## ARCHITE JOURI



standard

contents

every issue does not necessarily contain all these contents, but they are the regular features which continually recur.

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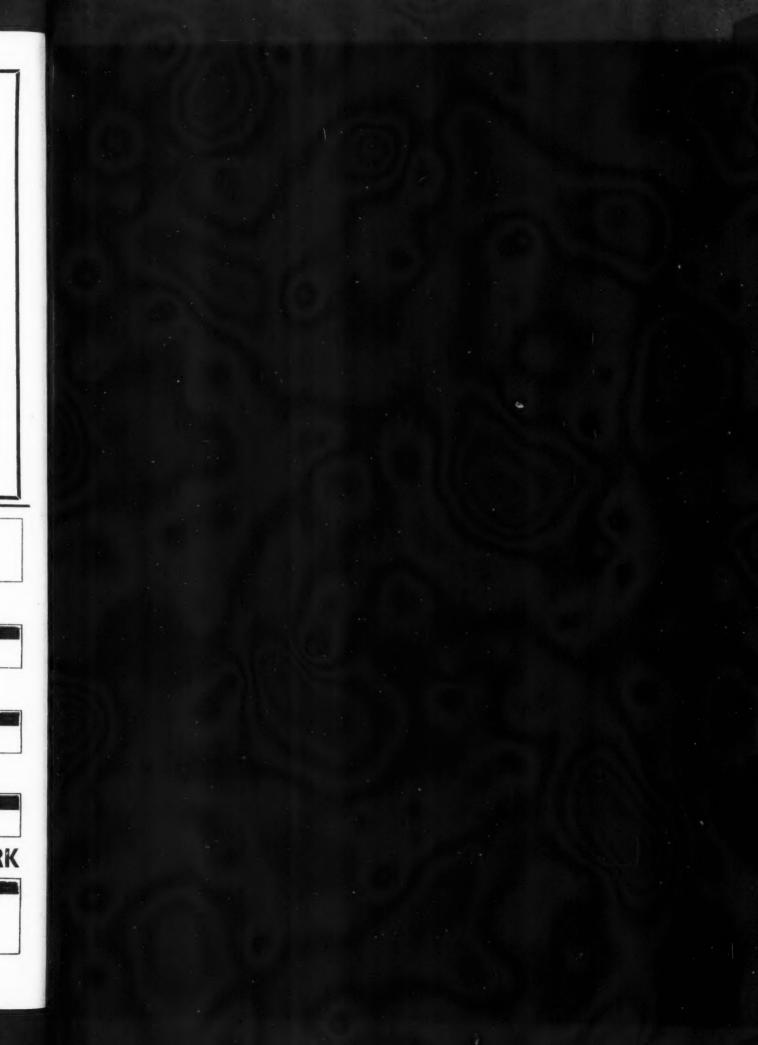
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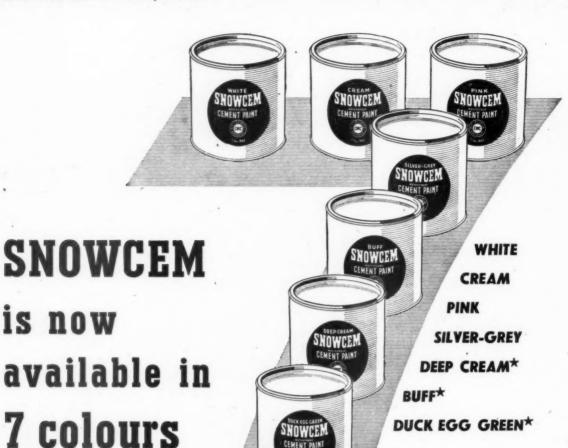
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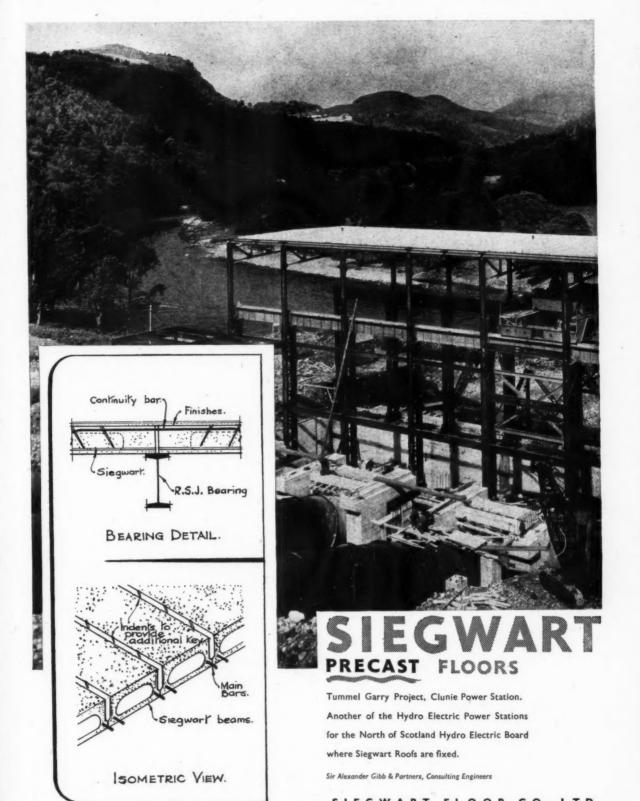
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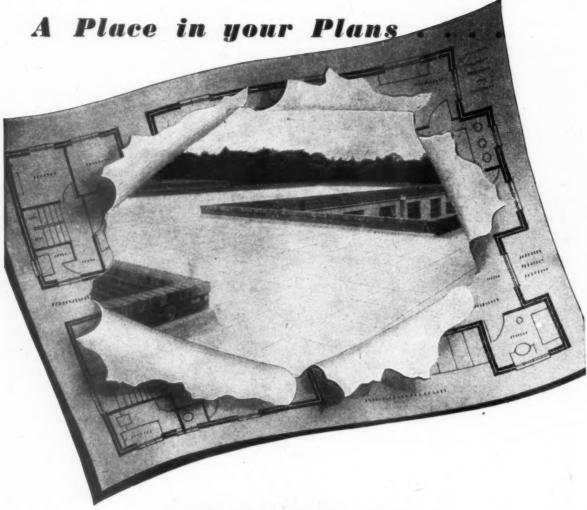


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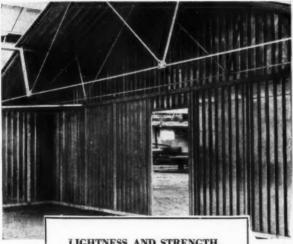
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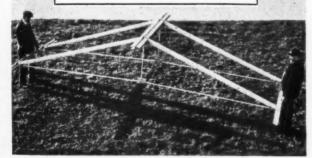
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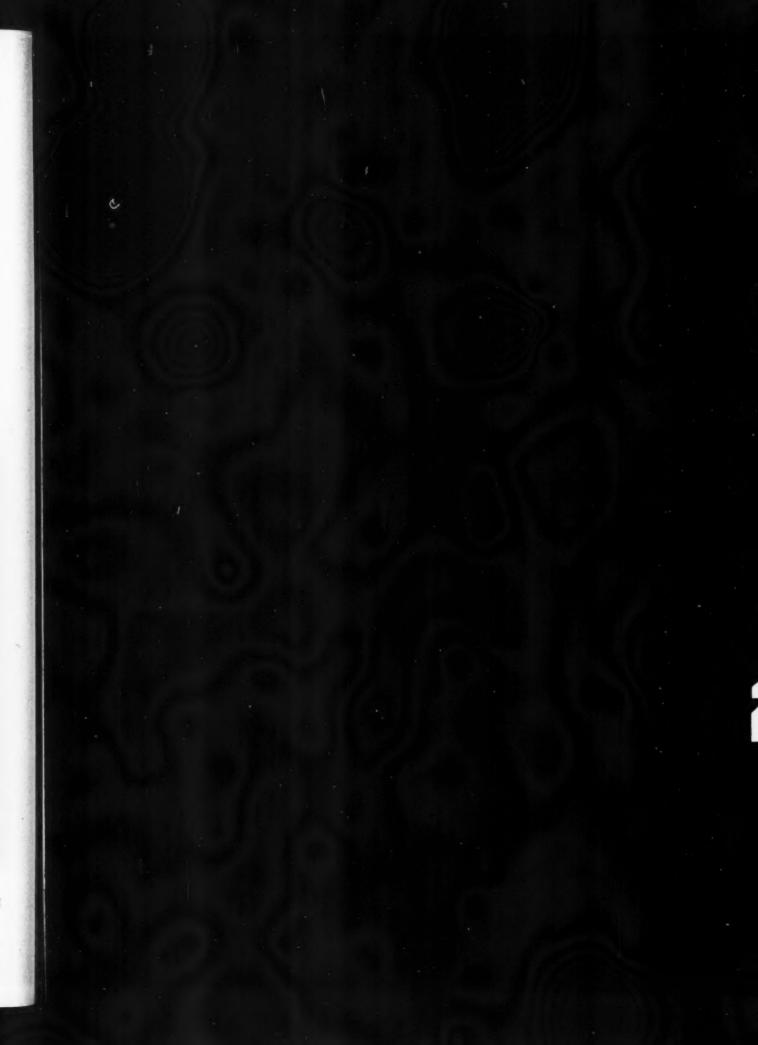
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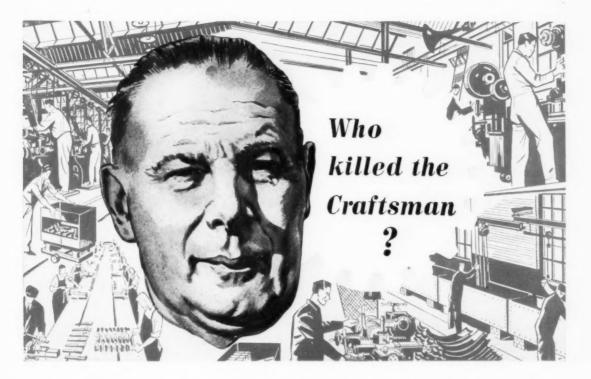




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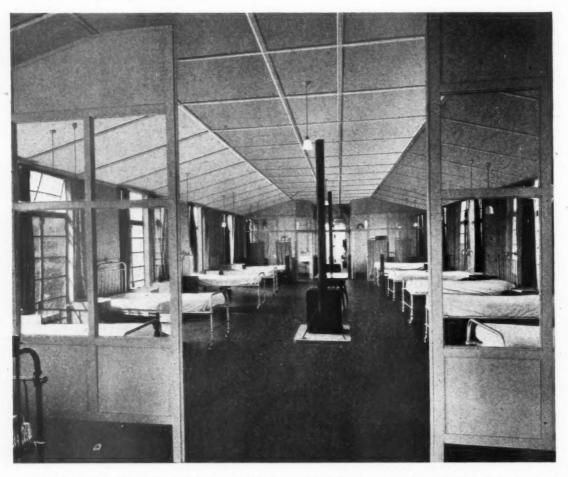
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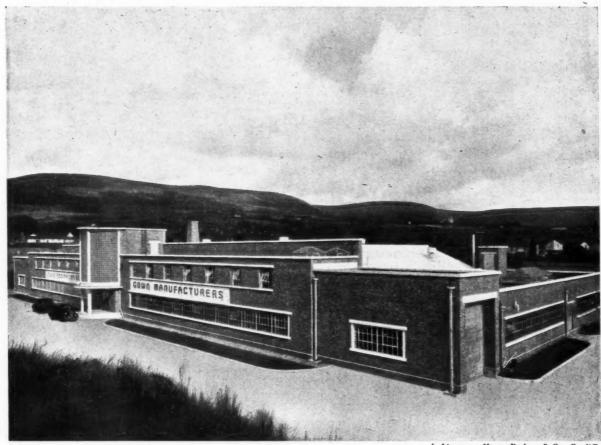
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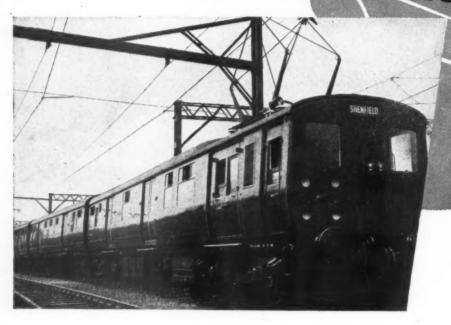


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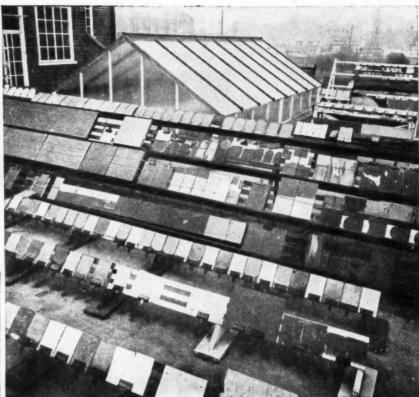


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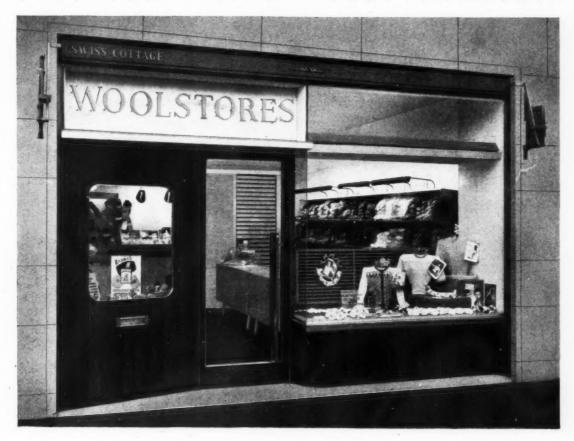
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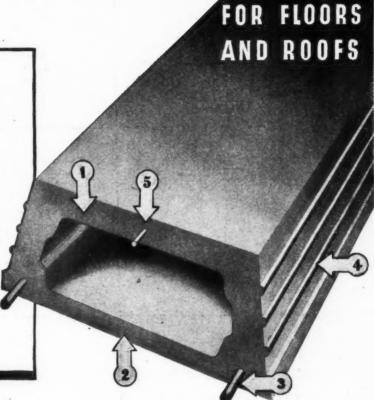
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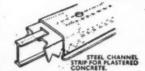
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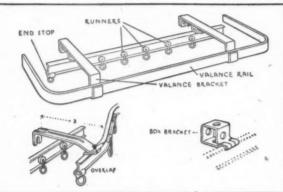




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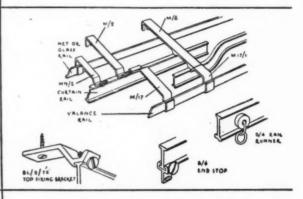


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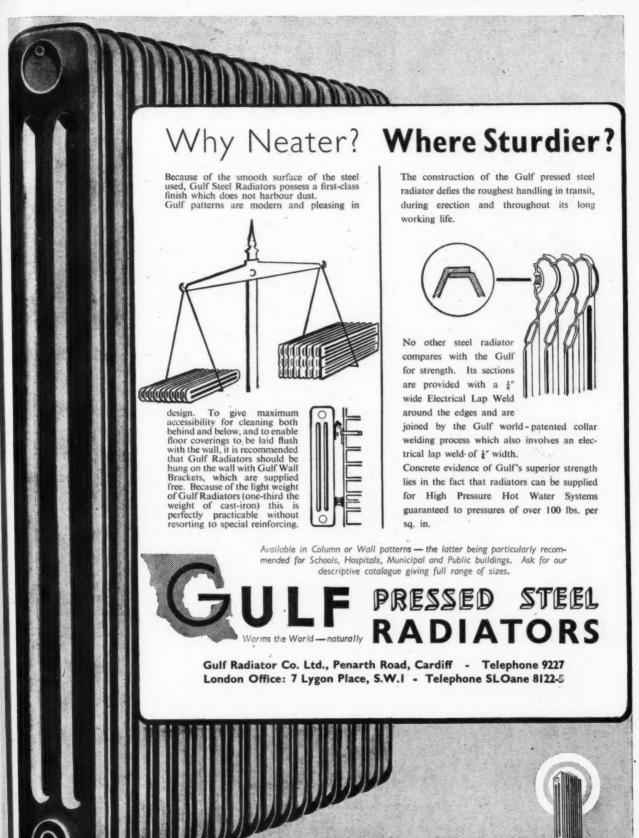
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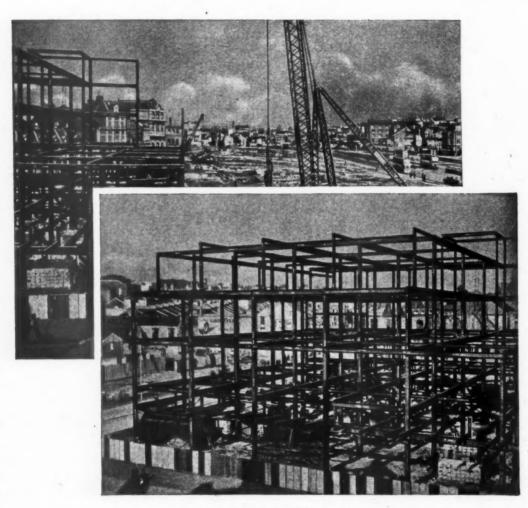
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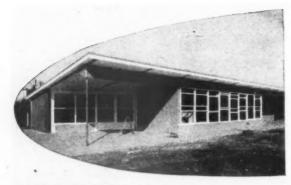


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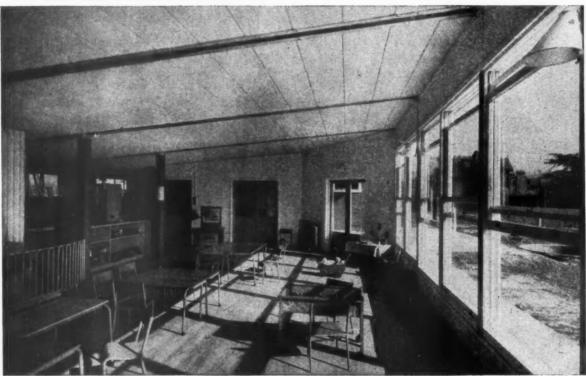
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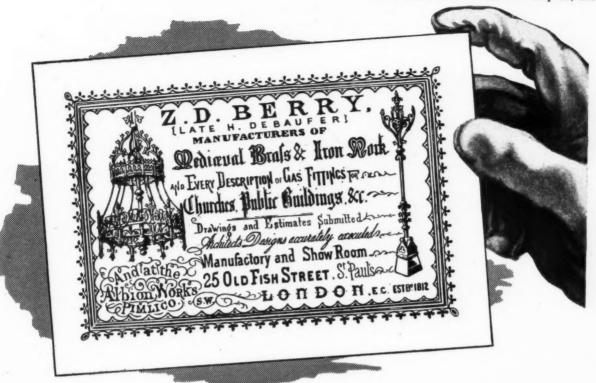
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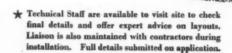
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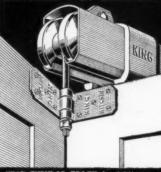
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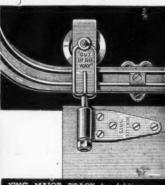


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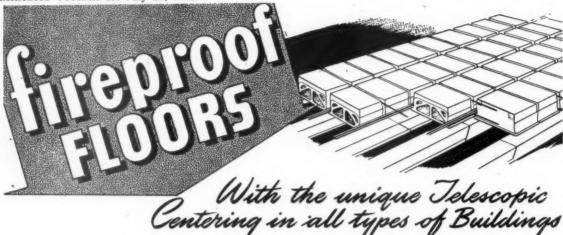
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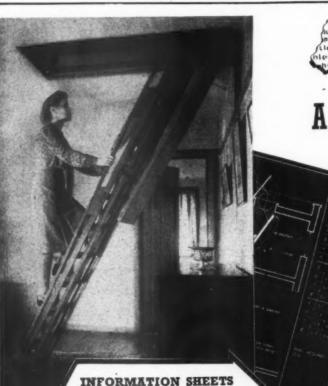
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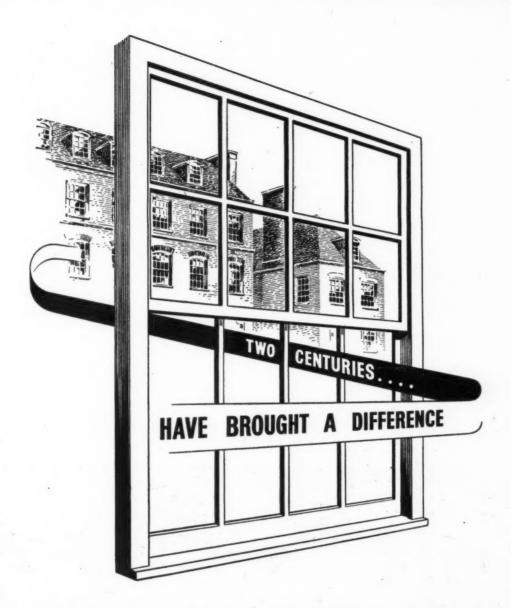
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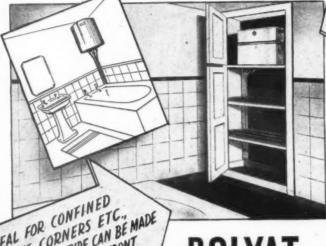
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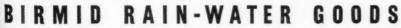
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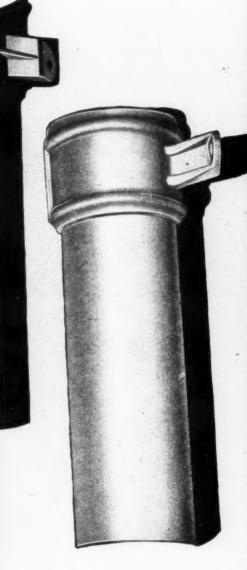
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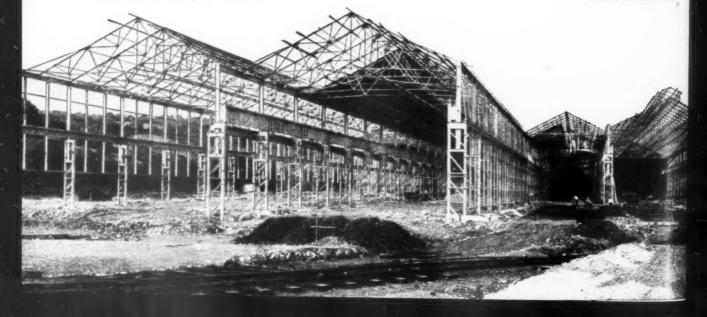
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THE ARCHITECTS' JOURNAL

No 2893 20 July 1950 VOL 112

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ASTRAGAL NOTES & TOPICS

THE AA PRIZEGIVING

I haven't the space for more than a brief mention of the proceedings in Bedford Square on Friday, which were as well organized as always. The marquee in the middle of the square is becoming an annual institution; long may it recur.

Jordan's report I thought a model of its kind, the lion of the afternoon, Frank Lloyd Wright, was in sparkling form and Anthony Chitty's speech, proposing a vote of thanks, was particularly apt and able: witty but brief, as all votes of thanks ought to be.

The exhibition of students' work—or as much as I could see of it over the heads of the crowd—looked to be well worth several further visits; an agree-

able ending to an unusually stimulating session.

WEDNESDAY FORUM

Students who were able to squeeze into the Wednesday Forum at the AA last week told me that Frank Lloyd Wright, who was guest speaker, ran true to his usual form and delivered himself of a number of critical statements. Emphasizing the importance of the spirit of the architect as the most significant factor in his architecture, he expressed doubts as to whether a school of architecture was any help to him at all. "Organic architecture is from within outwards," said the speaker, "and depends on the developed individuality of the architect."

It appeared that he did not see much hope for the kind of work so popular among students today: "The addition and multiplication of boxments... the product of egotism and conceit... humble hypocrisy and not honest arrogance." He avoided any rather ticklish questions. And when asked if he admired the work of contemporary architects, he replied: "They have my sympathy."

RAGLAN SQUIRE AND ARCON

Readers may notice, elsewhere in this issue, an announcement that Raglan Squire is retiring from the Arcon partnership and setting up in practice under his own name. I am asked to make it clear that this change does not affect his and Arcon's membership of the AJ editorial board. As guest editors of the AJ they will continue in association for the remainder of the year.

GOLD COAST OPENING

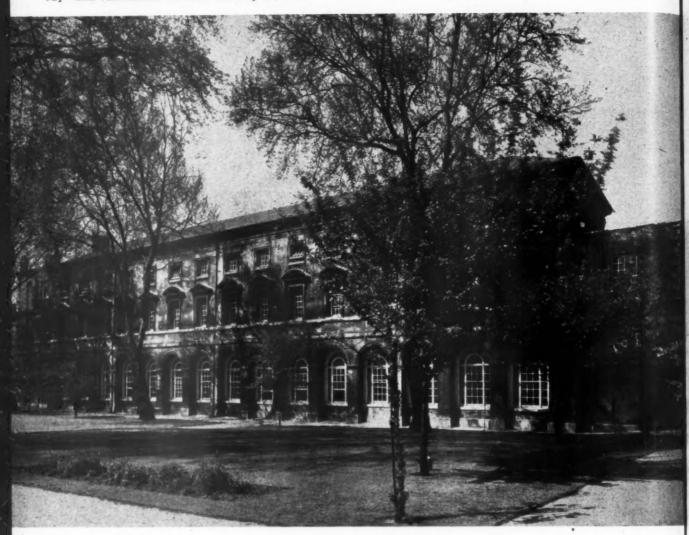
A colleague who knows West Africa

has asked me to draw attention to the need for really wide-awake town-planning architects in the Gold Coast. Apparently they now have quite advanced town - planning legislation there, are keen on planning and are developing at an extraordinarily rapid pace. So here is an opportunity for planners with architectural experience not only to find scope for their energies but, at the same time, to help, as far as planning goes, a young country, which is anxious to learn.

He tells me that planners will either be taken on to the permanent Gold Coast Government staff, or will be given a contract for two tours of duty lasting 18 to 24 months each. The salary is about £700 a year upwards according to age, experience and qualifications, with various allowances in addition. The qualifications are associateship of the TPI, associateship of the RIBA (or the Institutions of Civil Engineers or Municipal Engineers) and three to five years' town-planning experience.



Astragal is aware that students invariably cast inhibitions aside at the end of term. Even so, he was puzzled by this strange behaviour at the AA School (recorded by one of his spies last week) until he was shown the photographs on page 53.



# WESTMINSTER SCHOOL

College Dormitory (reconstructed after bomb damage)

reopened on Tuesday, June 6th 1950

Architects: Sir Hubert Worthington, A.R.A. and A. L. N. Russell, F.R.I.B.A.

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#### ELIEL SAARINEN

Last week I recorded the death of Eliel Saarinen, Finnish architect of Helsinki railway station, who has practised for the last twenty-five years in America. I now learn that Finland has decided to give him a State funeral, and the body is now on its way to Helsinki. This is a very rare honour. Only ten people have been given a State funeral since the Finnish republic was founded at the end of the 1914 war. Four of these have been architects—an indication of the prestige of architecture in the Scandinavian countries.

On account of this decision, Alvar Aalto has had to cut short his visit to England by a couple of days. As president of the Finnish institute of architects he has had to hurry back to Helsinki to play his part in organizing the funeral ceremonies.

#### YOUNG DESIGNERS

Designers of the present generation will have to look to their laurels, because there is a new generation coming along that already shows remarkable attainments—at least that is the impression I brought back from a visit to the exhibition of the work of students and staff of the Royal College of Art now to be seen at the RBA Galleries, Suffolk Street.

Architecture has but a small part in it, as the RCA does not run a course for training architects, but uses architecture to provide a basic training for design students generally. Nevertheless architects should see what their colleagues of the industrial arts are doing, and will be specially interested, I think, in the furniture (R. D. Russell's students), the textiles and the stained glass. The possibilities of the latter as a modern art medium — when it gets right away from the ecclesiastical conventions—are shown to be immense.



The photograph on the left offers a solution to the problem picture on page 51 which is, in effect, a study of human reaction to the inevitable. The two students shown on that page found there was no room for them at the Frank Lloyd Wright Lecture in the AA dining room. One accepted the situation with resignation, the other cast dignity aside and managed to hear the master's outspoken views on architectural education. Later on the same day, as seen below, the students regaled Lloyd Wright with eggs, bacon and questions.



AVE SPAZIO!

Astragal hesitates to expend his dwindling reserves of enthusiasm on new magazines, however glossy and polychromatic: too many of them recently have failed to last for more than a couple of issues. But the latest arrival, from Italy, does deserve a greeting. For one thing, its first number contains enough material for at least three issues of most of the elegant quarterlies that have been flourished at us in the last year or two.

Spazio (or space, if your Italian is rusty) is to appear monthly—no, I beg its pardon, eleven times a year. Edited by the architect Luigo Moretti, it describes itself as a review of art and

architecture; the emphasis, clearly, is on architecture as the mistress art. In format (13 by 10 inches) it is not unlike *The Architectural Review*; its layout also seems to owe something to the same model.

And its contents? Modern buildings and interiors, a design for a vast new hangar at Buenos Aires, a well illustrated survey of Italian architecture since the war, an article on the Futurist painter and sculptor Umberto Boccioni (whose work you can see, by the way, in the current exhibition of modern Italian art at the Tate), an essay on Futurism in general, full-page reproductions of Italian primitives, an archæological study of the Temple of





# Poland Rebuilds

This illustration of the Church of the Holy Virgin at Gdansk, in course of reconstruction, is taken from an exhibition, "Historical Treasures of Poland," which is on view at the RWS Galleries, 26, Conduit Street, W.1. This exhibition shows, with the aid of photographs, some of the remarkable work that is being carried out in the restoration and preservation of historical monuments and buildings, "indispensable elements in the building of the new socialist culture." Naturally, many new problems in connection with the principles and technique of conservation have arisen since conservation work began in 1945. And it is because they believe that the methods

used to solve these problems may be of wide interest that Poland's Ministry of Culture and Fine Arts has organized this small exhibition. A "before-and-after" technique is used in this display of photographs, which shows buildings before the war, immediately afterwards, in a state of partial restoration and as they are now. Perhaps the most notable achievement shown is the building of Warsaw's new east-west road-tunnel which by-passes the central area and allows it to be rebuilt almost as it was. It is hoped that a more ambitious exhibition, showing re-construction work in the shattered capital of Warsaw, will be arranged in London later this year.

Fortune at Præneste, a report on the competition for new doors for St. Peter's—and much else besides. A specially well done feature is the section of illustrated notes on exhibitions, books, ballet, fashion and so on, forming a kind of topical supplement, at the end of the paper.

#### DISTRICT HEATING

District heating has begun to rear its glazed head in the Battersea-cum-Pimlico housing scheme, and the 140-ft. glass tower on the north bank will give Powell and Moya two vertical features on the London skyline during 1951.

The tower houses the heat accumulator of the electric heat system by which exhaust heat from special turbo-generators installed at Battersea is harnessed to provide water at just below boiling point in the tower. At least that was the description given to a colleague by Kennedy and Donkin, the consulting engineers. Apparently the heat accumulator, which is a giant welded steel hot water cylinder, lagged against heat loss, and protected by an outer glass skin, has to be one hundred and forty feet high. Pure economics demand a gravity feed to the top floors of the flats. This avoids the constant use of pumps and does away with the need for expansion tanks to every unit it serves.

The system will not only provide for the Pimlico scheme but also for Dolphin Square and another Westminster City Council block in the area. These blocks will hold a population of 10,000. The scheme will save some 10,000 tons of fuel annually, but as it was too difficult and costly to adapt the old generators at Battersea to the scheme, there is still a lot of latent heat flowing merrily out to sea.

Incidentally, my colleague tells me that the Powell and Moya houses at Chichester—illustrated in the Journal a few weeks back—contain only one system of heating—a convector fire. Both houses were lived in last winter, which was, of course, a mild one, and apparently they proved to be quite snug. Certainly floors, walls and roof are all well insulated, but there is no double glazing. The one heat worry seems to be: will the houses be too hot in summer?

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ASTRAGAL

# The Editors

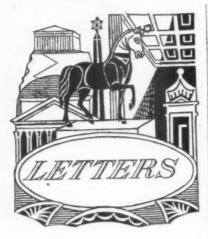
# THE CENSUS AND HOUSING

A CENSUS of population will be taken in Great Britain on April 8, 1951, and as in previous censuses, this will include a survey of housing. Under the Census Act of 1920, "the character of the enquiries to be included in the census" is determined by Order in Council. The draft now before Parliament contains two additional sets of questions on housing never asked at previous censuses. One is about the number of living rooms occupied by each person and the amenities provided in them; the other is about the use by each household (exclusive or shared) of a piped water supply within the house, a kitchen sink, a cooking stove or range, a water closet, and a fixed bath.

At this stage there is a temptation to suggest that more questions should be included, but as indeed there is no end to questions that would provide useful information, it is important to distinguish between two functions which the census fulfils in the field of housing: one concerns housing conditions, the other housing needs. Of course, better knowledge of the physical conditions of houses enables us to see more clearly what improvements are required, but long range planning should be based on the study of the changing needs of a changing population. In his book Estimating Housing Needs (which comprises a study of the census and suggestions for its improvement) Alexander Block pointed out that a comprehensive investigation is required of the composition of households by age, sex and marital condition, and of the relationship of the persons living together in each household. Such an enquiry would help to reveal how many of the existing households would be likely to split into two or more separate households if suitable accommodation was available, and the size and composition of these potential or "concealed" households. No additional questions need be asked at the census for this purpose. We know the age, sex and marital condition of the people of Great Britain by counties, towns, villages, etc. But no census has ever related these data to the individual households. We urge that this should be done in the next census.

Another matter, extremely important in estimating housing needs, readily solved by proper tabulation without bothering the millions of householders and the thousands of enumerators with new questions, is covered by the so called "relationship column" of the household schedule. Here is specified the relation of each person in the household to the head of the household, thus showing among other things, whether a household is a genuine family, or consists, wholly or in part, of persons unrelated by kinship or blood. This question has been asked at all censuses since 1841, and has absorbed no end of time and labour to fill in. Yet all this valuable and costly information (with the exception of small sample tabulations carried out in 1851 and 1861) has been completely lost, because (probably for reasons of economy) it was not even tabulated.





Two Students

Alere Flammam

Country Architect

P. A. Cranswick, A.R.I.B.A.

Leonard C. Howitt, F.R.I.B.A.

# Learning from the Past

SIR,—As Astragal can hardly have heard of our humble school of architecture, there are apparently two schools where "renaissance architecture is taught as appropriate to the design problems of today."

A revivalist member of our staff is in the habit of regularly setting design subjects, which, though covering contemporary requirements, are ludicrously tied down with regard to style and materials. For example, a recent design subject was a small market hall in which the following were rigidly specified:—Exact dimensions of the building, the internal arrangement, the exact materials, and the style to be Renaissance.

Though we fully appreciate the lessons to be learnt from previous styles, we feel that with historical testimonies completed, and "inter" rapidly approaching, our time could be better employed in a more practical subject.

TWO STUDENTS.

# Salaried Architects

SIR,—The letter of your correspondent Mr. J. V. Dixon Vaughan regarding the salaried assistant summarizes the position well, and I agree with him that the "only hope lies in the forming of an independent organization capable of negotiating with both private architects and public bodies solely on behalf of the salaried architect."

In my view, such an organization should be in the nature of a trade union, and quite distinct from any of the professional societies. It should be purely for architectural assistants, and any member who becomes a chief officer, or enters private practice as a principal, should be automatically barred. The cost should be met by the minimum subscription to cover expenses, elaborate offices and aloof secretaries not being required. The leaders should be carefully chosen, level-headed men of sound character and with the profession at heart, whom both sides could trust, and who would be sufficiently enthusiastic to give their services voluntarily.

ALERE FLAMMAM.

# New Regulations Needed for Submission of Plans

SIR,—I am gratified to see that the question of the submission of plans to local authorities by unqualified persons has been raised in your correspondence columns.

As an architect who has recently opened a practice in a rural area, I can confirm the fact that a very great deal of this work goes on. A much more serious matter however, is the submission of drawings by completely unqualified members of the staff of local authorities or town planning departments to themselves. This can and does take place, the method being simple enough.

The drawings are prepared by the official concerned and are presented to the client unsigned; the client then submits the drawings on his own account to the appropriate authorities. As one can imagine, the path to approval for such work is often very

As this work is not merely confined to small extensions and alterations but includes new private housing, light industrial work, etc., it is extremely galling for the young architect to see potential clients being diverted from him in this way. Apart from producing bad buildings, this practice must surely be strictly illegal. Little can be done to stop it however whilst the present regulations prevail, owing to the anonymity of the work. The solution, I feel, lies in the revision of the regulations on the lines indicated below. (1) All drawings and documents prepared for submission to authorities to be signed by the author of the work, giving his qualifications. (2) No building work costing more than a certain figure or enclosing more than a given area (say £50 and 50 sq. ft.) to be submitted by any person other than a registered architect.

COUNTRY ARCHITECT.

# New Towns

SIR,—Prophecy, if not perilous, is always precarious, nevertheless, it is becoming increasingly necessary to peer through the mists of uncertainty in an endeavour to see what the future might hold. While lips which pay service to the virtues of individualism over collectivism, are becoming more and more curled with cynical amusement, those of us who, remembering Ebeneezer Howard, were anxious to participate to the full in this vast new social experiment, are finding our enthusiasms gradually stifled, by the excessive cost of building, the acute shortage, away from existing settlements, of building labour, and the extraordinary attitude, which would surely have astonished the founders of Letchworth and Welwyn, that the New Towns are, in fact, no different from any local authority housing estate.

While such an attitude might officially be politic, if it is really necessary to appease those authorities who feel, for some extraordinary reason that we are trespassing

While such an attitude might officially be politic, if it is really necessary to appease those authorities who feel, for some extraordinary reason, that we are trespassing upon their coverts, it would surely be unforgivable if, as it may well be, this attitude becomes symptomatic of the Development Corporations themselves.

Development Corporations themselves. Apart from this last, the two major problems which face us today are, first, the attempt to build (and here I speak mostly of housing) in order to provide accommodation at what is supposed to be an economic rent within the capacity of the average local income, which, on the whole, is less than that of the national average; and secondly, to build within the limits of the available (mostly unskilled) site labour.

Building labour available in the locality virtually amounts to nil, as a result of which we are faced with two alternatives, either of importing labour wholesale, of whatever kind and from wherever possible, for considerable time at considerable expense, or of building immediately a large

proportion of housing of standardized or prefabricated types in order to provide homes as quickly as possible as an enticement to building labour. The first of these two alternatives (as we are finding to our cost) adds enormously to the cost of building, which naturally re-

are finding to our cost) adds enormously to the cost of building, which naturally reflects upon house-rentals, while the second remains anathema to those of us who can still believe in the New Towns concept. If one adds to this the fact that many contractors who, during the immediate post-war period, have developed at some expense their own systems of standard house-type-construction and can now virtually hold a pistol at our heads, with what amounts almost to the demand that either we build in a standardized patented construction, or we don't build at all, there is certainly no easy way out, other than complete capitulation.

It may be, of course, that time will provide one answer, but as we see it here, the only real solution is the immediate development of a system of building in well-designed industrialised components, which will not only permit that flexibility in planning and design which is absolutely essential, but which will really reduce site labour to an absolute minimum, and by large-scale production and scientific use of materials, contribute appreciably to reduction in costs.

tion in costs.
While these problems affect building generally, so far as the New Towns are concerned some solution is absolutely necessary if they are to advance to any marked degree from the drawing board.
For this reason, if for no other, it would seem that while joint consultations become the consultations because the consultations are consultations because the consultations are concerned to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation is a second to the consultation that the consultation that the consultation is a second to the consultation that the consultation that the consultation that the consultation is a second to the consultation that th

For this reason, if for no other, it would seem that, while joint consultations between the New Towns are already an accomplished fact at managerial level, regular joint consultations between their architectural, engineering and planning departments should follow inevitably at the earliest date.

PHILIP A. CRANSWICK.

Bo

A

en

Yorkshire.

Housing and the Municipal Engineers

SIR,—Our friends in the Institution of Municipal Engineers consider that members of allied professions tend to claim a far larger responsibility for housing than can be justified and have circulated a questionnaire to members holding chief appointments in the hope that it will produce evidence to refute such claims.

These members are asked (inter alia) to say whether they are registered architects, and those whose authorities employ a chief architect (presumably a city architect, borough architect or housing architect) or private architects for the construction of their houses, are asked to state the number completed or let to contract.

This laudable effort to give full credit where it is due would be much more realistic and of more constructive value if all engineers who claim responsibility had been asked to answer the following question:—

answer the following question:—

"Is the housing for which you are nominally responsible undertaken by architects subordinate to you?"

subordinate to you?"

The extent to which the replies were in the affirmative would provide really useful information as to the number of authorities whose technical-professional departments are in need of reorganization and would at the same time provide the justification of the claims of the architectural profession.

President, City and Borough Architects' Society.

Manchester.

The EDITORS reserve the right to shorten letters from readers. Whenever possible, however, they are published in full.



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## Exhibition Industrial Power

Britain's outstanding achievements in heavy engineering will be demonstrated at the Ex-hibition of Industrial Power at Kelvin Hall, Glasgow, during the Festival of Britain 1951. The exhibition's organizer will be Alastair Borthwick (Science Directorate, Festival Office). Basil Spence will be chief architect and designer and other designers will include Arthur Braven, Albert Smith, Hulme Chadwick, Jack Coia and Douglas C. Stephen.

The Exhibition will show how, by British enterprise, the power hidden in our mines and rivers has been harnessed to our daily needs. The exhibition develops, therefore, through two main sequences—one starting from coal, the other from water.

# TPI

# New President Elected

At a recent meeting of the newly elected Council of the TPI, Lt.-Col. H. P. Cart de Lafontaine, O.B.E., T.D., was elected president of the Town Planning Institute for 1950-51 and will take office in November next on the expiration of the term of office of Sir George Pepler.

# KENT

# Unauthorized Structures

A growing colony of people occupying unauthorized temporary structures near Culverstone Green, Meopham, has created a problem for Kent County Council and other authorities. Some of the huts, caravans and disused motor coaches on this site have been in position since before the way. The County in position since before the war. The County Council, which became the local planning authority two years ago, is now seeking a way of checking uncontrolled growth of the colony, while at the same time providing facilities which are obviously in demand. An

facilities which are obviously in demand. An effort by the Strood RDC to remove some of these structures in 1939 was frustrated by the outbreak of war.

Representatives of the County Council, the RDC and Meopham Parish Council have recently walked over this land to see conditions for themselves. They found some structures used for permanent living accommodation and others annaently used mainly modation and others apparently used mainly at week-ends. There was evidence that huts

were still being set up without authority. Through its planning committee, the County Council has decided in principle that County Council has decided in principle that a part of this area should be reserved in the development plan now in course of preparation for the erection of private week-end or holiday chalets and other suitable structures. The RDC will be invited to co-operate in defining the boundaries of the area.

The RDC is being asked to survey the area and to classify all contravening buildings. The County Council believes that when the survey is completed, consideration should be given to the guestion of enforcement action

given to the question of enforcement action being taken in respect of certain existing buildings. The County Council has also requested the RDC to take immediately what steps are open to it to prevent further structures being erected without permission.

# MOTCP

# The Repair of Public Paths

Highway authorities which, as a consequence of the National Parks and Access to the of the National Parks and Access to the Countryside Act, now have the primary responsibility for the repair of the public paths, are recommended "not to conform to some arbitrary standard" in a circular issued by the Ministry of Town and Country Planning. Where country paths are used constantly as part of everyday life—e.g. for walking to stations, churches or shops—the importance of keeping them fit for use in all weathers is emphasized. On the other hand, for paths

is emphasized. On the other hand, for paths used chiefly by ramblers all that will usually be wanted, the circular points out, is to keep them free from obstacles or impassable water

# SOUTHAMPTON

# Prime Minister to Open Ocean Terminal

The Railway Executive announces that the Prime Minister has accepted an invitation to perform the opening ceremony of the new Ocean Terminal building at Southampton Docks on Monday, July 31. The new terminal has been designed to cater for passengers embarking and disembarking from the largest ocean liners. It is a two-storey building equipped on the upper floor with waiting halls and customs examination halls and on the lower floor with an island halls, and on the lower floor with an island platform for boat trains and facilities for dealing with passengers' cars.

# CLB

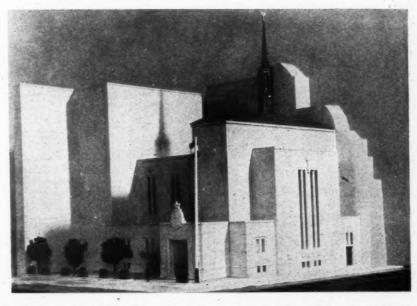
# Breaking of Party Walls

The Minister of Town and Country Planning has been advised that the operation of knocking a hole in a party wall between two buildings does not constitute development under the Town and Country Planning Act, 1047 1947, provided that the works undertaken do not materially affect the appearance of the premises from outside, and provided also that no material change of use is involved. Planning permission is, therefore, no longer necessary for such an operation, and no development charge is payable.

# RIBA

#### Council Election Results

On June 29 we published a list of the new RIBA Council members. Following are some recent additions to that list:—John L. Denman (Brighton), G. Grey Wornum (London), and Norval R. Paxton (Leeds), Chairman of the Allied Societies' Conference, have been elected vice-presidents, leaving one vice-president to be appointed. Martin S. Briggs (London) has been appointed hon. secretary and A. Leonard Roberts (Winchester) hon.



The foundation stone for the new Dutch Church in Austin Friars, E.C.2, the model of which is shown above, is to be laid on Sunday, July 23, by Princess Irene, the 11 year old daughter of the Queen of the Netherlands, accompanied by her father, Prince Bernhard. The original church which was destroyed by enemy action in 1941, dated back to 1120 and was granted by Royal Charter to Dutch Protestant refugees in 1550. July 23 marks the 400th anniversary of this event. The new church is designed by Arthur Bailey.

Exhibition of Students' Work. RWA School of Architecture, (Sponsor, Bristol City Museum and Art Galleries. UNTIL JULY 22

Lecture by Ernst May. At RIBA, 66, Portland Place, W.1. (Sponsor, MARS JULY 20

AA Exhibition of Students' Work. Daily, 10 a.m.-6 p.m. Saturdays, 10 a.m.-2 p.m. At 34, Bedford Square, W.C.1.

UNTIL JULY 27

Exhibition of Work by Students and Staff of the Royal College of Art. At RBA Galleries, Suffolk Street, S.W.I. Daily, 10 a.m. to 5 p.m., except Sundays. Admission 1s. UNTIL JULY 29

Exhibition: William and Mary and Their Time. At V and A Museum. (Sponsor, Arts Council.) Weekdays, 10 a.m. to 6 p.m.; Arts Council.) Weekuays, ... Sundays, 2.30 p.m. to 6 p.m. UNTIL AUGUST 20



This feature covers aspects of legislation, parliamentary news or statutory rules and regulations which are of special significance the architectural profession.

#### ERNEST WATKINS

# The Architect and Current Affairs

The report of the Committee headed by The report of the Committee headed by Lord Justice Jenkins on leasehold property is an extremely solid survey of a most complex problem—as it might well be, since it represents over two years' work. As far as professional interests are concerned, the bulk of it will have a greater appeal to property owners, lawyers and surveyors than to the architect and the planner. But that does not hold good for the whole of it. For instance, the architect is concerned with improvements to existing property and the improvements to existing property and the planner is concerned with the Committee's discussion of whether the lessee under a long lease should be given any right to enfran-chise his interest during the term of the lease or security of personal tenure at its

The Committee was asked to report on a set of specific questions. Its inquiry dealt

with three problems: leasehold enfranchisement, the tenure and rent of business premises, and the existing law relating to repairs and improvements to leasehold property. On the first there was considerable disagreement, on the second some disagreement, and on the third virtual unanimity.

The main points in the Committee's re-commendations on repairs are: no change in the existing law that the liability for repairs must rest as the terms of the lease or agreement provide, with an extension of the individual tenant's right to claim that he should be allowed to do all his repairs in the last year of his lease to all rack-rent lettings of more than seven years; the estab-lishment of a fixed code of repairing covenants; and a provision that the lessee of an old building should not be liable to do more than retain it in its state of repair at the start of the lease unless he specifically covenants otherwise.

Improvements made by a lessee are of more direct interest. Save for agricultural holdings (not dealt with by the report at all), the only lessee who may have any claim for compensation for improvements is the lessee of business premises, and his wight is the lessee of business premises, and his wight is the lessee of business premises, and his wight is the lessee of business premises. right is subject to awkward qualifications. The recommendation is that this right should be extended to all business and residential lettings and that the improvements ranking for compensation should include improve-ments made under some statutory liability (not the case at the moment). Further, that the basis of assessment of the compensation should be the increased letting value that results and that, while the lessee should be required still to obtain his landlord's consent to the work, that consent should not be unreasonably withheld. This proposal, of course, affects architects as tenants— being professional, not business tenants, they have no rights at the moment. It also affects architects who have clients who are anxious to make improvements, but are deterred from so doing because the improvement becomes a free gift to the landlord at the end of the term.

As far as the question of leases of business premises is concerned, again the main recommendation of interest is that which would put the professional man on the same footing as the business tenant, and so enable him to claim under the Landlord and Tenant Act, 1927 (which the Committee would enlarge), for a renewal of his tenancy or for compensation for loss of good-will if that was refused. The right is restricted, but where it exists it does meet cases of real hardship.

Leasehold enfranchisement is more a political subject, as is shown by the fact that, over this, there is a minority report at considerable variance with the majority at considerable variance with the majority report. The minority view, in outline, is that it is unjust that at the end of, say, a 99-year lease, the freeholder should have back both his land and all buildings erected on it by the lessee (although, be it noted, the whole basis of the New Towns legislation and of the redevelopment of compulsorily acquired areas by local authorities rests on this foundation). The majority of the Committee's members think it unjust the Committee's members think it unjust that a lessee, at the end of his term, should be entitled to claim statutory aid to improve the bargain originally made. That is the the bargain originally made. That is the issue, and political views will play a big part in deciding the answer. But there was agreement over one point: that the lessee, if a personal occupant of the house at the end of the term, should have the personal protection under the Rent Acts that a rack-rent tenant holding over at the end of his tenancy is given. Subject to the views of the House of Lords the Court of Appeal tenancy is given. Subject to the views of the House of Lords, the Court of Appeal has held that, as the Rent Acts stand, they do not apply to protect the lessee at the end of lease under which only a ground rent

was paid.
Architects will be bound to watch with interest the fate of any Bill introduced into Parliament based on this report.

#### FRANK LLOYD WRIGHT

On July 10 Frank Lloyd Wright disembarked from the "Queen Elizabeth" at Southampton and drove up to London. Barely 24 hours later he arrived, dressed in a rust coloured summer suit, at the main entrance of County Hall, London, escorted by Robert Furneaux Jordan, principal of the AA school, and Leo De Syllas. He had an appointment to look over the Royal Festival Hall on the South Bank. But he spent the next hour and forty minutes in the panelled office of the Architect to the Council, overlooking the brown waters of the Thames. And although it was suggested more than once that he might like to see the building itself, Mr. Wright preferred to stay in the office and look at the two models and a pile of drawings which, he said, showed the building down to a "gnat's foot." He said he was "too old to climb ladders." The AJ had the privilege of being represented at the meeting, during which Frank Lloyd Wright, describing himself as "consulting architect," sketched his ideas on the subject of concert



Left to Outside County Hall last week. right: J. L. Martin, deputy LCC architect, Frank Lloyd Wright, R. Furneaux Jordan and L. De Syllas. The photo-graphs opposite show the same group of architects, together with Robert Matthew, Architect to the Council, discussing drawings and models of the Royal Festival Hall.

GIVES HIS VIEWS FESTIVAL ON THE ROYAL HALL



fully explained to him, he seemed to approve he asked the designers, Robert Matthew and J. L. Martin, " Have you boys ever lecture on acoustics, sprinkled with a

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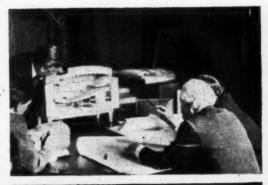
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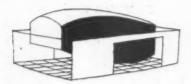
hall design. When the building had been built a concert hall before?" In a more serious vein he discussed many of it. "It's a gamble," he said, "you technical points, showing a special interest may hit it, you may not." At one point in the acoustic problems of the building. In fact, those present received a stimulating

generous measure of FLW autobiography. He said he would be over in Europe again next spring to attend, at Florence, the only comprehensive exhibition of his work ever held, and requested that a box should be kept for him at the first concert.









# DIARY

June 1.—Stucco marble to columns started.

June 19.—Steelwork to suspended ceiling in kitchen started.

June 19 to 30.—Main boilers arrived. Now installed.

June 26.—Fixing of external metal windows and internal metal screens started.

June 28.—Fixing of Hadene marble (Derbyshire fossil) to the outside face of the auditorium walls in the wings started.

July 3.—Fixing of metal balustrades in main foyer started.

The propping below the balcony has now been struck. A suspended scaffold has been slung over the auditorium from the roof in order to avoid a birdcage of scaffolding, which would hinder the work of the finishing trades. The suspended scaffold is shown on this page.

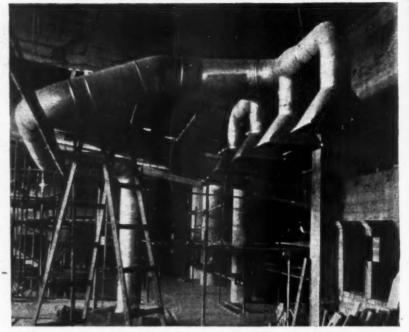
## **ROYAL FESTIVAL HALL: 6**

Progress report by John Eastwick-Field and John Stillman on services (part two).

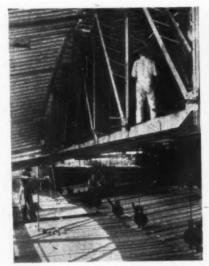
# HEATING AND VENTILATION

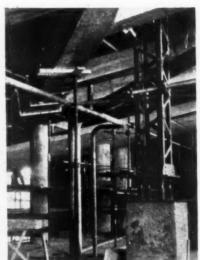
The auditorium is air-conditioned by the downward system. Various other parts of the building are ventilated mechanically, but with separate systems supplemented by convectors and floor panels to offset fabric losses. This is done so that each of the various parts of the building may be used independently, with economy in heating.

The fact that the principle adopted for the auditorium is a standard one, is interesting, because one might have anticipated some new development in this, as in other parts of the whole design. This is not to say that there are no points of detail which are exceptional, nor that the problem was in any sense straightforward. There has been no experience of air-conditioning in large auditoria here since 1939, but it is of interest to note that the Concert Hall, Radiohuset, Copenhagen, Denmark, used a similar system.



Above, galvanized steel ducting showing extracts from kitchen. Below, left, underside of roof showing suspended temporary working platform (see diary). Below right, ducting to foyer. One of the props with its jacks which temporarily supported the balcony can be seen in the foreground.





As was explained in the first article in this series, the heating engineers of the Architects' department, under the direction of R. Coe, M.I.H.V.E., have designed the scheme, with the exception of the boiler plant and equipment, which has been the responsibility of the Chief Engineer of the LCC.

Some of the particular problems encountered and their solutions are set out below:—

#### THE AUDITORIUM

The enclosed designs of the auditorium necessitated an air-conditioning system providing the required statutory amount of outdoor air, i.e., a minimum of 1,000 cu. ft. per person per hour. No refriger-

ation is provided for summer working other than that from cooled water from the Ministry of Works demonstration "heat pump," which will provide half the full cooling requirement. The plant has been designed for the incorporation of full refrigeration at a later date.

There will be only 75 per cent. extraction, in order to create a slight pressure which avoids inward draughts at doors. This is in accordance with Theatre Regulations. The system operates downward so that no dust is disturbed and draughts and contamination of the air rising past the audience are avoided.

The input plants are at roof space level, and the extraction is through the risers

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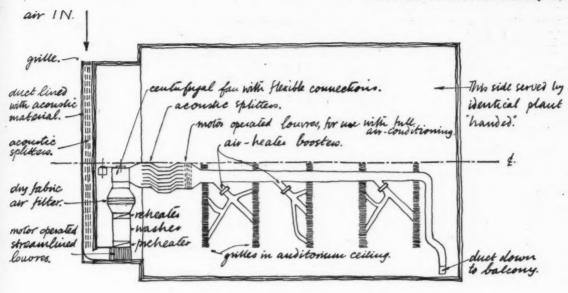
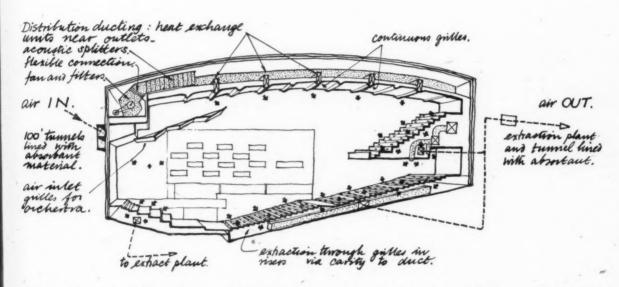


DIAGRAM SHOWING LAYOUT OF PLANT IN ROOF SPACE.



SKETCH ILLUSTRATING METHOD OF AIR-CONDITIONING AUDITORIUM.

of the stepped floor to extract plants. Fabric type filters are used with screens of flame-proof cotton wool in scrim. (The best types of filters are electrostatic precipitators which charge dust particles, and attract them out of the air stream. These are, however, costly and the high voltage is dangerous.)

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Design Considerations: — Winter: 67 deg. F. temperature; 50 per cent. relative humidity; 1,250 cu. ft./person/hr.; no recirculation. Summer—with full refrigeration: 75 deg. F. temperature; 50 per cent. relative humidity; 1,875 cu. ft./person/hr.; 50 per cent. recirculation.

To prevent penetration of external noise there are intakes and outlets

through approximately 100 ft. concrete tunnels, which have walls and ceilings lined with absorbents. Acoustic splitters are provided in the tunnels (*i.e.*, vertical panels of acoustic material) so as to increase the area of absorption. Panels slide, where necessary, to improve access for cleaning. Reduction in sound of 50 dbs. is anticipated.

To prevent noise from the system, super-silent electric motors are used, mounted on spring type anti-vibrators. Bases are on glass silk. Fans are of slow speed, with laminated casing to reduce drumming. The plant room is lined with acoustic material and the air supply passes through sound-absorbing supply passes through sound-absorbing the self-term for 25 ft. before entering the

roof space to distribution points. Air speed in ducts does not exceed 1,000 ft./min.

Control:—Thermostats and hygrostats in extract ducts (equivalent to condition in hall) control hot water to heat exchange units and humidifying plant. External weatherstats control boilers.

Provision is made for recirculation by separate plant when the auditorium is unoccupied, so as to economize in fuel consumption.

# ANCILLARY ACCOMMODATION

reduce drumming. The plant room is lined with acoustic material and the air supply passes through sound-absorbing splitters for 25 ft. before entering the ments and to offset fabric losses.

Foyers:—Separate plenum system with supplementary heating as above.

Restaurant:—Problem of extensive

Restaurant:—Problem of extensive glass area and danger of condensation. Separate ventilating plant with dew point control is provided. Gilled tubes through transomes.

Kitchen:—Cold and warm fresh air inlets; extract from hoods over cookers and through high level grilles. Hoods made of Georgian wired glass.

Practice Rooms:—Separate ventilating system, especially designed acoustically to prevent transmission of sound from one room to another.

Lavatories (all internal):—Ventilation by natural fresh air inlets, with mechanical extraction. Duplicate fan sets. All in accordance with Theatre Regulations.

## APPLIANCES AND MATERIALS

Ventilating ducting is of galvanized sheet steel. All supplementary iron work is galvanised after fabrication. Ducting to kitchens is treated internally against condensation.

Heating Pipes:—Self-coloured mild steel, painted and lagged; joints up to 2 in. are screwed; over 2 in., flanged. Expansion—horseshoe bends.

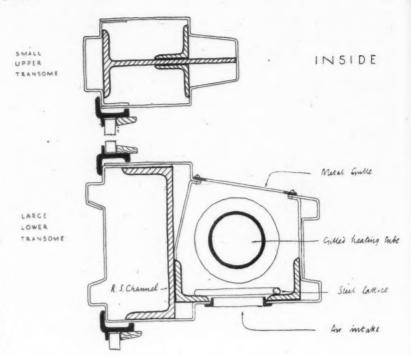
Floor heating:—All on separate indirect system; continuous steel tubes embedded in concrete, on 1½-in. cork insulation. Floor finishes over; granolithic, terrazzo, and wood strip.

# BOILER PLANT

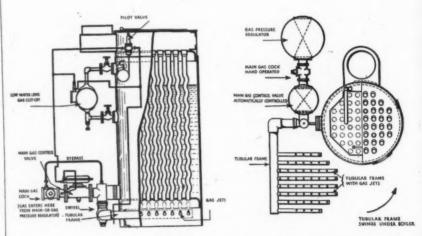
If the heating, hot water supply, and ventilating systems in the building are of largely orthodox design, the same cannot be said of the boiler plant. The boilers which provide low pressure hot water for the heating systems, and those providing domestic hot water, are highly efficient gas-fired vertical boilers, fitted with a very complete system of automatic controls. With an estimated total load of about 30 mill. B.Th.U., this boiler plant will be one of the largest and, probably the most efficient of the gas-fired installations in the country.

By the use of a fuel economizer, which utilises heat from the flue gases to increase the heat of water returning to the boilers, an overall efficiency of up to 85 per cent. may be expected. The use of a fuel economizer with gas fired boilers is unusual, but is warranted by the large size of the installation in this case. The appliance requires the maintenance of a draught in the flue to be effective, whereas the boilers themselves do not, and therefore a special system has had to be devised to meet these conditions.

The high efficiency in conjunction with quick automatic regulation of the boilers is the first answer to those who might think that gas is an extravagant type of fuel. While it is true that gas may be two or three times as expensive as solid fuel on a heat unit basis, this is not a proper basis for comparison of the total



PRELIMINARY DETAILS OF LARGE WINDOWS ON RIVER FRONT SHOWING HEATING IN TRANSOMES

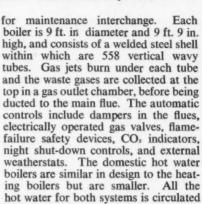


Maker's illustration showing gas boiler similar to those used for providing domestic hot water. The heating boilers are of greater diameter and have four tubular frames with gas jets.

cost of heating. With automatic controls a gas boiler responds immediately to changes in demand for heat, caused, for instance by changes of Such close adjustment the weather. is impossible with a solid fuel installation or even with liquid fuel. Further, by the provision of number of units each with multiple burner efficiency is not reduced when working at \$\frac{1}{4}\$, \$\frac{1}{2}\$, or \$\frac{3}{4}\$ load. Labour saving must also be taken into consideration; gas firing obviates stoking, and ash removal, and only a small amount of upkeep work is necessary.

From the architectural point of view the boiler house is small, no fuel storage space is required, and the flue is nothing more than a duct for innocuous waste gases. Finally, there are the amenities of the building to be taken into account; the complete absence of smoke and dirt, and reduction of sulphur pollution of the air have a value which may not be easy to assess but which is undoubtedly very great.

The heating plant consists of five vertical gas-fired boilers, each with an output of 6½ mill. B.Th.U. This number will allow for one boiler to be a spare



A single flue service serves all the boilers and consists of a vertical duct 4 ft. 3 in. × 3 ft. 9 in. (internal dimensions), lined with Fosalsil moler refractory bricks.

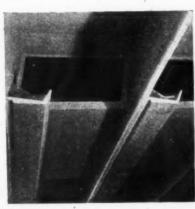
by centrifugal pumps, there being one

pump for each boiler.



Above, extract ducts beneath the auditorium stepped floor. One of these ducts is formed of brickwork rendered internally and the other of galvanized steel. Brickwork was used for economy where there was room.





Above left, a pair of flow and return HW heating pipes serving a number of distribution pipes. Above right, recently fixed fibrous plaster ceiling to foyer, showing extract grilles and lighting troughs. The opening in the bottom left-hand corner is for a tungsten fitting. Below, typical flow heating panel in steel tube, showing cork insulation beneath and battens on clips for strip flooring.



# **ELECTRICAL INSTALLATIONS**

The electrical installation is being carried out to the designs of the Chief Engineer of the LCC, working in close collaboration at all stages with the architect. Two things are of particular interest. The first is that in a building of this kind electricity is required to serve a multitude of purposes, and the second is that, although it is a technically complicated subject, it is one which generally gives architects little It allows of a certain trouble. flexibility in its arrangement which, granted full and early collaboration between architect and engineer, makes it possible to dispose of and conceal electric wires and cables more readily than, for example, the pipes in a heating installation.

On the other hand, in a large building there are complications. For instance, where a substation is required, it has to be positioned so that there is independent access for inspectors, and it must be possible to remove the equipment in case of breakdown.

Switch rooms must be dust free as far as possible, and in the main switch rooms on this job it was found desirable to provide a floor made up of removable timber panels on sleeper walls to give access to the cables.

Just as with other trades on this job, a very early assessment of the ultimate requirements had to be made for contract purposes, and in this instance a schedule of prices was drawn up as a basis for payment of the final scheme.

The supply is from the high-tension network controlled by the London Electricity Board, and is brought through a substation, serving the Festival Hall only, to two main low-tension rooms, each of which has a floor area of approximately 580 sq. ft. The substation is situated adjacent to

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veroutober pare the riverfront car park, and contains equipment installed by the Board, which transforms the high voltage current to the two existing standard pressures of 415 volts/three phase, and 240 volts/single phase-AC, which are required within the building. The total load is estimated to be some 1.500 KVA.

The main distribution is arranged in vertical ducts, one at each corner of the building, and at each floor level there are small subsidiary switch rooms. The two main switch rooms already mentioned are placed at the front and back of the building, and the current is brought to the sub-main distribution boards in paper-insulated lead-covered steel wire armoured cables.

Sub-circuit wiring for lighting and power is generally in vulcanized rubber-insulated cable (VIR) in heavy-gauge welded screw conduit, enamelled, except where the danger of rusting requires galvanized conduit. PVC (Polivynol chloride) insulated cable is being used in some places instead of the VIR cable, but mainly for low-powered installations, such as clocks and signals, and also for telephones, where multicored cable is required. There are also certain places in the building where special conditions have justified the use of the slightly more expensive copper sheathed cable, for which a conduit is not necessary. It is used principally for its heat-resisting properties, and was therefore a suitable choice for the somewhat intricate wiring in the boiler house, where electricity is required to be taken to controls adjacent to the boilers and to heating pipes.

HRC (high rupturing capacity) fuses are used throughout; these are cartridge-type fuses, and are familiar to architects from the new standard fused plugs, and, besides being more convenient, are also less liable to abuse than the common rewirable fuses.

Switches for large public areas are concentrated in the switch rooms, and for the sake of compactness a form of micro-gap switch has been used. These switches, which take advantage of the particular characteristics of AC current, are comparatively small for their rating, are simple in operation and relatively silent. They are a recent development, as are also the 13-amp. socket outlets with fused plugs which have been chosen for the job. They were originally designed in connection with "ring mains" in dwelling-houses.

The main uses for which electric current is provided are listed below, but the problems of "lighting" as such will be treated in greater detail in a later article.



Above, typical steel hangers and fibrous plaster ceiling clothing the concrete structure. The arrow indicates an electric conduit running in the cavity.

Lighting:-This includes floodlighting and the normal requirements for the foyers, the auditorium and the orchestra platform, and also the secondary lighting. The latter conforms to the Regulations for Places of Public Entertainment and is a "floating bat-tery system." Remote control dim-Remote control dimmers are provided for all the lighting in the auditorium, and a scheme included for the incorporation of stage lighting, since it is anticipated that the Hall may at some time be used for ballet. The dimming for the latter will also be by remote control by a single operator. The dimming apparatus is contained in a special room on the roof, which has to be provided with forced ventilation to dispose of the heat which is dissipated when the dimmers are operated.

Power:—This includes provision for: (1) Ventilation plant; (2) Heating; (3) Lifts; (4) Socket outlets; (5) Pumps and thermostatic controls and remote indicating thermometer systems; (6) Refrigeration; (7) General ancillary equipment, including signals and cue lights, clocks, watchman's pegging clock system, automatic internal telephones and GPO telephones. The heating

is for certain practice rooms where the other forms of heating might cause inconvenience by the transmission of noise from room to room, through the system. The heating appliances used in this case are convectors. Th

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Sound amplification and deaf aid system:—This includes provision for recording.

BBC sound and television:—Facilities are provided, including control rooms and commentators' booths for the transmission of vision and sound broadcasts.

Lightning protection: — Protection against lightning has been provided by linking the copper roof to electrodes which are buried in the earth below foundation level. The electrodes are connected to the roof and to finials at each corner by six 14 in. × 16 in. copper strips which are taken down the face of the building. In order to conceal these strips, which have to be held free from the wall to avoid damage to the fabric, they have been contained in vertical ducts measuring about 2 ft. × 1 ft. Had the Hall been a steel framed building, consideration would have been given to earthing the frame, as has been done in at least one large building in London.

The sub-contractors and suppliers for the services discussed are :-Electrical installation The Berkeley Electrical Engineering Co., Ltd. The Strand Electric Co. Special platform lighting Secondary lighting ... The Chloride Electrical Co., Ltd. Weygood-Otis, Ltd. Sound amplification ... Standard Telephones and Cables, Gent and Co, Ltd. Clocks . Internal telephones ... Siemens Brothers & Co., Ltd. W. J. Furse & Co., Ltd. Lightning protection ...

# FOB INFORMATION BUREAU

in LEICESTER SQUARE, W.I

designed by FELLO ATKINSON (JAMES CUBITT and PARTNERS)

OLIVER COX and MICHAEL VENTRIS

The ground floor of the Travel Association offices at 47, Leicester Square have been converted for the Festival of Britain as a bureau where overseas and provincial visitors can make enquiries about the Festival. In view of the limited sum allotted for the work, it was found necessary to make the minimum of structural alterations and to convert the existing counters to suit the new scheme of decoration.

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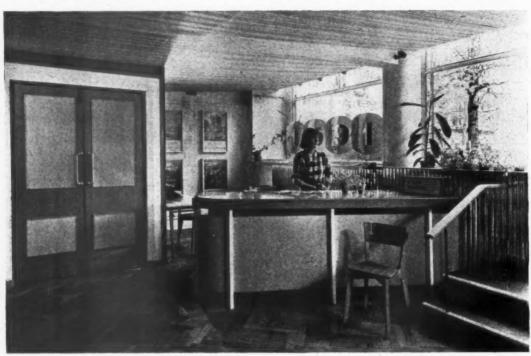
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The enquiry area and counter.



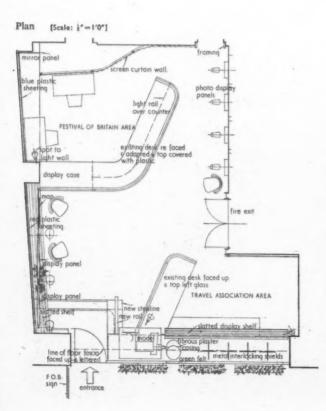


Above, the Travel Association enquiry area and counter. Below, the exterior from Leicester Square.

## FOB INFORMATION BUREAU

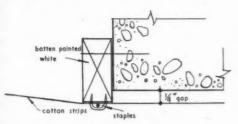
in LEICESTER SQUARE, W.I

designed by FELLO ATKINSON, OLIVER COX and MICHAEL VENTRIS

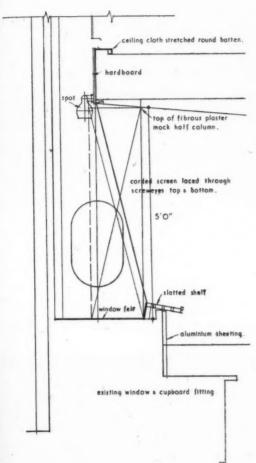


GENERAL.—The premises, which the FOB authorities are sharing with the Travel Association, were originally partly lined with oak and were somewhat drab in appearance. No structural alterations were made to the exterior except for the addition of a sign. The walls are now lined with various laminated plastic sheeting materials, either in their natural colours or spray cellulosed red, blue or mauve. The window stallboard panelling is of





Ceiling fixing 2 [Scale: 6"=1'0"]



Section through window [Scale: ]"=1'0"]

FOB ciation,

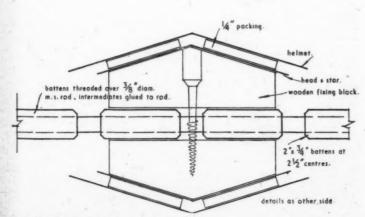
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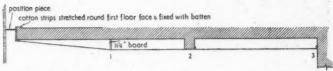
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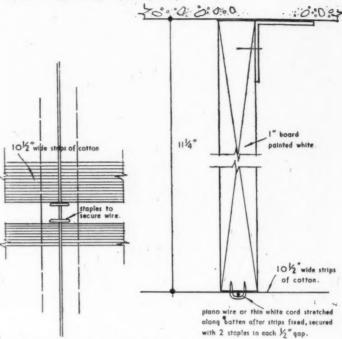
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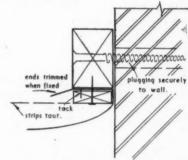
Section A-A through sign [Scale: 6'=1'("]



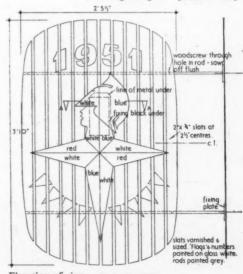
Section through ceiling [Scale: \( \frac{1}{n} = 1'0'' \)]



Ceiling hxing 1: plan and section [Scale: 6"=1'0"]



Ceiling fixing 3 [Scale: 6"=1'0"]



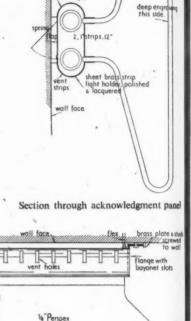
Elevation of sign [Scale: | "-1"0"]



## FOB INFORMATION BUREAU

in LEICESTER SQUARE, W.I

designed by FELLO ATKINSON, OLIVER COX and MICHAEL VENTRIS



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Half plan of panel [Scale: 3'-iV]

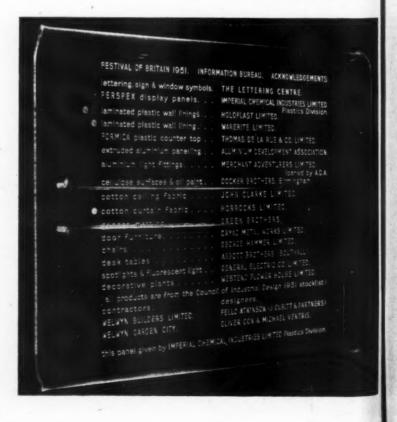
Above, the FOB enquiry counter showing specially lettered perspex panel. Right, the acknowledgment panel showing the names of firms who have donated materials.

extruded sheet aluminium. The false ceiling is of stretched strips of sea island cotton fabric. The colour scheme incorporates bright colours, blue, red, mauve and yellow, contrasted with white and grey.

EQUIPMENT.—Considerable use has been made of perspex for display panels and there is a specially lettered enquiry board. Joinery is of natural coloured mahogany and the remodelled counters have tops of heat-resistant, laminated plastic sheeting. Two types of inexpensive chairs have been loaned by the makers. The curtains are of yellow cotton material.

The contract price was £358.

The general contractors were Welwyn Builders, Ltd. For list of contractors who have donated materials and equipment, see page 76.



INFORMATION CENTRE QUESTIONS AND ANSWERS . CURRENT TECHNIQUE THE INDUSTRY · PRICES · TECHNICAL ARTICLES

INFORMATION SHEETS

# TECHNICAL SECTION

This feature covers both the production and marketing of new materials and designs of equipment, as well as the general trend of developments within the Building Industry.

#### THE INDUSTRY

· By Brian Grant

#### SOAP SUPPLIES

nent panel

Scale : 3"=|"

Anyone who has been irritated by the difficulty of obtaining an adequate supply of soap cellity of obtaining an acceptance supply of soap from the usual type of tilting dispenser will be glad to know that it is now possible to arrange for a supply to be piped to almost any number of basins from a single central supply tank. The system is perfectly straightforward and the piping layout is simple with metering valves over each basin designed so that a simple push provides enough soap for normal washing, while it is impossible for the valve to be left open or to make it provide a continuous and wasteful supply of soap. The glass supply tank has a capacity of one gallon and the contents can be instantly checked, while each valve has a fixing flange so that the pipework is adequately supported.

A standard range which consists of supply A standard range which consists of supply tank, all pipe work, screws and valves for three basins costs £13 11s., each extra valve and pipework costing a further 46s. Pipework is standardized for valves at 20, 22, 24 and 27 inch centres, but other arrangements can easily be made up.—(Charles Winn and Co. Ltd., Granville Street, Birmingham, 1.)

#### TIMBER PRESERVATION

For many years Messrs, Jenson and Nicholson have published a booklet, The Enemies of Timber, which has been completely revised and re-written and has now been republished in an enlarged form. It deals with all the fungi and insects which normally attack timber, and describes methods by which the attacks can be prevented or overcome if they have started. Rather naturally the suggested remedies are all based on the various Cuprinol compounds in which Jenson and Nicholson are interested, all of which have developed from the original Danish development in 1912, when metallic (mainly copper) naphthenates in spirit solvents were used as preservatives. Production over here started at Avonmouth in 1932 and there is now a full range of Cuprinol compounds for all types of preservation work. Any form of chemical applied to wood in an unfixed water soluble form is liable to be washed away when the wood becomes wet, the very time when the preservative is needed. On the other hand, chemicals in spirit solvents do not wash out and treated timbers can be handled as soon as the solvents have evaporated, a further advantage of the Cuprinol compounds being that they do not interfere in any way with subsequent decoration.

So far as the rest of the booklet is concerned, there is plenty of information about

the habits of the commoner fungi and wood borers, with useful photographs and other information to show how they can be identified.—(Jenson and Nicholson Ltd., 36, St. James's Street, London, S.W.1.)

### TOWER CLOCKS

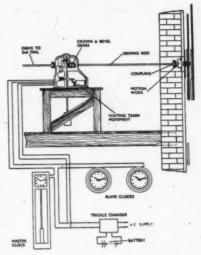
Gents' of Leicester have just issued a very informative catalogue on the planning and installation of tower clocks and striking and chiming equipment, the sort of work Gents have been doing for longer than most of us can remember.

They divide clocks of this type into two main groups, mains operated by time-controlled A.C., and normally very good, though less reliable nowadays with power cuts and the lowered frequencies which the companies provide during the process of load shedding. The alternative is the clock controlled from a master station and inde-pendent of all but current interruptions prolonged for days or more.

Movements are made in three sizes suitable for driving the hands of dials from 2 ft. to 20 ft. in diameter, the normal method with a four-faced clock being to mount the movement proper in the centre of the tower, driving a pair of shafts (rotating once an hour) at right angles; the 12 to 1 hour hand reduction being mounted in the wall immediately behind the face.

With the pendulum type of master clock controlling any number of dials the appropriate tower movement for the larger clocks is known as the waiting train type. is in effect a free swinging pendulum clock corrected to the exact time every half minute by the master clock. It has the advantage that the pendulum is electrically energised about once a minute in normal conditions, but in wind, snow or frost, the pendulum is automatically energised more often, every swing, if necessary, to provide the necessary extra power.

The firm also makes a range of striking and chiming mechanisms and the tune playing mechanisms which so many manufacturers seem to find so amusing, but



Wiring and connections of typical master clock controlled tower clock installation employing a waiting train movement.

against which I have a firm personal prejudice.

A useful booklet which gives all the essential information. (Gent & Co. Ltd., Faraday Works, Leicester.)

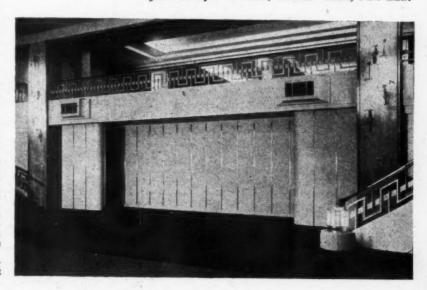
#### PORTABLE PLYWOOD SCREEN

An interesting portable screen designed by George Ramon and built by Pollards has recently been installed in the Great Room at Grosvenor House. This room is used for large-scale banquets and exhibitions are also held from time to time so that it is also held from time to time so that it is necessary to add or subtract from the floor space. The screen, therefore, had to be easily and quickly removable, of very light weight, and conform with LCC fire regulations. It is 34 ft. long, 11 ft. high, and only 1½ in. thick, and has 16 panels in the middle tongued into each other, with a door reasing at both ends. Each result weights opening at both ends. Each panel weighs only 74 lb., and they can be separated and stacked in a few minutes.

Plymax packed with mineral wool has

solved the problem of weight; it is fireproof and heat-resisting to a high degree. After sandpapering, the matt surface has been decorated to blend with the general decor.

Plymax screen, Great Room, Grosvenor House, Park Lane.



Prices are for work executed complete and are for an average job in the London area; all prices include overhead charges and profit for the general contractor.

# **CURRENT PRICES FOR MEASURED WORK**

BY DAVIS, BELFIELD AND EVEREST, Chartered Quantity Surveyors

For Rates of Wages and Market Prices of Materials see THE ARCHITECTS' JOURNAL for July 6.

Jawains

F.R.I.C.S., F.I.Arb.

#### **PRELIMINARIES**

Water and Insurances, according to the na (say)	ture of the job	11%
EXCAVATOR		
Excavation		
N.B.—The following prices are applicable to soil.	hand excavation	in heavy
Surface digging, 6" deep	per yard super	-/9
Ditto, 12" deep		1/51
Excavating not exceeding 10' 0" deep to	1 0	1 - 2
reduce levels	per yard cube	6/1
Excavating not exceeding 5' 0" deep to form	. 4	
basement	per yard cube	6/10
Ditto, exceeding 5' 0" and not exceeding		
10' 0" deep ditto	per yard cube	9/10
Excavating not exceeding 5' 0" deep to form		
surface trenches	per yard cube	8/4
Ditto exceeding 5' 0" deep and not exceeding		
10' 0" deep ditto	per yard cube	11/4
Excavating not exceeding 5' 0" deep to form		
basement trench, commencing 10' 0" deep	per yard cube	14/4
Disposal		
	-	
Returning, filling and ramming around	non word subs	910
foundations Wheeling excavated soil not exceeding 100	per yard cube	2/8
	per yard cube	3/-
Ditto and appending and lowelling	per yard cube	3/11
Ditto, ditto, and consolidating to make up	por yard cube	0/11
levels under floors and pavings	per yard cube	5/-
Filling into lorries and carting away	per yard cube	11/3
- many many continue away	por Jula oubo	4410

Planking and Strutting

per ft. super

per ft. super

per ft. super per ft. super -18

Planking and strutting to sides of surface or basement excavation not exceeding 5' 0"

Ditto not exceeding 10'0" deep
Planking and strutting to sides of surface
trenches not exceeding 5'0" deep (both
sides measured)

Ditto not exceeding 10' 0" deep (ditto)

To all valuations for measured work add for Preliminaries,

### CONCRETOR .

deep

Portland cement concrete 1:3:6 with 1½" coarse aggregate in foundations and masses exceeding 12" thick	52/3
Ditto 1:2:4 with #" coarse aggregate ditto per yard cube	50/6
Add to Basic Prices for :-	
Working around rod or mesh reinforcement per yard cube	4/6
Being in beds less than 12" thick (6"-12") per yard super	-/4
Ditto less than 6" thick (3"-6") per yard super	-/9

Concrete (Basic Prices)

# CONCRETOR—(continued)

Being in small quantities not exceeding 3'		
cube	per yard cube	12/1
Being in suspended floors and roofs	per yard cube	9/1
Being in walls not exceeding 6" thick	per yard cube	10/7
Ditto exceeding 6" but not exceeding 12"	non wand only	6/1
thick	per yard cube	6/1
Ditto exceeding 12" thick	per yard cube	3/-
Being in lintels, beams, etc., not exceeding 72 sq. in. sectional area	-ord outo	1910
	per yard cube	13/8
Ditto exceeding 72 and not exceeding 144 sq.	-or word subs	0/1
in. sectional area	per yard cube	9/1
Ditto exceeding 144 sq. in. sectional area	per yard cube	6/1
Being in columns not exceeding 72 sq. in.		03.10
sectional area	per yard cube	21/2
Ditto exceeding 72 and not exceeding 144 sq.		1040
in. sectional area		13/8
Ditto exceeding 144 sq. in. sectional area	per yard cube	9/1
Formwork		
Close boarded formwork and supports to		
soffites of floors not exceeding 12' high	ner ward spner	17/10
Ditto to vertical faces of walls (both sides		11/10
		14/3
measured) Ditto to sides and soffites of lintols and beams	per ft super	1/101
Add to any of the above for wrot formwork	per re. super	1/109
and rubbing down concrete	ner word comer	1/104
and rubbing down concrete	per yard super	1/102
Reinforcement		
5" to 1" diameter mild steel rod rein-		
forcement, hooked, bent and tied at		
intersections as required and fixing in		
concrete	per cwt.	34/4
g" diameter ditto	per cwt.	37/-
l" diameter ditto	per cwt.	46/6
Steel wire mesh fabric reinforcement to B.S.		
1221, weighing 4.71 lb. per yard super,		
well lapped at joints and embedded in		
concrete	per yard super	2/7
Ditto weighing 9.32 lb. per yard super ditto	per yard super	$4/10\frac{1}{2}$

# BRICKLAYER

Common Br	ickwork		
Reduced brickwork one brick thick in cement-lime mortar (1:3:9)	per yard super	Flettons 23/2	Rough stocks 27/10
Add to the above :— If in cement mortar (1:3) If circular on plan to flat sweep Ditto to quick sweep	per yard super per yard super per yard super	3/81	$\frac{-/1\frac{1}{2}}{3/11}$ $\frac{7}{10}$
Half brick wall in cement lime mortar (1:3:9)	per yard super	12/9	15/1
with a neat flush joint	per yard super	14/4	16/8

# nclude RK 2/1 9/1 0/7 6/1 3/-13/8 21/2 13/8 9/1 17/10 14/3 1/10½ 1/101 34/4 37/-46/6 $\frac{2}{7}$ $\frac{4}{10\frac{1}{2}}$

Rough stocks 27/10

> -/1½ 3/11 7/10 15/1

16/8

	d)						
1.1.1				1	Flette		Rough stocks
)ne brick wall built fair and po both sides with a neat flush	joint	per yar	d sup	er	23/3		27/11
1" hollow wall with 2" cavity galvanized iron twisted ties	and	per yar	d suj	er	25/9		30/5
Engine	ering i	Brickwor	k	]	ingfie Engir	1-	Blue ressed
Reduced brickwork one brick th cement mortar (1:3) Half brick wall in cement mortar Ditto built fair and pointed both	(1:3) sides			er	33/1 17/1	1	53/3 28/3
with a neat flush joint One brick wall built fair and dit	to		d suj	per	19/9 36/6		30/4 57/4
Extra for internal fair face and	Sundri flush	ies					
pointing  Horizontal damp-proof course of slates and bedding	of two	per yar	d suj	190		-/1	1
pointing Ditto of hessian base bitumen	well	per foo	ot suj	per		2/1	101
lapped at joints Fixing only metal window, size 1 4'0", including cutting and pi lugs to brickwork, bedding fi and pointing in mastic one sic	'8" × inning		,	per		6/5	
Ditto, 3' 3" × 4' 0" ditto Ditto, 6' 6" × 4' 0" ditto	****		e	ich		10/-	-
	Partiti		0.	BOIL		**1	
Breeze concrete solid parti- tion blocks to B.S. 492 and			2"			3"	41"
Hollow clay partition blocks to B.S. 1190, keyed on	er yar	d super	6/9	7	/10	9/-	11/4
Moler hollow partition	er yar	d super	6/10	7	/7½	9/-	11/1
blocks, keyed on both sides and ditto po	er yar	d super	11/2	13	/4	15/-	4" 17/2
	Facin	ıgs					
						faci	White clazed ngs p.c 60/- N for
Extra over common brickwork built with bricks p.c. 90/-M				rdin	ary	1,0 for	etchers 46/9-M héader d point
for facings as described, and pointing with a neat weath-			p.	C.	p.c. 219/8	in	g with
ered joint:— To solid wall in Flemish bond	per y	ard supe	M	[.	M. 13/2	C	ement
To cavity wall in stretcher bond	per y	ard supe	er 9	/5	10/9		58/3
To ditto in Flemish bond with snapped headers Half brick wall in facings in stretcher bond built fair and pointed one side with a neat		ard supe	er 10	/11	12/5		-
weathered joint							
Ditto pointed both sides	per y	ard supe			22/5 25/-		_
	per y	ard sup	er 23	/9			<del>-</del>
Ditto pointed both sides One brick wall in facings built fair and pointed one side Ditto pointed both sides Brick on end flat arch in facings 44" on soffte and 9" high and	per y	ard superard	er 23 er 37 er 40	/9 /8 /3	25/- 40/2		<del>-</del>
Ditto pointed both sides One brick wall in facings built fair and pointed one side Ditto pointed both sides Brick on end flat arch in facings 4½" on soffite and 9" high and pointing Brick on edge coping to 9" wall with two courses plain tiles under, laid breaking joint,	per y per y per y	ard superard	er 23 er 37 er 40	/9 /8 /3	25/- 40/2		
Ditto pointed both sides One brick wall in facings built fair and pointed one side Ditto pointed both sides Brick on end flat arch in facings 4½" on soffite and 9" high and pointing Brick on edge coping to 9" wall with two courses plain tiles	per y per y per y	ard superard	23 er 37 er 40	/9 /8 /3 2/5	25 - 40 2 42 9 2 6		
Ditto pointed both sides One brick wall in facings built fair and pointed one side Ditto pointed both sides Brick on end flat arch in facings 4½" on soffite and 9" high and pointing Brick on edge coping to 9" wall with two courses plain tiles under, laid breaking joint, two cement angle fillets and	per y per y per y	rard superard superar	23 er 37 er 40	/9 /8 /3 2/5	25 - 40 2 42 9 2 6		
Ditto pointed both sides One brick wall in facings built fair and pointed one side Ditto pointed both sides Brick on end flat arch in facings 4½" on soffite and 9" high and pointing Brick on edge coping to 9" wall with two courses plain tiles under, laid breaking joint, two cement angle fillets and pointing	per y per y per y	rard superard superar	23 er 37 er 40	/9 /8 /3 2/5	25/- 40/2 42/9 2/6	01 3.S.	
Ditto pointed both sides One brick wall in facings built fair and pointed one side Ditto pointed both sides Brick on end flat arch in facings 4½" on soffite and 9" high and pointing Brick on edge coping to 9" wall with two courses plain tiles under, laid breaking joint, two cement angle fillets and pointing  ASPHALTER  Horizontal asphalt tanking in thicknesses on brick or conce	per y per y per y per y per y	ard superard	er 37 40	/9 //8 //3 //5 //5	25/- 40/2 42/9 2/6 3/1 To F 109	01 3.S.	1418 25/2
Ditto pointed both sides One brick wall in facings built fair and pointed one side Ditto pointed both sides Brick on end flat arch in facings 4½" on soffite and 9" high and pointing Brick on edge coping to 9" wall with two courses plain tiles under, laid breaking joint, two cement angle fillets and pointing  ASPHALTER  Horizontal asphalt tanking in thicknesses on brick or conce	per y per y per y per y per y	e per ya	er 37 40	/9 //8 //3 //5 //5	25/- 40/2 42/9 2/6 3/11 To F 109 15,	04 3.S	25/2

ASPHALTER-	(continued)
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		To B.S. 988	To B.S. 1162
4" asphalt skirting 6" high with angle fillet at bottom and rounded top, turned into groove	per foot run	1/11	2/41
water check roll at top and under- cut drip at bottom	per foot run	2/71	3/2

unet at bottom and rounds	ed top,					
turned into groove		pe	r foot run	1/11	2/4	
asphalt fascia 6" high with	h solid					
water check roll at top and cut drip at bottom	under-	700	e foot mu	9/71	9/9	
car arp at bottom	,	pe	r foot rur	2/7	3/2	
DRAINLAYER						
		. 1 D.	1.			
	nches ar					
N.B.—The following prices ar						V
soil, only requiring planking a Excavate trenches for 4"-9"	nines	includ	ing	5 01 5 0	щоге.	
planking and strutting, filli	ing in a	and ra	am-			
ming, and wheeling and spre						
For each 12" in depth, for	or trem	ches	not		-	
exceeding 3' 0" deep				yard ru	n 2/5	
Ditto for trenches exceed	ding 3	0" 1	and		9 17	
not exceeding 5' 0" deep Ditto for trenches exceed	line 5'	0//	and per	yard ru	in 3/7	
not exceeding 10' 0" deep				yard ru	m 6/2	
			P	,		
6" concrete (1:3:6) bed and	benchi	ng		4"		
for pipes	****		per yard			
6" ditto, and surround	****		per yard	run 12/	1 14/1	04
	Drain	ns	0.0	4.00	0.5	
Clarinana butt isintad land			3"	4"	6"	
Clayware butt-jointed land drains and laying in trench	nor foo	t run	$-/3\frac{1}{2}$	-/4	-/7	1
"Seconds" quality glazed	per 100	t run	-/39	-/-	-/.	2
stoneware socketed drains			4"	6"	9"	
and laying and jointing in						
trench	per foot	run	1/71	2/4	3/8	Ī
"British Standard" quality			1/101	010	4.1=	
Extra on "Seconds" qual-	per foot	run	1/101	2/9	4/5	
lity for bends		each	1/11	2/10	4/-	
Ditto "British Standard"		Cuon	-1	-110	-1	
quality ditto		each	$2/3\frac{1}{2}$	$3/4\frac{1}{2}$	5/1	11
Extra on "Seconds" quality			1			
for single junction		each	3/1	$4/5\frac{1}{2}$	6/4	Ł
Ditto "British Standard"		orah	9/71	5/9	0/1	11
quality ditto Cast iron socketed drains to		each	3/71	5/3	8/1	14
B.S. 437 and laying and						
jointing in trench	per foo	t run	9/1	14/2	27/1	0
Extra for short radius bend						
(Fig. No. 4)		each	18/7	35/9	103/6	,
Extra for single junction (Fig. No. 18)		each	33/8	65/6	195/-	
			99/0	00/0	1001-	
	Fittings	, etc.		4"	6"	
Glazed stoneware trapped gui	llev wit	h galv	van-	*	U	
ized grating and outlet and s				h 17/9	29/-	
Ditto with vertical inlet ditto			eac	h 21/2	32/3	3
Cast iron trapped gulley with						
ing, and 4" outlet and setti	ng in co	ncrete		h 40/9		
Ditto with vertical inlet ditto Glazed stoneware intercepting		th ins	nec-	h 50/2	_	
tion arm, stopper and cha						
manhole and jointing to dr			еал	h 47/6	54/1	10
Brown glazed stoneware hal	f round	l stra				
channels and bedding and j	ointing	in cen	nent	n 1/6	2/3	2
mortar Ditto ordinary channel bend	and ditt	Р	er ioot ru	h 4/5	0.10	
Cast iron coated single seal m	anhole	cover	and	=10	0/0	
frame to B.S. 497 Grade C	and set	ing fr	ame	$24'' \times 1$	8" 24" × 5	24"
in cement and cover in grea			68.0	h 32/1		
Galvanized ditto	****	****	ea.c	h 52/1	0 76/1	10
DATION						
PAVIOR						_
Cement and sand (1:3) f	loated				1" 11	
screed to receive pavings		per ya	ard super	3/1	3/91 4/3	5 <u>\$</u>
Ditto trowelled smooth to r	eceive	ner w	ard super	3/41	4/1 4/7	7
Cement and sand (1:3)	naving	Por ye	a. a super	Olina	-12 -11	
trowelled hard and smooth		per ya	ard super	3/5	4/11 4/	71
Granolithic paying (1:24) 1	aid on	-		1"	11," 11	"
concrete  1" Red composition paving t	- TO 0	per y	ard super	$5/2\frac{1}{2}$	5/11 6/	7 1
Red composition paving t	o B.S. 7	70 lai	a on	ward am	per 15/9	0
prepared screed  §" Terrazzo paving (Portland	****		DOI	yard su	10/	
aggregate) laid on prepared	d screed	- SPEEKE	per	yard su	per 34/	11
Extra for white or cream cen	nent		per	yard su	per 57	
1" Rubber flooring in all col	ours, la	id on	pre-			
nared screed	****		per	yard su	per 34/	101
$\frac{1}{8}$ " $\times$ 12" $\times$ 12" Rubber tile	nooring	ditto	per	yard su	per 28/	14.3

PAVIOR—(continued)	CARPENTER—(continued)
%" × 12" × 12" Cork tile flooring (brown shades) laid in mastic on prepared screed,	Ditto and framing in ridge per foot cube 14/9
surfaced and polished per yard super 37/3	Ditto in hip and valley rafters including cutting rafters to sides per foot cube 16/6
14" Hard red paving bricks p.c. 309/6 per M.	Battening and Boarding
laid flat on prepared bed in cement mortar per yard super 17/4 11 Ditto laid herringbone per yard super 19/2	Roof Vertical
6" × 6" Red quarry tile paving to B.S.	1 X 11" Battens nailed to softwood for slopes hanging
1286 laid on prepared screed with straight joints per yard super 21/- 22/7	$20'' \times 10''$ slates to $8\frac{1}{2}''$ gauge per square $24/2$ $25/2$ Ditto $16'' \times 10''$ slates to $6\frac{1}{2}''$ gauge per square $28/10\frac{1}{2}$ $30/2$ Ditto $10\frac{1}{2}'' \times 6''$ tiles to $4''$ gauge $(4\frac{1}{2}''$ for
$6'' \times 6''$ Buff quarry tiles as last per yard super 22/1 24/8	vertical hanging) per square 39/4½ 39/4½
2½" (Finished) Gravel path laid on pre- pared bed, well watered and rolled to	Roof Slopes Mansards
cambers and falls per yard super 2/3½  MASON	Ditto $14\frac{1}{4}$ " $\times$ 10" pantiles to 12" gauge per square 16/10 17/4 Ditto $15$ " $\times$ 9" concrete interlocking
Portland stone and all labours in pilasters,	tiles to 12" gauge per square 16/10 17/4 Roof boarding in batten widths close #" 1"
quoins, jambs, lintols, etc per foot cube 34/8 Ditto in arches, columns, cornices, etc. per foot cube 43/1	jointed and fixed to flat or sloping roofs per square 89/5 111/4
Ashlar av. $6\frac{1}{4}$ on bed with plain dressed face per foot super 18/11	Ditto tongued and grooved and pre- pared for felt roofing including firring
Port- Arti-	to falls per square 148/5 173/3
Portland stone or artificial stone to land ficial B.S. 1217:—	Sawn gang boarding fixed to joists in roof per foot super $1/ 1/2\frac{1}{2}$ Wrot and crosstongued eaves soffite per foot super $1/7$ $1/10$
$4\frac{1}{2}$ " $\times$ 4" Sill, sunk, weathered, throated	6" Wrot and grooved eaves fascia
and grooved for water bar, set and jointed in cement mortar per foot run 6/4 3/4	planted on per foot run -/7 -/9
$9'' \times 3''$ ditto per foot run $7/4$ $4/10$	Wall and Ceiling Boards
2" × 12" Coping, weathered and twice throated, set and jointed as last per foot run 6/10\frac{1}{2} 4/5	½" Fibre board to B.S. 1142 fixed with Vertigalvanized flat headed nails to soft-
3" × 12" Ditto per foot run 9/5 6/6	galvanized flat headed nails to soft- cally Soffites wood per yard super 5/4 5/5
5" × 12" Saddle back coping twice throated, set and jointed as last per foot run 15/9 10/4	3 Asbestos cement flat sheeting to
6" × 12" Ditto per foot run 17/4 11/10	B.S. 690 fixed as last per yard super 4/6½ 4/10 ½" Ditto per yard super 5/5 5/7½
SLATER, TILER AND ROOFER	
Slates	JOINER
$20''\times10''$ 16" $\times8''$ Best Bangor slates to B.S. 680 laid with	Floors and Skirtings
3" lap, each slate nailed with two	(All thicknesses stated are nominal)
stout copper nails per square 225/- 210/- Ditto hung vertically to dormer cheeks	Plain edge softwood flooring in batten widths nailed to floor joists per square 106/9 118/6 142/3 Tongued and grooved ditto per square 114/- 126/3 151/-
and gables per square 236/3 225/-	Tongued and grooved ditto per square 114/- 126/3 151/- 1" Double grooved and tongued and grooved wood block floor
Tiles. Hand Machine	laid herringbone with two-block border, set in hot mastic
Best sand faced plain (nibbed) tiles to made made	composition on prepared screed and wax polished:— Swedish softwood per yard super 24/3
B.S. $402$ , $10\frac{1}{2}'' \times 6''$ laid to a 4'' gauge with each tile in every fourth course	English Beech per yard super 34/9
nailed with galvanized nails per square 141/9 133/104	European Beech per yard super 32/6 English Oak per yard super 45/3
Ditto hung vertically to dormer cheeks and gables to 4½ gauge with each tile	European Oak per vard super 39/4
nailed with galvanized nails per square 136/6 131/3	Burma Teak per yard super 46/3 Softwood skirtings with splayed or Sectional area
Berkshire hand made sand faced red pantiles $14\frac{1}{4}$ " $\times$ 10" laid to $2\frac{1}{4}$ " head and $1\frac{1}{4}$ " side laps,	molded top edge, planted on (per inch 3" to 6" Over 6"
each tile in every third course nailed with	sectional area) per foot run \( \sqrt{2\frac{1}{4}} -\sqrt{2\frac{1}{4}} \) Extra for grounds plugged to brickwork per foot run \( -\sqrt{5} \)
galvanized nails per square 141/9 Ditto to mansard slopes per square 149/7½	Windows in Softwood
Concrete plain (nibbed) tiles to B.S. 473, $10\frac{1}{4}$ " $\times$ 6" laid as before described for plain tiles per square 86/8	Rebated and molded softwood fanlights
Ditto hung vertically to dormer cheeks, and	and casement sashes divided into 11 2"
gables, ditto per square $89/3$ Concrete interlocking tiles $15'' \times 9''$ laid to $3''$	squares for glass per foot super 2/51 2/9 Extra for hanging each 4/11 4/11
lap, each tile in every third course nailed with	Cased frames with $6^{\circ} \times 3^{\circ}$ Oak sill and $2^{\circ}$
galvanized nails per square 76/1½ Ditto to mansard slopes ditto per square 84/-	molded double hung sashes including pulleys, line and weights per foot super — 8/6
Asbestos Cement	N.B.—The above prices are for purpose made joinery. Standard pattern casement windows and double hung sashes and frames to
6" Corrugated asbestos cement sheeting fixed to wood roofs with galvanized drive screws	B.S. 644 are cheaper.
and washers with a side lap of 11 corrugations	Doors in Softwood
and an end lap of 6" per square 69/4 6" Ditto but fixed vertically per square 73/6	Framed ledged and braced doors
Add to both last if fixed to steel purlins or	filled in with 1" T. & G. and V- jointed boarding and hanging per foot super 4/4 4/10½ 5/
sheeting rails with galvanized hook bolts per square $2/8\frac{1}{2}$ Felt	Four-panel door, square both sides
Reinforced bituminous roofing felt laid with 3"	and hanging per foot super $3/3$ $3/6$ $3/7$ Ditto molded one side per foot super $3/6$ $3/9\frac{1}{2}$ $3/10$
laps and nailed to rafters at 18" centres with galvanized clout nails per square 18/11	Ditto molded both sides per foot super 3/94 4/04 4/2
Two Three	N.B.—The above prices are for purpose made doors. Standard panelled doors to B.S. 459 are cheaper.
One-ply bitumen felt to B.S. 989 laid on layer layer concrete. Each layer bedded in hot	1½" Standard flush doors 2' 6" × 6' 6", internal pattern each 84/3
bitumen per yard super 6/4 8/5	
CARPENTER	Linings, Frames, etc., in Softwood Sectional area
Carcassing	Window and door linings etc. (per inch Up to 6" 6" to 12"
Softwood, sawn and fixed, in plates, sleeper joists and lintols per foot cube 12/1	in sectional area) per foot run -/3 -/2½  Frames wrot all round and framed
Ditto in floor and ceiling joists per foot cube 13/7	(ditto) per foot run -/21 -/2
Ditto in stud partitions per foot cube 14/11 Ditto in rafters per foot cube 14/9	Mullions, transomes and cills (ditto) per foot run $-/2\frac{3}{4}$ $-/2\frac{1}{4}$ $-$
Ditto in rafters per foot cube 14/9 Ditto in purlins and struts per foot cube 14/11	Moldings, architraves, etc. (ditto) per foot run -/2 -/1



Consulting Engineer: Martin I. Addams, B.Sc.(Eng.), A.M.I.C.E., A.C.G.I., M.I. Struct.E.

### EXTRA SEATING ACCOMMODATION TODAY-

14/9 16/6 Vertical hanging 25/2 1 30/2 39/4 1 39/4 1 17/4 1" 111/4

> 173/3 1/2½ 1/10 -/9

Soffites

5/5 4/10 5/7½

24/3 34/9 32/6

45/3 39/4 46/3 area

Over 6' -/21

2/9 4/11

8/6 Standard rames to

101 5/-

3/10

Standard

ach 84/3 ach 89/9

nal area '6" to 12"

-/21

-/21 4" to 6"

## COMPLETELY CLEAR SPACE TOMORROW

The large increase in the seating accommodation at Earls Court Stadium is made possible by Mobile Units each capable of seating up to 150 people. These were designed to specification and constructed by Hills (West Bromwich)

Limited from T.I. Aluminium Alloy Sheet and Extrusions. Mounted on Castors the Units can be moved by only four men and the entire additional seating can be cleared away in less than 24 hours. This seating arrangement is typical of the almost limitless applications for which T.I. Aluminium is suitable and which are winning the approval of larger and

REDFERN ROAD, TYSELEY, BIRMINGHAM. TEL.: ACOCKS GREEN 3333

larger audiences in all branches of industry.

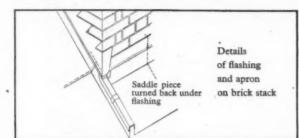
Aluminium

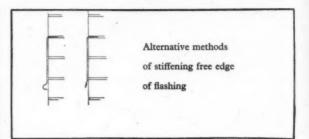
O - TI Aluminium

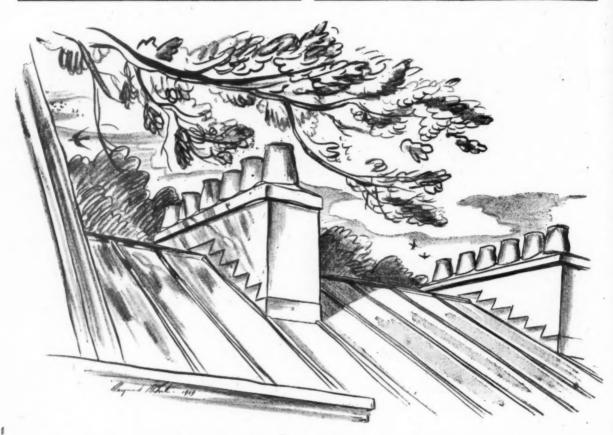
O - TOTE INVESTMENTS COMPANY

ALUMINIUM AND ALUMINIUM ALLOY INGOT, SLABS, BILLETS, SHEET, STRIP, TUBES AND EXTRUSIONS TO ALL COMMERCIAL, A.I.D. AND LLOYD'S SPECIFICATIONS

### DATA SHEET FOR ARCHITECTS No. 7 ZINC CHIMNEY FLASHINGS & APRONS







Zinc is one of the most economical materials available for permanent work and has the additional advantage that it is easily formed. For flashings and aprons No. 14 Z.G. (21 I.S.W.G.) is recommended as a thickness which will ensure a long, trouble-free life. Step flashings of the required length are easily made up from zinc strips at least 7" wide by measuring off the steps against the brickwork. Flashings and aprons are turned into the brickwork and secured by wedges and then pointed. No standard dimensions can be laid down owing to the wide variation in the size of chimneys and the pitch of roofs. Further information on weatherings, gutterings and other uses of zinc in building can be had from the Association, together with a list of publications.

### ZINC DEVELOPMENT ASSOCIATION

LINCOLN HOUSE TURL STREET OXFORD TELEPHONE OXFORD 47988



OINER—(continued)			PLASTERER AND TILE FIXER—(continued)
	Thickne		Wall Tiler
	1" 2/3	1½" 2/5	$6'' \times 6'' \times \frac{3}{8}''$ Standard quality white glazed
	2/5	2/8	wall tiles set and jointed on prepared screed per yard super Ditto coloured enamel bright glazed tiles ditto per yard super 42
Shelving and Fittings in Softwood			Ditto eggshell matt enamelled per yard super 42
helving of 2" slats spaced 1" apart on	1,01	1"	and the same of th
	1/81/2/2	2/1 2/7	'
rosstongued shelving on ditto per foot super	2/41	3/-	EXTERNAL PLUMBER AND COPPERSMITH A
	1/6	1/11	ZINCWORKER
Shelf bearers plugged to walls per foot run the following in framed up cupboard fittings:—	-/9	-/9	Gutters, Step
& G. & V-jointed back per foot super	1/10	2/-	Flats flash- fla ings, etc. in
rosstongued top, bottom shelf or	0/91	0.17	Milled sheet lead and labour per cwt. 169/4 169/4 176
division per foot super ‡" Flush cupboard doors per foot super	2/31/4/10	02/7	24 S.W.G. sheet copper and
abour rebate or groove per foot run	-/2	1	labour per foot super 4/7 4/10 5 23 S.W.G. sheet copper and
Ditto cross-grain per foot run	-/3		labour per foot super 4/10 5/1 5
" $\times$ 2" Bearers screwed on per foot run N.B.—The above prices are for purpose-made cupl	-/4 board fi		14 gauge zinc and labour per foot super 2/9½ 2/11½
tandard pattern kitchen fittings to B.S. 1195 are cheap	er.		Rainwater Pipes and Gutters
		- 1	Cast iron medium section (3"
RONMONGERY			metal) R.W. pipes and joint-
		Hard- wood	ing and fixing to walls with 3" 4" pipe nails and distance pieces With With With W
"Steel butts (medium quality) per pair	1/10	1/10	or holderbats (cutting and holder- nails holder- r
" Ditto (ditto) per pair	2/4	2/4	
Double action floor springs and top centres including filling boxes with oil P.C. 116/6 each 14	49/7 1	147/4	separately) per foot run $4/6\frac{1}{2}$ $3/8$ $5/6$ 4 Pressed steel R.W. pipes and $24$ G. $20$
Overhead check action door springs. P.C. 60/6 each		78/6	ditto per foot run 2/10½ 2/4½ 3/10 3
Barrel bolts. P.C. 3/7 each	5/3	5/7	Asbestos cement R.W. pipes
Cupboard locks. P.C. 6/4 each worfolk latches. P.C. 4/7 each	9/8	9/10	and ditto per foot run 2/1 — . 2/8 Cast iron half round eaves 4" 6"
Evlinder night latch, P.C. 10/6 each		17/6	gutter and jointed and fixed 1" 3." 1".
fortice latch. P.C. 7/9 each	$12/1\frac{1}{2}$	13/4	with brackets to fascia per foot run 1/11½ 2/8½ 3/4½
Rim lock. P.C. 8/3 each lock. P.C. 12/1 each		12/8 19/4	Ditto O.G. ditto per foot run 2/6 3/4 3/9 4  18 Gauge pressed steel half
Door furniture. P.C. 17/8 each per set		20/4	round ditto per foot run 1/11 2/10
Sash fasteners. P.C. 6/1 each	8/11/2	8/71	
Casement fasteners. P.C. 6/1 each casement stays. P.C. 8/10 each	7/9 10/9	$\frac{8/1\frac{1}{2}}{11/2}$	Asbestos cement half round ditto per foot run 1/104 2/11
Casement stays. P.C. 8/10 each	10/3	11/2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
STEEL AND IRONWORKER			Soil and Ventilating Pipes
Structural Steelwork			Lead soil, waste and ventilat-
The following prices are for Basis sections (5" $\times$ 4)	y" to 16	" × 6")	ing pipes (17 lb. per yard for
only. Prices for other sections vary roughly in proport of the steel. Ex mills—see "Current Market Prices of	ion to th	ne price	ing pipes (17 lb. per yard for 3" and 22 - 8 lb. per yard for 4" diameter) fixed to walls with 3" 4"
R.S.J.—in steel framed structures hoisted and fixed		s. d.	diameter) fixed to walls with $3''$ 4" lead tacks and brass screws per foot run $9/8$ 13/3
complete per	ton 45		Medium or heavy section cast
Riveted compound girders including plates and rivets per	ton 40	7 0	iron soil, waste and ventilat- ing pipes with caulked joints,  Heavy Med- Hea
R.S. Stancheons including caps, bases, cleats, etc per	ton 50	18 6	fixed to walls, with pipe 3."
Riveted compound stanchions ditto per	ton 52	2 10 0	nails and distance pieces per foot run 4/8 4/3½ 5/10½
Riveted roof trusses with flat and angle members,	ton 76	7 0	
plates, cleats, etc., 30' span per Ditto 40' span per	ton 68	5 0	INTERNAL DILIMPER
Sundries			INTERNAL PLUMBER
simple wrot iron balustrades fixed complete (excluding mortices etc.)			Lead Pipes Prices are based upon the following weights per yard.
(excluding mortices etc.) per Bolts with heads, nuts and washers and fixing per	cwt. 7	7 15 0	1" 1" 1"
per with neads, note and wasners and nxing per	CWE. 8	8 15 0	Îh. Îh. Ih.
DIACTEDED AND THE EIVED			Supply 7 11 16
PLASTERER AND TILE FIXER			Distributing 6 9 12.5 Flushing and overflow 3 5 7
4 gauge expanded metal lathing and fixing to softwood soffites per yard	l gunos	5/-	Waste and ventilating
	asuper	5/-	Supply pipe in trench (mea-
Lime and Gypsum Plaster Three coat lime and two coat Sirapite or		- 57	Supply pipe in trench (measured separately) per foot run $3/2$ $4/10$ $6/11$ Ditto fixed to walls and ceilings per foot run $3/6\frac{1}{2}$ $5/4\frac{1}{2}$ $7/7\frac{1}{2}$ le
similar Computer plactor.	Lime S		Ditto fixed to walls and ceilings per foot run $3/6\frac{1}{2}$ $5/4\frac{1}{2}$ $7/7\frac{1}{2}$ Distributing pipe fixed to walls
On brick wells and nortitions	4/41	3/6	and ceilings per foot run $3/2$ $4/7$ $6/3$
On brick wans and partitions per yard super	0/44	4/6	Flushing and overflow pipe ditto per foot run 2/6½ 3/1 4/1½
On brick walls and partitions per yard super On concrete soffites including hacking per yard super On soffite of E.M.L. (measured senar-		410	Waste and ventilating pipe ditto per foot run — — — — — — — — — — Joints to fittings — — — — — — — — — — — — — — — — — — —
on some of E.M.L. (measured separately)	4/5	4/8	
on some or E.M.L. (measured separ- ately) per yard super On and including wood laths, to soffites per yard super	4/5 7/8½	-	Bends each -/9½ -/9½ 1/0½
On soffice of E.M.L. (measured separately) On and including wood laths, to soffites per yard super Gypsum plasterboard fixed to softwood	4/5 7/8½		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
On soffite of E.M.L. (measured separately) On and including wood laths, to soffites per yard super  grad super  gr	7/8½		Bends       each $-/9\frac{1}{2}$ $-/9\frac{1}{2}$ $1/0\frac{1}{2}$ Branch joints       each $5/1$ $6/1\frac{1}{2}$ $6/6\frac{1}{2}$ Steel Tubes and Fittings
On soffite of E.M.L. (measured separately) On and including wood laths, to soffites per yard super  grad super  gr	7/8½		Steel Tubes and Fittings Galvanised steel tubes to B.S.
on soffice of E.M.L. (measured separately)  On and including wood laths, to soffites per yard super of Gypsum plasterboard fixed to softwood soffices, in accordance with manufacturer's instructions, scrimmed and finished with setting coat of suitable plaster  Plaster moulded cornice or cove (per inch in	. 7/8½	5/9	Steel Tubes and Fittings Galvanised steel tubes to B.S. 1387 Class C with screwed
on softe of E.M.L. (measured separately)  On and including wood laths, to soffites per yard super groups of Gypsum plasterboard fixed to softwood soffites, in accordance with manufacturer's instructions, scrimmed and finished with setting coat of suitable plaster per yard plaster moulded cornice or cove (per inch in girth) per form	7/8½	-	Steel Tubes and Fittings Galvanised steel tubes to B.S. 1387 Class C with screwed
on soffite of E.M.L. (measured separately)  On and including wood laths, to soffites per yard super soffites, in accordance with manufacturer's instructions, scrimmed and finished with setting coat of suitable plaster  Plaster moulded cornice or cove (per inch in girth)  Cement Rendering	. 7/8½	5/9	Steel Tubes and Fittings Galvanised steel tubes to B.S. 1387 Class C with screwed
on soffite of E.M.L. (measured separately)  On and including wood laths, to soffites per yard super on and including wood laths, to soffites per yard super of Gypsum plasterboard fixed to softwood soffites, in accordance with manufacturer's instructions, scrimmed and finished with setting coat of suitable plaster per yard plaster moulded cornice or cove (per inch in girth)  Cement Rendering  Rendering in Portland cement and sand (1:4) and setting in Keenes cement on brick walls	7/8½ d super	5/9 -/4	Steel Tubes and Fittings  Galvanised steel tubes to B.S.  1387 Class C with screwed joints in red lead as supply pipe laid in trench (measured separately) per foot run 1/7 1/10 1/11½ 2  Ditto Class B ditto fixed to
on soffite of E.M.L. (measured separately)  On and including wood laths, to soffites per yard super on and including wood laths, to soffites per yard super of Gypsum plasterboard fixed to softwood soffites, in accordance with manufacturer's instructions, scrimmed and finished with setting coat of suitable plaster per yard plaster moulded cornice or cove (per inch in girth)  Cement Rendering  Rendering in Portland cement and sand (1:4) and setting in Keenes cement on brick walls	7/8½ d super	5/9	Steel Tubes and Fittings  Galvanised steel tubes to B.S.  1387 Class C with screwed joints in red lead as supply pipe laid in trench (measured separately) per foot run 1/7 1/10 1/11½ 2  Ditto Class B ditto fixed to
on sofite of E.M.L. (measured separately)  On and including wood laths, to soffites per yard super \$\greceit\ \greceit\ \grece	7/8½ d super	5/9 -/4 4/6½	Steel Tubes and Fittings  Galvanised steel tubes to B.S.  1387 Class C with screwed joints in red lead as supply pipe laid in trench (measured separately) per foot run 1/7 1/10 1/11½ 2  Ditto Class B ditto fixed to walls and ceilings as supply, distributing waste nine etc. per foot run 1/8 1/11 2/2
on soffite of E.M.L. (measured separately)  On and including wood laths, to soffites per yard super on and including wood laths, to soffites per yard super of Gypsum plasterboard fixed to softwood soffites, in accordance with manufacturer's instructions, scrimmed and finished with setting coat of suitable plaster per yard plaster moulded cornice or cove (per inch in girth)  Cement Rendering  Rendering in Portland cement and sand (1:4) and setting in Keenes cement on brick walls	d super	5/9 -/4	Steel Tubes and Fittings  Galvanised steel tubes to B.S. 1387 Class C with screwed joints in red lead as supply pipe laid in trench (meas- ured separately) per foot run 1/7 1/10 1/11½ 2  Ditto Class B ditto fixed to walls and ceilings as supply, distributing, waste pipe, etc. per foot run 1/8 1/11 2/-

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in the nation ilding a list



# NO RUST on HOPE'S

HOT-DIP GALVANIZED

## WINDOWS

after seven years at sea

HOPE'S HOT-DIP GALVANIZED WINDOWS WERE INSTALLED IN THIS SEA FORT IN 1941 AND WERE NOT PAINTED UNTIL 1947, BUT THE PROTECTIVE COAT OF ZINC IS STILL IN EXCELLENT CONDITION

HENRY HOPE & SONS, LTD., SMETHWICK, BIRMINGHAM & 17 BERNERS ST., LONDON, W.1

Copper Tubes	and Fitt	ings					
Prices are based upon the following a							
		1"	3"	1"		11	10
Supply		18	17	16		16	
Distributing, waste, etc		19	19	18		18	
Copper tubes to B.S. 1386, as							
supply pipe laid in trench							
(couplings and trench mea-							
sured separately) per f	foot run	1/61	2/2	3/-		3/8	
Ditto to B.S. 659 as distribut-							
ing, waste pipes, etc. fixed							
to walls and ceilings. Coup-							
lings measured separately per i	foot run	1/6	1/11	1 2/9		3/3	1
Brass compression type coup-		0.10	0.11	~		0.15	
lings—copper to copper	each		3/10			6/1	I
Ditto bends	each		5/1			9/3	
Ditto tees	each	5/85	6/6	9/1	θ	14/	4
Sanitary					0		1
Fireclay sinks $24'' \times 18'' \times 10''$ inc and pinning brackets to tiled wall.	nuaing (	cutting		1			d
Combined metal sink and drainer 42'	F.U. (	V 91"	6	ach	3	16	9
to bearers (measured separately).	DC 90	0/8		ach	16	15	6.9
Fireclay lavatory basin 25" × 18"				acn	10	19	0
towel rail bracket including screwi							
tiled wall. P.C. 101/6				each	6	1	6
Rectangular cast iron porcelain e	namelle	hath		acii	,0	1	
5' 6" long, with taps, and panels t							
end fixed to framing (measur	red sens	rately)					
P.C. 312/	ou copu	a diocay )		ach	18	12	6
Fireclay w.c. pan with trap, plastic	seat, hig	h level					
cistern and flush pipe, including s							
floor and cistern brackets to backbo	ard. P.	C. 136/	- 6	each	8	16	8
Ditto with low level cistern. P.C. 14				each	9	11	(
GLAZIER							
OD. I DIE				To		To	
18 oz. Ordinary quality sheet glass	and			wood		met	
glazing with putty in squares							-
exceeding 4 ft. sup		r foot	uper	1/0		1/2	
24 oz. Ditto and ditto		r foot				1/3	
32 oz. Ditto and ditto		r foot				1/7	
Figured, rolled, and cathedral-			T.	-1-2		-, -	
tinted and ditto		r foot	uper	1/3		1/5	
		r foot		1/4		1/6	
l" Rough east and ditto	ре	I TOOK					
f" Rough cast and ditto f" Wired cast and ditto		r foot				1/7	

GLAZIER—(continued)		
	To wood	To metal
1" Georgian wired polished plate and ditto per foot super 1" Polished plate (glazing quality) and	5/1	5/3
ditto per foot super	4/41	$4/6\tfrac{1}{2}$
PAINTER		
Whitening, Distemper and Paint on Walls		
Prepare and twice whiten plastered walls and		
repare and twice distemper with washable	super	-/111
distemper on plastered walls and ceilings per yard s	nner	1/4
Ditto on brick or concrete per vard s	super	1/7
Ditto on brick or concrete per yard a	Pos	-1.
on plastered walls and ceilings per yard s	super	2/7
		Add for
		each ad
	rice	ditiona
Prepare, prime, and paint one coat oil	10	coat
colour on general surfaces per yard super 2	0	$\frac{1}{1}$
Ditto metal casements per yard super 3 Ditto members of roof trusses per yard super 3	110	
Ditto members of roof trusses per yard super 3	/Z	1/4
Ditto balustrades one side per yard super 3	10	1/71
Ditto bars, etc., not exceeding 6" girth per yard run -	10	-/3 <del>2</del>
Ditto small pipe per yard run – Ditto large pipe per yard run 1	/91	-/3g
Ditto large pipe per yard run l	105	-/02
1 40000 010 17 0000		Add for
T P	Basic	each ad
Knot, prime, stop and paint one coat	rice	ditional
oil colour on general surfaces of wood- work oil in per yard super 2 Ditto on skirtings, rails, frames, etc.,	2/91	1/1
Ditto on skirtings, rails, frames, etc.,		
not exceeding 3" girth per yard run - Ditto ditto for each additional 3" in girth per yard run -	-/41	-/12
Ditto ditto for each additional 3" in girth per yard run -	-/4	$-/1\frac{1}{2}$
Ditto on sash squares one side per dozen 3 Ditto on large sash squares one side per dozen 6	1/7	1/5
Stain and Varnish on Wood	5/6	2/6
Prepare, size, stain and twice varnish on		2/10
general surfaces of woodwork per yard s Ditto on skirtings, rails, frames, etc. not exceed-	super	
ing 3" girth per yard	d run	$-/4\frac{1}{2}$

Ditto ditto for each additional 3" in girth ....

### Announcements

As a result of the Northern Ireland prime minister's recent visit to the United States and Canada, some American and Canadian firms propose to send representatives to Northern Ireland to explore industrial possibilities on the spot. This information was given in the Northern Ireland Senate recently by Sir Roland Nugent, Leader of the House.

Messrs. W. H. Saunders & Son of Bank Chambers, 1, Carlton Crescent, Southampton, announce the following appointments:—Mr. J. R. Oates, A.R.I.B.A., DIP. ARCH. Sheffield, as Manager of their Channel Islands office at 4, Library Place, St. Helier, Jersey. Mr. R. W. Leggatt, A.R.I.B.A., A.M.T.P.I., as manager of their Portsmouth office at Woolwich Equitable Buildings, 53, Commercial Road, Portsmouth.

Horseley Bridge & Thomas Piggott, Ltd., of Tipton, announce that Mr. J. D. Vaughan, M.SC., M.I.C.E., M.I.STRUCT.E., has been appointed chief engineer and Mr. J. Sim, production manager.

Messrs. Stramit Boards, Ltd., announce the appointment of Mr. A. W. Pyatt, of Birmingham, as their technical representative for the Midlands.

From Saturday, July 8, the address of the head office of the Northern Ireland Housing Trust will be:—12, Hope Street, Belfast. (Tel.: 27971-5.)

Messrs. Thomas Lowe & Sons Ltd., of Burton-on-Trent have produced an illus-

trated brochure to commemorate a century and a quarter of building by the firm.

As the TDA has received hundreds of requests for copies of the statistical graphs showing comparative prices of imported timber from Russia, Sweden and Finland, which originally appeared in the "TDA Quarterly Review," October, 1948, issue, these graphs and explanatory text have now been reprinted in leaflet form. The original graphs covered the period 1920-1947, and supplementary figures for the years 1948 and 1949 have now been included in the leaflet to bring the statistics up to date. Copies are obtainable, free of charge, from the TDA, 75, Cannon Street, E.C.4.

Constructional Research Bulletin No. 5
"Glued Laminated Timber Structures" recently issued by the Timber Development
Association discusses the advantages of
lamination, adhesive requirements, design
considerations, early work in Europe, American progress, American fabrication methods,
bowstring roof trusses, Swedish techniques
and factors such as cost and species of timber commonly used. Copies of the bulletin
can be obtained on application to the TDA,
Ltd., 75, Cannon Street, E.C.4.

Mr. G. Kenneth Porter, DIP.ARCH.(DIST.), A.R.I.B.A., A.M.T.P.I. ELECT., has commenced practice in Malta and will be pleased to receive trade catalogues at the following address:—c/o Messrs. Barclays Bank Ltd., D.C. & O., Valetta, Malta.

Mr. Edward D. Mills, F.R.I.B.A., F.R.S.A., chartered architect, announces that his practice is now being carried on from 16. Carlisle Street, Soho Square, W.1 (tel.: Gerrard 8305/6.)

Shortage of packaging materials is causing serious concern to manufacturers throughout the country. Many firms are already handicapped in production, both for the home market and for export, and the position threatens to grow worse. The Waste Paper Recovery Association say that demand has already outstripped the normal supply of waste paper by many hundreds of tons each week, and that stocks have dwindled alarmingly, to four weeks supply. They are appealing especially to all engaged in industry to see that every scrap of used and unwanted paper is recovered. Commercial houses who permit waste paper to be destroyed jeopardise their future supplies of new packaging materials. The Association will deal with any queries at their headquarters, 52, Mount Street, W.1.

The Council of the Design and Industries Association, 13, Suffolk Street, Haymarket, S.W.1, has decided to give consideration to the effect of present high rates of purchase tax on design development. They say there is some evidence that, in some spheres at least, the tax is having a stultifying effect on design development owing to the severe restriction of the home market where, it is generally acknowledged, new ideas must be tried out, perhaps modified, and finally established on an economic basis of production, before they can be offered with complete confidence, and at competitive prices overseas. Retailers, who are obliged to tie up large capital sums in purchase tax, in addition to the value of goods themselves, are severely curtailing their purchases. This is resulting in stocks of certain goods being inadequate not only in quantity but particularly in quality and variety, thus giving a

Readers requiring up-to-date information on building products and services may complete and post this form to The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1.

### ENQUIRY FORM

I am interested in the following advertisements appearing in this issue of "The Architects' Journal." (BLOCK LETTERS, and list in alphabetical order please).

Please ask manufacturers to send further particulars to:

NAME

PROFESSION or TRADE

ADDRESS

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false idea to the buying public of advances that have been made. The systematic reduction of quality standards resulting from this position gives grave cause for concern, especially in view of the influx of foreign visitors expected for 1951. To enable the Association to decide on a course of action, Association to decide on a course of action, members are asked to communicate to the secretary, as soon as possible, any relevant facts or experiences of which they have personal knowledge, relating to the repressive effect of purchase tax. Confidential information will be treated as such, but it would be of much greater assistance if permission can be given to event facts in the mission can be given to quote facts in the names of firms or individuals.

The Governors of the Leeds College of Art have confirmed the award of the Pilkington Research Grant of £100 to Mr. R. T. Clough, to enable him to make a measured and photographic study of the Old Lead Smelting Mills of the Yorkshire Dales. Mr. Clough was awarded the Leeds Diploma in Architecture with Distinction in July, 1946, and is the first old student of the Leeds School of Architecture to be awarded the Pilkington Grant under the new regulations. The object of the Grant is to encourage original work in some subject related to the theory or practice of architecture. theory or practice of architecture.

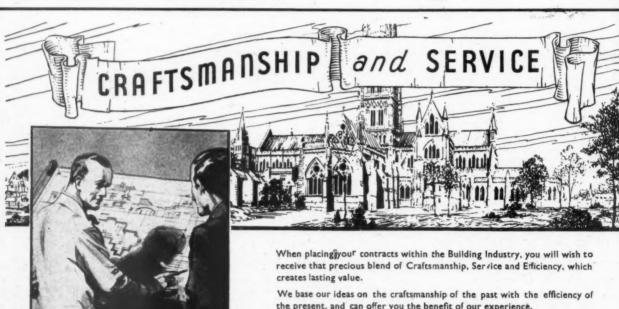
Mr. Hugh Dalton, Minister of Town and Country Planning, has informed Pembroke-shire County Council that he will confirm shire County Council that he will confirm an application to make certain parts of the rural areas of the country, areas of special control for outdoor advertisements. The villages of Johnston, Crymmych and Kilgetty will be excluded from the area of special control originally proposed. In a letter to the County Council announcing this decision the Minister stated that in Fishguard and Goodwick and in Tenby the proposals submitted will be approved with modifications. modifications.

Mr. Raglan Squire announces that he is retiring from the firm of Arcon, Chartered Architects, and will in future practise under the title of Raglan Squire, F.R.I.B.A., M.S.LA., Chartered Architect, at 39, Eaton Square, London, S.W.1. Telephone Sloane 4226 and

Mr. Howard V. Lobb has entered into part-nership with Mr. F. G. Frizzell, A.R.I.B.A., until lately Northern Divisional Architect with the Miners' Welfare Commission. They will practise under the style of Howard V. Lobb and Partners at 20, Gower Street, London, W.C.1 (tel.: Museum 8575).

### **Buildings Illustrated**

FOB Information Bureau, Leicester Square, FOB Information Bureau, Leicester Square, W.1. (Pages 165-68.) Architects: Fello Atkinson (James Cubitt & Partners), Oliver Cox, and Michael Ventris, A./A.R.I.B.A. General Contractors: Welwyn Builders Ltd. The following firms donated materials: Lettering, sign and window symbols, The Lettering Centre; perspex display panels, Imperial Chemical Industries Ltd. (Plastics Division); red and mauve laminated plastic Imperial Chemical Industries Ltd. (Plastics Division); red and mauve laminated plastic wall linings, Holoplast Ltd.; blue laminated plastic wall linings, Warerite Ltd.; formica counter top, Thomas De La Rue Ltd.; extruded aluminium panelling, Aluminium Development Association; cellulose surfaces and oil paint, Docker Bros.; sea island cotton ceiling fabric, John Clarke Ltd.; yellow curtain fabric, Horrockses Ltd.; geebro coconut matting, Green Bros.; door furniture, Dryad Metal Works Ltd.; chairs, George M. Hammer & Co. Ltd.: desk tables. George M. Hammer & Co. Ltd.; desk tables, Abbott Brothers (Southall); spotlights, General Electric Co. Ltd; special spun alu-minium light fittings, Merchant Adventurers



ST. ANN'S STREET. WESTMINSTER, S.W.I. and at Streatham Telephone: ABBEY 4661 (5 lines) the present, and can offer you the benefit of our experience.

We really ENJOY giving advice of such a service as ours and it has often been our pleasure to be entrusted with most important commissions.

WESTMINSTER

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M.S.I.A. Square,

1226 and nto part-A.R.I.B.A., Architect n. They ward V. Street, ated r Square, : Fello A.R.I.B.A. ders Ltd. aterials: ols, The panels, (Plastics d plastic aminated formica ue Ltd.; surfaces a island ke Ltd.: island es Ltd.; os.; door chairs, sk tables. potlights, pun aluventurers

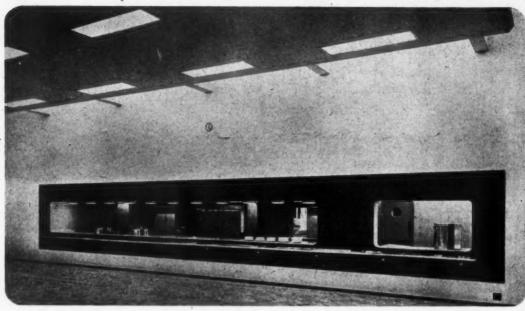
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he is rehartered se under

> Petrocarbon Carrington -- Cheshire

Architects: SCHERRER & HICKS, F/F.R.I.B.A., Lendon



### Co-operation in Kitchen Design

We carry out installations to meet the designs and requirements of the architect and our technical staff are always at your service.

KITCHEN EQUIPMENT (1950)CO. LTD. Registered Office: PREBEND GARDENS, 195, STAMFORD BROOK ARCHES, HAMMERSMITH, W.6

Tel. : RIVerside 5081 Showrooms: 22-24, Buckingham Palace Road, London, S.W. I.

### These three in harmony

### mean better workability



All over the country Architects and Builders are making increased use of LIME-gauged mortar . . . .

LIME makes mortar more plastic — it spreads more easily and packs quicker and tighter into joints.

LIME increases adhesion of mortar to bricks thus reducing penetration of moisture and helps to prevent efflorescence.

For a better job in less time use.

Full details of Cement Lime Sand mixes will be sent on application to:-



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## BENHAM

#### COOKING

Kitchen layouts and complete installations. Manufacture of Cooking Equipment for all fuels.

Manufacture of Dishwashing Machines.

Manufacture of Kitchen Joinery.

Supply of complete range of Chefs' Utensils, Peelers, Mixers, etc.

Peelers, Mixers, etc.

Manufacture of Stainless Steel Sinks and
Drainers.

#### HEATING

Heating and Hot Water Supply by all recognised systems.

recognised systems.
"Panelite" invisible system of radiant warming.

Boiler plant, Automatic Stokers, etc.

"Electro-vapour" Radiators, Immersion
Elements and Towel Rails.

#### VENTILATING

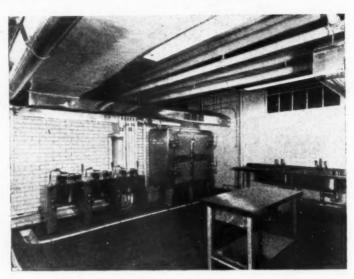
Ventilation for all types of buildings, and

Air-conditioning.

Dust collection, fume removal and process ventilation.

Rectification of existing installations.

### SERVICE TO ARCHITECTS



Part of the new kitchen equipment of the Great Room, Grosvenor House, Park Lane, W.1.

### Benham & Sons Ltd.

66 Wigmore Street, London, W.1. Tel.: Welbeck 9253 (14 lines) ASSOCIATED COMPANIES: DUBLIN, MELBOURNE & JOHANNESBURG.

### THE VELVETY FLOOR THAT'S HALF AIR

is not only QUIET, WARM, LUXURIOUS but TOUGH, LONG-LASTING, ECONOMICAL

#### IMPACT NOISE

Cork's air-cellular structure kills noise. Tests of impact noise produced by dropping a steel ball gave the following comparative values for different floors:

HARDWOOD, taken as 100

MARBLE - - - 47.4

QUARRY TILE - - 12.3

CONCRETE - - - 10.5

LINOLEUM - - - 2.74

RUBBER TILE - - 1.37

RUBBER TILE - - 1.01

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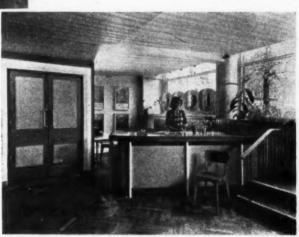
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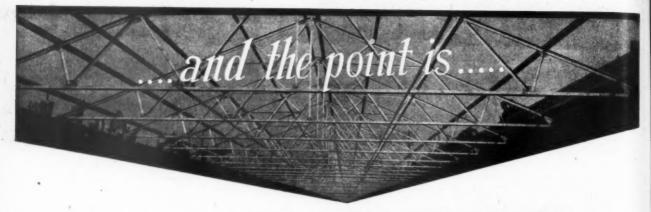


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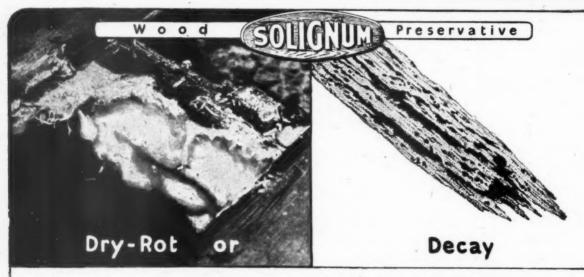
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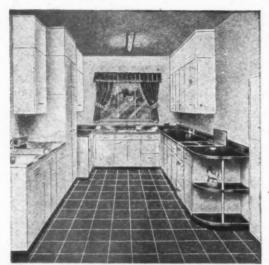
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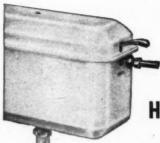
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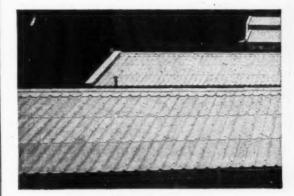
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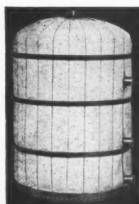




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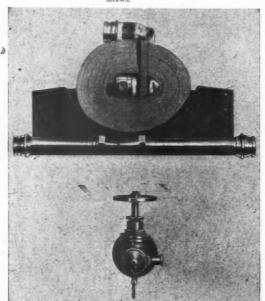
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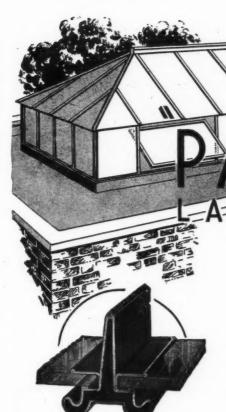


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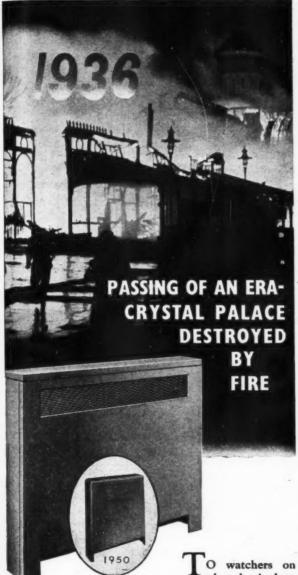
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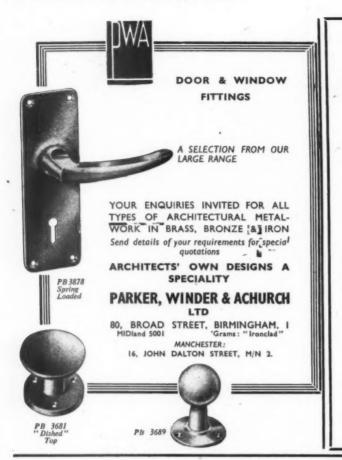


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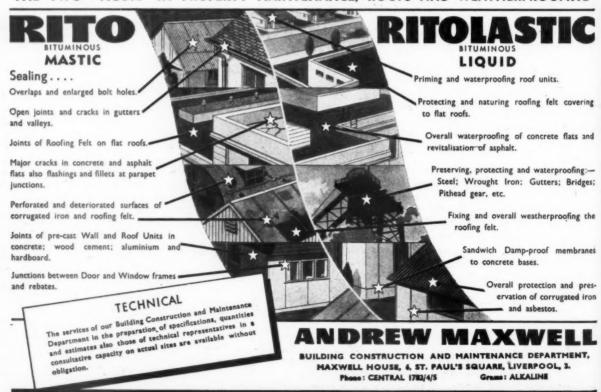
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LONDON COUNTY COUNCIL.

London, W.8. quoting reference 9787.

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Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.E.1 (stamped addressed envelope required and quote reference A.A.1). Canvasing disqualifies. (816)

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Candidates should preferably be Associate Members of the Royal Institute of British Architects.
Applications, stating age, present and previous appointments, technical training, qualifications, experience, etc., together with the names of three referees, must be delivered to Mr. J. H. Melville Richards, A.M.I.C.E., M.I.Mun.E. Borough Engineer and Surveyor, Hornsey Town Hall, N.8, not later than the 24th July, 1950.
Candidates must disclose in writing whether, to their knowledge, they are related to any member or officer of the Council.
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H. BEDALE,

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Town Hall, Hornsey, N.8.

3rd July, 1950.

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H. A. DAVIS,

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DEPARTMENT.

Applications are invited for the appointments of ASSISTANT ARCHITECTS. Salary will be in accordance with A.P.T., Grades IV to VI, of the National Scales, subject to qualifications and experience, and otherwise as set out below:

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Applications, endorsed "Appointment of Assistant Architects," stating age, qualifications and previous experience, and accompanied by copies of two recent testimonials, should be addressed to the Director of Education (A), Ceunty Education Offices, Earl Street, Stafford, and should be received not later than first post on Monday, 31st July, 1960.

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DRAWING OFFICE ASSISTANTS. Men, £175-£250; women, £175-£300.
Entrant salary is dependent on age and experi-

The appointments are temporary, but the programme is expected to last for some years. Hours and conditions of service are similar to those in the Civil Service. An additional allowance is paid for hours worked in excess of the normal and the civil service.

week.

Applicants for Architectural posts should be Corporate Members of the R.I.B.A. by examination. Those for Surveyor posts should be Corporate Members of the R.I.B.A. or R.I.C.S. (Building Section) by examination.

Applications, giving full details of age, nationality, qualifications and experience, etc., should be sent as soon as possible. Testimonials should not be sent with the applications, which should be addressed to Chief Architect and Surveyor, New Scotland Yard, London, S.W.I. Envelopes should be marked "Appointments."

Envelopes should be marked "Appointments."

APPOINTMENT OF ARCHITECTURAL

ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant, in the Borough Surveyor's Department of the Borough of Kettering, at a salary within Grade IV of the A.P.T.

Division of the National Scale of Salaries, namely, £480 per annum, rising, subject to satisfactory service, by amoual increments of £15 per annum.

Applicants must have passed the Intermediate Examination of the Royal Institute of British Architects and have had a minimum of two years' experience in an Architectural office. A good knowledge of building quantities would be an advantage, and applicants should have had experience of local authority housing schemes.

The appointment will be subject to the Local Government Superanuation act, 1937, and to the provisions of the National Scheme of Conditions of Service, and the successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications, present and previous appointments and experience, together with the names of three referees, must be delivered to the undersigned not later than the 5th August, 1950.

D. DUNSFORD PRICE,

Town Clerk's Office, High Street, Kettering.

D. DUNSFORD PRICE.
Town Clerk's Office, High Street, Kettering.
8th July, 1960.

KENT COUNTY COUNCIL.

Applications are invited from Fellows or Associates of the Royal Institute of British Architects for appointment in the Buildings Department as a PRINCIPAL ASSISTANT ARCHITECT, at a salary of not exceeding £900 a year, to be fixed according to the qualifications and experience of the successful candidate. The post is superannuable, and the selected candidate will be required to pass a medical examination.

Candidates must have had wide experience in the planning, designing and construction of public buildings, be used to staff control, and have had considerable administrative experience.

Applications, on forms obtainable from the County Architect. Springfield, Maidstone, must be delivered to him, duly completed, by not later than 12th August. 1960.

W. L. PLATTS,
Clerk of the County Council.
County Hall, Maidstone.

County Hall, Maidstone. 12th July, 1950.

HARROW URBAN DISTRICT COUNCIL.
ENGINEER AND SURVEYOR'S
DEPARTMENT.
ASSISTANT (NEW WORKS).
Applications are invited for the above appointment in the Department of the Council's Engineer and Surveyor, at a salary in accordance with Grade A.P.T., VIVIII. Salary scale: £595-£760, plus London "weighting" allowance.
Applicants should be Associates of the Royal Institute of British Architects, and have had wide experience in the design of Municipal Buildings, the organisation of works, and the supervision of staff.

the organisation of works, and the supervision staff.

The appointment will be subject to the provisions of the Local Government Superannuation Act. 1937; to the passing of a medical examination; and to the National Joint Council's Scheme of Conditions of Service.

Forms of application may be obtained from the undersigned, to whom they should be returned not later than Friday, 4th August, 1950.

H. WELLS,

Clerk of the Council.

Council Offices, Harrow Weald Lodge,

Harrow.

CUMBERLAND COUNTY COUNCIL.
Applications are invited for the following appointments on the permanent establishment of the Architect's Department:—
(a) ASSISTANT ARCHITECT. A.P.T., Grade

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the Architect's Department.

(a) ASSISTANT ARCHITECT. A.P.T., Grade V (2820-2570).

(b) ARCHITECTURAL ASSISTANT. A.P.T., Grade IV (£480-£520).

(c) JUNIOR ARCHITECTURAL ASSISTANT. A.P.T., Forms of Application and further particulars and conditions of appointment may be obtained from John H. Haughan, F.R.I.B.A., County Architect, 15, Portland Square, Carlisle. Completed application forms must be received by him not later than Thursday, 10th August, 1950.

G. N. C. SWIFT,

G. N. C. SWIFT,

Clerk of the County Council.

July, 1950. CIEFE of the County Council.

July, 1950. The County Council Avaga DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH.

BUILDING RESEARCH STATION.
Applications are invited for three temporary posts of ASSISTANT ARCHITECT at the Building Research Station, Garston, near Watford, Herts., of the Department of Scientific and Industrial Research. Salary will be on the range 248-2720 p.a. for men, somewhat lower for women. Candidates should have good architectural qualifications, and preferably some training in elementary science, and should be at least 25 years of age. The range of work for which architects are required at the Station covers the following aspects:

aspects:—
(a) Work in close association with physicists on the study of the functional requirements of building, such as lighting, sound transmission and acoustics, heating and ventilation.
(b) General liaison work with the building industry, inspection of building practice and examination of difficulties and failures. This group also would assist in dealing with the considerable volume of technical enquiries received from the building industry.
(c) Work in relation to experimental building and research in architectural design in the light of the results of work in the laboratory.

Forms of application are obtainable from "K" Section, Technical and Scientific Register, York House, Kingsway, London, W.C.2.

The Reference Number J.9/50 should be quoted.

NOTTINGHAMSHIRE COUNTY COUNCIL.
COUNTY PLANNING DEPARTMENT.
Applications are invited for the appointment of a PLANNING ASSISTANT, in the Development Control Section, at a salary of \$520 to \$2570 p.a.
Applicants should preferably have had experience in Building and Land Development and the general administrative work of a Planning Office, but Local Government experience is not essential. It will be an advantage if applicants hold the qualification of Corporate Member of the Town Planning Institute, but consideration will be given to applicants who possess other suitable qualifications.

fications.

Further particulars are obtainable from the County Director of Planning, Shire Hall, Nottingham, by whom completed applications must be received not later than 5th August, 1950.

Canvassing will disqualify.

K. TWEEDALE MEABY.

Clerk of the County Council.

LEEDS REGIONAL HOSPITAL BOARD.
Applications are invited for the post of SENIOR ASSISTANT ARCHITECT on the Head-quarters Staff of the Board. Salary in accordance with Grades A.P.T., VII-VIII, £635-£760 per annum. Candidates, who must be registered Architects with recognised architectural qualifications, must have had considerable experience in hospital design and construction.
The appointment will be subject to the Autional Health Service (Superannuation) Regulations, 1950, to such Terms and Conditions of Service as may be laid down from time to time, and the successful candidate (if not already in the National Health Service) will be required to pass a medical examination. The appointment will be terminable by one calendar month's notice on either side.

will be terminable by one calendar month's notice on either side.

Applications, stating age, qualifications, experience and present salary, together with the names of two referees, should be forwarded to the Secretary, 29/31. Eastgate, Leeds, 2, not later than Saturday, 5th August, 1950.

Canvassing in any form, either directly or indirectly, will disqualify.

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indirectly, will disquality.

Resolvent of the Chief Works Officer, the Department of the Chief Works Officer, with location in London. Preference will be given to applicants who are Members of the R.I.C.S. or have equivalent technical qualifications, and experience in Hotel and Catering establishments would be an advantage. The successful applicant will be required to prepare Bills of Quantities, estimates, and deal with all accounts both for new and maintenance works.

The commencing salary will be within the range 250-2559 per annum, according to experience and qualifications, which should contain all relevant information, including date of birth, qualifications, Applications, which should contain all relevant information, including date of birth, qualifications, previous experience, present position and alary, together with the names of two referees, should reach the Chief Personnel Officer, The Hotels Executive, 222, Marylebone Road, Lendon, N.W.1, not later than 3rd August, 1950.

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MINISTRY OF WORKS.

There are vacancies in the Chief Architect's Division for ARCHITECTURAL ASSISTANTS and LEADING ABCHITECTURAL ASSISTANTS with recognised training and fair experience. Successful candidates will be employed in London and elsewhere on a wide variety of Public Buildings, including Atomic energy and other Research Establishments, Telephone Exchanges, and Housing.

Housing.

Salary: Architectural Assistants, £300-£525 per annum; Leading Architectural Assistants, £500-£625 per annum; Starting pay will be assessed according to age, qualifications and experience. These rates are for London; a small deduction is made in the Provinces.

Although these are not established posts, some of them have long term possibilities, and competitions are held periodically to fill established vacancies.

vacancies.

Apply in writing, stating age, nationality, full details of experience, and locality preferred, to Chief Architect, W.G.10/BC, Ministry of Works, Abell House, London, S.W.1, quoting reference W.G. 10/BC.

W.G. 10/BC. 4626
NATIONAL COAL BOARD—WEST MIDLANDS
DIVISION.
Applications are invited for the following appointments, with headquarters at Himley Hall, near Dudley. Worcs.
One ARCHITECT, Grade II. Salary scale £450
× £25-£700.
Candidates must be Associate Members of the R.I.B.A. or equivalent, and should have experience in the preparation of Survey Sketch Plans, Contract Drawings, Specifications, Site Supervision, etc.

ence in the preparation of Survey Sketch Plans, Contract Drawings, Specifications, Site Supervision, etc.

ONE ARCHITECTURAL ASSISTANT, Grade I. Salary scale £410×£20—£550.

Applicants should be able to prepare Sketch Plans and Working Drawings from rough sketches and have a good knowledge of construction and have passed the Intermediate Examination of the R.I.B.A.

Commencing salary according to experience and qualifications.

Posts are eligible for the Board's Superannuation Scheme.

Applications, giving age, qualifications, experience, etc., should be made as soon as possible to the DIVISIONAL ESTABLISHMENT OFFICER.

National Coal Board, West Midlands Division, Himley Hall, Dudley, Wores.

Only those required for interview will be notified.

BOROUGH OF MALDEN AND COOMBE.

Himley Hall. Dudley, Wores.

Only those required for interview will be notified.

BOROUGH OF MALDEN AND COOMBE.
BOROUGH ENGINEER'S DEPARTMENT.
APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT, GRADE A.P.T., Va. Applications are invited for the above-mentioned permanent appointment, at a salary in accordance with Grade Va of the Administrative. Professional and Technical Division of the National Scales for Local Government Officers, namely, £550×£02-£610 per annum, plus "London weighting." The appointment will be subject to the National Scheme of Conditions of Service, terminable by one month's notice on either side, and subject to the provisions of the Local Government Superannuation Act, 1937. The successful candidate will be required to pass a medical examination.

Preference will be given to registered architects who have had experience in the architectural design and construction of general Municipal work, including flat development.

Applications, giving details of age, experience, qualifications, present and past appointments, and enclosing copies of two recent testimonials, should be addressed to reach the undersigned not later than 27th July, 1950.

Canvassing, directly, or indirectly, will be deemed a disqualification, and candidates must disclose in their applications whether to their knowledge they are related to any member or senior official of the Council.

The Council will endeavour to provide the successful candidate with housing accommodation if deemed necessary.

HAROLD E. BARRETT.

Town Clerk.

Municipal Offices, New Malden, Surrey.

4223

COUNTY BOROUGH OF SOUTHAMPTON.

BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following positions:—

(a) SENIOR ASSISTANT ARCHITECTS.

tions:—
(a) SENIOR ASSISTANT ARCHITECTS.
Grade VI (£595-£660).
(b) JUNIOR ARCHITECTURAL ASSISTANT
(Temporary). General Division (£135-£385).
(c) QUANTITY SURVEYOR. Grade VI (£596-

(Temporary). Grade VI (£596(£660).
(£) QUANTITY SURVEYOR. Grade VI (£596(£660).
(£) ASSISTANT QUANTITY SURVEYOR.
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(£) ASSISTANT QUANTITY SURVEYOR.
(£) JUNIOR PLANNING ASSISTANT.
(£) TECHNICAL ASSISTANT (Structural).
(£) TECHNICAL ASSISTANT (Structural).
(£) TECHNICAL ASSISTANT (Structural).
(£) Applicants for appointment (£) should be fully qualified Structural Engineers, experienced in design and checking calculations.

Applications, on forms obtainable from L.
Berger, DipArch. A.R.L.B.A., Borough Architect,
(£) Vic Centre, Southampton, must be returned not later than Tuesday, £th August, 1950.

R. RONALD H. MEGGESON.
Town Cterk.

Civic Centre, Southampton.

Civic Centre, Southampton. 12th July, 1960.

HUYTON WITH ROBY URBAN DISTRICT COUNCIL.

GENERAL ARCHITECTURAL ASSISTANT. Applications are invited for the permanent appointment of GENERAL ARCHITECTURAL ASSISTANT. The salary will be in accordance with A.P.T., Grade III, £450-£495, according to qualifications and experience.

III, £450-£495, according to qualifications and caperience. Candidates must comply with the scheme of conditions of service for Local Government officers, and must have passed the R.I.B.A. Intermediate Examination or its equivalent at one of the recognised schools of Architecture, and with less than one year's subsequent experience in an Architect's office, will be appointed on A.P.T., II.

than one year's subsequent experience in an Architect's office, will be appointed on A.P.T., II.

Applicants, having had a minimum period of one year in an Architect's office with the above qualifications, or who have worked for a minimum period of three years in an Architect's office and have passed the Intermediate Examination or its equivalent, will be appointed on A.P.T., Grade III.

The appointment is on the Established Staff and is subject to the provisions of the Local Government Superannuation Act, 1937.

Applications, in envelopes endorsed Architectural Assistant, "stating age, qualifications, and details of experience, and the names of two persons to whom reference may be made, should be received by the undersigned not later than 27th July, 1950. Canvassing, either directly or indirectly, will disqualify.

H. E. H. LAWTON,

Clerk of the Council.

Applications are invited for the appointment of an Architectural Assistant, at a salary in accordance with Grade A.P.T., V (£520-£570 p.a.), on the permanent staff of the Borough Engineer and Surveyor.

Preference, will be given to applicants who are

but permanent staff of the Borough Engineer and Surveyor.

Preference will be given to applicants who are Registered Architects, or who have passed parts of the Associate Membership Examination of the R.I.B.A.

of the Associate Membership Examination of the R.I.B.A.

The person appointed will be required to devote his or her time to the Council's programme of house building, and previous experience of similar work will be an advantage.

A house will be made available, if necessary, and the appointment is subject to the National Scheme of Conditions of Service, the Local Government Superannuation Act, 1937, and the successful passing of a medical examination.

Applications, stating age, qualifications and experience, together with the names of two persons to whom reference may be made, should reach Mr. T. J. Livesey, M.C. A.M.I.C.E., A.M.I.Struct.E., A.M.I.Mun.E., Guildhall, Grantham, not later than noon on Monday, 31st July.

JOHN F. GUILE,
Gnildhall, Grantham.

Guildhall, Grantham.

8th July, 1950.

COUNTY BOROUGH OF EAST HAM.
BOROUGH ENGINEER'S DEPARTMENT.
Applications are invited for the undermentioned appointments:—
SENIOR ARCHITECTURAL
(Grade A.P.T., VI). Salary £595 to £660 per appum.

SENIOR ARCHITECTURAL ASSISTANT (Grade A.P.T., VI). Salary £595 to £660 per annum.

ENGINEERING ASSISTANT (Grade A.P.T., V). Salary £500 to £570 per annum.

ARCHITECTURAL ASSISTANT (Grade A.P.T., IV). Salary £480 to £525 per annum.

ESTIMATOR (Building Works) (Grade A.P.T., IV). Salary £480 to £525 per annum (temporary appointment).

QUANTITY SURVEYOR (Grade A.P.T., IV). Salary £480 to £570 per annum is paid in addition to the above salaries, and salaries in excess of the minima of the grades may be paid according to the qualifications and experience of successful candidates.

The Council will be prepared to consider applications for a subsistence allowance in appropriate cases from persons appointed should they be unable to obtain suitable housing accommodation.

Full particulars of the duties, terms and conditions of appointment and form of application (which must be returned by Monday, the 31st July, 1950) may be obtained from the undersigned.

Canvassing will disqualify.

H.A. EDWARDS.

Town Clerk.

4843

BOROUGH OF BARKING.

Town Hall, East Ham, E.6.

BOROUGH OF BARKING.

BOROUGH ENGINEER AND SURVEYOR'S

DEPARTMENT.

Applications are invited for the position of TOWN PLANNING ASSISTANT, Grade V, £20.2576, plus London weighting.

Candidates must have had Town Planning experience and the possession of suitable qualifications will be an advantage.

Forms of application and conditions of appointment may be obtained from the Borough Engineer and Surveyor, Town Hall, Barking. Essex, and should be returned to the undersigned not later than 31st July, 1950.

E. R. FARR.

E. R. FARR, Town Clerk.

Town Hall, Barking. 4th July, 1960.

BOROUGH OF DEAL.

BOROUGH ENGINEER AND SURVEYOR'S

DEPARTMENT.

Applications are invited for the appointment of
JUNIOR ABCHITECTURAL ASSISTANT, at a
salary in accordance with Grade A.P.T., II (£420£465).

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examination.

The Council will be prepared to assist the successful candidate to obtain housing accommodation, if necessary.

Applications, with copies of three recent testimonials, should be sent to the Borough Engineer, Municipal Offices, Deal, not later than Saturday, 29th July, 1960.

Deal Danliels

D. A. DANIELS,
Town. Clerk.
10th July, 1950.

Inth' July, 1950.

GOVERNMENT OF NORTHERN IRELAND.
ARCHITECT.
Applications are invited for the post of Architect (salary scale £950×£30—£1,100) in the Ministry of Health and Local Government. Subject to a probationary period of two years, the post will be permanent and pensionable. Candidates must be British subjects normally resident in the United Kingdom. They should be not less than 30 years of age, and must be Fellows or Associates of the Royal Institute of British Architects. They must have at least 10 years' practical experience, including up-to-date house design and layout, and be thoroughly conversant with present-day materials, construction and costing.

versant with present-day materiais, construction and costing.

The successful candidate will be placed in a position of responsibility, and administrative ability is therefore necessary.

Preference will be given to suitably qualified candidates who served with H.M. Forces during war-time providing the Commissioners are satisfied that such candidates can or within a reasonable time will be able to discharge the duties efficiently.

reasonable time will be able to discharge the duties efficiently.

Application forms may be obtained from the Secretary, Civil Service Commission, Stormont, Belfast, to whom they should be returned with copies of two recent testimonials, so as to reach him not later than 3rd August, 1950.

copies of two recent testimonials, so as to reach him not later than 3rd August, 1950.

COUNTY OF LINCOLN—PARTS OF KESTEVEN.

COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment of DEPUTY COUNTY ARCHITECT. Salary will be in accordance with A.P.T., Grade IX. of the National Scales, i.e., 2750 rising by annual increments of 250 to a maximum of 2900 per annum. Commencing salary will be in accordance with experience. Car and subsistence allowances will also be paid.

A.R.I.B.A., or similar qualification, is necessary, and candidates should have had experience in the architectural work normally carried out by the Architect's Department of a County Council. Experience in connection with Educational architectural work is particularly desirable. Applicants should possess administrative experience and be capable of controlling staff.

The appointment will be subject to the provisions of the Local Government Superammation Act, 1937, to a satisfactory medical certificate, and to termination by three months' notice in writing on either side.

Application forms may be obtained from the undersigned, to whom applications should be sent not later than 10th August, 1950, together with copies of two recent testimonials. Canvassing, either directly or indirectly, will disqualify.

Clerk of the County Council.

copies of two recent testimonials. Canvassing, either directly or indirectly, will disquality.

J. B. BLOW,

Clerk of the County Council.

County Offices, Sleaford, Lincs. 4814

HAMPSHIRE COUNTY COUNCIL.

PLANNING DEPARTMENT.

Applications are invited for the post of an ASSISTANT COUNTY PLANNING OFFICER. In the County Planning Department. The salary scale is £750×£50-£900. The principal duties of the post will relate to the architectural and amenity aspects of Town and Country Planning, and applicants must, in addition to being Corporate Members of the Town Planning Institute, be also Corporate Members of the Royal Institute of British Architects. Previous experience in a similar capacity in a Government or Local Government Planning Department would be an advantage, but the primary need is for a qualified architect-town planner.

The appointment is pensionable and is subject to a satisfactory medical report.

The officer appointed will be required to keep a car and will receive a travelling allowance on the County Scale for the time being in force. Applications, stating age, education, qualifications, previous experience, present position, together with a copy of one testimonial and the names and addresses of two persons to whom reference may be made as to professional ability and character, and endorsed "Assistant County Planning Officer. Litton Lodge, Clifton Road, Winchester, not later than the 4th August, 1950.

G. A. WHEATLEY,

Clerk of the County Councit.

G. A. WHEATLEY,
Clerk of the County Council.
July, 1950.

MUNICIPALITY OF SINGAPORE.

APPOINTMENT OF TEMPORARY ASSISTANT ARCHITECT.

SINGAPORE WATER DEPARTMENT EXTENSION WORKS.

Applications are invited for above appointment on three years' agreement, with possible renewal for duration of Extension Works.

Qualifications: A.R.I.B.A. and A.M.T.P.I., or recognised Town Planning Course in lieu of latter, and preferably with experience in Municipal, Government or Colonial Service, and knowledge of L.C.C. building procedure.

Basic salary up to \$1,000 peer month, according to age, qualifications and experience, plus costoliving allowance, at present \$220 p.m. single, \$295 p.m. married, or \$395 married with family. One Straits dollar equals 2s. 4d. Thus maximum salary offered for married man with family is equivalent to £1,955 per annum.

Officer appointed required to live in South Johore. Free quarters or allowance in lieu. Appointment subject to medical examination. Six weeks' leave per year of service on satisfactory completion of agreement. 1st class passages paid, including family.

Applications in duplicate, with full personal and technical information, and copies of three testimonials, to Messrs. Peirce & Williams (Agents to the Municipal Commissioners), 1, Victoria Street, London, S. W.I., by Wednesday, 9th August, 1950.

COUNTY BOROUGH OF WEST HAM.
BOROUGH ARCHITECT AND PLANNING
OFFICER'S DEPARTMENT.
Applications are invited from suitably qualified
sersons for the following permanent appoint-

person 

age 32).
Plus London "weighting."
Applicants for post (a) should be Associates of the Royal-Institution of Chartered Surveyors, and will supervise a section of the Department.
Applicants for posts (b), (c) and (d) should have had practical experience in an Architect's office, preferably on Housing and Schools.
Applicants for post (e) should be neat, quick draughtsmen.

Applicants for pure (et urnable by 11th August. Application forms (returnable by 11th August. 1980) obtainable from Borough Architect and Planning Officer, Thomas E. North, F.R.I.B.A., 70, West Ham Lane, Stratford, E.I.S. 4828

70, West Ham Lane, Stratford, E.15.

COUNTY BOROUGH OF WALLASEY.
APPOINTMENT OF TOWN PLANNING
ASSISTANTS.

Applications are invited on or before 11th
August, 1950, for the following established posts
in the Town Planning Section of the Borough
Engineer and Surveyor's Department:—
SENIOR PLANNING ASSISTANTS. Two
vacancies, A.P.T., Grade V, £520-£570 per
annum.

vacancies. A.P.T., Grade V, £520-£570 per annum.
PLANNING ASSISTANT. One vacancy.
A.P.T., Grade III. £450-£495 per annum.
JUNIOR PLANNING ASSISTANT. One vacancy. A.P.T., Grade III. £420-£465 per annum.
Applicants for the Grade V posts should have had town planning experience, and should hold some planning qualifications. Applicants for the Grade III and Grade II posts should be capable draughtsmen, and should have had experience in a Planning. Architectural or Municipal Engineer's office. Full particulars and forms of application may be obtained from the Borough Engineer and Surveyor, Town Hall, Wallasey.

A. G. HARRISON.

A. G. HARRISON, Town Clerk

LONDON ELECTRICITY BOARD.

Applications are invited for the following appointments in the Architect's Section of the Chief Engineer's Department in Central London.

(a) ASSISTANT ARCHITECTS. Commencing salary will be from £550 per annum, dependent upon qualifications and experience.

Applicants should preferably be Associate Members of the R.I.B.A. They should be capable of preparing working drawings and specifications, and should have had good general experience in design and construction.

of preparing working drawings and specifications, and should have had good general experience in design and construction.

(b) ARCHITECTURAL ASSISTANTS. Commencing salary will be from £500 per annum, dependent upon qualifications and experience.

Applicants should be studying for or have passed the Intermediate Examination of the K.I.B.A., be capable draughtsmen, and have had several years' experience in an Architect's office.

(c) DRAUGHTSMEN. Commencing salary will be from £350 per annum, dependent upon ability and experience.

Applicants should be neat draughtsmen, and preferably have had several years' experience in an Architect's office.

The salaries for the above posts are provisional, pending grading of the posts under the National Agreement of the apprepriate negotiating body. Application forms, obtainable from Establishments Officer, 46/47. New Broad Street. E.C.2, on receipt of an addressed foolscap envelope, to be returned duly completed, not later than 28th July, 1950. Please mark envelope EST/V/878/A.

BOROUGH OF NUNEATON.
ARCHITECTURAL ASSISTANT.
Applications are invited from Registered Architects or persons possessing other approved qualifications for the appointment of Architectural Assistant on the staff of the Borough Surveyor, at a salary in accordance with Grade A.P.T. V, of the National Scheme of Conditions of Service (PROP. 570)

of the National Scheme of Conditions of Scheme (£520-£579).

Further particulars and conditions of appointment may be obtained from the undersigned, by whom all applications must be received not later than the 19th August, 1950.

T. OLDROYD, Town Clerk.

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T. OLDROYD,
Town Clerk.

COUNTY BOROUGH OF HALIFAX.
BOROUGH ENGINEER'S DEPARTMENT.
Applications are invited for the following appointments:—
CHIEF ARCHITECTURAL ASSISTANT
(GENERAL). Salary A.P.T., VII (£635-£710).
ARCHITECTURAL ASSISTANT (GENERAL).
Salary A.P.T., V (£520-£570).
ARCHITECTURAL ASSISTANT (SCHOOLS).
Two positions. Salary A.P.T., V (£250-£570).
QUANTITY SURVEYOR. Salary A.P.T., VI (£595-£660).
Candidates should nowage appropriate.

OUANTITY SURVEYOR. Salary A.F.T., v (£520-£570). QUANTITY SURVEYOR. Salary A.F.T., vi (£526-£560). Candidates should possess appropriate technical qualifications, and will be required to pass a medical examination. The appointments will be subject to the conditions of service adopted by the Corporation and to the Local Government Superannuation Act, 1337. Consideration will be given to applications for housing accommodation made by persons appointed to these positions. Candidates must disclose whether to their knowledge they are related to any member of or the holder of any senior office under the Council. Applications, stating age, qualifications, present position, salary and experience, accompanied by copies of three recent testimonials, should be appropriately endorsed and delivered to the undersigned not later than Saturday, 12th Augus, 1950.

RICHARD DE Z. HALL, Town Clerk. Town Hall, Halifax. 13th July, 1950.

Town Hall, Haiifax.

13th July, 1950.

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HOLLAND COUNTY COUNCIL.
COUNTY PLANNING DEPARTMENT.
Applications are invited for the appointment of
PLANNING ASSISTANT, Grade IV (£480-£525),
in the Boston office of the Department.
Candidates should have had good experience in
planning survey and research work under the
Town and Country Planning Act, 1947, and
should have passed the Intermediate Examination
of the Town Planning Institute: further qualification will be an advantage.
Candidates will be required to provide a motor
car, for which they will be paid an allowance in
accordance with the Council scale. The appointment will be subject to the provisions of the
Local Government Superamonation Act, 1937, and
the successful candidate will be required to pass
a medical examination.
Applications, stating age, education, qualifications and experience, accompanied by one recent
testimonial and the names of two persons to
whom reference may be made, should be sent to
arrive not later than 14 days after the publication of this notice. Envelopes should be addressed
to R. N. Whiston, Esq., A.M.T.P.I., 21, Haven
Bank, Boston, Lines.

H. C. MARRIS,

Clerk of the County Council.

July, 1950.

Boston, Lincs.

July, 1950.

COUNTY OF ESSEX.

ILFORD COMMITTEE FOR EDUCATION.

The Essex County Council invite applications for an ASSISTANT ARCHITECT in the Office of the Borough Engineer of Ilford.

Applicants should be Members of the Royal Institute of British Architects, and have had considerable experience in the planning, designing, construction and supervision of school buildings and have had administrative experience.

The scale of salary will be in accordance with the National Joint Council, A.P.T. Division, Grade VII, £635×£25 to £710, plus the apprepriate London area allowance. There will also be paid such travelling and subsistence allowances as may from time to time be determined by the Council.

Applicants should be made on a form to be

Council.

Applicants should be made on a form to be obtained from, and returned to, the Borough Education Officer, Education Officer, Town Hall, Ilford, together with copies of not more than three recent testimonials, within 14 days of the appearance of this advertisement.

appearance of this advertisement. 4849
BOURNEMOUTH EDUCATION COMMITTEE.
BOURNEMOUTH SCHOOL OF ART.
Principal: FREDERIC E. COURTNEY.
Required in September, 1950 (if possible):—
Full-time ASSISTANT TEACHER (man or woman) for Architecture.
The Teacher appointed must possess the qualification of A.R.I.B.A., and will be required to assist in the teaching of students to the standard of the Intermediate R.I.B.A. examination. Salary will be in accordance with the Burnham Salary Scales. Forms of application and further particulars may be obtained from the undersigned at the Town Hall. Bournemouth, to whom they should be returned as soon as possible.

S. CHILDS.

S. CHILDS.

Education Officer.

12th July, 1950.

HARROW URBAN DISTRICT COUNCIL.
ENGINEER AND SURVEYOR'S
DEPARTMENT.

APPOINTMENT OF TOWN PLANNING
ASSISTANT.
Applications are invited for the above appointment in the Department of the Council's Engineer and Surveyor, at a salary in accordance with Grades A.P.T.; IV/V. Salary scale: £480-£570, plus London "weighting" allowance.
Applicants must be Associate Members or Students of the Town Planning Institute, should possess a sound knowledge of Town Planning Law, be neat and expeditious draughtsmen, and have experience in the interim development control in urban areas.
The Council is unable to offer any assistance in obtaining housing accommodation for the successful candidate.
The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937; to the passing of a medical examination; and to the National Joint Council's Scheme of Conditions of Service.
Forms of application may be obtained from the undersigned, to whom they should be returned not later than Friday, 4th August, 1950.

H. WELLS,
Clerk of the Council.
Council Offices, Harrow Weald Lodge,
Harrow, Middx.

4841

EDINBURGH COLLEGE OF ART.
SCHOOL OF ARCHITECTURE.
Applications are invited for the following fulltime appointments on the Teaching Staff of the
College:
SENIOR ASSISTANT. Salary scale £70-£800.
ASSISTANT, Grade II. Salary scale £450-£700.
ASSISTANT (JUNIOR). Salary scale £3755610.

Commencing salary according to qualifications

Commencing salary according to qualifications and experience.

Forms of application and conditions of appointment can be obtained from the Secretary, Edinburgh College of Art, Lauriston Place, Edinburgh, 3, to whom completed applications should be sent not later than 12th August, 1950.

CORPORATION OF THE CITY OF ABERDEEN.

TOWN PLANNING DEPARTMENT.

Applications are invited for the following posts:—

olds:—

(a) DEVELOPMENT ASSISTANT. Salary scale £595, rising by annual increments to £660 per annum.

per annum. Applicants should possess one or other of the following qualifications, viz., A.R.I.B.A.,

A.R.I.C.S., A.M.I.C.E., A.M.I.Mun.E., or A.M.T.P.I. The successful applicant will be required to assist the Senior Development Assistant in dealing with development applications made to the Corporation under the Town and Country Planning (Scotland) Act. 1947. and the Aberdeen City Acts, with particular reference to the structural design and stability of building proposals. Experience in the design of steel-framed and reinforced concrete buildings is therefore desirable.

(b) PLANNING ASSISTANT. Salary scale £595, rising by annual increments to £660 per annum.

(b) PLANNING ASSISTANT.
2595, rising by annual increments to £660 per annum.

Applicants should hold one or other of the qualifications referred to in (a) above, and should have had considerable planning experience. The successful applicant will be required to assist in the preparation of the Statutory Planning Proposals for the City.

(c) JUNIOR PLANNING ASSISTANTS (TWO). Salary scale £390, rising by annual increments to £570 per annum.

Applicants should preferably hold one of the qualifications referred to above, and should have passed at least one or other of the Intermediate Examinations leading to these qualifications. Placing in the combined salary grade will be in accordance with qualifications and experience. The appointments are superannuable and are subject to the passing of a medical examination. Application forms (which should be submitted in duplicate) may be obtained from the Director of Town Planning, 5. Bon-Accord Crescent, Aberdeen, to whom they should be returned on or before 12th August, 1950.

J. C. RENNIE,

Town Clerk.

Town House, Aberdeen. 14th July, 1950.

BOROUGH OF NEWCASTLE-UNDER-LYME.
ARCHITECTURAL ASSISTANT.
Applications are invited for the above appointment in A.P. & T. Division, Grades II (£420.£456 per annum)-IV (£480-£525 per annum), of the National Scales of Salaries. The grading will be fixed in accordance with the successful candidate's experience and qualifications. Further particulars and conditions of appointment may be obtained from the Borough Engineer and Surveyor, Lancaster Building, High Street, Newcastle, Staffs., to whom applications must be delivered not later than Tuesday, 8th August, 1950.
C. J. MORTON,
Town Clerk.
District Bank House, Penkhull Street,
Newcastle-under-Lyme, Staffordshire.
4827

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Architectural Appointments Vacant

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JUNIOR ARCHITECTURAL ASSISTANT required, up to R.I.B.A. Intermediate standard, for London office; capable of executing working drawings, etc.; to start immediately; interesting work, and scope for applicant showing initiative; commencing salary £200-£250 per annum. Apply in writing, stating age, training, experience, and salary required, to: Elie Mayorcas, F.R.I.B.A., 13, David Mews, W.I.

A RCHITECTURAL ASSISTANT (Senior and Junior) required; pref. Industrial Building experience. Write, stating age, experience, and salary required, to Winter & Pickering, 114/115. Holborn. London, E.C.1.

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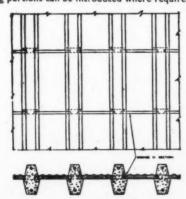
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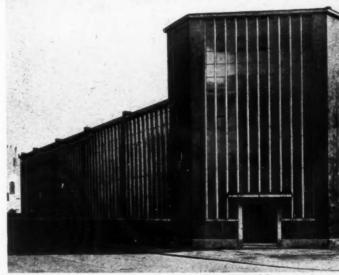
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ARCHITECTURAL

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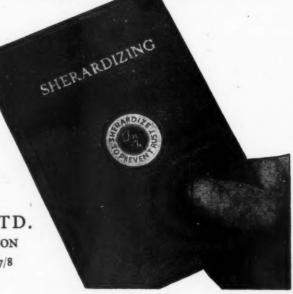
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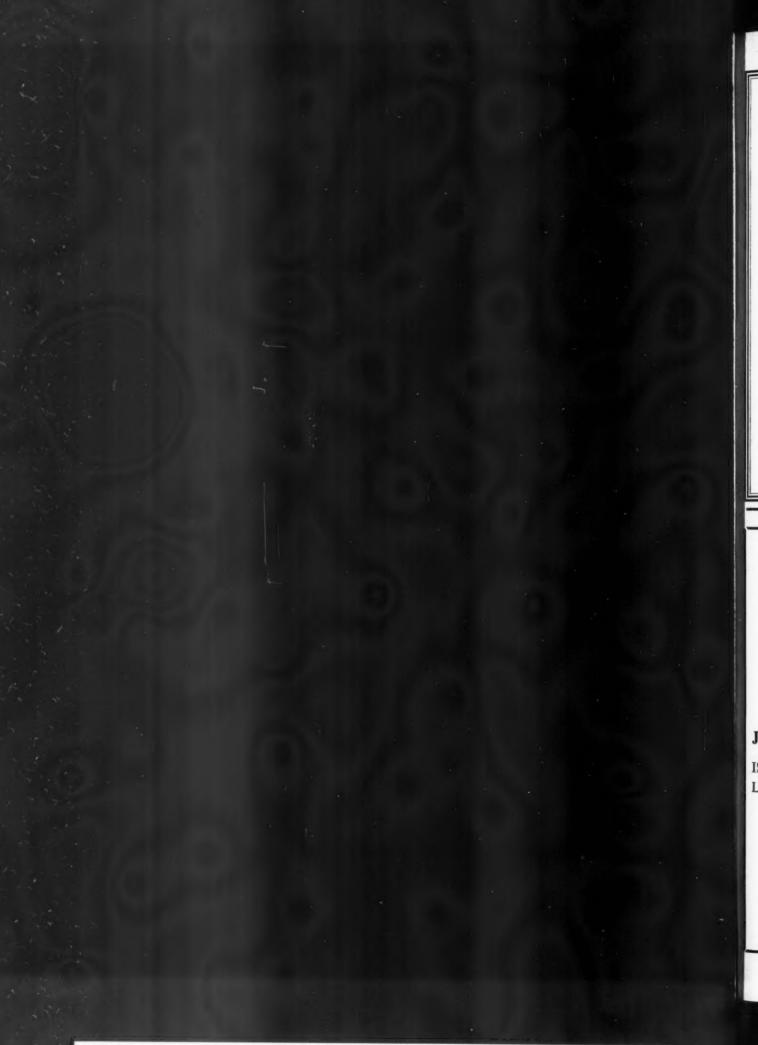
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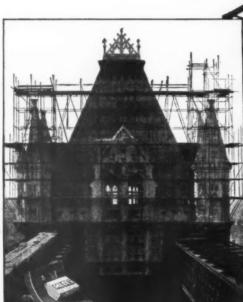
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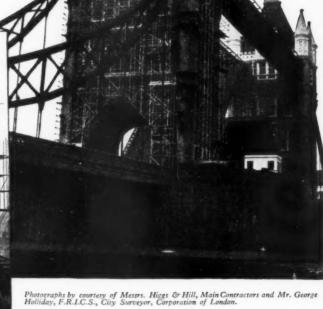
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