

- | | |
|--------------------------------|------------------------------------|
| 1 : Town Clerk's Department. | 9 : Lord Mayor's secretary's room. |
| 2 : Secretary's Room. | 10 : Lord Mayor's reception room. |
| 3 : Town Clerk's room. | 11 : Consultation rooms. |
| 4 : Ante room. | 12 : Press. |
| 5 : Waiting room. | 13 : Members' robing room. |
| 6 : Lady members' lavatory. | 14 : Members' lavatory. |
| 7 : Lady members' robing room. | 15 : Still room. |
| 8 : Cloakroom. | 16 : Committee room. |

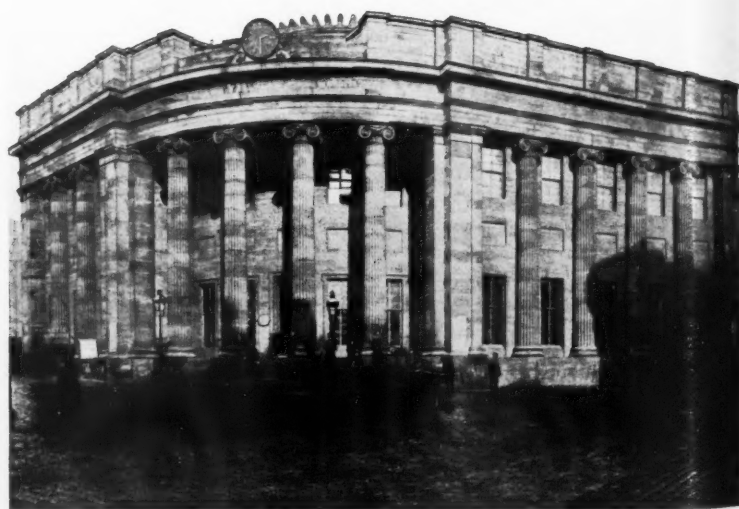




A view on the Aire and Calder Canal, near Richmond Hill, Leeds.

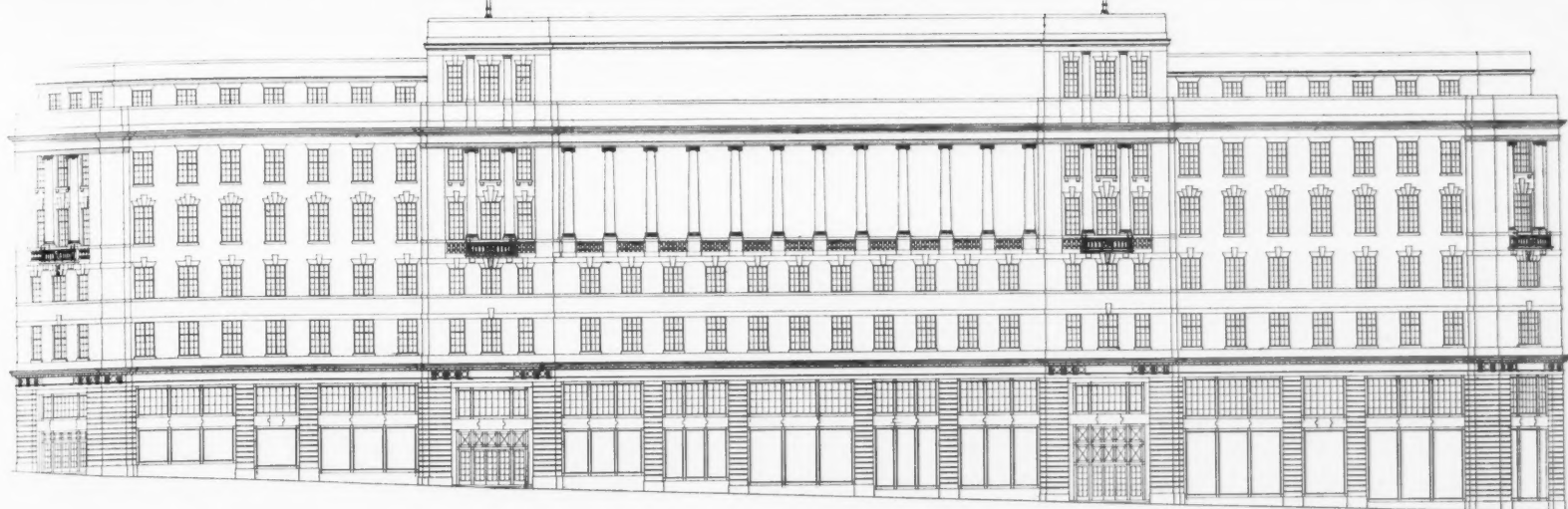


Typical late Victorian Commercial architecture in Leeds. The General Post Office in the City Square.



OLD LEEDS. Commercial Buildings now pulled down, at the corner of Boar Lane and Park Row.

L BUILDINGS OF LEEDS



THE HEADROW. The completed design for Messrs. Lewis's shop between Briggate and Woodhouse Lane. Architects: Sir Reginald Blomfield and G. W. Atkinson. So far only the ground and first floors have been erected.



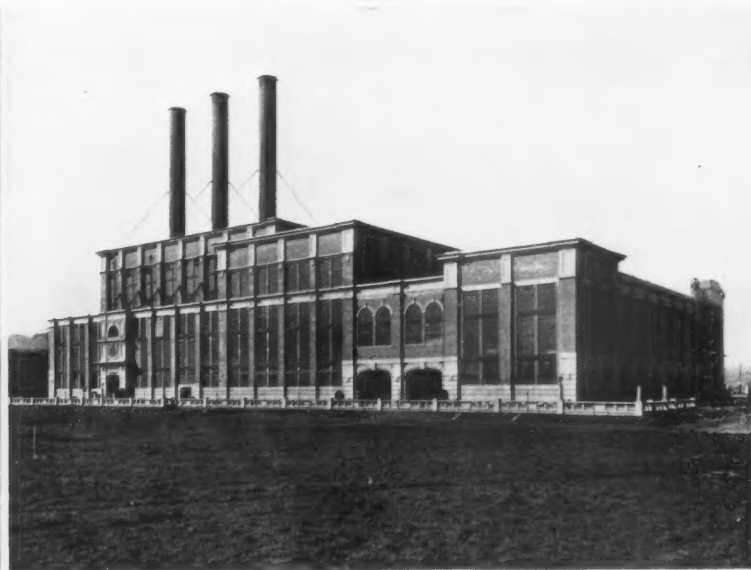
THE HEADROW, Lloyds Bank on the corner. Architects: Sir Reginald Blomfield and Kitson, Parish, Ledgard and Pyman.



THE HEADROW. Between Cookridge Street and Albion Street. Architects: Sir Reginald Blomfield and G. W. Atkinson.



THE HEADROW, at its eastern extremity. The beginning of the block to be continued up the hill. In the foreground is the Kingston Unity Friendly Society (architects: Kirk and Tomlinson). The further part of the building is Messrs. Wharram's Warehouse. Architect: G. W. Atkinson.



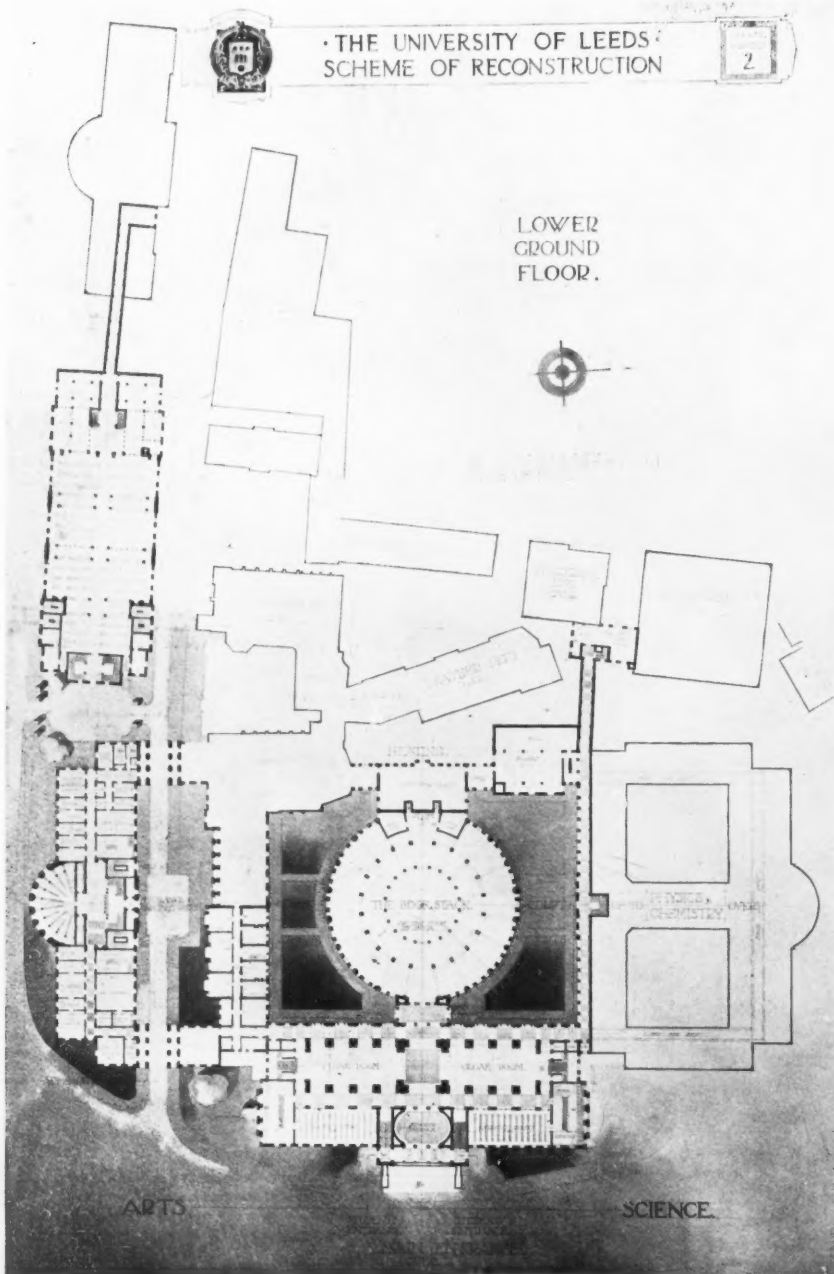
The Leeds Corporation Electric Power Station at Kirkstall, near Leeds. Architect: Ernest C. Thomson. The general architect for the whole of the Headrow is Sir Reginald Blomfield.



A general view of the hitherto completed work taken from Woodhouse Lane showing the chemistry block

on the left and the mining block in the background.

The General Lay-out



LEEDS UNIVERSITY EXTENSIONS

LANCHESTER & LODGE
ARCHITECTS

The architecture of Leeds University is at the moment in a state of chaos. The original buildings, in a commercial Gothic style, by Waterhouse, were found to be inadequate and in 1927 Messrs. Lanchester & Lodge won a competition for the lay-out of new University buildings. So far only the Gymnasium, Mining, Chemistry and Physics blocks have been completed. The circular library will be finished in two years and thereafter comes a secession of work, unless more funds are available.

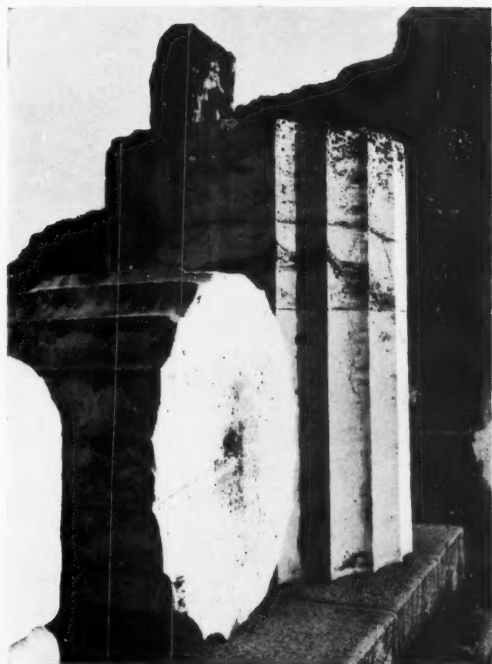
Part of the laboratory on the first floor of the Physics block

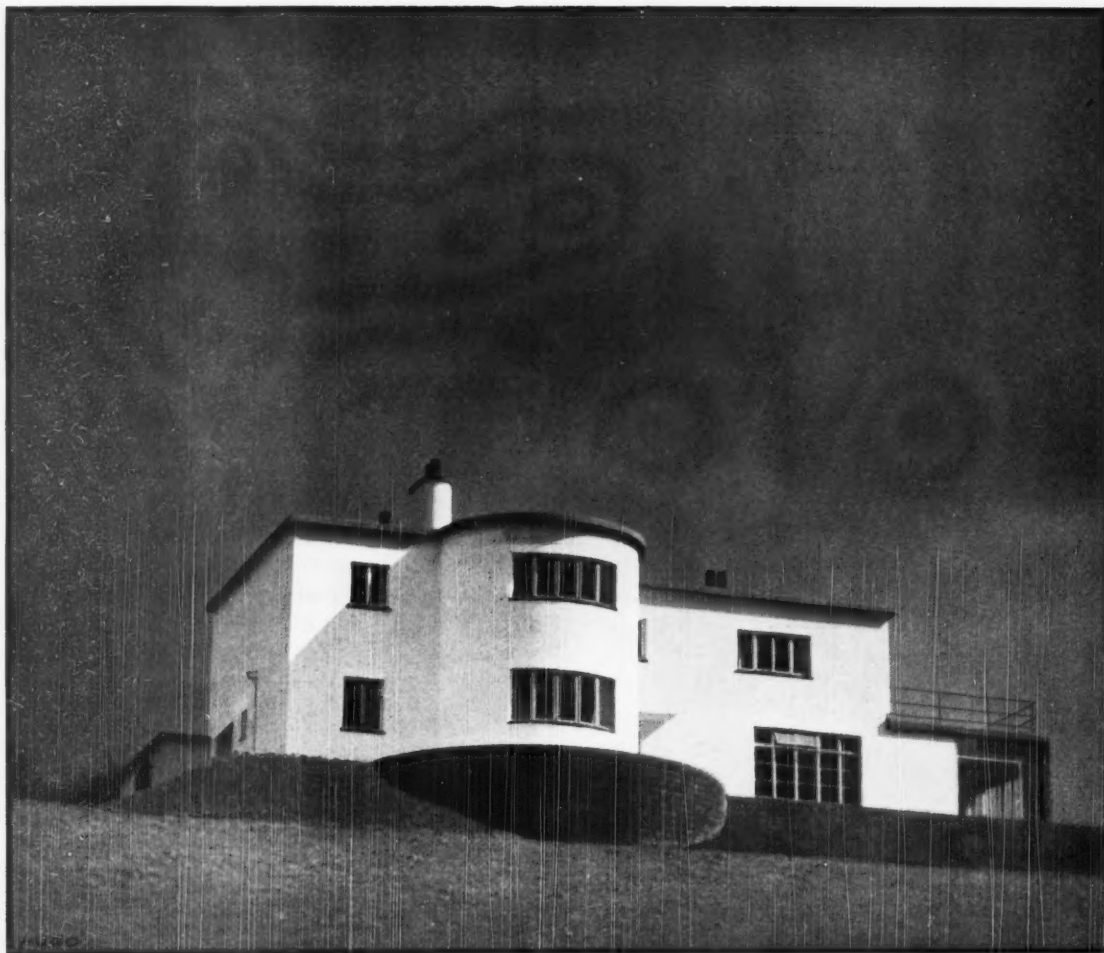




LIGHT OVER THE ACROPOLIS

Like generations of ushers before him, M. le Corbusier (who is no relation of plain M. Jeanneret) has discovered eternal, but hitherto undiscerned, verities in the Acropolis. Yet neither the pedantry of the former nor the turgid Helvetian rhetoric of the latter can dim the superb reticence of its monuments for either ex-public schoolboys or A.A. students privileged to behold them with their own eyes. Seen flood-lit in honour of the arrival of the Quatrième Congrès International d'Architecture Moderne in Athens, it was as easy to forget those bleached, once chocolate-coloured, photographs round Fifth Form classroom walls as doctrinaire reiterations of the saving "new" architectural virtues of light, air and space. The significant thing is that modern lenses alone have made it possible to capture something of the unforgettable interplay of intense light and supreme form on this spot for those who have never stood there. Archæologists will have the peculiar satisfaction of determining at just what angles of the Parthenon these views were taken. Mr. Wells Coates, who projected them, very properly professes the sort of indifferent ignorance on this score reserved for purely presentational considerations.

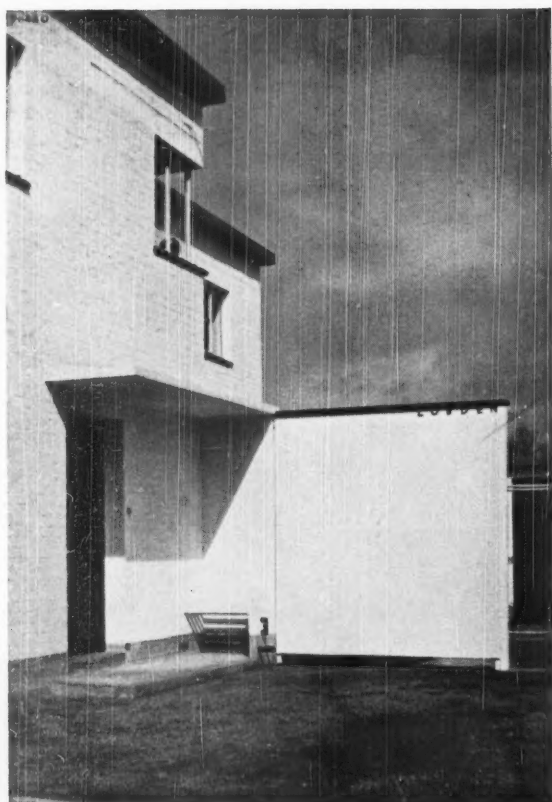




A HOUSE

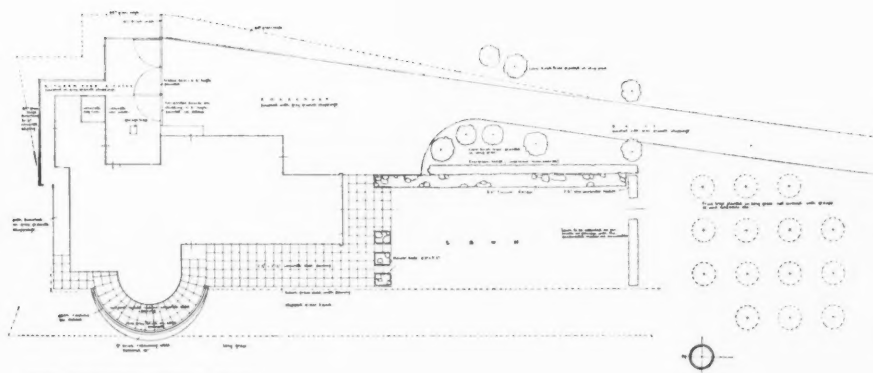
R. D. RUSSELL &
MARIAN PEPLER

ARCHITECTS



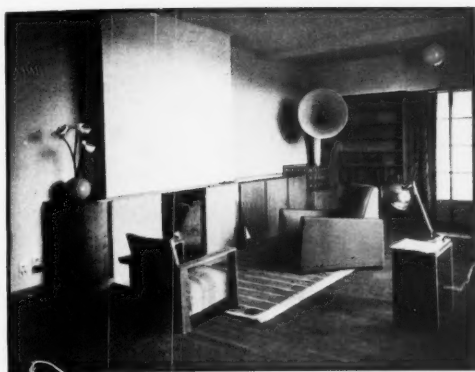
The front door, cellulosed matt black, on the east side. The name of the house 'Lobden' is on the partition wall dividing the front door from the kitchen and cloak room.

The west front of a house at Colwall, near Malvern, which overlooks the Welsh and Herefordshire hills. The west slope of the hill falls away steeply below the house. The external walls are colour washed with slightly pinkish white and the metal window frames are painted white, while the sills, outside and inside, are formed with black glazed tiles. Construction: brick cavity walls, reinforced concrete roof and finished to a black glazed tile soffit.



The lay-out which has been embellished with silver birches.

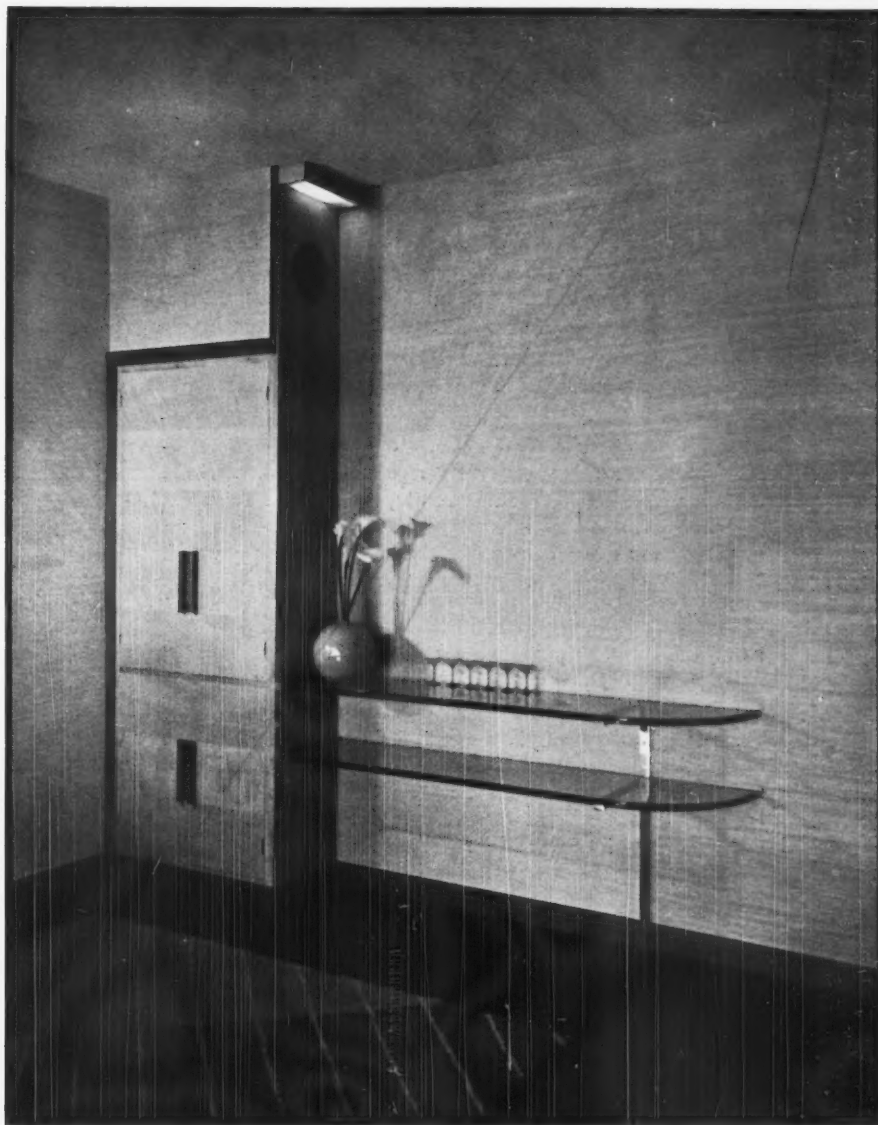
OVERLOOKING THE WELSH HILLS



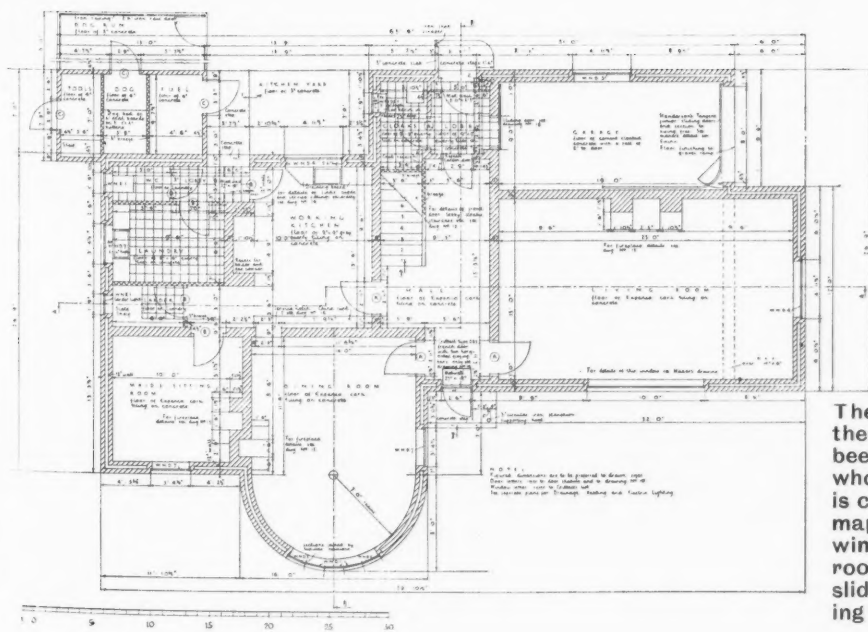
A general view of the living room showing a fitted-in wireless set. The curtains are of white wool and the carpet a dull celadon green. The furniture was designed by R. D. Russell and the rug by Marian Pepler. The walls, and most others in the house, are distempered a parchment colour.



A bedroom with sycamore furniture by R. D. Russell. The rug is natural black and white, tufted and hand-made. It was designed by Marian Pepler.



A corner of the dining room. The walls are covered with Japanese straw-coloured grass cloth. The service hatch, in unstained sycamore and mahogany, is surmounted by a wireless loudspeaker. The carpet is chestnut brown and the fawn and white tufted rug in the foreground was designed by Marian Pepler.



The ground floor plan showing how the main rooms of the house have been designed for the view. The whole of the south wall of the hall is covered with a one-inch ordnance map of the view seen from the west windows. At the end of the living room is a glass sun porch with sliding and folding glass doors opening clear to the south.

Christendom to Capital

By OSBERT BURDETT

GHASTLY GOOD TASTE, or the Depressing Story of the Rise and Fall of English Architecture. By John Betjeman. With an Illustration forty inches long by Peter Fleetwood Hesketh. Chapman and Hall. 5s.

IN this stimulating essay on the changes that architecture has undergone in England during the past three centuries and a quarter, Mr. Betjeman does not, I think, define what he means by Ghastly Good Taste. The effect of his delightful opening chapter, which recounts the alterations made in a house belonging to the same family, between 1600 and the present time, however, is to suggest that taste is good so long as people work in a convention that they take for granted, and ceases to be good when they become self-conscious, and so the prey of theories and fashions and reasons imported from outside. This is probably true, and may mark, let us hope, a reaction from the orgy of theory and advice which succeeded the Regency and made the Gothic Revival, with more recent experiments, so strange a chapter in our history.

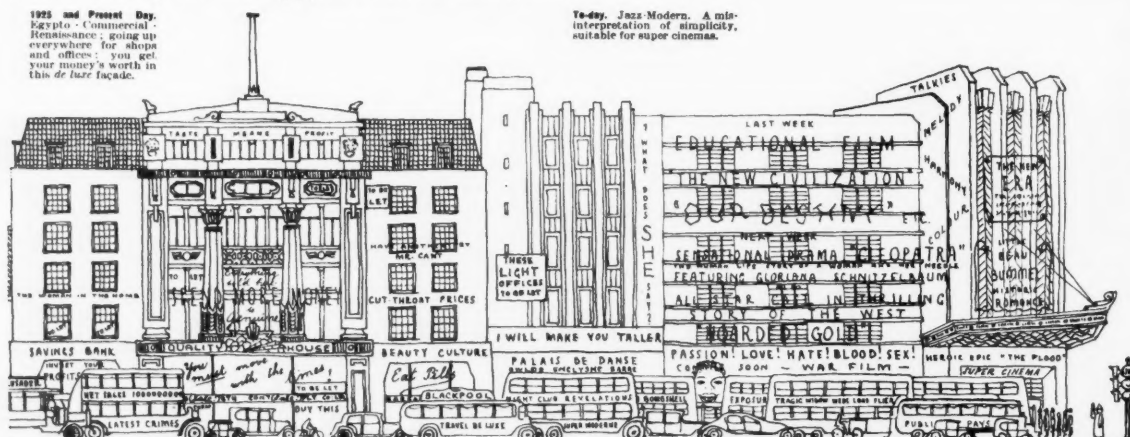
A recovery, however, is not easy, for, as the author shows, our civilization is a chaos of rival nationalisms and rival egos, and beside that we have new materials that we do not yet know how to use harmoniously. Until, he concludes, the former unity of Christendom shall have been replaced by another unity (of whatever kind) as comprehensive, the happy state of building in an agreed convention, because we know no better and are happy in it, will remain beyond recall. If, then, we are fated to remain in the present confusion of experiment, I wish that one fact could be remembered, that the mechanical facilities for height and span and so forth should not blind architects (who are not really free agents) to the first question that all wise persons ask of every room they enter: "Could I be ill here?" One could in, say, the Adelphi. One could not, say, in Broadcasting House, because the proportions of the rooms and the passages and the very entrance hall are all wrong. They hurt one even to enter them. The human case against the skyscraper is that human beings are not happy in a vertical street, and



A part of the folding illustration, forty inches long, by Mr. Peter Fleetwood Hesketh. The three buildings on the right are in styles popular from 1898-1910 and still used. Notice the lamp posts.

that no Taste is so Ghastly as that which constructs rooms in which our sense of proportion is outraged.

How it has come to be is vividly presented by Mr. Betjeman in his opening chapter, and from this story of one house, altered by its family as taste changed with the generations, the layman can digest and remember more of history than from any generalized book. This chapter and the vast illustration by Mr. Fleetwood Hesketh make this the most original architectural essay of the year. There are shrewd remarks, a dozen at least, to enliven the theoretical chapters that follow, and one rejoices in the author's divining power, though some of his historical generalities are more open to question. I cannot think of any possible reader who will not enjoy this book which, without any preaching, describes the confusion of our time and shows that architecture cannot help expressing the condition of the society that it serves, so that, in his own words, "Since architecture [which now includes engineering] is too big a job for one man, several men must do it. . . (and) several men, each working in his own department, can be made harmonious by a unity of ideals." If that unity does not come a crash seems inevitable, and meanwhile we must bear as well as we can the confusion that is mirrored in Ghastly Good Taste.



The last few inches of Mr. Peter Fleetwood Hesketh's drawing. The general titles along the drawing run from "Christendom" through "educated class architecture" to the state conscious

days of the Regency, to middle-class architecture of mid-Victorian times and end with the titles "middle class self conscious" and "big business and chaos" (illustrated above). The whole

drawing is called "The March of English Art down the ages," printed in Elephant type. Both illustrations on this page are taken from "Ghastly Good Taste."





SHAM GOTHIC

The plaster vaulting on the ceiling of the south aisle of the Chapel in Dublin Castle. The architect of the chapel was Francis Johnston (R.H.A.) of Dublin, and the building took seven years to complete (1807-14), so elaborate an essay was it in the Decorated and Perpendicular Gothic styles. The sculptured corbels are by Stewart. It will be noticed that the sculptor was still under the influence of the Baroque.

The Chapel of Dublin Castle, used after the British evacuation as Law Courts, is now not used at all. There is dust on the Communion Table, dust on the box pews in the galleries with their red velvet and baize cushions for the ease of forgotten Irish peers, and even the enamelled glass windows are dusty and dark.

On page 131 of this issue is an illustration of St. George's Church, Leeds, a typical example of Protestant Gothic, built a generation later. But the plaster quality survives even in this stone building. The impression is of a Georgian building whose decorations happen to be in the Gothic instead of the classical taste. In Dublin Castle Chapel the classical impression is still stronger. Dublin plasterers, whose fathers had moulded Rococo and Adamesque ceilings in St. Stephen's Green and Merrion Square, used all their skill in copying equally elaborate Gothic details. Because of this, but chiefly because of the ingenuity of Johnston, that great and forgotten Gothic Revivalist, the Castle Chapel may be considered as a more important pioneer building of the Revival than Savage's Chelsea New Church which was built nearly twenty years later.

CONVENTION TO CONVENTION

ENGLISH DECORATIVE PLASTERWORK OF
THE RENAISSANCE. By M. Jourdain. New Issue.
London : B. T. Batsford, Ltd. Price 15s. net.

EVER since the Reformation the Englishman has had an itch to own his own castle. Many small yeoman's houses of the seventeenth century contain elaborate plasterwork ; many gaunt town houses of the eighteenth century display a wealth of decoration within belied by their plain homogeneous exteriors ; even the rigid simplicity of the Regency allowed each box a Greek frieze in the hall and some Greek frets in the saloons. Victorian small holders spent their money on wallpaper and ornaments and today the villa-dweller is proud of his half-timber gable.

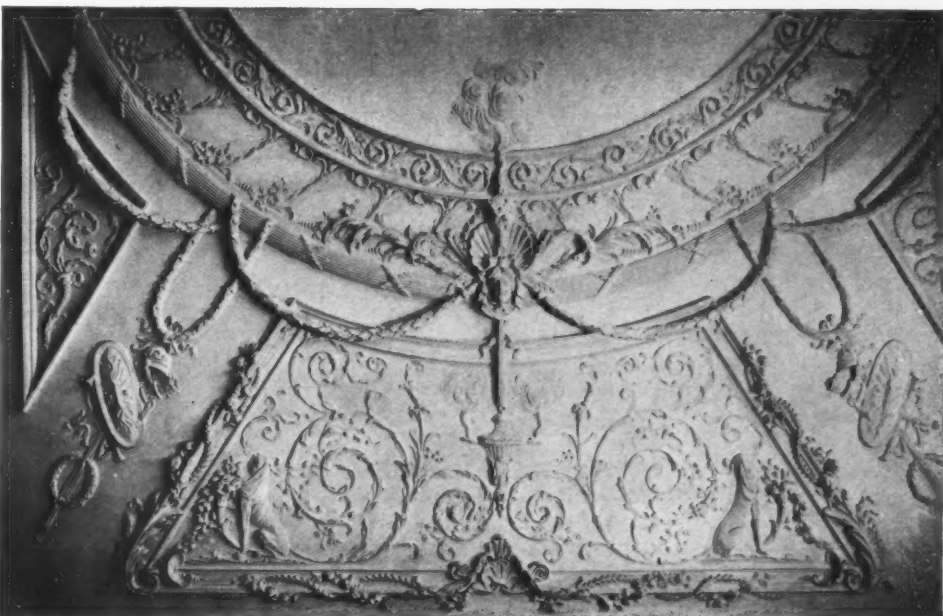
So it is in plasterwork, once the most universal form of interior decoration, that we see the change of English taste and it is noticeable that "freak" ceilings, beautiful, massive and enormous, form the less instructive, if the more entertaining, part of Miss Jourdain's book. In fact, the theory that plasterers were for the most part of Italian importation is contradicted by the author's index of plasterers at the beginning of her book. Most of the names here are English. Of course, Artari did work at the Senate House, Cambridge (1725), and Sutton Scarsdale (c. 1724) and Vassali's work at Hayley is known, but Italians were employed for the larger buildings and their work is not so characteristically English.

The three illustrations from this book I have chosen to reproduce are a mirror of taste from the early seventeenth century to the late eighteenth. The earliest example, from Westmorland (top), shows a flower design severely conventionalized, owing not so much to Italian influence as to the native mood for conventionalization at the time. The next (middle) from Yorkshire is an example of the naturalistic school of plasterers. Italy and Palladio may have ordained the limits within which the plasterer may be allowed free play, but within those limits his natural talent ran riot, and a close examination will reveal familiar English flower forms. Such naturalism (we learn that the prudent plaster flowers and fruit at Kilmainham Royal Hospital projected so much that "they could be swung like a pendulum") did not last long. The rococo influence appeared more in plaster than anywhere else in English architecture, and the curves and pirouettes, Chinese and Chippendale, gave the plasterer as much play as did fruit. But, with French influence at the end of the eighteenth century, the plasterer's art almost disappeared and we find paint taking the place of plaster and plaster laid on so flat as almost to give the effect of wash. Compare the conventionalization in the bottom illustration with the first. No native flowers appear on this characteristic example. The conventionalization is more of rococo decorative motives than of nature. From such simplicity it was only a short stride to the open spaces of Soane and the Regency.

If you want a history of architecture and furniture you can find it in this magnificent book. For walls and ceilings were once built to harmonize with textiles, cupboards and chairs.

ARCHIBALD OLDYS.

Top : Early conventionalization. Detail of plasterwork from BLEAZE HALL, Westmorland (c. 1610). *Middle* : The "Nationalistic" style. Detail of staircase hall, ACKLAM HALL, Yorks (c. 1683). *Bottom* : Detail of ceiling at the Board of Trade Offices, Whitehall Gardens, London.





ESSEX BRIDGE, STAFFS, over the river TRENT. This is probably a seventeenth century construction.
From *The Ancient Bridges of Mid & Eastern England*

Ancient Engineers

THE ANCIENT BRIDGES OF MID AND EASTERN ENGLAND. By E. Jervoise. London: The Architectural Press. Price 5s. 6d. net.

THIS delightful little book forms the third of a quartette of works dealing practically with all the old bridges of England and Wales, and it is as complete and fascinating as were its forerunners and as will doubtless be its successor. As its title indicates, it is concerned with the bridges of the Midlands and Eastern counties, and the letterpress together with the excellent illustrations show how rich this part of our land is in these picturesque and often historically interesting features. The book deals primarily with those bridges which may be threatened by road-making schemes; and the author's pious hope that none of them will be destroyed will be echoed by all who have an eye for the charm which man's handiwork in the past has added to the essential beauty of the countryside. For there are few things more attractive as component parts of a rural scene than these structures which it was once regarded as "a blessed thing" to build.

E. BERESFORD CHANCELLOR.

The Next Step

LE CONSERVATION DES MONUMENTS D'ART ET D'HISTOIRE. Publication de l'Institut de Coopération Intellectuelle.

WORLD Conferences are the prevailing fashion. The accepted inefficiency and inadequacy of the fashion has caused a merry mistrust of every sort of conference, and particularly international ones. Occasionally however, we come across real proof of the genuineness of international co-operation, which is the natural tendency for the intellectual world, but is apparently unnecessary in the political world. All nations are united on purely intellectual and aesthetic grounds; their differences, at any rate, do not often compel organized secrecy or legalized murder.

In 1921, at a Congress held in Paris, the question of the restoration and preservation of ancient works of art was discussed, but it was not till 1930 that L'Office International des Musées organized a congress of experts at Rome for this specific purpose. It was only possible then for attention to be given to painting and sculpture, and it was apparent that a special congress would have to be called to discuss and act upon the advice of experts with regard to architecture. This was done at Athens in 1931.

The publication of l'Institut de Coopération Intellectuelle contains a brief summary of the conclusions the Congress reached. The book itself is a series of chapters by authoritative representatives of many countries dealing with principles and theory, legislation, an inquiry into the aesthetic and other values of ancient monuments, exhaustive research in the technicalities of the elements of deterioration, and suitable methods of restoration. Actual examples are taken and described in detail; for instance, Antwerp Cathedral, the Pantheon at Rome, the Minoan palaces of Krete, and the buildings of King Zoser at Sakkara. The book is filled with exquisite illustrations and typographically is a beautiful production.

The general conclusions provided are definitely of the utmost importance, and every organization for the preservation of ancient buildings (or of rural England) would profit by a close consideration of them. The conference does, for instance, recommend the continual habitation of old buildings, and there is sound advice against the ignorant incursion of unplanned and haphazard building in their vicinity.

"La Conférence recommande de respecter, dans la construction des édifices le caractère et la physionomie des villes, surtout dans le voisinage des monuments anciens. Elle recommande surtout la suppression de toute publicité."

And yet it is the hardest thing in the world to prevent people putting up corrugated iron erections on the skyline at Stonehenge. The next step after recommendation is compulsion; and there is no reason why it shouldn't start in Trafalgar Square.

P. J. DUFF.

Scenarios

WRITING FOR THE FILMS. By L'Estrange Fawcett. London: Pitman. Price 3s. 6d. net.

ONLY the other day one of the best-known directors in England received a script for a silent movie with the subtitles labelled "SNIPPETS!"

And every week the film critic receives a number of letters asking him certain questions. In what form should a film story be presented? How should a film studio be approached? How much technical knowledge is required to write a film story? Should an actual scenario of the subject be attempted? Is there any demand for new material or do the studios rely entirely on their own writers for stories?

Mr. L'Estrange Fawcett's book provides set reply to the ambitious and set instruction for the industrious...

One of Mr. Fawcett's laws is that no author should write for the films until the film audience has been studied. But is it as easy as the experts think to study a film audience? Inside the cinema many of the apparently satisfied members of the audience are merely content with the Talking Picture in general, plus its escape mechanism, and the Super Cinema, plus its luxuries and comforts. Neither can box-office receipts make theory, they can only show that a certain bill of turns once lured an audience into the show. Next time, perhaps, the bill will have to be changed.

If films are to improve and to become part of modern experience, the first study that the film author should make is far more fundamental than that of the film audience, it is what the film audience should be.

Were the film scenarists to discover the receipt of spiritual FOOD, then, hungry, we would all be forced to return again and again to the box-office.

When we go abroad our eyes are occupied and we never give the movies a thought. Yet we take music and literature (both spiritual foods) with us. So a new generation of film scenarists could make it impossible for the traveller to forget enchanted hours in the dark.

Mr. Fawcett, though, is quite right in reminding film authors who would see their work on the screen that people do not speak of "this novel business" or of "this play business" but always of "this film business." Under present economic conditions, there is too much money sunk in the talkies for any gambles on art for its own sake.

With regard to the shape of the popular film, Mr. Fawcett condemns the episodic (Knoblock) treatment and urges the author to seek unity. The spectator wants to sink himself in the film, as he can sink himself in the good novel but never in a volume of short stories, so that he can let the rest of the world go hang. Which is, after all, the most practical way of pointing out that film and stage have, technically, little in common. And how much the play loses economically, as Mr. Fawcett himself humorously remarks, by not being able to show a ten foot square baby in action!

There is one very curious but stimulating idea which Mr. Fawcett casually introduces. He suggests that talking films might be accompanied by orchestras playing in the theatres. When the incidental music is recorded, often the rhythm of the film is disturbed. Also, there is always the danger of the spectator being irritated by the conscious thought, "Where does the music come from?"

OSWELL BLAKESTON.

F L O O R S



A floor inlaid rubber sheet in a London showroom in which the contour suggested by natural shadows is made the pattern of the floor and links the display shelf and table to the bookcase. A pattern of lines joins the floor to the fire hearth. The depth of tone in the shadow pattern is balanced by the dark mass of the arm-chair. *Architects:* Stanley Hall and Easton and Robertson. The floor was designed by Marion Dorn.

THE ARCHITECTURAL REVIEW
**DECORATION AND
 CRAFTSMANSHIP**
 SUPPLEMENT

October 1933



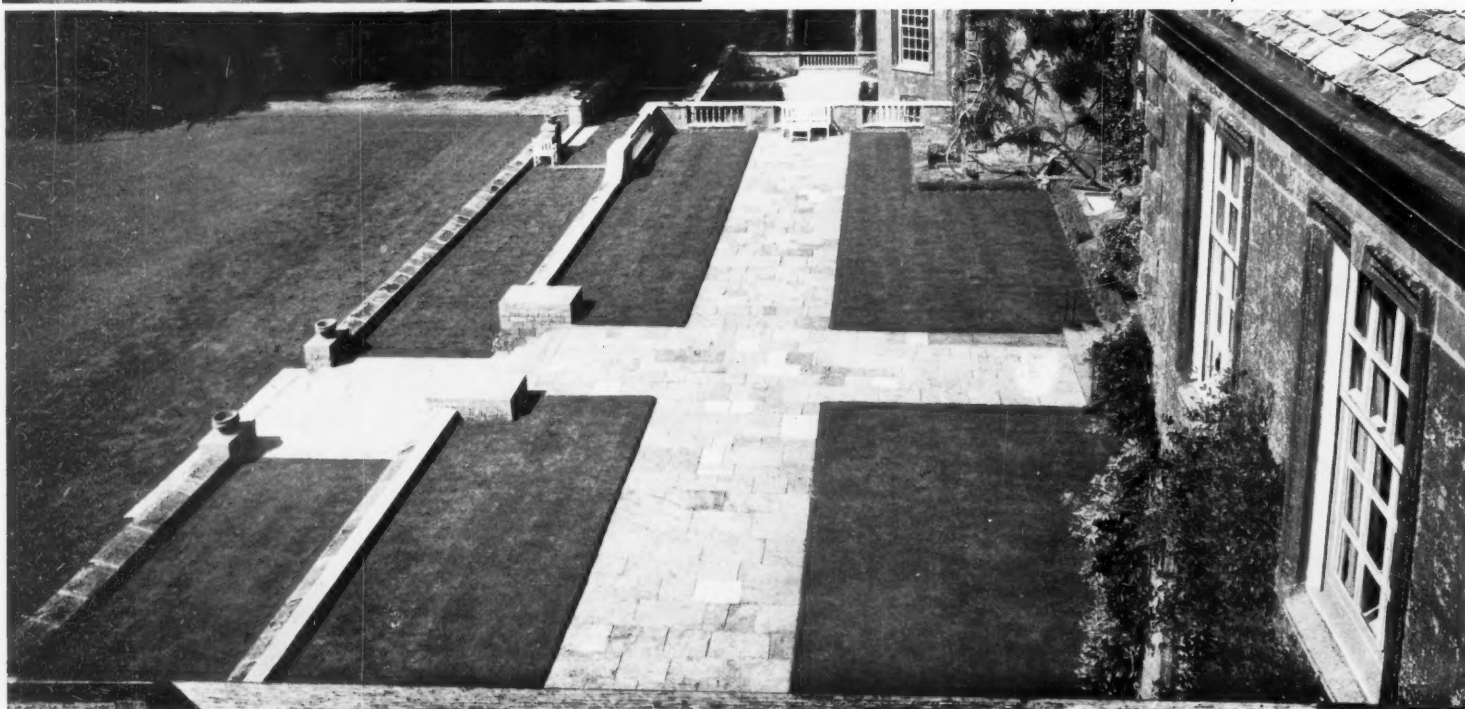
Nature's shadow pattern. A lawn with deep shadow and mass of trees linking into one picture the lawn and wall of an old sixteenth-century church. A view out of the old house at Boconnoc, Cornwall.



Top and centre. Nature's floors. Continuous texture left by currents on the sand beach. The top illustration shows the ripple aftermath of a rough sea, and the centre one the more regular and peaceful pattern of smooth water. The photographs are by Henri Storck.



Below. Nature's floor and man's aid. Stone paving in a garden in Oxfordshire where the pattern is made of house, terrace and lawn and gives continuity to the whole. Architect: P. E. Morley Horder.





A sitting room floor of sharply contrasted squares of black and white linoleum of the same simplicity of design and colour as the furniture, together with which it makes the complete pattern. Architect: HENDIRK SENDKER.

A Grammar of Groundwork

By Serge Chermayeff

Historical

IT appears necessary in reviewing flooring to emphasize immediately, in fact in the very title of the article itself, the position and function of the particular covering, finishing—what you will—which is our subject matter. Necessary, because such a review or selection of treatments for discussion may be confused by various interesting and ingenious qualities to be found in individual cases, which more often than not prove on closer examina-

tion merely exhibitionist or frankly frivolous.

The same deference and a sensibility to appropriateness which in Queen Anne's day kept bird and basket motifs on hangings where they could be contemplated, and off seats where they would be sat on, prevents one from readily accepting a decadence which followed in the years when architecture and all its dependent arts became pictorial.

Beginning with the great Louis XIV and finishing with the no less great Louis

Ritz, generations walked grinding the faces of a thousand poor angels and monkeys squirming uncomfortably between vegetables.

The bad habits of those periods still survive, although they are expressed in other motifs, and with the exception of an occasional sea-horse or so, revived for old times' sake, the pattern is the geometric, the "pseudo-modern," the "modernistic"—the heritage of fashion-mongers and Paris confectioners, who are today as insensible to Picasso as their patron ancestors and their imitators were to Boucher in their day.

The more recent menace to good taste of the Edwardian days, when good Anglo-French relationship produced a series of over-carpeted hotels, has found its equivalent in our neo-Georgian times in the Anglo-American film *entente*, with its picture palaces of uneducated modishness and commercialism where the majority of the masses today receive their artistic education, if not always consciously.

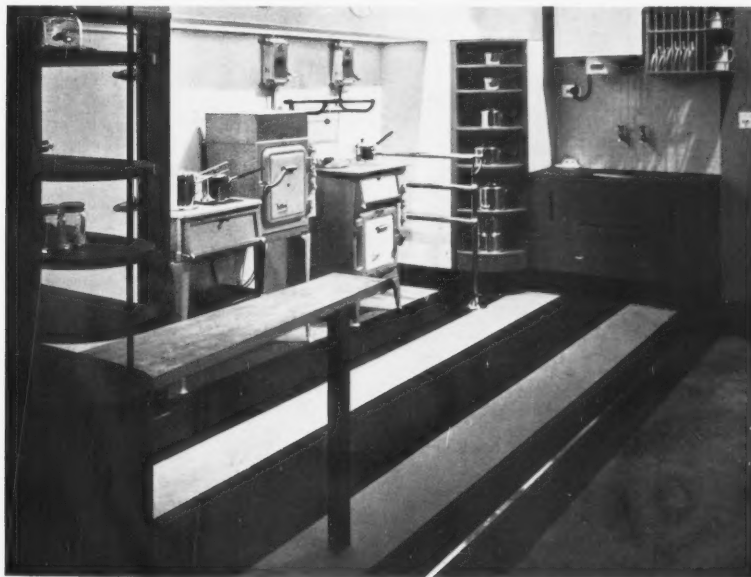
In the past, daintily-shod feet and long skirts were lifted over the animal and vegetable kingdom. Today we dip our crêpe soles into vacillating plains of contrasting colour and geometric form which remove the floor from the two-dimensional sphere and give it depth and interruptions of uncomfortable paddling.

Typical are some interesting mistakes made in the Cambridge Theatre, all of which have been copiously plagiarized and wrapped in specious argument. A complete theory has evolved which experience has since shown to have been based on false premises.

Modern architecture of steel and concrete of the best kind is demonstrating a true building quality last seen in the Gothic, and has once more given us a spacial conception of building and equipment as opposed to the Pictorial Period.

GENERAL

This article is intended to deal only with interior floorings, although properly, roofing, paving, terracing and other

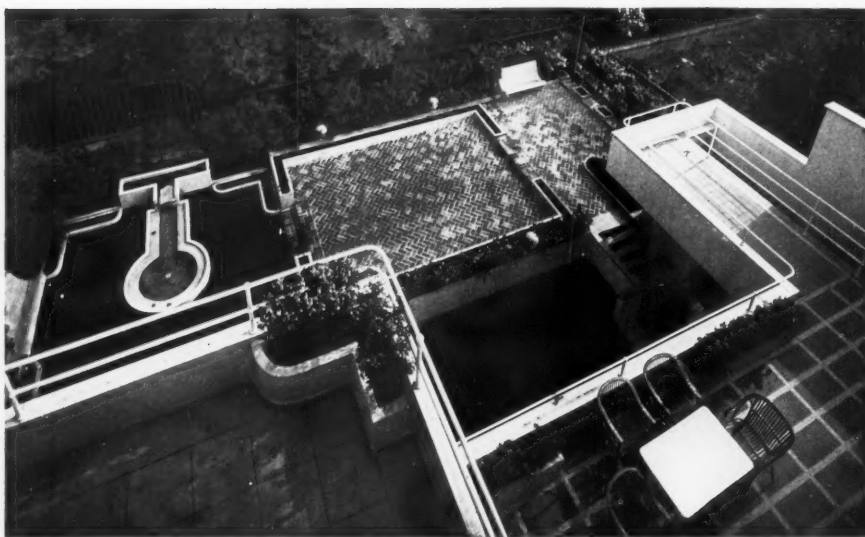


Strips of rubber of the same contrasting colours as those above, underlining the length and straight line arrangement of the kitchen fittings at the Kensington and Knightsbridge Electrical Company's showroom. Architect: RAYMOND McGRATH.

external coverings should be discussed at the same time. There is, however, enough scope in the interior flooring only, to which the main principle governing all flooring must apply: That the finished floor being a partial enclosure to a given space in one plane only, a two-dimensional area, and that any treatment applied to it must sustain this fact and must further never remove the floor of any portion or motif in it from the purely horizontal. That is to say, that any pattern of contrasting colour which creates the illusion of perspective is wrong, as for instance, alternating black and white diamond shapes which build optically a kind of "giants' causeway." Further, a floor must as a whole and in individual motif, remain static. Pattern that moves optically is wrong—e.g., a black spiral against a white background, or vice versa, rotates. A series of repeats tend, when the eye is moving, to create the illusion of whirlpools. A similarly treated motif of Greek keys of small scale will cause an apparent vibration of the floor and will, in some cases, actually cause giddiness and nausea.

PARTICULAR

In order to develop this analysis and to relate it more easily to the various selected examples illustrated, I have found it advisable to make some quite arbitrary classifications. I do not for a moment claim that these cover the whole scope of the subject or that they can possibly fit each particular case or problem, but I believe that some principles may emerge which will be at least useful as



A villa at Neuilly, Paris, where the architect has employed various sized units and colours for the different terraces. The pattern is calculated to be viewed from the outside living-room above. Architect: GABRIEL GUÉVREKIAN.

a method for approaching most flooring problems.

Purpose, Position and Quality

PURPOSE

The character of the enclosed space is largely affected by the purpose for which it is to be used. Obvious examples occur immediately:

The festive, that is, the gay or the stimulating.

The sacred, which can be interpreted variously to achieve effects

of solemnity through scale or a suggestion of eternal stability and restfulness through readily recognized consideration of materials used.

The "particular purpose" room, which includes the domestic, need not, I think, be particularly mentioned here as various examples, good and bad, are making more and more frequent appearances in the non-technical press.

POSITION

Physical and psychological factors enter equally into consideration of treatment of a space in relation to its position.

The physical considerations are simple. To illustrate one or two:

Lightness of colour, to reflect and intensify light where there is a lack.

A silent tread where silence is desirable.

Easy washability and durability in areas where much traffic passes and carries external dirt into the building, as in a Hall.

The psychological may be conveniently illustrated by the Hall again. It is the first impression which remains throughout your stay. It is the last glimpse on leaving, which may determine the subsequent associations with that particular building and its functions.

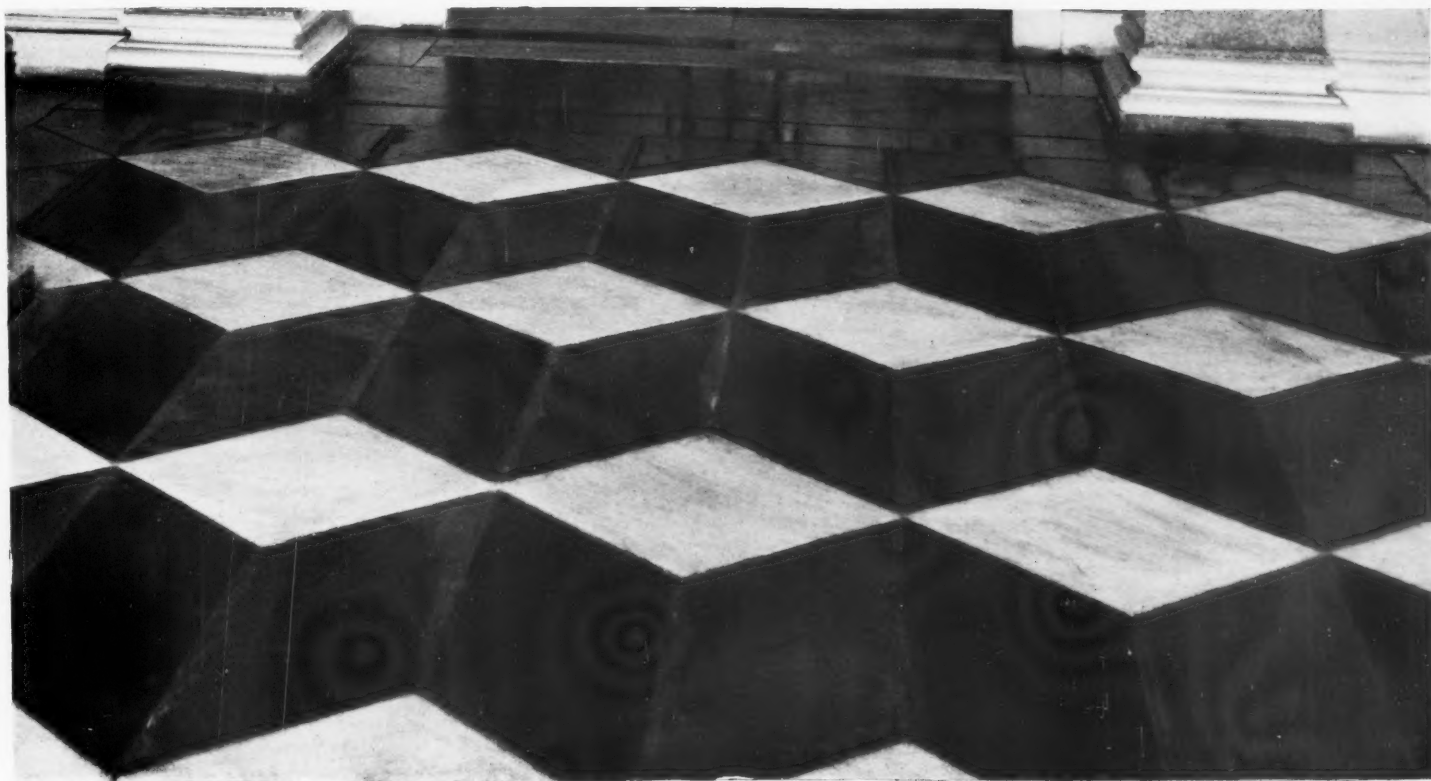
A solicitor's room is advantageously close-carpeted and sound absorbing. It induces confidence, particularly if segregated and private.

Where a visitor is calculated to be placed at a disadvantage I strongly recommend a large expanse of hard flooring. A sense of inferiority is easily acquired in a very short walk when every step rings out disturbingly in an apparently fully exposed location.

[Continued on page 153]



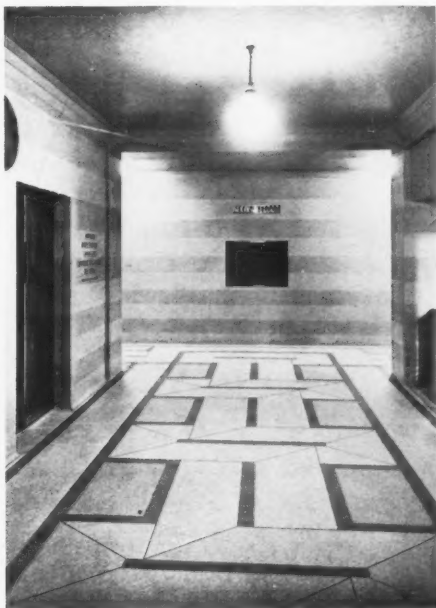
Travertine paved steps and walk to a small house in Berlin. Both approach and the house itself have gained in scale through continuity of treatment in the outdoor pavement and flooring on the ground floor of the house being of the same material and laid in the same units. Architect: ERIC MENDELSON.



A black and white eighteenth century marble floor of diamond shape units. Compare the restlessness and unevenness of this pattern with the squares on the left. The perspective effect is one of climbing an irregular staircase. The floor is not in a horizontal plane.



Mosaic floor in Messrs. Easiwork's shop in Tottenham Court Road, London, forming the principal feature of the entrance. *Architect:* Raymond McGrath. *Craftsmen:* Carter and Company.



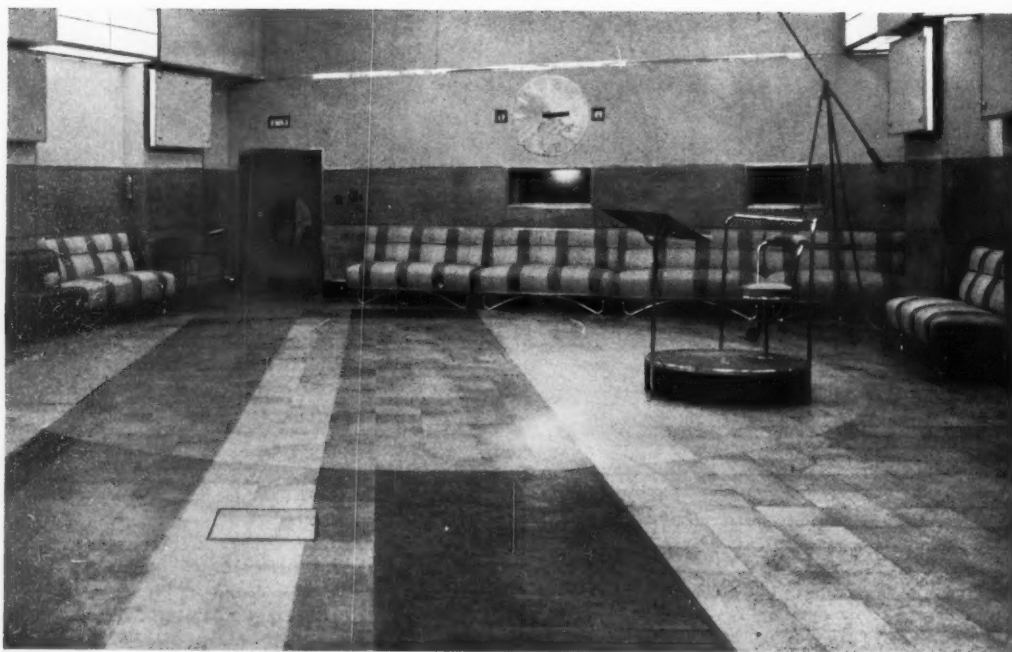
A composite pattern of terrazzo neartone in the main hall of the offices at Hay's Wharf, London Bridge. *Architect:* H. S. Goodhart-Rendel. *Craftsmen:* Art Pavements and Decorations.



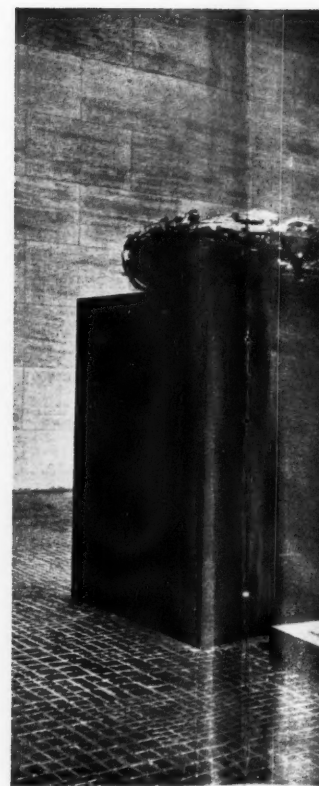
A flooring of brown and buff rubber laid in two foot unit tiles forming a neutral background to the ever-changing display of a modern store. *Craftsmen:* St. Helens Cable and Rubber Company.



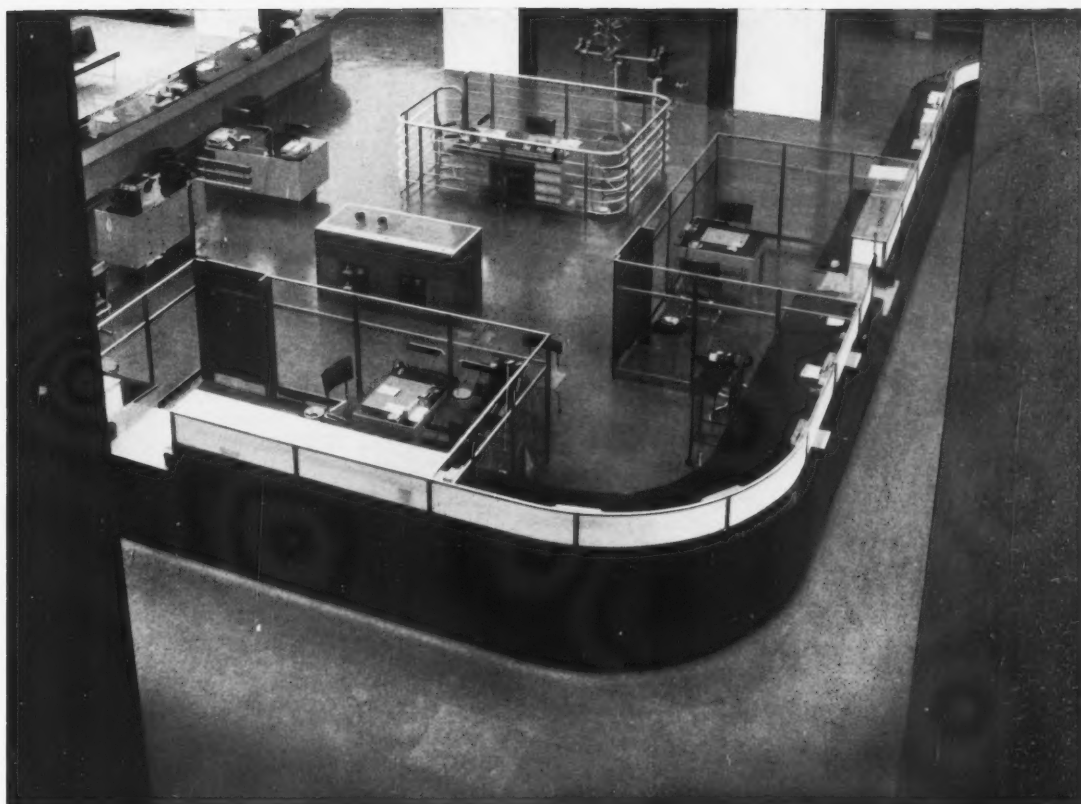
Lounge hall in the new hotel, Latitude 43, showing the architect's division of the passage way from the rest space. The former is a washable composition flooring of deep tone stressing its passage function and forming a contrast to the carpet suggestive of ease and warmth around the seats. Architect: G. H. Pingusson.



Cork flooring of tongued and grooved tiles in four different shades in one of the studios at Broadcasting House, London. The pattern marks the orchestral grouping and makes visual access in a completely asymmetrical room. Architect: Serge Chermayeff. Craftsman (for the cork tiles): John Elbo.



The grave of the Unknown Warrior, a mixture of small tiles giving a sense of continuity and solidity capable of carrying the weight of the clad walls. Architect: Henriek Foss.



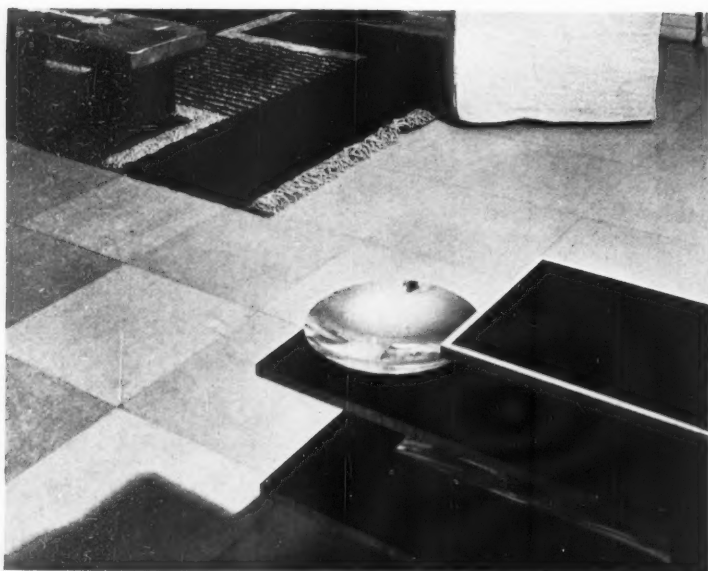
A sea of uniform flooring in which the necessary equipment of the banking office in Philadelphia makes its own pattern suggestive of hygiene and efficiency and acting as a light reflector. Architects: Howe and Lescaze.



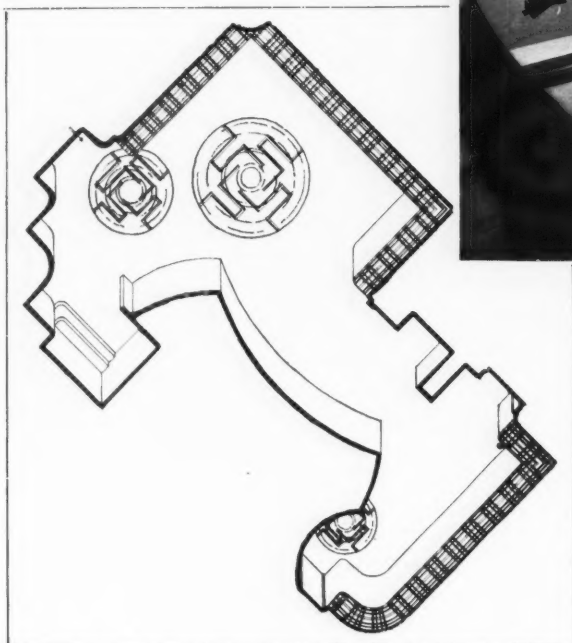
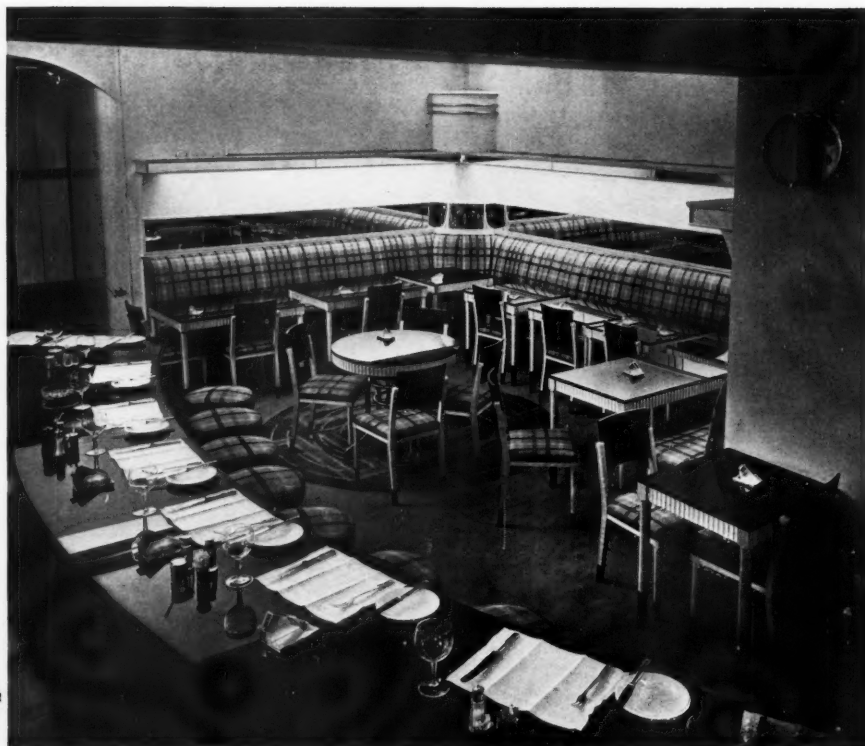
The Unknown Warrior, Berlin. The floor is a tiles giving a coarse texture suggestive of earth able of carrying the granite tomb and marble itect: Heinrich Tessenow.



View of a terrace showing how simplicity of flooring treatment gives continuity and unity to room, terrace and lawn. Architect: George Walton.



Top, left. A floor at Fortnum and Mason's in natural birch ply lightly waxed, laid with small squares and giving a character of great elegance and lightness and forming an admirable groundwork for various displays. *Craftsmen* for the floor: The wood blocks were made by Venesta and laid by the Metropolitan Flooring Company. The rug in brown and beige was designed by Marion Dorn. *Top, right.* A hand-made carpet in Messrs. Lund Humphreys' London showroom where the pattern is made the junction between floor and wall and is suggestive of shadows given by the natural source of light. The pattern is obtained through both colour and texture contrasts. *Designer:* Marion Dorn.



Centre. The new Buttery at the Berkeley Hotel, London, illustrating the group-creating effect of the hand-made rug sewn into the close-covered carpet. The designer's drawing, *bottom*, shows the arrangement of the whole restaurant. *Architects:* Stanley Hall and Easton and Robertson. The rugs were designed by Marion Dorn.

QUALITY

As another means of making an impression on the mind as opposed to size or over-richness.

Quality of design, material, finish—that is to say, first rate conception, materials and execution.

Governing factors in selection :

- (a) Cost.
- (b) Durability.
- (c) Hygiene—that is to say, washability and non-absorption.
- (d) Damp-resisting qualities. Non absorption.
- (e) Insulation, that is, against heat, against sound.
- (f) Noiselessness—that is, softness, not producing noise when in use, and absorption—that is, noise absorption and not reflection.
- (g) Feel—that is, smooth, possibly dangerous, relatively rough and soft, safe.

Design

The design itself must be related to the area or room ; be in harmony with it and appropriate to it.

Governing factors :

- (a) Quality.
- (b) Scale.

A room, large or small, may have a large scale and may be further coupled with an important function. The motif of floor design, if it is to be quite legible as such, grows in importance within certain limits in proportion with that scale. The reduction in scale of the individual unit will eventually lead to a point where the unit as such is no longer legible, but where the combined repetitive effect is appreciated as texture—that is to say, a textural pattern.

- (c) Texture and colour.
- (d) Movement.

This last point is intended to cover a problem which every designer is faced with in a room that has a dynamic shape—that is, other than circular or square on plan, or cube in volume, where the length of the room is readily appreciated from any one entrance, and gives that room a definite direction or movement. In an oblong shaped room an oblong unit is good, but in order to conform with requirements of "wholeness" the floor should be subdivided into units bearing a direct relationship in size to legible features or proportions of the room itself,

and must be so placed as to move in the same direction as the room if this movement is to be emphasized.

Exceptions :

Where an optical foreshortening is required for an exceptionally long floor space, when an oblong unit will achieve this placed across the movement of the room. Where a static impression is required it is best obtained with the square.

The designer can determine the effect desired through the choice of treatments, which can be best described as falling under three headings :

- (a) The unit lay-out.
- (b) The textural.
- (c) The close-cover or all-over treatment.

Material

A good working classification can be made under the above headings, as follows :

FOR LARGE AREAS

"Large Unit" Floors :

- (a) Marble slabs.
- (b) Natural and artificial stone slabs.
- (c) Granolithics and cements, with expansion joints.
- (d) Composition floors, with expansion joints.



A rubber floor with inlaid pattern marking the lay-out and function of the workroom—the entrance, passage and working space. Architects: STANLEY HALL AND EASTON AND ROBERTSON.



An inlaid rubber floor of abstract pattern, the circular motive of the floor being the principal focal point in the room around which the furniture is grouped. Architect: T. S. TAIT.

(e) Wide planking.
(f) Plywood sheets.
FOR MEDIUM AREAS
The Textural "Small Unit" :

- (a) Large tiles.
- (b) Brick paving.
- (c) Cork tiles.
- (d) Rubber tiles.
- (e) Crushed leather tile.
- (f) Narrow planking.
- (g) Parquet.
- (h) Wood blocks.

Close Textural :

- (a) Small tiles.
- (b) Mosaics.
- (c) Granular compositions, as, for example, terrazzo.

SMALL AREA AND DOMESTIC WORK

Close Covering :

- (a) Jointless composition.
- (b) Jointless asphalt.
- (c) Sheet rubber.
- (d) Sheet linoleum and linoleum-like products.
- (e) Carpets and felts.

Constructional

All the above can be once more re-classified in their constructional differences, that is, in method of application :

- (a) The monolithic floor.
- (b) The built-up floor requiring battens or other form of fixing.
- (c) The sheet floor held down to all intents and purposes by its own weight and consistency.

Continuity

The choice of flooring should, after individual considerations have been satisfied, be governed by the sense of constructional unity which can be determined by material, colour and texture and treatment. The maximum continuity in a given structure wherever adjoining rooms or areas are not definitely closed off almost permanently one from the other, is invariably desirable. There is a psychological discomfort in crossing a threshold from dark to light, from rough to smooth, from hard to soft. It is a mental hurdle, and has in addition the

obvious disadvantage, in the case of limited space, of cutting it up into small particles and losing the sense of scale which might otherwise have been achieved and visually, in fact, of reducing it further in size.

All floor treatments, in my opinion, gain and suffer in proportion with the combination or absence of one or more of these common factors within the building.

Colour

The most successful treatment of floors is, in my opinion, that which is guided by a principle "from the ground up." That is to say, a sense of natural balance is maintained and the floor appears to carry, structurally, as it in fact does more often than not, the walls and other parts of the super-structure upon it, as the earth carries the building itself. The floor should be a base, from which the walls grow up. For that reason the floor colour should be preferably :

- (a) Neutral, or,
- (b) Natural colour—that is, of primary materials undyed and unpigmented, colour complementaries being found for the room in other things.
- (c) Preferably dark, that is to say, the darkest of equivalent structural planes in the room.

Exceptions :

When the floor is required as a light reflector or for the purposes of meticulous cleanliness, as for instance, in hospitals, where the least particle of dirt must be immediately visible.

The Decorative and Particular

Under this heading I should definitely classify the rug, a legible entity lying upon another floor. Particularly for :

- (a) Additional Insulation—in a sitting place.
- (b) Feel—soft bedside rug for the bare feet.
- (c) Focal point, as for instance a method of drawing together into one group different objects by direct

contact with each, or as an attraction to the eye through texture of colour.

(d) Correction and balance, as for instance, compensation for lack of defined form or colour.

(e) The purely decorative, no other colour complementaries being available.

Technically, rug design, as indeed all the other classifications mentioned, might form the subject for a book by a specialist, and is here best dealt with very shortly. It would be difficult to discuss it beyond the better known technical means of expressing an individual idea.

A rug possesses the qualities of richness or poverty. That is to say, a soft cut pile and a hard uncut weave.

The pile can be short or long, loose or close.

The close pile ensures the fine definition of a linear or area colour pattern. It is necessary for a faithful rendering of the original drawing. It is for this reason that precise geometric designs of a certain type can only be successfully rendered in an expensive medium.

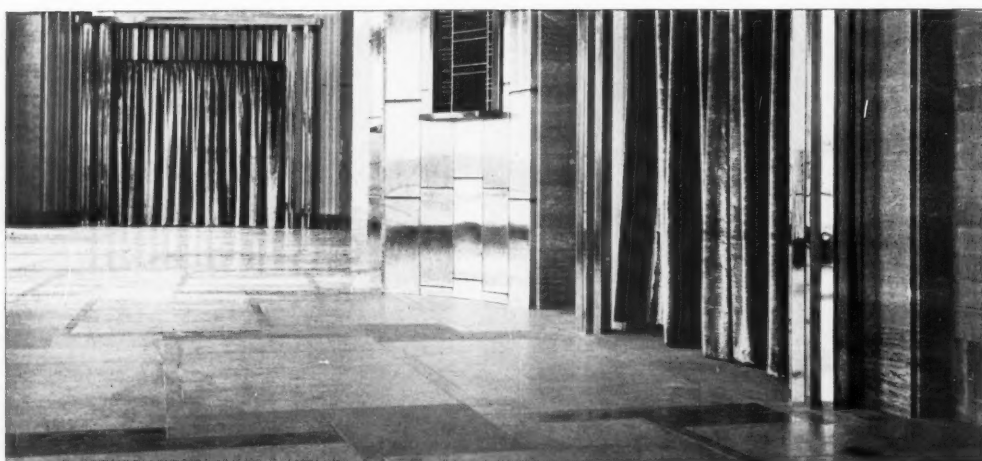
The different treatment of texture contrasts, as for example, short pile against long, in the same rug, is an obvious variation in surface design.

Conclusion

On re-reading the article I see that there are several particular cases which do not come under any of the headings or fall under all.

It appears obvious and unavoidable that many other flooring problems of importance are omitted.

There is an infinity of particular exceptions and technical complications which can only be examined individually, but I believe as a general principle that we have now reached a stage of development in building where the floor, among other things, is appreciated structurally. As our familiarity with new building methods and materials increases, flooring demands the same breadth, simplicity and sanity of treatment which the structures themselves are rapidly acquiring.



Stone floor of harmonizing tones and irregular units in the main foyer of the new Shakespeare Memorial Theatre. Various colours of wall materials and hangings are reflected in the tones and materials selected for the flooring. Architect: ELIZABETH SCOTT.

ANTHOLOGY

THE INDUSTRIAL NORTH

STEAM, AT SHEFFIELD

I.

Well gaze thou on the hills, and hedge-side flowers !
But blind old Andrew will with me repair
To yonder massive pile, where useful powers,
Toiling unconsciously, aloud declare
That man, too, and his works, are grand and fair.
Son of the far-famed self-taught engineer,
Whose deeds where marvels in the bygone days !
Ill it becomes thee, with ungrateful sneer,
The trade-fed town and townsmen to dispraise.
Why rail at Traffic's wheels, and crowded ways ?
Trade makes thee rich ; then, William, murmur not
Though Trades black vapours ever round thee rise.
Trade makes thee sage ; lo, thou readst Locke and
Scott !

While the poor rustic beast-like lives and dies ,
Blind to the page of priceless mysteries !
" Fair is the bow that spans the shower," thou say'st,
" But all unlovely, as an useless skull,
Is man's black workshop in the streeted waste."
And can the city's smoke be worse than dull
If Martin* found it more than beautiful ?
Did he, did Martin steal immortal hues
From London's cloud, or Carron's gloomy glare—
Light-darken'd shadows, such as Milton's muse
Cast o'er th' Eternal—and shalt thou despair
To find, where man is found, the grand and fair ?
Canst thou love Nature, and not love the sound
Of cheerful labour ? He who loathes the crew
To whose hard hands the toiling oar is bound,
Is dark of spirit, bilious as his hue,
And bread-tax-dy'd in tory lust's true blue.

II.

Come, blind old Andrew Turner ! link in mine
Thy time-tried arm, and cross the town with me ;
For there are wonders mightier far than thine ;
Watt ! and his million-feeding enginry !
Steam-miracles of demi-deity !
Thou canst not see, unnumber'd chimneys o'er,

* John Martin, artist (1789-1854).

From chimneys tall the smoky cloud aspire ;
But thou canst hear the unwearied crash and roar
Of iron powers, that, urg'd by restless fire,
Toil ceaseless, day and night, yet never tire,
Or say to greedy man, " Thou dost amiss."

III.

Oh, there is glorious harmony in this
Tempestuous music of the giant, Steam,
Commingling growl and roar, and stamp and hiss,
With flame and darkness ! Like a Cyclop's dream,
It stuns our wondering souls, that start and scream
With joy and terror ; while, like gold on snow
Is morning's beam on Andrew's hoary hair !
Like gold on pearl is morning on his brow !
His hat is in his hand, his head is bare ;
And, rolling wide his sightless eyes, he stands
Before this metal god, that yet shall chase
The tyrant idols of remotest lands,
Preach science to the desert, and efface
The barren curse from every pathless place
Where virtues have not yet atoned for crimes.
He loves the thunder of machinery !
It is beneficent thunder, though, at times,
Like heav'n's red bolt, it lightens fatally.
Poor blind old man ! what would he give to see
This bloodless Waterloo ! this hell of wheels !
This dreadful speed, that seems to sleep and snore,
And dream of earthquake ! In his brain he feels
The mighty arm of mist, that shakes the shore
Along the throng'd canal, in ceaseless roar
Urging the heavy forge, the clanking mill,
The rapid tilt, and screaming, sparkling stone.
Is this the spot where stoop'd the ash-crown'd hill
To meet the vale, when bee-lov'd banks, o'ergrown
With broom and woodbine, heard the cushat lone
Coo for her absent love ? Oh, ne'er again
Will Andrew pluck the freckled foxglove here !
How like a monster, with a league-long mane,
Or Titan's rocket, in its high career,
Towers the dense smoke ! The falcon, wheeling near,
Turns, and the angry crow seeks purer skies.

EBENEZER ELLIOTT (1781-1849)

MARGINALIA

A SPECIAL ISSUE

The November number of THE ARCHITECTURAL REVIEW will be devoted entirely to the discussion and illustration of recent developments in the use of ELECTRICITY in this country. It will also explore the possibilities for the future of Architecture, Industry and Domestic Life which the recent completion

of the "Grid" system foreshadows. Amongst the articles to be included in this issue, to be published at the usual price of 2s. 6d., will be the following :—

FOREWORD. By the Editor. THE "GRID." By Hugh Quigley. REGIONAL PLANNING AND POWER. By Alwyn R. Dent. A NEW INDUSTRIAL PLAN. By A. G. H. Dent. ELECTRICITY AND HOUSING. By Ismay Goldie. THE ARCHITECTURE OF ELECTRICITY. By Sinclair Wood and John Gloag. ELECTRICITY AND ARCHITECTURAL PRACTICE.

By Walter Goodesmith. THE ELECTRICITY SHOP. By the Editor.

* * *

Junius, who is at present abroad, will resume his monthly article, *A Free Commentary*, in the December issue.

ZERO HOUR

South Africa has leaped forward with a startling and beautifully produced paper called "Zero Hour," containing illustrations of the work of Gropius and le Corbusier, as well as of an interesting house in Pretoria by

MARGINALIA

Gordon McIntosh. This is a final answer to those who imagine that Colonial architecture is in a more Neo-Renaissance state than it is in England. It describes itself as a "propagandist manifesto" for bringing into closer relationship "the public consciousness of architecture in its many manifestations and the achievements of our active contemporaries in this field." Let Australia, Canada and New Zealand do likewise.

PLACES OF WORSHIP

"The old boxes have been taken away and those near the stage are now covered with an architectural framework reminiscent of cathedral windows."

Account of The Empire, Cardiff, in *To-day's Cinema*.

"The altar is of English oak and has a pleasing and unusual design based on a combination of the oriental and modern schools."

Catholic Herald.



This furniture for a dining room, designed by Maurice Adams and hand-made in Australian walnut, is for sale at £50 and will be shown at the Modern Room Exhibition. The chairs are upholstered in a vivid hand-woven check material.

THE MODERN ROOM EXHIBITION

Those whose appreciation of fine craftsmanship is greater than their means are advised to visit the Modern Room Exhibition which will be opened at the Adams Gallery, 6, Granville Place, Orchard Street, W.1, on October 17 under the patronage of Lord Gorell and others distinguished for their encouragement of the best in British design.

The exhibition, consisting of a series of complete modern rooms, will be staged round a new class of furniture, hand-made to designs by Mr. Maurice Adams, for sale at prices as low as £50 per room.

The exhibits will include fabrics, carpets, glass, pottery, lighting, fittings, etc., by British craftsmen and pictures and sculpture by distinguished artists.

The exhibition will be open for one month and admission will be free.

The Architectural Review, October 1933.

THE RURAL NORTH

Some extracts from "WIRRAL COUNTRYSIDE—A Cautionary Guide." Published by the Liverpool University Press, price 6d.



Litter. "This other Eden"—*Richard II.*



Formerly a beautiful site—



Now ruined by bad development.

THE RURAL NORTH (CONTINUED)



Fancy Dress

A SEEMLY AND AN UNSEEMLY END



The True Christian Spirit—



?

MARGINALIA

WITHOUT ANY VISIBLE MEANS OF SUPPORT

A well-known architect, a pioneer in domestic architecture, said recently in commenting on THE ARCHITECTURAL REVIEW, "I am tired of seeing these houses built without any visible means of support. Somehow they seem to be so like the people who occupy them."

CORRESPONDENCE

The Euston Portico

The Editor,
THE ARCHITECTURAL REVIEW.

SIR,—I have read the article by Mr. Betjeman in your last issue on the Doric portico at Euston with the greatest interest, and am in full accord with his plea for its re-erection on another site.

In this connection it occurs to me that probably no better or more appropriate use could be made for it than to rebuild it in front of the new London University buildings, which are now in course of construction at Bloomsbury.

The portico would fittingly augment those attributes of dignity and permanence which are inherent in Mr. Holden's design, and enforce upon all its academic character.

Your obedient servant,
FREDERICK CHATTERTON.

The Carillon

The Editor,
THE ARCHITECTURAL REVIEW.

SIR,—May I draw your attention to the fact that on page 104 of the September number of the ARCHITECTURAL REVIEW, you have attributed the authorship of *The Carillon* to Mr. H. A. Fricker and Mr. L. E. Shore. Actually the book is by Mr. Percival Price, Carillonneur for the Dominion Government at the Peace Tower, Houses of Parliament, Ottawa, Canada. Mr. Fricker contributed the Preface and Mr. Shore the drawings.

I shall be grateful if you will draw attention to this mistake in the next number of your REVIEW.

Your obedient servant,
HUBERT J. FOSS,
Musical Editor, Oxford University Press.

GOOD NEWS FOR THE "MODERNE"-ISTS

"These modern plans seem to indicate that the coming generation of architects in this country has got away from that arrogant simplicity which at one time threatened to run to an extreme.

"In the present drawings the tendency is for more simplicity combined with slight ornamentation."

Lincolnshire Echo.

ILLUSTRATIONS

The photograph of Euston Great Arch in detail (Plate iv) which appeared in the September issue, was taken by Mr. Maurice Beck.

The Editor wishes to thank the *Yorkshire Post* and *Leeds Mercury* for their permission to reproduce the illustrations on pages 129, 131 (top right, bottom left and middle) and 133 of the present issue. He is also indebted to Mr. Charles Pickard.

The photograph of "The Hopfield" near Wrotham, Kent, illustrated on page 125 of this issue, is reproduced by the kind permission of Mr. Bascden Butt.

THE "CASE METHOD"

The Department of Business Administration of the London School of Economics provides an example of the art of relating education to contemporary conditions in commerce and industry. The importance of the work undertaken by this Department may be assessed when its methods are examined. It exists for the purpose of training the business executives of the future, and the subjects which form the main course of training include marketing, retail management and sales management, finance, production, and statistics, accounting and personal management as instruments of executive control. What is known as the "case method" is employed, which means that actual business problems are supplied by over a hundred firms who collaborate with the Department. These problems are studied, and the realities of commercial and industrial practice are observed during visits to factories, shops and offices, and illuminated by discussions opened by business men. Here is an able effort to make business training fruitful by contact with practical affairs; and this effort might well be made by educational organizations concerned with other branches of training. It is true that there are spasmodic contacts made by art and technical schools with industry; but no school concerned with training designers should be satisfied with such tentative gestures. The "case method" has possibilities that might well engage the attention of every school of design; for industry and commerce are likely to be the greatest patrons of design in the future, and, if the industrial and commercial ad-



The old Commercial tradition of Leeds, illustrated here, makes an interesting comparison with modern commercial Leeds illustrated on pages 136 and 137 of this issue. This photograph was taken many years ago where Queen's Arcade now stands.

ministrators of the next generation have graduated in the Department of Business Administration at the London School of Economics, their patronage may conceivably be enlightened because they have been trained to think about problems instead of burying them under prejudices.

GREATER BRIGHTON

Few sights are more depressing than the additions to Brighton. The old Steine is having red brick and Portland stone buildings introduced into it, in the all too familiar Neo-Renaissance manner. From Hove to the Clock Tower, commerce has burst out with repulsive façadism in Portland Stone.

No authority seems to control the magnificent terraces and crescents either side of Sussex Square. Owners are allowed individual taste in painting the stucco and one house is blue, the next black, the next red, the next white, so that the architectural effect of the whole is destroyed.

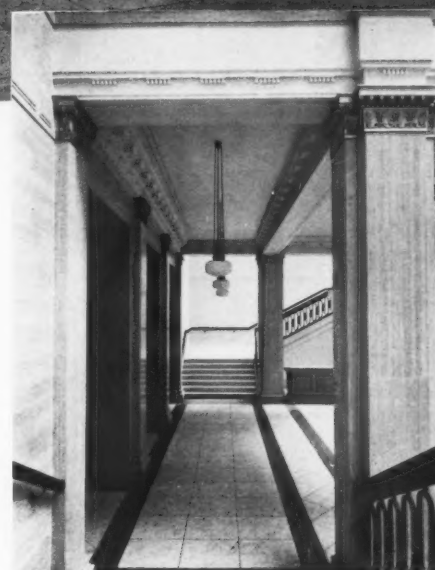
There is only one new building in Brighton which shows any respect for the Regency and late Georgian tradition of Brighton and that is the extension to the Old Ship Hotel on the front. It is a sensible low-windowed building which compares favourably with everything around it and reminds one that Brighton front was once, everywhere, as good as it is now in parts of Kemp Town and Hove.



The Walker Art Gallery, Liverpool. Architects : Briggs and Thornely, FF.R.I.B.A.

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Thermal Storage for Cooking

By Christian Barman

DURING the last two or three years an entirely new kind of cooking appliance has made its appearance in England. It is known as the thermal storage or stored heat cooker. Although cookers of this kind (and one, the pioneer variety, in particular) are now installed in thousands of households, remarkably little is known by the general public about the principles on which they are constructed, or about the fascinating mechanism by which they work.

The idea of storing up heat is not a new one. The hot water bottle is probably the best known example. Primitive man when he cooked his food in the ashes of a bonfire, made use of stored heat. Wood and coal-fired baking ovens used to bake our bread with heat stored up in the oven walls after the fire had been raked out. These older applications of stored heat cooking came about because people had not yet discovered how to apply the heat direct to the food. They disappeared altogether once the modern cooking range made it possible to place the heat-producing unit next to the food and to cook by direct transmission.

THE cooking of food requires heat over short periods only; such a short period of maximum demand is what the engineer describes as a "peak." Any kind

of "peak" is a troublesome thing. It is, for example, both difficult and expensive instantly to generate enough heat to fill a bath with hot water. Hence the hot water

storage tank, which enables you to withdraw in two or three minutes the heat that has been slowly produced and saved up during as many hours. But the sudden heat demand for cooking is still greater than the heat demand for a bath. The peaks for cooking are even stronger. It is the object of stored heat cooking systems to eliminate the peaks. It is like a railway track that eliminates the gradients of the natural country by means of cuttings and embankments. On a level track a smaller engine can haul your load. The stored heat cooker too works on a level track, and consequently a smaller engine is needed.

It is a very interesting fact that stored heat cooking should have been taken up simultaneously from the electrical side and from the solid fuel side. It is interesting because the results obtained, though in both cases they tend to greater economy, are really startlingly different. It is the object of the present article to examine some of these results. Briefly, it may be said that whether electricity or solid fuel is used, cooking with stored heat will level out your consumption of fuel. But here the similarity ends. The electric stored heat cooker will burn about twice as much electricity as an ordinary electric cooker, whereas the stored heat cooker for solid fuel will burn only a fraction of the fuel needed for an ordinary cooking range. The point about the coke-fired stored heat cooker is that it represents an enormous saving on the fuel bill. The point about the electric stored heat cooker is not that it



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saves fuel, but that it reduces considerably the cost of the machinery needed to produce the fuel and to supply it to the consumer.

THE ELECTRIC COOKER

A very instructive account of electrical stored heat cookers has been published by Messrs. O. W. Humphreys and E. C. Walton, of the Research Laboratories of the General Electric Company. This kind of cooker, they say, "inevitably calls for the consumption of a considerably greater quantity of heat energy than is required for performing the same operations by direct means. . . . Storage cookers do not necessarily show an economic gain over cookers of the ordinary type; in fact, they should not be considered as being primarily intended to compete with such cookers. Their value lies rather in the fact that they enable electric cooking to be introduced into areas in which, for one reason or another, it is either impossible for cookers of the standard type to be used at all, or if they can be used, the rate which has to be charged for energy is so high as to be practically prohibitive." Why should it be necessary to charge rates that are "practically prohibitive"? The reason is to be found in the "peaks" that were mentioned just now. The size of a generating plant is not determined by the average demand: it is determined by the maximum demand that can occur; and we are told that this maximum under present-day conditions is between three

and four times the average demand during the 24 hours. Suppose an electrical supply company has an average demand requiring £100,000 worth of generators, transformers, cables and other similar equipment. What it finds is that at certain brief moments during the day, there occur exceptional peak demands requiring between £300,000 and £400,000 worth of equipment. It cannot refuse to meet the peak demand, and so it finds itself saddled with expensive machinery and plant working at 25 per cent. to 30 per cent. of its capacity during the greater part of the day.

THE PROBLEM OF THE "PEAKS"

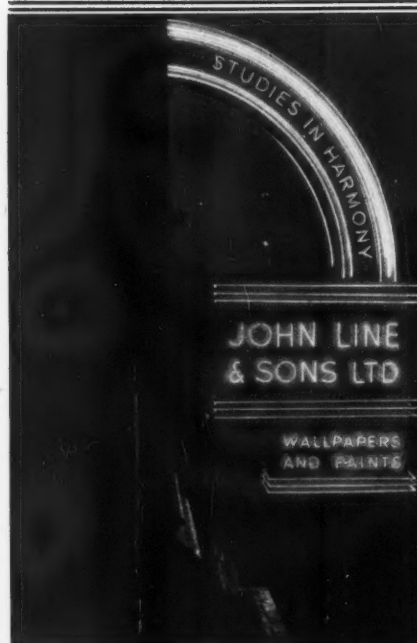
There is a symbol that is less often seen on architectural drawings today than it used to be in the past, though the thing it stands for is as widely used as ever: it is the symbol W.W.P. Long ago the water supply companies realized that if everybody in the town were to fill their baths and flush their w.c. pans from the "main" at one and the same moment, the water distributing machinery would cease to work. And so they insisted on individual storage tanks for each consumer. The individual cistern was the response to the "peak" danger. What the electrical industry today is doing is to apply the principle of the Water Waste Preventer to electricity. It only requires a moment's reflection to make us realize that without this device, electricity can never be made generally available for all its possible uses. "In an area in which

there is a considerable industrial load, the highest peak will probably occur in the early evening when the industrial and lighting loads overlap. . . . In an area in which the supply is mainly domestic and a considerable number of cookers are connected, these may themselves cause the peak demand." With the spread of electrical cooking the excess of peak over average demand is bound to increase unless the storage principle is universally applied. That is why already a number of supply companies find it thoroughly economic to reduce their charge per unit for storage cookers to a point where the cost of using such cookers, despite the greatly increased consumption, is no higher than with the ordinary non-storage type.

COAL-BURNING TYPES

What is the outstanding fact about an ordinary electric cooker? Its capacity for being switched on and off. It is just because of the cumulative effect of many switchings on and off that the electric stored heat cooker had to be invented. What is the outstanding fact about a solid fuel cooking range? Precisely its lack of this capacity for being switched on and off. And it is because of the resulting wastage that the solid fuel storage cooker had to be invented. That, in a word, is the difference in purpose between these two types. The ordinary coal range is like a motor car, the engine of which has to remain "ticking over" when the car is parked. Or it is like a tap that has to be

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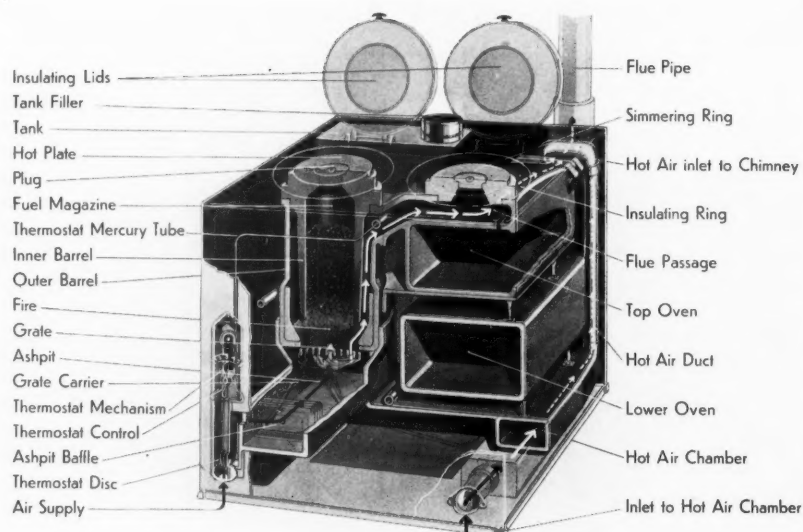
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left running because if it was shut off it could only be turned on again by sending for the plumber. To set a solid fuel fire going properly is a job that no one would care to tackle three times a day. Once is enough; and so from morning till night the fire is kept going simply in order to make continued relighting unnecessary. It is the pilot-light that waits to be turned "full on" the moment the heat is wanted.

Unfortunately, it is an expensive pilot-light. By a curious coincidence the relative cost of the coal pilot-light in your cooking range is about the same as the average output of an electrical generating station between the "peaks," i.e., 25 per cent. to 30 per cent. of the maximum output, but the difference is that the electricity produced in these off-hours is being used by somebody, whereas the pilot-light coal fire is doing no useful work at all. It is simply allowed to go on because, without it, the fire would be extinguished and have to be relit.

The outstanding achievement of the stored heat cooker using solid fuel, invented by Dr. Gustaf Dalén, is that it actually does pick up these pilot-light losses and make them available for cooking. Not only that, but with the aid of Dalén's invention, heat that was recklessly thrown away just to keep the fire alight between "peaks" becomes the main supply you rely on to do the work. The flow from the leaking tap is collected and stored, and somehow is found sufficient by itself. When you want to begin cooking you no longer have to "stoke



Section of a well-known coal-burning storage cooker. (By permission of Bell's Heat Appliances, Ltd.)

up" to obtain the necessary heat. The ball-valve "input" device has been filling up with all the heat you need, and it is there, ready for any use to which you may want to put it.

Here is a very important difference between the electric storage cooker and

the solid fuel type. In the electrical cooker you put in a "pilot-light" specially in order to fill your storage unit, which is kept at working temperature always. And so in the course of twenty-four hours you are bound to consume a great deal more current. In the coke



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PHOTOGRAPHIC REPRODUCTION OF PENCIL DRAWINGS

WITH the time-saving methods of making Photographic Reproductions (Blue Print, Ozalid, etc.), direct from pencil drawings, many enquiries have reached us from Koh-i-noor users, asking if we make a special pencil for the purpose. No doubt such enquiries have been prompted by the appearance of so-called "blue-print" pencils, for which many claims have been made, and as the originators of the highest class of drawing pencils for all purposes, the matter was one that called for our most serious attention, and the careful investigation of our Research Department by the most up-to-date scientific methods.

The results are interesting, and briefly may be summarised as follows:—

If the stroke of a pencil is examined under a powerful microscope it will be seen that it is by no means a solid line, but instead, separate particles of graphite which are impenetrable to light rays, lying more or less close to each other, and interstices which allow light rays to pass through.

For the purpose of making the *original* drawing for photographic reproduction the aim then must be to provide a pencil, the stroke of which will allow the minimum light rays to penetrate; and in an endeavour to achieve this several new methods in lead manufacture have been adopted.

One is to treat the lead with dyestuff mixed with some fatty substance, and as there are many such dyestuffs available, this offers no difficulty, had we found the method effective. The weakness of it is, however, that the additional substance merely adheres to the graphite particles, which are in themselves impenetrable to light rays, and does not in any way reduce the interstices. That this weakness is also recognised by one manufacturer who adopted this method, appears obvious from the fact that he now suggests that drawings made with such pencils should be washed with a special fixative, to dissolve the dyestuff and spread it over the interstices. We have made the most careful microphotographic tests of such treated drawings, and have failed to discover any trace whatever of the covering dyestuff over the interstices, or that such "after treatment" was of any value whatever. Besides, it must be borne in mind that if such treatment was effective the dyestuffs would be spread not only over the interstices within the line, but would spread also outside the line, giving it an uneven appearance.

It will hardly be disputed that if this or any such method had had the desired result, it would long since have been adopted not only by ourselves, but by all other leading pencil manufacturers.

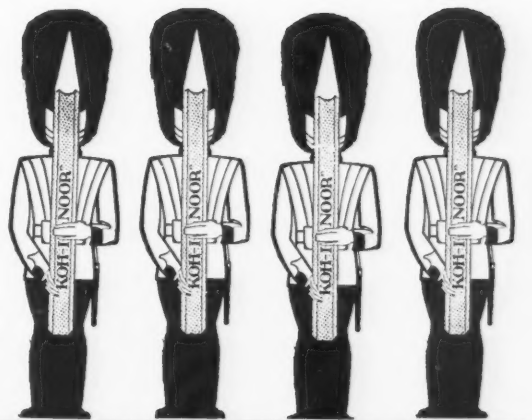
The assumption which has been advanced from some quarters that the finer the graphite particles are ground the greater must be the covering power of the stroke of such a pencil, is equally misleading. Particles, the dimensions of which are smaller than the wavelength of light rays, must lose much of their ability to "cover."

All our tests and experiments have done nothing but convince us more than ever that the whole secret of producing a pencil stroke best suited for photographic reproduction lies in the actual manufacture of the lead on the lines followed by us exclusively in the standard Koh-i-noor Drawing Pencil.

The covering power of a pencil is not influenced by such things as the additions of dyestuffs, but is decided by the correct size and shape of the graphite particles, and their resultant regular distribution and stratification in the stroke. These requirements being perfected in the Koh-i-noor make it unequalled for preparing drawings for photographic reproduction.

With very little experience one can ascertain the degree which gives the best results for one's purpose, and as seventeen different degrees of hardness are available, no difficulty is likely to be experienced in this respect.

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cooker you reduce your fire to the steady level of an already existing "pilot-light." That is why, with a coke cooker, you consume less. The first of the coal stored heat cookers, the famous Aga, consequently has a thermal efficiency of 84 per cent., against the 15 per cent. of the ordinary fuel range. Its maximum fuel cost of £4 per annum shows with what extraordinary efficiency the "pilot-light" trickle of heat has been utilized.

CONSTRUCTION AND DESIGN

All storage cookers have the following requirements in common (the list is quoted from the paper by Messrs. Humphreys and Walton, already referred to):—

Of course the "pilot-light" to which the heating unit in an electric cooker is here compared bears no resemblance to actual "pilot-light" devices used in certain types of electric appliances.

1. A heat storage medium.
2. Means of heating this medium.
3. An oven and hot plates.
4. Means of transferring the heat from the storage medium to the oven and hotplates.
5. Effective heat insulation for all parts of the cooker which are permanently hot, and a design which reduces to a minimum the conduction of heat from the storage medium to the outside case of the cooker.

The first of these items is, of course, the most characteristic, as it is the most novel and interesting. And the first problem the engineer has to solve is that of finding the most suitable material for this medium to be made of. In an older American type of stored heat cooker water is the medium used, as it is in ordinary central heating. But for the

high temperatures used in cooking, water has great limitations, and in most current types the storage medium is a metal block of varying shape and weight. The Magnet electric cooker has a block of cast iron weighing 130 lb. The Aga solid fuel cooker has a number of heavy metal parts weighing together about half a ton, and retaining enough heat to cook for twelve hours without a fire at all. In the Esse cooker a single cast iron storage block weighs as much as 1½ cwt. The various types of solid fuel cooker have a thermostatic device which controls the fire draught. The degree of insulation varies considerably, and, roughly speaking, the fuel consumption varies with it. The Aga cooker alone, among all non-electric cooking appliances, is guaranteed by its makers not to exceed a predetermined consumption figure. A saving of 80 per cent. and over on one's fuel bills may sound incredible, fantastic, but in this make of cooker it is an indisputable fact.

SOME PRACTICAL POINTS

A cook working on stored heat has all sorts of advantages which cannot here be enumerated, though some of them may be mentioned very briefly. The most important is, of course, that the cooker is ready for anything at all hours of the day. There is no preliminary warming-up to be done. And in the coal-burning type the different portions—ovens, hotplates and suchlike—are ready together and will function together without the necessity for human control. There are no taps, switches or

dampers to handle, for the simple reason that the temperatures of the various parts are automatically kept at their various predetermined levels from which they cannot materially err. Another interesting development is the return to the old-fashioned idea of the oven that cooks with radiant heat coming from all the four oven walls in equal proportions. Since the eighteenth-century baking oven was superseded by the type in which the fire burns on one side of the oven, this kind of concentric heat has been, in practice, unattainable. In order to make sure of equal radiation all round, the makers of one cooker have had to fight against the Victorian notion that the biggest oven is the best, and have designed an oven that snugly encircles the food without its capacity being impaired thereby. Generally speaking, it may be said that stored heat cooking has certainly come to stay. No housewife is going to keep a large cooking range alight for fifteen hours a day if she can avoid it. Nor will she continue to throw away 85 per cent. of her fuel energy if there is a way of avoiding such waste. Nor will she want to have her range relit every morning if, instead, she can let it burn on quietly for weeks on end. And no electric supply company is going to treble or quadruple its capital expenditure by putting down plant and cables to meet peak loads that can be avoided without decreasing total consumption. Stored heat cooking means an end to nineteenth-century extravagance, waste and in-

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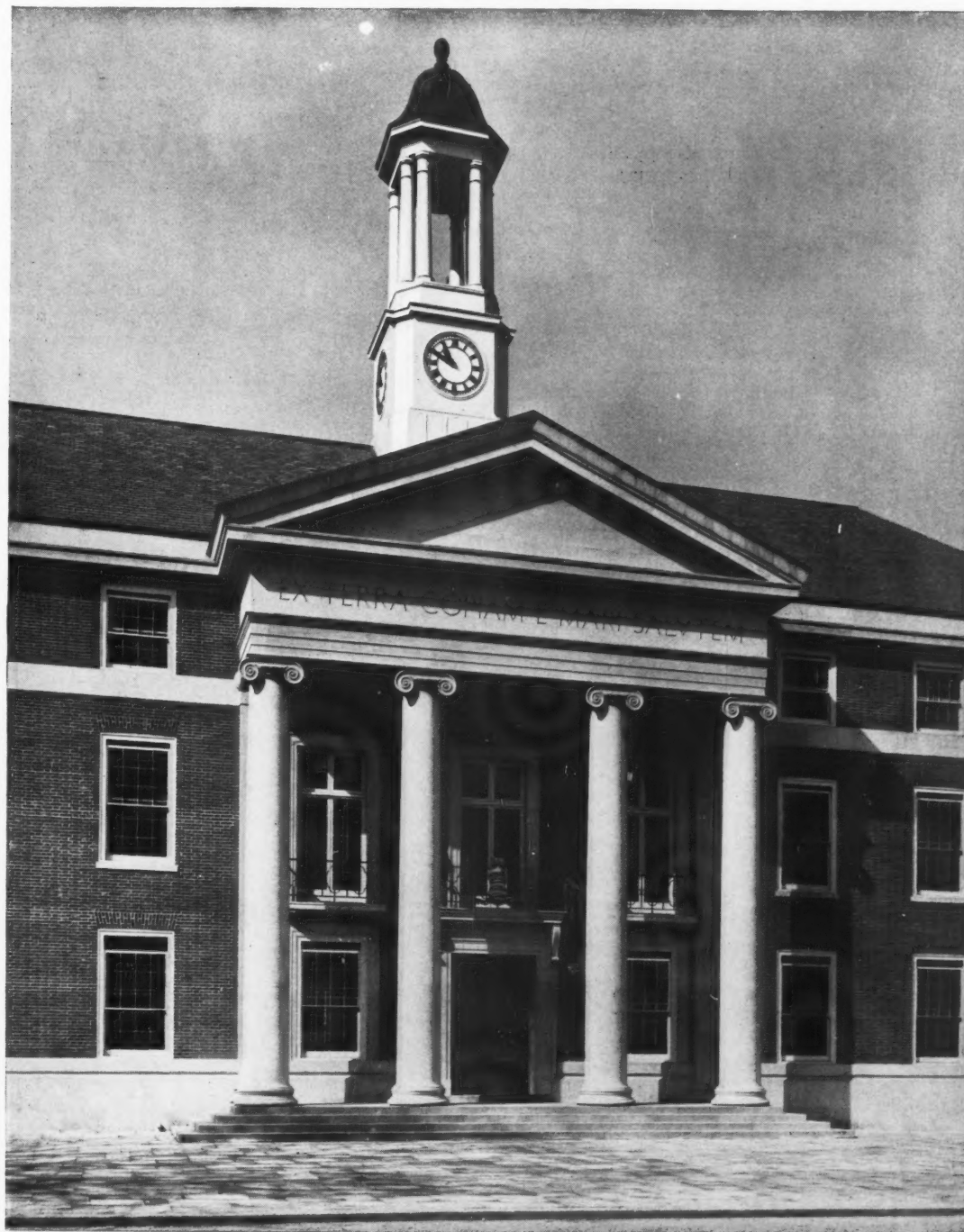
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NOTES & ANNOUNCEMENTS

The general contractors for Leeds Civic Hall were Messrs. Armitage and Hodgson, Ltd. Among the artists, craftsmen and sub-contractors were the following:—G. Jackson and Sons, Ltd. (models, fibrous plaster, crystal chandeliers to Assembly Hall), Luxfer, Ltd. (spiral staircase, lantern light, steel partitions), Waygood-Otis, Ltd. (lifts), Tunstall and Co. (asphalt), Braithwaite and Co. (heating, ventilating, plumbing), G. N. Haden and Sons, Ltd. (heating and ventilating), Wippell and Co. (wrought-iron balconies, screens and octagonal lanterns), Leeds Fireclay Co. (sanitary fittings), Dixon and Sons (electrical work), Manu-Marble Co. (marble), Edward Wood (steelwork), Fenning & Co. (marble work), J. P. White and Sons (panelling Lord and Lady Mayoress's rooms), William Nicholson and Son (Leeds), Ltd. (panelling committee rooms and Council Chamber), Pickles Bros. (slating), May Acoustic Co. (Maycoustic stonework), Coleman, Ltd. (revolving doors), Milners Safe Co. (strong-room doors and steel shelving), Dixon Powner (balustrades), Martin Van Straaten (wall tiling), Synchronome Co. (clocks), Standard Telephones (telephones), James Gibbons, Ltd., H. H. Smith & Kaye and Sons (ironmongery), Conway, Ltd. (turf and loam around

building), Hetley & Co. (mirrors), Best and Lloyd (ceiling fittings and wall brackets), Brewis Ltd. (carpets), Smith Bros. (curtains), Bellman, Ivey and Carter (scagliola columns and pilasters in entrance hall and main staircase), Richardson, Ltd. (gallery chairs).

* * *

The general contractors for the new University, Leeds, were Messrs. William Airey and Son, Ltd., while Messrs. Lazenby Bros. were responsible for the gymnasium. Among the artists, craftsmen and sub-contractors were the following:—L. Harpham (demolition), Turnstalls Seyssel Asphalte Co., Ltd. (dampcourses and asphalt), Leeds Brick Co. (bricks), F. J. Barnes and Quibell and Son, Ltd. (stone), Redpath Brown and Walter Scott, Ltd. (structural steel), William Airey and Son, Ltd. (excavation, foundations and "Aerodrome" floors), Kleine Flooring Co., Ltd. (fireproof construction), Asbestos Products, Ltd. (acid resisting flues), T. H. Wilson, Ltd., and W. H. Heywood & Co., Ltd. (patent glazing), Acme Flooring Co., Ltd., and R. W. Brooke & Co., Ltd. (wood-block flooring), Haywards, Ltd. (cellar flaps), Griffiths Son and Cromwell and Young, Austen and Young (central heating), Waring, Withers and Chadwick (electric wiring), N. F. Bailey & Co. (electric wiring), Green and Smith, Ltd. (electric wiring), Dixon and Son, Ltd. (electric wiring), Sitch & Co., Ltd. (electric light fixtures), H. Braithwaite & Co., Ltd.

(gasfitting and plumbing), Leeds Fireclay Co., Ltd., and Doulton & Co., Ltd. (sanitary fittings), A. Andrews and Son (terrazzo stair treads and flooring), Alfred Whitehead, Ltd. (stair treads), J. Kaye and Sons, Ltd., and J. and H. Smith (door furniture), Crittall Manufacturing Co., Ltd. (metal casements and window furniture), Dixon, Powner and Sons, Ltd. (iron staircases), James and Son (blinds), J. Starkie Gardner, Ltd., and C. Hall (metalwork), R. J. Snaith and Son and William Bellerby, Ltd. (joinery), L. F. Roslyn (sculpture), Turners Asbestos Cement, Ltd. (acid resisting wall covering), R. Brewis & Co., Ltd. (linoleum), Bratt Colbran and Co. (mantels), Bennett Furnishing Co., Ltd. (lecture theatre seating), Newalls Acoustic Products, Ltd. (acoustic panels), Messrs. Rawlinsons, Ltd. (lifts).

* * *

Messrs. W. James and Son, Upper Colwall, near Malvern, were the general contractors for Lobden, Upper Colwall. Among the artists, craftsmen and sub-contractors were the following:—Blockley Brick and Tile Co. (bricks), Trussed Concrete Steel Co. (special roofing), National Radiator Co. (central heating), Bratt Colbran (grates), Messrs. Troughton and Young, Ltd. (electric light fixtures), Alfred Goslett (sanitary fittings), Crittall Manufacturing Co., Ltd. (casements), Manu-Marble, Ltd. (marble), Gordon Russell, Ltd. (door furniture, joinery, textiles, and furniture).

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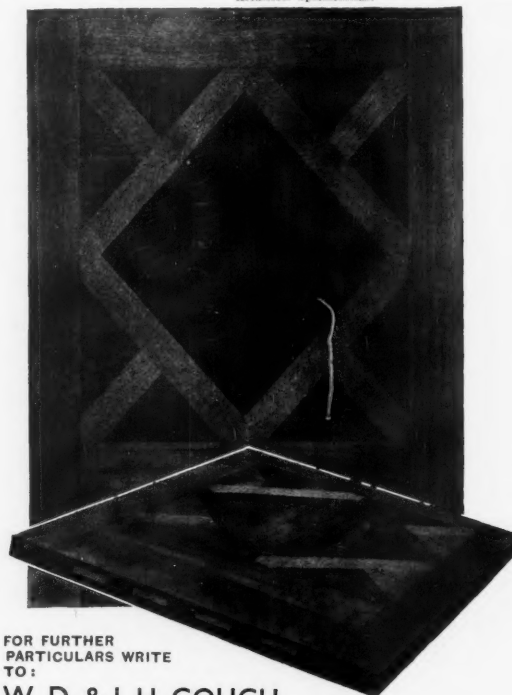
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